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FEDERAL PROGRAMS FOR THE  
DEVELOPMENT OF HUMAN RESOURCES

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A COMPILATION OF REPLIES FROM DEPARTMENTS AND  
AGENCIES OF THE U.S. GOVERNMENT TO A  
QUESTIONNAIRE FORMULATED BY THE  
SUBCOMMITTEE ON ECONOMIC PROGRESS

OF THE  
JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES

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## URBAN STUDIES AND HOUSING RESEARCH

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The program is intended to enable the Secretary of the Department of Housing and Urban Development to undertake such programs of investigation, analysis, and research as are necessary and appropriate in carrying out the national housing and urban development programs for which he has responsibility.

#### 2. Operation

The Secretary can make contracts with agencies of State and local government, educational institutions, and other nonprofit organizations; enter into working agreements with other departments and in-

dependent establishments and agencies of the Federal Government; or engage profit-motivated organizations to carry out such programs of data collection, research and analysis as he deems desirable and necessary.

The Secretary depends upon his staff, primarily within the Office of Program Policy, to identify areas in which research and analysis are required and to screen proposals which are submitted by various applicants who seek HUD funds for research in fields which relate to departmental programs. The Director of the Office of Program Policy is head of a Departmental Coordinating Board for Research and Demonstrations, and this Board establishes guidelines and priorities with regard to research efforts, and it also evaluates proposed research activities for their possible value and applicability.

The Director of the Office of Program Policy negotiates the terms and conditions of the research contract, which he submits to the Secretary for approval. The Director passes upon the scope of the survey, its cost, its methodology, and the caliber of the professionals who will manage and direct the effort.

### *3. History*

The housing research and urban studies program was authorized in the Housing Act of 1948 and was amended by the Housing Act of 1949. Pursuant to this authorization, an active research program was conducted in HHFA from 1950 through 1952. In 1952 the Independent Offices Appropriation Committee's action terminated the program, allowing only such funds as were necessary to terminate outstanding research contracts. The scope and kinds of research undertaken during this period were broad and varied, with a substantial portion of funds spent upon technological research.

In 1956 a new research program authorization was enacted by the Congress. This new authorization did not limit, in any way, the research authority previously granted under the earlier research legislative authorizations. No funds, however, were voted to implement this more recent authority until 1961. In 1961 \$350,000 was appropriated to conduct the housing and urban studies research program. Through fiscal year 1965 the annual level of appropriations has remained at this same level. The fiscal 1966 level, however, is proposed at \$700,000.

The limitation of funds for research has circumscribed the numbers and kinds of research and analysis which could be undertaken by this Department. A substantial portion of available funds has been spent for expanding and refining housing production and marketing data, and this service has been contracted through the Census Bureau.

### *4. Level of operations. (See table 1.)*

Program: Urban studies and housing research.

Department or agency, and office or bureau: Department of Housing and Urban Development; Office of Program Policy.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimates	Fiscal year 1967 estimates
Contracts.....	4	4	8	8
(a) Participants:				
State government agencies.....	0	0	0	1
Local governments.....	0	0	1	2
Nonprofit groups.....	1	2	2	2
Universities.....	1	1	2	2
Other Federal agencies.....	2	1	3	1
(b) Federal finances:				
Unobligated appropriations available.....	\$387,000	\$397,000	\$750,000	\$750,000
Obligations incurred.....	\$335,000	\$342,000	\$690,000	\$690,000
(c) Matching expenditures.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
(d) Number of employees.....	4	4	5	5
(e) Non-Federal employees.....	0	0	0	0

<sup>1</sup> Not applicable.

NOTE.—Fiscal years 1966 and 1967 are estimated. Differences between unobligated appropriations and obligations incurred are represented by administrative expenses.

### 5. *Estimated magnitude of program in 1970*

It is difficult to estimate the levels of activity under this program for 1970. The broadened role of the Department and the increase in the number and complexities of new housing and urban development programs require a substantially expanded program of research and analysis. The President has emphasized the need to develop and explore new techniques and mechanisms for improving the urban environment and restoring economic vitality to cities.

### 6. *Prospective changes in program orientation*

(a) A major legislative proposal which is currently pending is the demonstration cities program. The principal emphasis of this program will be upon improved program coordination and integration, with the aim of restoring large sections of various cities to renewed health and vitality through focused and combined programs of physical and human resources development. The effects of this program upon the Department's research efforts will be indirect; actual operation of the program will undoubtedly indicate valuable areas for research and analysis.

(b) In his 1965 message on cities, President Johnson proposed the establishment of an Institute of Urban Development to "administer grants to States and cities for studies and other basic work which are the foundation of long-term programs." This Institute will soon be established within the new HUD organizational structure.

(c) The need for more and improved research will increase, rather than decrease during the coming year. Our Nation's urban areas continue to grow at undiminished rates; by 1990, 8 out of every 10 Americans will live in an urban area. This increased urbanization will be characterized by equally rapid growth of our major metropolitan areas. The increasing amounts of land and housing needed to accommodate this increased population will create problems, which by their very magnitude, will be more complex and more difficult than those which have developed in the past. These will include, for example, how to bring adequate water and sewer services to this increased population, how to improve transportation and commutation, how to keep the air from being polluted, how to develop governmental mechanisms that will allow effective treatment

of these and other problems on a metropolitan and regional basis, etc. It is urgent that the Department and the Federal Government know more about the dynamics of urbanism and learn how to control these and make them work to the advantage of our citizenry.

### *7. Coordination and cooperation*

(a) The Office of Program Policy is a comparatively small group, and there is ready and informal exchange of information and expertise. The resources of the entire Office are utilized to help select appropriate research projects and to shape and control their execution. Specialists within the Office are assigned ad hoc responsibilities and duties with regard to liaison with contractors, their supervision, and evaluation of progress.

(b) As indicated, the Department has a Coordinating Board for Research and Demonstrations. It is comprised of representatives from all planning and research activities carried out by the separate constituents of HUD. Its functions were described under (2).

(c) Coordination with other Federal agencies and departments is achieved through the Science Information Exchange, wherein information regarding all ongoing urban research efforts is registered. Informal contact, as well, is maintained with all Federal agencies and departments that might undertake urban-centered research. In this manner, research overlap and duplication is avoided, and clearer and more precise research focus is obtained.

(d) and (e) Coordination with State and local governments in the urban studies and housing research program is accomplished by joint participation in some projects and through consultation and cooperation in others.

(f) The HUD program of research is not directly involved with foreign governments and their research programs. On frequent occasions, however, foreign governments request information regarding research in the urban field. The Office of Program Policy works closely with HUD's Office of International Housing, and in the past, has contributed to urban research symposiums carried out by the United Nations and in the convocation of international conferences of urban economists and planners.

(g) Coordination with nonprofit institutions, urban study centers and universities is accomplished through joint participation in some research efforts and through informal consultations with others.

(h) Business enterprises are eligible to enter into contracts with HUD under this research program; however, as noted in the response to question (4), previous participants were governmental, academic, and nonprofit, and the same pattern is expected to hold for fiscal years 1966 and 1967.

### *8. Laws and regulations*

Section 301 of the Housing Act of 1948, 62 Stat. 1268, 1276, 12 U.S.C. 1701 (1946 ed. Supp. III) as amended by the Housing Act of 1949, 63 Stat. 413 (approved July 15, 1949), authorizes the Housing and Home Finance Administrator "to undertake and conduct a program with respect to technical research and studies concerned with the development, demonstration and promotion of the acceptance and application of new and improved techniques, materials and methods which will permit progressive reductions in housing construction and

maintenance costs and stimulate the increased and sustained production of housing, and concerned with housing economics and other housing market data."

Section 602 of the Housing Act of 1956, 70 Stat. 1091, 1113, authorizes the Housing and Home Finance Administrator to "undertake such programs of investigation, analysis and research as he determines to be necessary and appropriate in the exercise of his responsibilities."

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

The economic impact of a research program cannot be readily and precisely identified. The 1950-52 research program of HHFA had a substantial technological component, and several research efforts resulted in improved and more efficient building products and techniques, providing a better and more economical housing product for the consumer. In the nontechnological field, the benefits of the program are more difficult to identify and measure. Frequently, the value of such research activity is revealed in an indirect manner—telling us as much what not to do, as what should be done. Generally, the insights obtained into problems and the conceptual breakthroughs which come from sound research have value far beyond the costs expended for the research activity.

### 10. *Economic classification of program expenditures*

Expenditures for urban studies and housing research are a purchase of goods and services.

[NOTE.—The U.S. budget shows that Federal expenditures in the fiscal year 1965 were \$444,000.]

## COMMUNITY DEVELOPMENT TRAINING PROGRAMS

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

This program is intended to assist the various States to develop special training programs for the development of skills needed to further economical and efficient community development. It is intended to aid the States in providing the facilities for training the technicians and skilled personnel who would be employed by public bodies. Also, the program seeks to support State and local research activities that will advance effective solution of community development problems.

#### 2. *Operation*

The program will be operated on a 50-50 matching grant basis. Federal assistance will be contingent upon submittal by the individual States of plans for training and research, and these plans must be approved by the Secretary of HUD.

#### 3. *History*

The community development training program was authorized under title VIII of the Housing Act of 1964. However, the Congress has not yet funded the program. A request for an appropriation of \$5 million is included in the administration's fiscal year 1967 budget.



#### *4. Level of operations*

There is no operating experience under the program from which data can be derived to answer this question.

#### *5. Estimated magnitude of program in 1970*

It is anticipated that the 1970 level of the program will reach \$30 million; this is the maximum amount which has been authorized in the enabling legislation. In enactment of this legislation, Congress recognized that the rapid expansion of our urban communities has caused severe problems in urban and suburban development and has created a national need to provide special training in those skills required to cope with these problems and required programs. The rapid growth of our urban areas, which by 1990, will see 8 out of every 10 Americans living in urban communities, emphasizes that the need for these program aids will increase, rather than diminish.

#### *6. Prospective changes in program orientation*

As indicated, the increased number of urban dwellers and the vastly increased amounts of land which will be required to house them and provide locations for businesses and industries will create problems in the fields of community facilities, housing, traffic control, air pollution, and intergovernmental cooperation. The demands for skilled and experienced technicians will grow correspondingly—and in fact, at a higher rate, since the problems will be more complex, and larger amounts of funds will have to be spent to keep the urban communities viable and efficient.

There is no new legislation pending which will affect this program. Actual program experience must be gained and evaluated before administrative and organizational changes could be considered.

#### *7. Coordination and cooperation*

Coordination of this program, within the Department, will be accomplished through the HUD Research and Demonstration Coordinating Board.

Coordination with other departments and agencies will be achieved through the National Advisory Council on Extension and Continuing Education.

It is intended that the program, once underway, will function as a "clearinghouse" with regard to State training programs and research activities carried on by their counterparts.

States will be responsible for coordinating title VIII activity within their boundaries and among their local governments. It is important to note that the plans and mechanisms for achieving and promoting this coordination must be demonstrated to the satisfaction of the Secretary, HUD, as a condition to the Department's making of a training and research grant.

Foreign governments and international organizations will not be directly involved in this program, although the activities of the HUD Office of International Housing will supply a communication channel to foreign countries with regard to progress and achievements under this program.

Nonprofit organizations and institutions, such as colleges, universities, and urban study centers will be directly involved in providing training and research facilities under this program. Their activities will be coordinated under the State plans, as approved by the Secretary, HUD.

### 8. *Laws and regulations*

Title VIII of the Housing Act of 1964, Public Law 88-560, 78 Stat. 802; 20 U.S.C. 801 (September 2, 1964) authorizes the Administrator of the Housing and Home Finance Agency to make matching grants to the States and to assist in establishing community development training and research programs.

Section 1103(a) of the Housing and Urban Development Act of 1965, Public Law 89-117 (August 10, 1965), 79 Stat. 451, 503, substituted \$30 million for the \$10 million authorized for program implementation.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

Since the program has not yet been implemented, no data can be supplied for this part of the questionnaire.

Generally, the value of training and research cannot be identified in dollars and cents. This much is certain: that better trained personnel will be able to administer urban programs more effectively and economically, and that locality-focused research will enable communities to develop new and efficient approaches and mechanisms with which to cope with problems of urbanism.

### 10. *Economic classification of program expenditures*

Not in operation in fiscal year 1965.

## URBAN PLANNING ASSISTANCE

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

Urban planning is concerned with improving the utilization of the resources of an area to produce a better living environment and a stable economic base. Its purpose is rational decisionmaking and coordinated public action in dealing with the social, economic, and physical development of the area. The urban planning assistance program is concerned with encouraging the broader application of planning to urban areas.

#### 2. *Operation*

The urban planning assistance is a grant-in-aid program to assist official planning agencies in carrying out the following activities:

1. Preparation of a comprehensive development plan for the pattern and intensity of land use and the provision of public facilities, including transportation facilities, together with plans for the economic and social development of the area and the long-range fiscal plans for such development.

2. Programing and scheduling of capital improvements, together with definite financing plans for the improvements to be constructed in the earlier years of the program.

3. Coordination of all related plans of the subdivisions of the government concerned.

4. Intergovernmental coordination of all related planning activities among the State and local government agencies concerned.

5. Preparation of regulatory and administrative measures and public educational and informational material in support of the foregoing activities.

Grants under the urban planning program may be made to—

1. Cities and other municipalities with less than 50,000 population, counties, and Indian reservations. Generally such grants are made through the official State planning agency.

2. State, metropolitan, and regional planning agencies, and metropolitan organizations of public officials.

Grants under the program may amount to no more than two-thirds of the total cost of the urban planning project. However, for localities designated under the Economic Development Act of 1965, or in areas in which there has occurred a substantial reduction in employment as a result of a decline in Government employment or purchases, grants may amount to as much as three-fourths of project costs.

### 3. History

The urban planning assistance program was authorized in section 701 of the Housing Act of 1954 with an initial authorization of \$5 million. The program was substantially amended in 1959, 1961, 1964, and 1965.

The program is now in its 11th year and extends to communities in all 50 States plus Guam, Puerto Rico, and the Virgin Islands. Between the passage of the original enabling legislation and the Housing Act of 1961, annual commitments averaged about \$3 million per year. The 1961 act considerably broadened the scope of the program in two major respects: grant ratios were increased from the 50-percent level to the 66 $\frac{2}{3}$ -percent level, and comprehensive transportation studies were specifically authorized as an eligible activity. Program levels rose sharply to about \$18 million in each of the years 1962 and 1963, and to over \$21 million in 1964. The level of the program in 1965 dropped to the amount of the available appropriation. At the end of fiscal 1965 the total amount of the Federal grants which had been allocated was \$86 million. The following table provides a fiscal summary of the program.

TABLE 1.—*Summary of program*

(In thousands of dollars)

Fiscal year	Appropriations		Net approvals		Appropriation balance carried forward
	In year	Cumulative	In year	Cumulative	
1955.....	1,000	1,000	103	103	897
1956.....	2,000	3,000	878	981	2,019
1957.....	1,500	4,500	1,786	2,747	1,753
1958.....	1,275	5,775	3,024	5,771	4
1959.....	3,250	9,025	2,961	8,732	293
1960.....	3,375	12,400	3,504	12,236	164
1961.....	4,000	16,400	2,961	15,197	1,203
1962.....	17,100	33,500	18,179	33,376	124
1963.....	18,000	51,000	17,900	51,276	224
1964.....	21,150	72,650	21,244	72,520	130
1965.....	13,675	86,325	13,705	86,225	100

### 4. Level of operations. (See table 2.)

Program: Urban planning assistance.

Department or agency, and office or bureau: Department of Housing and Urban Development; Office of Planning Standards and Coordination [formerly in Urban Renewal Administration].

TABLE 2.—Level of operations or performance, fiscal years 1964-67

[Dollars in millions]

Measure	Fiscal year			
	1964 actual	1965 actual	1966 estimate	1967 estimate
(a) Magnitude of program:				
Cumulative number of projects approved.....	1,670	2,016	2,591	3,371
Cumulative amount of projects approved.....	\$72.5	\$86.2	\$113.1	\$148.1
(b) Participants (cumulative):				
State government agencies.....	29	34	37	40
Small communities.....	3,482	3,894	4,600	5,600
Redevelopment area localities.....	562	720	1,050	1,360
Metropolitan and regional areas.....	181	203	250	305
(c) Federal finances:				
Unobligated appropriations available.....	\$21.4	\$13.8	\$26.9	\$35
Obligations incurred.....	\$21.2	\$13.7	\$26.9	\$35
Commitments made.....	\$21.2	\$13.7	\$26.9	\$35
(d) Matching or additional expenditures (State and local contributions) <sup>1</sup> .....	\$9.1	\$5.9	\$11.5	\$15
(e) Number of Federal Government employees <sup>2</sup> .....				
(f) Non-Federal personnel <sup>3</sup> .....				

<sup>1</sup> Dollar estimates based on usual Federal grant of 66½ percent of project cost except in redevelopment areas and certain other minor areas where Federal grant level is 75 percent.

<sup>2</sup> Employees are included in totals shown on table for urban renewal projects.

<sup>3</sup> Estimates not available.

##### 5. Estimated magnitude of program in 1970

There are no current estimates of the performance level for the urban planning assistance program for 1970.

##### 6. Prospective changes in program orientation

(a) *Pending legislative proposals.*—In his state of the Union message of January 12, 1966, the President stated, "I will offer other proposals to stimulate and to reward planning of entire metropolitan areas." No details of this proposal have yet been released.

(b) *Proposed administrative or organizational changes.*—The Urban Renewal Administration has been incorporated as a part of the new Department of Housing and Urban Development. Aside from this, there are no announced organizational or administrative changes pending.

(c) *Probable changes in the conditions under which the program will function in 1970; e.g., technological, economic, or social.*—It is anticipated that there will be an increasing insistence upon sound urban planning as a basis for approving various Federal programs of aid for physical development.

The technology of urban planning has been undergoing rapid change with the introduction of computers with the capacity for rapid retrieval of large quantities of data. Many of the recent urban planning activities involve the development of simulation models to provide for better forecasting and to permit the testing of planning assumptions.

The entire field of urban planning has shown an increasing concern for the social implications of planning decisions and how the planning process can be used more effectively to encourage desirable social changes. It is significant that urban planners have been deeply involved in the antipoverty efforts of many communities.

### 7. *Coordination and cooperation*

(a) *Within your bureau, division, or office.*

(b) *With other units of your department or agency.*—The 701 program is used to meet the general planning requirements of other HHFA programs, including the community planning, neighborhood analysis and parts of other elements of the workable program for community improvement, which is a prerequisite for the title I urban renewal program, the low-rent housing program of PHA, and certain FHA mortgage insurance programs. It is further used to meet the general planning requirements of title I, the open space land program, and the mass transportation program. 701 funds are also available to meet the local and areawide planning needs of the 702 program and the new water and sewer, neighborhood facilities, urban beautification, advanced land acquisition, and FHA land development programs.

(c) *With other Federal Government departments or agencies.*—By its nature, comprehensive planning is concerned with a broad range of development activities—water resources, recreation, transportation, education, economic development—that are the direct responsibility of several Federal agencies. Accordingly, coordination with these agencies, to provide liaison for State, metropolitan, and local planning agencies in the 701 program, has been continued and expanded by URA. The urban planning assistance program policy emphasizes that local planning agencies are expected to coordinate their activities with all related Federal, State, and local programs. These include other programs administered by HHFA; the overall economic development program (OEDP) of the Economic Development Administration; transportation studies sponsored by the Bureau of Public Roads and State highway departments; Federal Aviation Agency programs of airport development and air traffic control facilities; Army Corps of Engineers programs dealing with water programs for State and local recreation areas, national parks and monuments, land management and disposal, and water resources; Department of Agriculture programs of rural area development soil conservation, and national forests; and Department of Health, Education, and Welfare grant programs for sewage disposal plants, air pollution control, schools, and other aspects of environmental engineering.

During 1964 and 1965 negotiations leading toward formal coordination procedures were started with the new Office of Economic Opportunity, with the new Appalachian regional development program, and with three bureaus of the Department of the Interior: The Bureau of Outdoor Recreation, the Bureau of Land Management, and the Bureau of Indian Affairs. These new areas of coordination activity resulted from changes in section 701 because of the Housing Act of 1964, or from other new Federal legislation such as that creating the OEO.

(d) *With State governments or their instrumentalities.*—See (e), below.

(e) *With local governments or communities.*—Different planning agencies concerned in various ways with development in a single urban area may include: A metropolitan comprehensive planning agency; or several local comprehensive planning agencies; or one or more State comprehensive planning agencies; or one or more special purpose functional planning agencies (e.g., transportation, water resources, economic development and health facilities planning agencies). Thus, a comprehensive planning framework within which planning efforts

at various levels of State and local governments are integrated and coordinated is the key consideration.

State coordination devices include:

1. Participation in metropolitan planning by local governments and public and private special-purpose agencies.

2. The preparation of functional plans and development programs as part of areawide comprehensive planning, through which the common or closely related activities of special-purpose districts and functional agencies at Federal, State, and regional and local levels can be integrated.

3. Administration of local planning assistance grants by metropolitan planning agencies, with the approval of the State planning agency.

4. Mandatory referrals of plans and project proposals from local to metropolitan and, as appropriate, to State planning and development agencies.

5. Continuing liaison between local, metropolitan, and State planning agencies.

6. Technical and special services to local planning and development agencies by State and metropolitan planning agencies.

(f) *With foreign governments or international organizations.*—The 701 program has been used in several California, Arizona, and Texas localities as a complementary undertaking to the Mexican national border program (programa nacional fronterizo de Mexico) of Mexico. The broad objectives of the Mexican border program are to promote the economic and social development of the 1,600-mile United States-Mexican border region.

For (g), (h), and (i) none.

#### 8. *Laws and regulations*

Public Law 560, 83d Congress, approved August 2, 1954 (68 Stat. 590, sec. 701). (See Basic Laws and Authorities on Housing and Urban Development, 1965, p. 288.)

Amended by:

Public Law 1020, 84th Congress, approved August 7, 1956 (70 Stat. 1091, 1103, sec. 308).

Public Law 85-104, approved July 12, 1957 (71 Stat. 294, 305, sec. 606).

Public Law 86-372, approved September 23, 1959 (73 Stat. 654, 678, sec. 419).

Public Law 87-70, approved June 30, 1961 (75 Stat. 149, sec. 310).

Public Law 88-560, approved September 2, 1964 (78 Stat. 769, secs. 314-317).

Public Law 89-117, approved August 10, 1965 (79 Stat. 451, sec. 1102).

Current appropriations: Public Law 89-128, approved August 16, 1965, 79 Stat. 520 (see Basic Laws and Authorities on Housing and Urban Development, 1965, p. 596).

Supplemented by: Public Law 89-309, approved October 31, 1965, 79 Stat. 1133, 1135 (see Basic Laws and Authorities on Housing and Urban Development, 1965, p. 603).

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

The economic effects of comprehensive urban planning are of a broad nature and, in general, take place over a long period of time. Specific measurements in dollar figures such as those found in a cost-benefit analysis would be extremely useful; however, no such measurement devices have yet been successfully applied to the economic effects of urban planning. Furthermore, there is some question as to whether the effects of planning for such things as improved urban esthetics or increased convenience are directly quantifiable. However, the economic and social effect of the urban planning assistance program can be discussed in a general way.

Social and economic studies are encouraged under the 701 program. Such studies are undertaken as an integral part of the physical development plans of urban areas.

The urban planning process aims toward a more efficient allocation of economic and social resources as well as toward a more rational physical arrangement of elements such as the transportation system, the various land uses, and central business district functions. To the degree the plans are successfully implemented, there is generally a positive but often indirect effect on personal income (item a); on the more efficient placement of industry—and on the placement of workers (item b); and on stimulation of new business enterprises or expansion of existing ones through central business district plans. Effectuation of plans has, no doubt, an effect on the gross national product (item g) but again, such effects as the program may have are not yet measurable in quantitative terms.

10. *Economic classification of program expenditures.* (See table 3.)

Program: Urban planning assistance.

Department or agency, and office or bureau: Department of Housing and Urban Development; Office of Planning Standards and Coordination [formerly in Urban Renewal Administration].

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government:	
Purchases of goods and services.....	(1)
Grants to State and local governments.....	\$16.6
<b>Total, Federal expenditures.....</b>	<b>16.6</b>
<b>Non-Federal expenditures.....</b>	<b>(2)</b>

<sup>1</sup> Federal administrative expenses included under urban renewal projects.

<sup>2</sup> Not available.

## OPEN-SPACE LAND PROGRAM

## PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

The open-space land program is designed to upgrade the quality of the urban environment by helping to preserve and develop lands having value for park, recreation, conservation, scenic, or historic purposes. In terms of developing human resources, the program is

designed to provide recreation opportunities within easy reach of home, reduce the effects of congestion and urban sprawl, and thereby help create a more livable, attractive environment favorable to human development.

## 2. Operation

The program provides eligible local public bodies with up to 50 percent of the cost of (a) acquiring undeveloped or predominantly undeveloped land having value for park, recreation, scenic, or historic purposes, (b) acquiring and clearing developed land in built-up portions of the city to create small parks, if open space needs cannot be met by undeveloped land, (c) developing lands acquired with grant assistance, with landscaping, sanitary facilities, minor recreation facilities, and small shelters. Federal aid may be used also for relocation assistance payments authorized for individuals, families, and businesses displaced by the purchase of land with grant assistance.

All projects assisted under the program must meet two basic planning requirements: (a) There must exist adequate comprehensive planning for the urban area, and (b) there must exist, consistent with the comprehensive planning, an adequate open-space acquisition and development program for the urban area.

Applications are processed in the HUD regional offices and approved by the Urban Renewal Commissioner.

A program of studies and technical assistance is also authorized under title VII.

## 3. History

The program was authorized by title VII of the Housing Act of 1961 and amended by title IX of the Housing and Urban Development Act of 1965, which increased the level of grant assistance and extended program assistance to create small parks in built-up areas.

Since the program was initiated in 1961, up until December 1965, it had helped communities in 37 States acquire over 145,000 acres of scarce urban open-space land by means of 405 grants totaling over \$46 million. Most of the lands acquired have been in the developing fringes of the large, fast-growing, metropolitan centers of the east and west coasts, and the North Central United States. And 50 inter-governmental agreements have been signed by hundreds of local governments agreeing formally to coordinate open-space planning and acquisition on a metropolitan scale.

## 4. Level of operations. (See table 1.)

Program: Open-space land program.  
Department or agency, and office or bureau: Department of Housing and Urban Development; Office of Urban Neighborhood Services [formerly in Urban Renewal Administration].



TABLE 1.—*Level of operations or performance, fiscal years 1964–67*

[Dollar amounts in millions]

Measure	Fiscal year 1964 actual	Fiscal year 1965 actual	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program:				
Cumulative projects approved (net).....	219	390	610	965
Cumulative number of acres for acquisition in projects approved.....	102,000	145,000	190,100	240,400
(b) Applicants or participants (cumulative):				
State government agencies.....	23	36	39	42
Local communities.....	196	246	345	503
(c) Federal finances: <sup>1</sup>				
Unobligated appropriations available.....	\$14.7	\$14.7	\$44	\$75
Obligated incurred (net).....	\$14.3	\$13.7	\$44	\$75
Commitments made (net).....	\$14.3	\$13.7	\$44	\$75
(d) Matching or additional expenditures <sup>2</sup> .....	\$42.9	\$20.5	\$44	\$75
(e) Number of Federal Government employees <sup>3</sup> .....	23	20	66	82
(f) Non-Federal personnel <sup>4</sup> .....				

<sup>1</sup> Excludes administrative expenses. The term "net" reflects the fact that prior year obligations recovered were not available for reuse prior to fiscal year 1966.

<sup>2</sup> Estimates based on various Federal grant ratios in effect. The factors used are as follows: 1964, 25 percent; 1965, 40 percent; 1966–67, 53 percent.

<sup>3</sup> Includes employees working on urban beautification program.

<sup>4</sup> No estimates available.

### 5. *Estimated magnitude of program in 1970*

The Housing and Urban Development Act of 1965 authorized \$310 million for the open-space and urban beautification programs, all but \$36 million of which was to be used for open-space acquisition and development. When this authorization is appropriated and expended, it is probable that additional authorization will be required, due to continued rise in demand for outdoor recreation facilities and the continued loss of lands having value for recreation, conservation, scenic and historic purposes.

### 6. *Prospective changes in program orientation*

(a) *Pending legislative proposals.*—None.

(b) *Proposed administrative and organization changes.*—There are no announced organization or administrative changes pending as of January 1966.

(c) *Probable changes in the conditions under which the program will function in 1970, for example, technological, economic, social.*—

(1) Mobility, personal income, and leisure time will continue to grow and result in accelerating demand for outdoor recreation opportunities in and near concentrations of population. At the same time, continued urbanization will result in the permanent loss of lands having value for recreation, scenic, historic and conservation purposes. All these factors will continue the requirement for the purchase of large amounts of urban land for park purposes.

(2) At the same time, poverty, crime, and unemployment should continue to be a problem, particularly for minority groups within large cities. There will be an increased need to provide for recreation facilities within convenient reach of low-income residents. Increased emphasis should be placed on these needs and new avenues should be explored for providing a pleasant living environment where a majority of low-income people live, work, and play. Research and technical assistance activities should also reflect a concern for these needs.

## 7. *Coordination and cooperation*

(a) *Within your bureau, division or office.*—Within the Urban Renewal Administration, the operations of all the programs have been integrated, with the technical support and policy guidelines coming from line officials and the processing of applications being undertaken by field operations. In addition, there is especially close coordination between the urban planning assistance program and the open-space land program.

As the neighborhood facilities program gets underway, there will be opportunities for coordination with that program.

(b) *With other units of your department or agency.*—Activities of the program have been coordinated with the Office of Program Policy, Office of General Counsel, the Office of Metropolitan Development and the Office of Administration—all located in the Office of the Secretary, HUD.

As the program for advance acquisition of land of the Community Facilities Administration gets underway, there should be greater opportunities for coordination with that program.

(c) *With other Federal Government departments or agencies.*—Coordination with other agencies is undertaken primarily through the Interagency Recreation Advisory Council. In addition, a special type of coordination is required between this program and the Bureau of Outdoor Recreation in the Department of the Interior. Executive Order 11237 provides a basic division of responsibility between the two programs.

Information concerning open-space applications is provided to the Federal Aviation Agency and the Bureau of Public Roads so that the proposed acquisitions will be consistent with their own future development plans. Further coordination with other Federal agencies is facilitated by the requirement that open-space acquisition and development is consistent with the comprehensive planned development of each urban area in which the land is to be acquired. As the program begins to operate more in low-income areas, there should be opportunities for coordination with the Office of Economic Opportunity community action programs.

(d) *With State governments or their instrumentalities.*—URA has close coordination with the States having local open-space assistance programs. Since local applicants receive both Federal and State funds to assist in land acquisition, steps have been taken to insure comparability of procedures and requirements. Connecticut, New Jersey, New York, California, and Pennsylvania have had especially good coordination with the Federal Government in this program.

(e) *With local governments or communities.*—Since grants are made directly to counties, special districts and municipalities, coordination is assured with these public bodies. And since there is the dual requirement for comprehensive planning and a unified program of open-space acquisition for the urban areas in which the land is being acquired, coordination between local jurisdictions is being encouraged. Under the program over 50 intergovernmental agreements for open-space preservation have been signed for metropolitan areas throughout the country.

(f) *With foreign governments or international organizations.*—Information on the program has been provided to many foreign governments and to the UNESCO.

(g) *With nonprofit organizations and institutions.*—The program has worked closely with the League of Women Voters, National League of Cities, National Association of Counties, the National Recreation Association, American Institute of Park Executives, the National Association of Housing and Redevelopment Officials, and other nonprofit organizations concerned with conservation and a better urban environment.

(h) *With business enterprises.*—There has been little contact with business groups.

### 8. Laws and regulations

Public Law 87-70, approved June 30, 1961 (75 Stat. 149, 183, title VII). (See "Basic Laws and Authorities on Housing and Urban Development, 1965," p. 378.)

Amended by:

Public Law 88-560, approved September 2, 1964 (78 Stat. 769, 806, sec. 1001).

Public Law 89-117, approved August 10, 1965 (79 Stat. 451, 595, title IX).

Executive Order 11237 (30 F.R. 9433), July 27, 1965. (See "Basic Laws and Authorities on Housing and Urban Development, 1965," p. 383.)

Executive Order 11017 (27 F.R. 4141), April 27, 1962. (See "Basic Laws and Authorities on Housing and Urban Development, 1965," p. 386.)

Current appropriations:

Public Law 89-128, approved August 16, 1965 (79 Stat. 520). (See "Basic Laws and Authorities on Housing and Urban Development, 1965," p. 596.)

Supplemented by: Public Law 89-309, approved October 31, 1965. (79 Stat. 1133, 1135). (See "Basic Laws and Authorities on Housing and Urban Development, 1965," p. 603.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

Sections (a) through (h) deal with the effects of the program on personal income, business, employment levels, the GNP, and other economic indicators. The open-space land program is not designed to further economic goals, but to improve the quality of the urban environment. Providing recreation facilities and acquiring land having value for scenic and conservation purposes does have a long-term economic impact on the communities, but this is hard to quantify. In some cases, property values are enhanced by neighboring parks; tourists and park users generate economic activity for businesses servicing these areas; and the preservation of a pleasant urban setting might tend to halt economic decline of neighborhoods and cities. Further research is needed on these effects.

Of course, the direct expenditures made by the Federal, State, and local governments under the program would have the normal multiplier effect for any area in which they are made. As of September 1965, the total amount of funds expended by all sources to purchase the 145,000 acres was \$168 million. Of this amount \$46 million were

Federal funds under the program. Most of the Federal funds were expended in the following States:

	<i>Million</i>		<i>Million</i>
California.....	\$7.9	Ohio.....	\$3.0
Illinois.....	6.7	Pennsylvania.....	2.8
New Jersey.....	5.8	Connecticut.....	1.6
Maryland.....	4.6	Michigan.....	1.1

The 30 other States each received less than \$1 million in grants.

10. *Economic classification of program expenditures.* (See table 2.)

Program: Open-space land program.

Department or agency, and office or bureau: Department of Housing and Urban Development; Office of Urban Neighborhood Services [formerly in Urban Renewal Administration].

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

	[In millions of dollars]
Federal government:	
Purchases of goods and services.....	0.3
Grants to State and local governments.....	5.9
Total, Federal expenditures.....	6.2
Non-Federal expenditures.....	(1)

<sup>1</sup> Not available.

## URBAN BEAUTIFICATION PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The urban beautification program is designed to help create an attractive urban environment most favorable to human development. Large areas of our cities, while not yet blighted, are overcrowded and uninventing—lacking in basic street, park, and other improvements so important to a sense of community spirit. Such an environment limits, rather than enhances the opportunities for full personal development. The urban beautification program is designed to help communities provide their people with more pleasant and desirable places in which to live, work, shop, and play, by assisting them in undertaking programs of beautification and improvement of parks and other public places.

#### 2. Operation

Grants cover up to 50 percent of the amount by which the cost of activities carried under an approved local beautification program exceed usual expenditures for comparable activities. Beautification activities must take place on land which the public owns or controls, and they must have "significant" and "long term" benefits for the community. Examples of eligible activities are the development of parks, malls, squares, and public waterfront areas with landscaping walks, and minor recreation and outdoor exhibition facilities. Also eligible are street improvements such as lighting, benches, tree planting, and decorative paving.

Activities funded under the program must be part of a community-wide beautification program officially approved by the community's governing body. This program should be consistent with the comprehensively planned development of the community.

### 3. History

The program was authorized by the Housing and Urban Development Act of 1965 and is in its first fiscal year of operation.

### 4. Level of operations. (See table 1.)

Program: Urban beautification program.

Department or agency, and office or bureau: Department of Housing and Urban Development; Office of Urban Neighborhood Services [formerly in Urban Renewal Administration].

TABLE 1.—Level of operations or performance, fiscal years 1966–67 <sup>1</sup>

[Dollars in millions]

Measure	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program:		
Amount of grant approvals in year.....	\$5	\$10
Number of grant approvals in year.....	50	100
(b) Applicants or participants: Local communities.....	50	75
(c) Federal finances:		
Unobligated appropriations available.....	\$5	\$10
Obligations incurred.....	\$5	\$10
Commitments made.....	\$5	\$10
(d) Matching or additional expenditures.....	\$2.5	\$5
(e) Number of Federal Government employees <sup>2</sup> .....		
(f) Non-Federal personnel <sup>2</sup> .....		

<sup>1</sup> Not in operation in fiscal years 1964 and 1965.

<sup>2</sup> Included in figures for open space program.

• Estimates not available.

### 5. Estimated magnitude of program in 1970

The Housing and Urban Development Act of 1965 authorized \$36 million for the program. When this authorization is appropriated and expended, it is probable that additional authorization will be required, due to expanded demand to improve the appearance and the livability of our cities.

### 6. Prospective changes in program orientation

(a) Pending legislative proposals.—None.

(b) Proposed administrative and organization changes.—There are no announced organization or administrative changes pending as of January 1966.

(c) Probable changes in the conditions under which the program will function in 1970; e.g., technological, economic, social.—It is still too early in the urban beautification effort to evaluate the factors which will affect the future activities of the program. However, over the past several years there has been an obvious increased concern with the general area of urban esthetics and of the impact this has upon those who live and work there. A functional but sterile urban environment is not a satisfactory one. We would expect a continuation of this concern.

### 7. Coordination and cooperation

(a) Within your bureau, division or office.—Policy elements of the urban renewal program (title I) and the "701" urban planning assistance program are coordinated closely with the urban beautification program. The experience gained in title I projects with improved urban design is being applied to the urban beautification program.

And urban design studies undertaken with "701" planning funds can be implemented, in part, with beautification funds.

Also research and demonstration activities of all three programs are closely related.

(b) *With other units of your department or agency.*—Activities of the program have been coordinated with the Office of Program Policy, Office of General Counsel, the Office of Metropolitan Development and the Office of Administration—all in the Office of the Secretary, HUD.

Site improvement and design activities of the Public Housing Administration and experimental housing and land planning activities of the Federal Housing Administration have been keyed in to some extent with beautification activities. Opportunities for closer cooperation exist.

(c) *With other Federal Government departments and agencies.*—Coordination of Federal agency beautification activities will be carried on through the Recreation Advisory Council which has been expanded to include beautification, as well as recreation. In addition, there have been bilateral contacts with the activities of the highway beautification program of the Bureau of Public Roads and the National Youth Corps activities of the Office of Economic Opportunity.

(d) *With State governments and their instrumentalities.*—There is a potential for greater contact with the State governments, particular in dissemination of information on the beautification program. There has been little direct contact up to this point.

(e) *With local governments or communities.*—The program deals directly with local governments. To insure that eligible public bodies coordinate their beautification activities, there is the requirement that these activities can be assisted only if they are part of a balanced communitywide beautification program officially approved by the governing body of the community. Most of the applications for urban beautification have come from cities, not counties or other local jurisdictions.

(f) *With foreign governments or international organizations.*—None.

(g) *With nonprofit organizations and institutions.*—Among the organizations cooperating with the program are the Council of Mayors, the National League of Cities, the National Association of Housing and Redevelopment Officials, and the combined Urban America—Action Council for Better Cities.

(h) *With business enterprises.*—Many businesses, such as electric utilities and manufacturers of signs, have expressed interest in the program, but there has been no formal coordination.

### 8. Laws and regulations

Public Law 89-117, approved August 10, 1965 (79 Stat. 451, 494, sec. 906). (See "Basic Laws and Authorities on Housing and Urban Development, 1965," p. 378.)

Executive Order 11237 (30 F.R. 9433), July 27, 1965. (See "Basic Laws and Authorities on Housing and Urban Development, 1965," p. 383.)

Executive Order 11017 (27 F.R. 4141), April 27, 1962. (See "Basic Laws and Authorities on Housing and Urban Development, 1965," p. 386.)

Current appropriations:

Public Law 89-309, approved October 31, 1965, 79 Stat. 1133, 1135. (See "Basic Laws and Authorities on Housing and Urban Development, 1965," p. 603.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

Sections (a) through (h) deal with the effect of Federal programs on personal income, business, employment levels, the GNP, and other economic indicators. The urban beautification program is not designed to further economic goals, but to improve the quality of the urban environment so that there are more favorable conditions for human development. Beautification activities might have a long-term effect on preventing deterioration of a neighborhood or community, but little research has been done on this effect.

Also, the funds expended by the program would provide employment opportunities for persons of relatively low skill level. This would be a direct benefit for those who actually worked on the projects.

Up to January 15, 1966, no grants have been made under the program so there is no information which can be provided on the economic impact.

### 10. *Economic classification of program expenditures*

The urban beautification program was not operating in fiscal year 1965.

## NEIGHBORHOOD FACILITIES

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

The neighborhood facilities program is aimed at helping localities construct neighborhood or community centers, youth centers, health stations, and other public buildings to provide health, recreational, social, or similar community services for the low- and moderate-income residents of a community.

#### 2. *Operation*

Grants may be made to a local public body for up to two-thirds (or three-fourths in areas approved under the Public Works and Economic Development Act of 1965) of the development cost of the facility.

The facilities to be provided must be necessary for carrying out programs of health, recreational, social, and similar community services. As contemplated in the act, emphasis will be placed on projects which will support a community action program under the Economic Opportunity Act (antipoverty program), and projects which are so located as to be of special benefit to low-income families. The facilities developed must be of direct benefit to neighborhood residents, either providing wholly new services or extending current services so that they offer new opportunities. They may be designed to educate and motivate individuals to use existing services of which they are not aware or which they do not know how to use. In other words, they must be in addition to existing social services in the community. They may be provided through new construction, acquisition and necessary rehabilitation or remodeling of existing structures, or both.

Grants may be made to cities, counties, or other political subdivisions having authority, under State or local law, to acquire or construct neighborhood facilities. Nonprofit organizations—such as community action agencies—having the legal, financial, and technical capacity to carry out the project may contract with the public body applicant to own or operate the facilities. However, the municipality must retain control over the use of the facilities. It is responsible for assuring that the facility is used for the purposes proposed in the application for assistance and that no conversion to other uses occurs for a period of 20 years. All neighborhood facilities developed under section 703 must be consistent with comprehensive planning for the development of the community.

The statute provides that a priority should be given to projects designed primarily to benefit members of low-income families or otherwise substantially the objectives of a community action program. It is expected that most of the applications approved will qualify for priority consideration.

### 3. History

The neighborhood facilities program was authorized by the Housing and Urban Development Act of 1965.

### 4. Level of operations. (See table 1.)

Program: Neighborhood facilities.

Department or agency, and office or bureau: Department of Housing and Urban Development; Office of Urban Neighborhood Services [formerly in Urban Renewal Administration].

TABLE 1.—Level of operations or performance, fiscal years 1966-67<sup>1</sup>

[Dollar amounts in millions]

Measure	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program:		
Amount of grant approvals in year.....	\$12	\$25
Number of facilities approved.....	80	170-
(b) Applicants or participants: <sup>2</sup> Local communities.....	80	125
(c) Federal finances:		
Unobligated appropriations available.....	\$12	\$25-
Obligations incurred.....	\$12	\$25-
Commitments made.....	\$12	\$25-
(d) Matching expenditures <sup>3</sup> .....	\$5.1	\$10.7
(e) Number of Federal Government employees.....	73	78-
(f) Non-Federal personnel <sup>4</sup> .....		

<sup>1</sup> The program was not in operation in fiscal 1964 and 1965.

<sup>2</sup> The term "local communities" does not necessarily imply that the community involved will itself be the formal applicant or participant. In some cases, other bodies may apply with the consent of the local governing body.

<sup>3</sup> Based on Federal grant ratios of 66% and 75 percent.

<sup>4</sup> Estimates not available.

### 5. Estimated magnitude of program in 1970

Experience under the neighborhood facilities program is still too limited to justify any valid estimates of performance several years into the future.

### 6. Prospective changes in program orientation

(a) Pending legislative proposals.—None.

(b) Proposed administrative or organizational changes.—The Urban Renewal Administration has been incorporated as a part of the new



Department of Housing and Urban Development. Aside from this, there are no announced administrative or organizational changes pending.

(c) *Probable changes in the conditions under which the program will function in 1970; e.g., technological, economic, or social.*—At this time there are no estimates of possible impacts of changing technological, economic, or social conditions on the operations of the neighborhood facilities program.

#### 7. *Coordination and cooperation*

(a) *Within your bureau, division, or office.*—Coordination achieved through normal administrative structure.

(b) *With other units of your department or agency.*—Discussions on coordination have been held with the Public Housing Administration.

(c) *With other Federal Government departments or agencies.*—Discussions on coordination have been held with the Office of Economic Opportunity and the Department of Health, Education, and Welfare.

(e) *With local governments or communities.*—The neighborhood facilities program will be carried out in direct cooperation with local governmental bodies.

(d), (f), (g), (h), and (i).—None.

#### 8. *Laws and regulations*

Public Law 89-117, approved August 10, 1965 (79 Stat. 451, 489, sec. 703). (See Basic Laws and Authorities on Housing and Urban Development, 1965, p. 298.)

Current appropriations:

Public Law 89-309, approved October 31, 1965 (79 Stat. 1133, 1135). (See Basic Laws and Authorities on Housing and Urban Development, 1965, p. 603.)

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

#### 9. *Economic effects*

Operations of the neighborhood facilities program are still too limited to permit any valid judgements on economic effects.

#### 10. *Economic classification of program expenditures*

The neighborhood facilities program was not operating in fiscal year 1965.

(NOTE.—In national income terminology this is considered a grant to local governments.)

### LOW-INCOME HOUSING DEMONSTRATION PROGRAM

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. *Objectives*

The program was created by section 207 of the Housing Act of 1961, which authorized grants to public and private organizations for developing and demonstrating new or improved means of providing housing for low-income persons and families.

The original authorization of \$5 million was increased to \$10 million under the Housing Act of 1964 and to \$15 million under the Housing and Urban Development Act of 1965. Eligible demonstrations include but are not limited to construction techniques. Other aspects,

such as design, land acquisition, land use, rehabilitation and financing can be and are being dealt with.

## 2. Operation

The Secretary of the Department of Housing and Urban Development makes grants to eligible agencies for eligible demonstration projects. Applicants deal directly with the program staff, lodged in the Office of Program Policy. The final decision rests with the Secretary.

An advisory committee of nationally known experts in housing, architecture, construction technology, and social welfare assists with selection of the most promising proposals.

In selecting proposals the Department considers the judgment of the advisory committee and receives assistance from staff of departmental operating programs.

Demonstration funds are generally not used for financing the development of the housing which is the context of the demonstration, but for the conduct of the demonstration as such, its evaluation, and the preparation of a report.

The evaluation, in most cases carried out by a third-party under contract with the grantee, is an integral part of each demonstration, the purpose being the development of guidelines for application of the new techniques, mechanisms, and principles to other situations and in other localities.

## 3. History

By the end of fiscal 1965, a total of \$6,086,282 had been allocated to 39 agencies. Grants ranged from a low of \$40,000 to a high of \$764,351, with an average of approximately \$156,000. The first contracts were approved in June of 1962.

## 4. Level of operations. (See table 1.)

Program: Low-income housing demonstration program.

Department or agency, and office or bureau: Department of Housing and Urban Development; Demonstration Programs Administration.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Unit	Fiscal 1964	Fiscal 1965	Fiscal 1966 estimate	Fiscal 1967 estimate
(a) Approved projects (39) <sup>1</sup> .....	9	7	8	14
(b) Participating bodies (39) .....	9	7	8	14
State government agencies (7) .....	2	3	0	(?)
Local governments (15) .....	1	1	2	(?)
Nonprofit groups (17) .....	6	3	6	(?)
(c) Federal finances: <sup>2</sup>				
Unobligated appropriations available .....	\$1,099,990	\$1,275,000	\$1,275,000	\$2,575,000
Obligation incurred .....	\$1,056,990	\$1,227,700	\$1,227,700	\$2,500,000
(d) Matching expenditures .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
(e) Number of Federal Government employees .....	<sup>4</sup> 3	<sup>4</sup> 3	<sup>4</sup> 3	<sup>4</sup> 7
(f) Non-Federal personnel .....	0	0	0	0
(g) Other measures .....	0	0	0	0

<sup>1</sup> Figures in parentheses refer to all projects approved since the beginning of the program.

<sup>2</sup> Cannot be predicted at this time.

<sup>3</sup> Difference between the 2 figures for each year represents administrative expenses.

<sup>4</sup> Information not available.

<sup>5</sup> 1 director, 2 program assistants.

<sup>6</sup> 1 director, 6 assistants.

## 5. Estimated magnitude of program in 1970

The probable program level in 1970 cannot be estimated. An increase over recent and current levels is considered both desirable

and necessary. This is consistent with the administration's emphasis upon development of programs and techniques that help the poor. Improvement of the housing conditions of low-income families is a major goal, and all possible ways to reach this objective should be tested and evaluated.

#### 6. *Prospective changes in program orientation*

(a) There are no legislative proposals pending which would change the program orientation.

(b) Increased staff is urgently required to follow up the increasing number of demonstrations; to assist participating bodies in execution, evaluation, and reporting; and to assure useful results from the investments made by the Government.

(c) The program orientation depends on trends in housing and other social policy. If a new method tested under the demonstration program becomes, through legislation, part of an operating program, it is no longer a suitable object of a demonstration. A case in point is the rent supplement program, first pioneered under the demonstration program, which is now incorporated in the 1965 Housing and Urban Development Act.

The emphasis on human development, inherent in the Economic Opportunity Act, the fact that State governments are taking an increasing interest in housing in their States, and the need to utilize new technology in developing low-cost housing play a growing role in the emphasis of the program.

Supplementary funds from OEO to one of the grantees enlarged the scope of the demonstration carried out by the city of New York. The first contract with a State government was approved in June 1965 (California) followed by contracts with the State of North Carolina and the Commonwealth of Pennsylvania in June of 1965. The program is likely to be oriented more strongly in the future than it has been in the past to problems of how to translate technological advances into lowered cost of housing.

The program will continue to be flexible and imaginative in approach. Regardless of what form or organization it will have in 1970, it will maintain its emphasis upon finding ways to get better housing for the low-income families and the poor.

#### 7. *Coordination and cooperation*

Because of its small staff, which cannot provide expertise in all fields of housing, the demonstration program, which operates nationwide and which involves technical, financial, and other types of expertise, relies heavily on advice, guidance, and consultation from other parts of the Department and the Government.

(a) Within the Office of Program Policy advice is received from virtually all members of the staff.

(b) The Department's Coordinating Board on Research and Demonstrations, chaired by the Director, Office of Program Policy, and on which the demonstration program is represented, establishes guidelines for areas of program activity and reviews proposals before they are approved.

(i) Many proposals require coordination with and the cooperation of other branches within the Department. In most cases, the basic financing for the housing which constitutes the demon-

stration setting, is obtained through the use of customary financing aids supplied under PHA and FHA programs.

(ii) Cooperation agreements take the form of informal and formal consultation, exchange of memorandums of understanding, etc.

Because each demonstration usually requires a different form of cooperation, the procedures are not formalized but developed on a case-by-case basis.

(c) Cooperation with other Federal departments or agencies is required less frequently because most of the program resources are lodged within the Department. However, the Bureau of Indian Affairs is directly involved in one demonstration dealing with self-help housing on Indian reservations. Conferences have been held with representatives of OEO, USDA, and others for the purpose of coordinating efforts that might have beneficial results for more than one agency.

(d) State governments are participating bodies in three cases; State universities in another four.

(e) Local governments are participating bodies in 4 cases; local housing authorities in an additional 10.

(f) The program has had no dealings with foreign governments or international organizations. On occasion, program staff provides orientation on the program to foreign visitors.

(g) Slightly less than one-half the grant contracts are with private nonprofit corporations. They include general community welfare organizations, special community-purpose organizations, and one educational institution.

(h) Numerous business organizations approach the program for grants for what, in effect, would be product development. The program, however, cannot make grants to profit-motivated organizations or individuals. A number of demonstrations were stimulated by business groups, but are being carried out by nonprofit organizations. For example: a builder helped initiate the demonstration of the University of Florida, under which low-income families acquire owner-occupied houses under modified credit criteria. The Home Builders Association of Tulsa, Okla., initiated a demonstration, carried out by the city of Tulsa, under which low-income families acquire new houses under a lease-with-option-to-buy arrangement. A demonstration designed to apply modern engineering techniques to rehabilitation is carried out by the Institute of Public Administration. The T. Y. Lin Corp. carries out the technological work under a third-party contract.

### *8. Laws and regulations*

Section 207 of the Housing Act of 1961 (75 Stat. 165, 42 U.S.C. 1436 (June 30, 1961)), authorized the Housing and Home Finance Administrator to enter into contracts to make grants not exceeding \$5 million to public or private bodies or agencies to develop and demonstrate new or improved means of providing housing for low-income families.

Section 203(e) of the Housing Act of 1964 (78 Stat. 784 (Sept. 2, 1964)), amended the 1961 act to authorize demonstrations of the types of housing and the means of providing housing that will assist low-income persons or families who are handicapped.

Section 407 of the Housing Act of 1964 (78 Stat. 796 (Sept. 2, 1964)), increased the amount authorized for the program to \$10 million.

Section 1105 of the Housing and Urban Development Act of 1965 (79 Stat. 503 (Aug. 10, 1965)), increased the amount authorized for the program to \$15 million.

The low-income housing demonstration grant program is subject to regulations issued by the Department of Housing and Urban Development to effectuate title VI of the Civil Rights Act of 1964. (24 CFR, subtitle A, pt. 1.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

The demonstration program is too small—\$6 million committed since its start in 1961—to have a discernible direct effect on the income level of persons served, the distribution of income, employment levels, business stimulation, or the gross national product. The program is geared to the development of new methods and techniques, and the number of housing units produced in the process is incidental, and usually small. (NOTE.—The dollar volumes of housing produced under this program, and employment and payroll generated would be included within the figures provided for FHA and PHA programs.)

Housing demonstrations produce guidelines for policy and insights for the decisionmaking process. The economic value of such guidelines lies in the future avoidance of improper policies, as well as the institution of new programs designed to achieve national goals more expeditiously, at lower cost, and at greater benefit to families and communities. A small breakthrough in the technological field is likely to be worth many times the small government investment. The value of mistakes avoided cannot be measured; it can be great, indeed.

The economic and technical potentials of each proposal are scrutinized to the degree necessary to assure a fair chance of success, not to guarantee it. Since it is the objective of the program to venture new approaches and to explore as yet untried and unproven alternatives, no more than a fair chance can and should be assured. Even outright failures serve a useful purpose in that they document as infeasible or undesirable certain approaches before they become part of an operating program.

None of the demonstrations is, as yet, completed. The first reports will become available during the current fiscal year.

### 10. *Economic classification of program expenditures*

No tabular presentation of economic effects of program expenditures is provided, primarily because of the relatively insignificant amount of its expenditures. Moreover, because each project is distinct from all others, a prohibitively detailed analysis, project by project, would be necessary.

## RENT SUPPLEMENT PROGRAM

## PART I. DESCRIPTION OF THE PROGRAM

*1. Objectives*

The program is intended to produce privately owned rental housing which will serve certain categories of low-income families. Housing to be provided under this program, whether new construction or substantially rehabilitated units, will be financed at market rates of interest under the FHA section 221(d)(3) program. Under ordinary circumstances, the rent required for such housing would be out of the financial reach of poor families. The rent supplement program, however, makes these units available to low-income households by virtue of a rent supplement payment, made by the Federal Government to the eligible private owner of the project. The amount of this rent supplement will represent the difference between the rent which the eligible occupant can pay, on the basis of a 25-percent rent-to-income ratio, and the market rent which is required to amortize the project and pay for its operation and maintenance. This program represents a radically new approach to answering the housing needs of low-income families, through a partnership between private ownership and the Federal Government. The private owners who are eligible to enter into rent supplement contracts are restricted to private nonprofit organizations, limited dividend corporations, and cooperative groups.

Families eligible to obtain rent supplement payment benefits are those with incomes below limits set in each locality—generally the same as for public housing—and who are either: (1) occupants of substandard housing, (2) elderly, (3) physically disabled, (4) governmental action displacees, or those whose housing units were severely damaged or destroyed by natural disasters occurring after August 10, 1965. In addition to the foregoing requirements, eligibility is confined to families with assets of less than \$2,000, or \$5,000 in the case of the elderly.

*2. Operation*

As of this reporting date the program is not yet in operation. Although authorized under the Housing and Urban Development Act of 1965, it has not yet been funded, and appropriation act approval from the Congress has been requested. The following describes how the program will operate once contractual authorization funds are made available.

The primary responsibility for administering the rent supplement program will rest with the Federal Housing Administration, a constituent agency of HUD. Responsibility for issuing mortgage insurance commitments will rest with the 76 individual local insuring offices of FHA. The Secretary of HUD, however, will retain responsibility for defining the eligible market for such housing (in terms of income limits), and he will also allocate the program authorizations for rent supplement payments by regions, and by individual market areas.

The project will be built under the FHA section 221(d)(3) mortgage insurance section. The mortgage limits to be established for such housing will assure that the housing production will be of modest, but

adequate nature. Mortgages for these projects will be at market rates of interest, and private financing will supply the mortgage funds. Once issued, these mortgages will be eligible for purchase under the regular secondary market operations of the Federal National Mortgage Association.

Project owners will enter into a contract with FHA for the 40-year life of the mortgage. This contract will establish the amount of rent supplement payments which will be paid in behalf of eligible low-income household occupants. The level of the payments will be predicated on the number of low-income families that will be served in the project, and the amounts of rent supplement payments that these families will require.

Applicant families will be certified by FHA as to income and asset eligibility and also as to other criteria of eligibility, e.g., elderly status, occupancy of substandard housing, etc. Continued eligibility as to income and assets will be recertified at each lease expiration. As household incomes rise, the occupant families will pay higher rents—on the same 25-percent basis—until they reach the full market rent required for the unit. These higher income families will not be required to move, but can remain in occupancy by paying the full rent.

A number of projects will be designed so that individual units can be purchased by their occupants on a lease-purchase basis. During the course of occupancy, these families may pay "extra" funds into an escrow account. When family incomes increase to a level at which full housing costs can be met and the required small downpayment is accumulated, a separate mortgage will be written for the unit, and the occupant will assume title.

Project owners will, in the great majority of cases, pay full real estate taxes. Earnings from interest will be subject to full corporate and personal income taxes.

### 3. *History*

This is a newly authorized program, as yet unfunded. Its legislative background indicates that the Congress was concerned with flexible and alternative means of directly serving the housing needs of low-income families. Heretofore, the only Federal program able to serve such families had been the low-rent public housing program, wherein the partnership relationship was between two public bodies. The rent supplement program will now enable certain types of private owners to develop and operate such housing. In conjunction with the direct construction, leasing and acquisition and rehabilitation programs of the Public Housing Administration, the rent supplement program will supply both an expanded magnitude and a more diverse set of alternative housing choices to the poor.

### 4. *Level of operations.* (See table 1.)

Program: Rent supplement program.

Department or agency, and office or bureau: Department of Housing and Urban Development.

TABLE 1.—*Level of operations or performance, fiscal years 1966-67*

Measure	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (dwelling units).....	50,000	58,000
NOTE.—Proposed budget authorizations are for contracts for up to \$30,000,000 in annual payments in fiscal year 1966 and \$35,000,000 for fiscal year 1967. These contracts normally will run for 40 years. HUD assumes an average rent supplement benefit of \$600 per family per year.		
(b) Applicants or participants:		
State government agencies.....	None	None
Local communities or governments.....	None	None
Individuals or families.....	None	None
Number of project owners.....	330	385
NOTE.—Assume that each project will contain an average of 150 families who will receive rent supplement payments.		
(c) Federal finances:		
Unobligated appropriations available.....	}	(1)
Obligations incurred.....		
Allocations or commitments made.....		
(d) Matching or additional expenditures for the program.....	None	None
(e) Number of Federal Government employees administering, operating, or supervising the activity.....	90	105
(f) Non-Federal personnel employed in the program.....	None	None
(g) Other measures of level or magnitude of performance.....	(2)	(2)

<sup>1</sup> Program not yet funded. Necessary appropriation action to permit rent supplement contracts has been requested of Congress.

<sup>2</sup> Not applicable.

### 5. *Estimated magnitude of program in 1970*

The Housing and Urban Development Act of 1965 authorized contractual obligations for annual rent supplement payments which will reach a cumulative level of \$150 million per year as of July 1, 1968. This reflects a first-year authorization of \$30 million, with subsequent additional authorizations of \$35, \$40, and \$45 million a year for the next 3 fiscal years. It is expected that congressional authorization for fiscal year 1969 will either follow the same pattern of increase (to \$50 million), or will extend the fiscal year 1967 or fiscal year 1968 levels of \$40 to \$45 millions.

Preliminary estimates of the potential market for rent supplement housing show about 3 to 4 million eligible households. The rent supplement program will, from its 4-year authorization, serve about 250,000 of these families. It should be noted that the low-serve public housing program will also serve the same general market, and its 4-year authorization, under the Housing and Urban Development Act of 1965, will provide about 180,000 units that can serve the poor. The 2 programs, combined, will serve only a fraction of the potential need, from 10 to 14 percent, depending upon whether the 3 or 4 million universe figure is used for computation.

Certain internal changes in the potential market for such housing will probably occur. As personal incomes continue to rise and high levels of employment are maintained, the number of nonelderly families in substandard housing will probably decrease, duplicating the 1950-60 experience. This, however, will be partially offset by the increasing numbers of elderly whose low retirement incomes will make them eligible for these program aids. A third major source of market, governmental action displacement, will probably continue to show moderate increases.



### 6. *Prospective changes in program orientation*

(a) Pending legislative proposals: There are none at the present time.

(b) Proposed administrative and organizational changes: The program is not yet in operation. Program experience must be gained before the need for change becomes evident.

(c) Probable changes in the conditions under which the program will function in 1970: As indicated above, it is possible that the elderly will constitute an increasing segment of the effective market.

It should be also noted, at this time, that the rent supplement program authorizes 10 percent of the funds to be used under an experimental program. Five percent, or half, can be used in connection with projects which are financed under the FHA section 221(d)(3), below-market-rate-of-interest program. The combination of more advantageous financing (presently authorized at 3 percent) and rent supplements will allow families with extremely low incomes to be served. The other 5 percent will be used in housing-for-the-elderly projects, financed either under the market-rate-of-interest, FHA section 231 program, or under the below-market-rate-of-interest, Community Facilities Administration section 202 direct loan program. The latter will also allow elderly families of very low income to be served. If the experience gained with regard to this experimental effort proves to be a feasible method of housing very low-income families, it might be expanded.

### 7. *Coordination and cooperation*

(a) *Within your bureau, division, or office.*—The Secretary's office will develop criteria and standards for more precise evaluation and measurement of needs for rent supplement housing, and it will develop improved measures for coordinating programs which serve this same market. It will define the market to be served in various localities, and it will allocate, by region and housing market, the amounts of rent supplement housing to be built.

These activities will be lodged in the Office of Program Policy, which is a comparatively small organization. No problems of internal coordination are anticipated.

(b) *With other units of your department or agency.*—As indicated previously, day-to-day administration of the program is delegated to the Federal Housing Administration. The FHA will be headed, by statute, by an Assistant Secretary of HUD. No problems of coordination or cooperation are anticipated.

With the increasing number and complexities of housing programs, there will be greater need to obtain improved program coordination and more precise allocations of all HUD program resources to individual housing markets. This will be pursued, and one of the most important mechanisms for securing these goals will be a stepped-up program of housing market analysis.

(c) *With other Federal Government departments or agencies.*—Since the rent supplement program is intended to serve the poor, we anticipate that coordination and cooperation will be strengthened with all agencies and departments that have programs serving this group. In addition to the Office of Economic Opportunity and its local extensions through the community action programs, we expect close cooperation, for example, with HEW. Such coordination has already

been established between HEW and PHA in the operation of low-rent public housing projects where HEW and local and State agencies bring concerted social services to low-rent-project occupants. We also expect closer contact and collaboration with the Department of Agriculture regarding possible program overlap in smaller communities.

(d) *With State governments or their instrumentalities.*—This will occur in the areas of supplying various kinds of social services to the occupants of rent supplement housing. This will probably occur with highest intensity in rent supplement projects which have a preponderance of occupancy by the elderly.

(e) *With local governments or communities.*—See comment (d) above.

(f) *With foreign governments or international organizations.*—None required and none expected.

(g) *With nonprofit organizations or institutions.*—These private groups will constitute a major source of sponsorship under the rent supplement program.

At the present time, HUD is cooperating with OEO in that agency's proposed program to develop suitable and adequate nonprofit sponsorship for various kinds of housing development—notably, rent supplement housing. OEO contemplates a program whereby it will supply "seed money" to help formation of such nonprofit sponsor organizations, develop management competence, and support possible financial losses incurred in the development of suitable project proposals to FHA.

(h) *With business enterprises.*—Limited distribution corporations and cooperative groups will be eligible sponsors under the rent supplement program. (Note: The largest category of sponsors under the FHA section 221(d)(3) below-market-rate-of-interest program has been of the limited dividend nature.)

(i) *With others.*—There will be continuing relationships and contacts with professional housing and planning organizations and with professional industry groups.

## 8. Laws and regulations

The enabling legislation for this program is the Housing and Urban Development Act of 1965, Public Law 89-117, 89th Congress, August 10, 1965. The program is authorized under section 101 of the act.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

(a) *Effects on personal incomes of persons served and on the distribution of personal incomes.*—The rent supplement payment benefits will not increase the disposable incomes of project occupants, except to the extent that a number of occupant families may wind up paying a lower proportion of income for rent than previously. These possible benefits cannot be estimated at this time.

(b) *Effects on placement or productivity of workers, or both, and on their earnings.*—An improved environment may stimulate the desire of occupant families to seek a better way of life; in so doing, they may take advantage of those aids and programs which will improve their earning capacities. The rent supplement program will support such motivations, since an increase in income will not jeopardize continued occupancy in the rent supplement project.

(c) *Effects on business or industrial organization and management.*—Viewed from the standpoint of our Nation's total housing production, the rent supplement program will supply a significant impact. An initial rent supplement program that serves 50,000 families represents 3.3 percent of the 1.5-million unit annual housing output. These represent units which would, undoubtedly, not have been built otherwise. A premise used for planning purposes is that the typical size of projects built under this program will run to about 180 to 200 units, with about 150 of these occupied by families who receive rent supplement payments. Projects of this size are not, ordinarily, considered large enough to support development of major new shopping centers, although they may provide a purchasing power nucleus for supporting building, or expansion, of neighborhood shopping centers.

(d) *Effects on the stability, level, volume, or other aspects of employment, wages, costs, production, sales prices, or other phases of economic activity.*—Based upon BLS estimates, the construction which will flow from rent supplement program authorizations will generate the following volumes of business activity, employment, and payroll: (Note: for comparative purposes, indexes and earnings are held constant for the 4-year period.)

	Fiscal year 1966	Fiscal year 1967	Fiscal year 1968	Fiscal year 1969
Dollar value of construction <sup>1</sup> (millions).....	318	371	424	477
On-site and off-site man-years of employment (rounded).....	33,000	38,000	44,000	49,000
Payroll (millions of dollars, rounded).....	190	221	253	285

<sup>1</sup> Assuming average value of \$12,500 per unit, of which approximately \$10,600 is represented by outlays for site improvement and housing construction. This latter figure is reflected in above computation.

The foregoing will be noninflationary. According to Department of Labor information, present underemployment in the construction industry can support increments of hiring which are substantially greater than the increased employment needed to support the rent supplement housing program. The attendant requirements for building materials and housing equipment (in light of the 3.3 percent addition by this program to total housing starts, mentioned previously) represent no more than the anticipated productivity increases in these industries.

(e) *Other benefits.*—The rent supplement program, in conjunction with continuing housing production under the low-rent public housing program and under the section 221(d)(3) below-market rate of interest program, will have the broad effect of increasing the supply of standard housing available to and within the capabilities of the poor. This, in turn, will have the longer range effect of tending to reduce rents for private housing available to the poor. In turn, this will allow lower-income families to allocate increased portions of their incomes to other vital consumer needs. Private landlords, faced with increased competition, will be motivated to improve their properties in order to attract tenants. Where rehabilitation is not economically feasible, private landlords will remove properties from the market—a consequence which would not have been possible under “shortage” conditions.

(f) *Pertinent geographic differentials.*—Rent supplement projects will be initially produced where needs are greatest and where private

builders are most ready to take advantage of the new vehicle. Urban renewal activities are expected to supply many sites for these projects which will be built within the central cities of large metropolitan areas.

(g) *The measurable contribution of the program to either the magnitude or the rate of growth of the gross national product.*—The following identifies the relationship of economic contribution of the rent supplement program to the GNP.

	Fiscal year 1966	Fiscal year 1967	Fiscal year 1968	Fiscal year 1969
Dollar value of construction (millions).....	375	437.5	500	562.5
Estimated GNP (billions of dollars).....	670	730	765	800
Percent of dollar value of construction to GNP..	0.056	0.060	0.065	0.070

The foregoing assumes that rent supplement housing will represent net additions to the GNP that would otherwise not have occurred. It should be noted, however, that the volume of new rental housing starts has been declining during the last year. In this regard, the rent supplement program provides a desirable "offset" to declines that might seriously affect the health of the economy. The "lead" cyclical effect of the construction industry is well known; any program which can contribute to the stability and orderly growth of the homebuilding industry will have a value far greater than the actual dollar volume of benefits which is involved.

#### 10. *Economic classification of program expenditures*

The program was not funded in 1965. Administrative expenses were provided in Supplemental Appropriation Act, 1966, dated October 31, 1965.

### COLLEGE HOUSING PROGRAM

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. *Objectives*

The college housing program was created by title IV of the Housing Act of 1950 to assist educational institutions, through long-term Federal loans, in the construction, expansion or rehabilitation of dormitories and other housing for students and faculty. The program has since been expanded to cover service facilities such as dining halls, student unions, and infirmaries and to cover housing for student nurses, interns, and resident physicians at approved hospitals.

##### 2. *Operation*

The program is conducted in the seven regional offices of the Department of Housing and Urban Development under the direction of the regional director of community facilities with general policy supervision by the central office of the Community Facilities Administration. Eligibility, financial, legal and engineering reviews are conducted on each application. Actual construction is the responsibility of the borrower with the Government a third party to the contract, performing specified inspection only.

Loans under the college housing program may be made only to the extent that the applicant institution is unable to obtain the necessary financing elsewhere on equally favorable terms and conditions. Loans are made through Government purchase of bonds issued by the college or hospital. The bonds are first offered for sale in the open

market, by means of public advertisement, and are purchased by the Government only when there is no other equally favorable offer by private investors or bond houses. The Government may purchase all or only a part of the bond issue. Loans may be made for up to 100 percent of the eligible costs of developing and constructing projects. However, financial participation by the applicant is encouraged to the extent possible.

The program is financed through a revolving fund which is funded by an authorization to borrow from the Treasury as a public-debt transaction. The initial enactment in 1950 provided a borrowing authorization of \$300 million; this amount has been increased on several occasions to a cumulative total of \$3,175 million during fiscal year 1966. Program policies are directed toward the development of sound loans to protect the interests of the Federal Government, private lenders, and the borrowers. The success of the Agency efforts in this regard is attested to by the fact that as of June 30, 1965, more than \$1,883 million in bond issues were held by the Agency, none of which was in default. Loans may be repaid over a period not to exceed 50 years.

### *3. History*

The college housing program was enacted as title IV of the Housing Act of 1950 to provide loans for the construction of housing on college campuses. It provided an initial authorization of \$300 million to fulfill the purposes of the act.

Plans to carry out the mandate of title IV were suspended when the Korean war began, and the need to conserve construction materials became pressing. However, in December 1950, a Presidential Executive order made available \$40 million of the \$300 million that had been authorized, with the stipulation that funds were to be used only for college housing that contributed to defense activities. This defense-connected requirement lasted until August 1953.

Amendments adopted during the 84th Congress broadened the types of facilities which could be included under the program to include cafeterias, dining halls, student centers, or unions, health facilities, and other essential service facilities for students (the 1950 act provided these facilities only for students in dormitories financed by the college housing program); lowered the interest rate; and increased the size of the loan fund by \$200 million.

The new lower interest rate stimulated a flood of loan applications. During fiscal year 1956, 388 applications for loans of \$430.2 million were filed, as compared with the previous 5 fiscal years, when there had been a total of 460 applications for \$340.7 million in loans.

The Housing Act of 1956 added another \$250 million to the \$500 million already authorized. In 1957 the loan fund was increased by \$175 million, and in 1958 by yet another \$250 million. There was not any authorization in 1959, because no Housing Act was passed. In 1960 the authorization was increased by another \$500 million.

The Housing Act of 1961 was a high point in the development of the program. The act provided funds for 4 years, instead of annually as in the past. Furthermore, it raised the annual rate of authorization for fiscal years 1962 through 1965 to \$300 million, which was almost double the average annual rate of \$165 million in the first 10 years of the program.

During the 89th Congress in 1965, eligibility under the program was broadened to include new colleges and certain public vocational and

technical institutions. The interest rate was changed from a computed rate which had been in effect since 1955 to a maximum of 3 percent. In addition, cumulative authorizations under the program were increased \$300 million a year through fiscal year 1969, bringing the total authorization to \$4,075 million.

#### 4. Level of operations. (See table 1.)

Program: College housing program.

Department or agency, and office or bureau: Department of Housing and Urban Development; Housing Assistance Administration [formerly in Community Facilities Administration].

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year			
	1964	1965	1966 estimate	1967 estimate
(a) Magnitude of program:				
(1) Net project approvals:				
Number.....	247	244	222	201
Amount (millions).....	\$307.7	\$338.8	\$347.5	\$328.7
(2) Construction starts.....	210	226	211	278
(3) Construction completions.....	243	231	245	220
(4) Housing accommodations and related facilities approved:				
Men students.....	36,578	36,326		
Women students.....	36,016	31,016		
Student families.....	1,579	907		
Faculty.....	71	274		
(b) Applicants or participants:				
Colleges and hospitals (applications).....	316	352	1,357	1,129
Colleges and hospitals (millions).....	\$427.0	\$526.0	\$610.0	\$232.1
(c) Federal finances:				
Unobligated appropriations:				
Available (millions).....	\$300.0	\$300.0	\$300.0	\$300.0
Number (fund reservations).....	239	206	182	184
Amount (fund reservations) (millions).....	\$298.5	\$293.2	\$300.0	\$300.0
(d) Matching or additional expenditures.....	None	None	None	None
(e) Number of Federal employees.....	(?)	(?)	(?)	(?)
(f) Non-Federal personnel.....	0	0	0	0
(g) Other measures of level.....	(?)	(?)	(?)	(?)

<sup>1</sup> Acceptance of applications was suspended Jan. 31, 1966. The fiscal year 1967 estimates assume the suspension will be lifted late in the fiscal year.

<sup>2</sup> Not available.

#### 5. Estimated magnitude of program in 1970

Any estimate of the program level in 1970 must be made in the context of broad economic-budgetary-social-educational policy. It is conceivable that a demand could exist in 1970 to support a program level in excess of \$1 billion annually.

#### 6. Prospective changes in program orientation

We do not foresee any significant change in program orientation or emphasis within the next few years.

#### 7. Coordination and cooperation

(a) Coordination of the college housing program within the Community Facilities Administration is accomplished through the Assistant Commissioner for Operations and Engineering. The program depends on other organizational units for services and technical assistance.

(b) Coordination with the Commissioner of Education is maintained on determining eligibility of educational institutions for participation in the program.

(c) Coordination with colleges and universities is coordinated through an Advisory Committee, appointed by the Administrator, representative of colleges and educational associations.

### 8. Laws and regulations

*Housing Act of 1950, Public Law 81-475, April 20, 1950.*—Program enacted with authorization of \$300 million for 40-year loans for the construction of college housing.

*Housing Amendments of 1953, Public Law 83-94, June 30, 1953.*—Changed basis of determining interest rate.

*Housing Act of 1954, Public Law 83-560, August 2, 1954.*—Changed effective date when "current interest rate" is applied.

*Housing Amendments of 1955, Public Law 84-345, August 11, 1955.*—Eligible facilities broadened to include separate dining halls and cafeterias, student unions, and student centers, infirmaries and "other essential service facilities."

Authorization increased from \$300 to \$500 million, with not to exceed \$100 million to be used for facilities other than housing. Automatic interest rate reestablished. Maximum term of loan increased from 40 to 50 years. Certain nonprofit corporations made eligible for loans. Reduced interest rate extended retroactively to certain previously approved loans.

*Housing Act of 1956, Public Law 84-1020, August 7, 1956.*—Increased revolving fund by \$250 million.

*Housing Act of 1957, Public Law 85-104, July 12, 1957.*—Amended eligibility provisions of law. Increased revolving fund by \$200 million. Twenty-five million dollars sublimitation for nursing students or intern housing.

*Housing Act of 1959, Public Law 86-372, September 23, 1959.*—Cosignature on note of student housing cooperatives.

*Housing Act of 1959, Public Law 86-788, September 14, 1960.*—Cosignature on note of student housing cooperatives.

*Housing Act of 1961, Public Law 87-70, June 30, 1961.*—Changed maximum cumulative total loans which could be made to institutions within any State from 10 to 12½ percent.

*Housing Act of 1964, Public Law 88-560, September 2, 1964.*—Eligibility changes.

*Housing Act of 1965, Public Law 89-117, August 10, 1965.*—Eligibility broadened to include new colleges and certain public vocational and technical institutions. Interest rate fixed at 3 percent maximum.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

(a) The direct loan program has made possible lower costs of housing for college students and faculty by virtue of lower interest rates and longer terms for loans. Current rate for private financing is approximately 4 percent for 35 years, as compared with the Federal loan maximum rate of 3 percent for 50 years. The difference in amortization is about \$4 per thousand per year. Assuming average costs for space of \$5,000, there is a rental saving possible of \$20 per student per year. Assuming that approximately 70,000 spaces will be provided, gross savings will total approximately \$1.5 million per year through 1968. Further, it is quite possible that students will be able

to obtain college educations because housing is available through the direct loan program who might not otherwise have been able to go to college.

(b), (c), (d), (e), and (f) not applicable.

(g) It is very difficult to relate this program to the gross national product. However, some studies indicate that a college education increases the earning capacity of a person by about \$3,000 per year, as compared to the high school graduate. Since housing can provide college educational opportunities which might not otherwise be available, the college housing program has an impact on the increased earnings mentioned above. In addition, the construction costs and salaries of providing the additional college housing facilities do contribute to GNP, as indicated in (h) below.

(h) Other economic effects:

(1) About 80 percent of a loan goes for construction and other labor, which produces about 15 percent in Federal taxes, and one-quarter of this in State and local taxes.

(2) About one-half of the loan is for materials, on which there is an average sales tax of 2 percent.

(3) Each project produces an increase in the number of man-years of labor, assuming that 80 percent of the project is construction cost, and that each \$1,000 produces 207 man-hours of labor, and an average of 2,000 man-hours makes up a man-year.

#### 10. *Economic classification of program expenditures.* (See table 2.)

Program: College housing program.

Department or agency, and office or bureau: Department of Housing and Urban Development; Housing Assistance Administration [formerly in Community Facilities Administration].

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]	
Federal Government:	
Loan disbursements.....	262, 050
Other expenditures <sup>1</sup> .....	50, 715
	312, 765
Total, Federal expenditures <sup>2</sup> .....	
Non-Federal expenditures, not available.	

<sup>1</sup> Other expenditures include interest payments as well as other administrative costs.

<sup>2</sup> Expenditures are shown on a gross basis. Net expenditures are \$220,700,000.

NOTE: In national income terminology, the college housing loan fund is classified as a government enterprise.

## PUBLIC FACILITY LOANS

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

The program is intended to serve as a loan resource for small communities unable to obtain credit in the private market on reasonable terms for financing needed public works. Eligibility extends to political subdivisions and instrumentalities of States serving populations under 50,000 (under 150,000 in redevelopment areas and no population limit for communities near NASA installations) and to Indian tribes. Loans must be reasonably assured of repayment. The maximum maturity is 40 years.

Small communities are frequently disadvantaged in borrowing. Many are relatively unknown in the capital markets, they are inexperienced in financial matters, they lack the established credit ratings



of their larger counterparts, and their small bond offerings are not particularly attractive to private investors. In these situations, the PFL program is available as a "lender of last resort," making possible facilities essential to health and welfare that would not otherwise be constructed or would be built only with the penalty of excessive interest charges.

## *2. Operation*

The program operates wholly as a direct Federal operation. Program operations are highly decentralized, with major responsibilities delegated to the seven regional offices and one area office of the Department of Housing and Urban Development, under the general supervision of a Washington headquarters office.

## *3. History*

Authorization for the program derives from title II of the Housing Amendments of 1955, as amended. The PFL program is the functional successor to programs initiated in 1932 under the Reconstruction Finance Corporation and in 1933 under the Public Works Administration to assist State and local governments in the construction of needed public works.

Prior to the passage of the Housing Act of 1961 the eligible applicants were defined as "States, municipalities and other political subdivisions of States, public agencies, and instrumentalities of one or more States, municipalities and political subdivisions of States, and public corporations, boards, and commissions established under the laws of any State" having authority under State or municipal law to finance specific public projects. Section 501(b), Housing Act of 1961, Public Law 87-70, further restricted the eligibility to authorized municipalities and other political subdivisions and instrumentalities of States (including public agencies and instrumentalities of one or more municipalities or other political subdivisions in the same State.) Thus, States no longer are eligible. In 1962, Indian tribes became eligible for program assistance under the provisions of section I of Public Law 87-808.

Title II of the Housing Amendments of 1955 requires that the Department of Housing and Urban Development give priority to applications of smaller municipalities for assistance in the construction of basic public works (including water, sewer and gas distribution systems) for which there is an urgent and vital need. "Smaller municipalities" are defined in the statute as incorporated or unincorporated towns, or other political subdivisions of a State, having a population of less than 10,000 inhabitants at the time of the last Federal census. Public Law 87-808 added Indian tribes within the meaning of small communities.

Title II of the Housing Act of 1961 amended the eligibility requirements by establishing maximum population limits. Financial assistance was limited to eligible public agencies having a population of less than 50,000, or less than 150,000 in the case of a community located in a redevelopment area as designated under the second section of section 5(a) of the Area Redevelopment Act. A community of less than 150,000 population in or near which is located a research or development installation of the National Aeronautics and Space Administration was also made eligible by Public Law 87-634, ap-

proved September 5, 1962. Section 5(a), Public Works Acceleration Act, Public Law 87-658, approved September 14, 1962, eliminated population limits for communities extended assistance in financing projects accelerated as a result of a grant-in-aid under section 9 of the act.

The Housing Act of 1964 provided that the under-150,000 population limitation theretofore applicable to communities located in redevelopment areas designated under section 5(a) of the Area Redevelopment Act was extended to include communities in redevelopment areas designated under section 5(b) of that act. Additionally, in the case of a project serving two or more communities, the population of each community, rather than their aggregate populations, was made determinative in meeting the prescribed population limitations.

The Housing and Urban Development Act of 1965 established three additional modifications. Private nonprofit corporations were made eligible for loans to finance the construction of sewer and water facilities in smaller communities and rural areas where it was not feasible to provide such services through a public body. Population limits were removed for communities in or near which is located a research or development installation of the National Aeronautics and Space Administration. The special population limits previously made applicable to communities located in redevelopment areas designated under sections 5(a) and 5(b) of the Area Redevelopment Act were defined to include, additionally, redevelopment areas designated in acts successor thereto.

The initial authorization for the PFL program established a \$100 million revolving fund. In 1960, Congress authorized an additional \$50 million, and the Housing Act of 1961 authorized another \$50 million (of which \$50 million was set aside for loan for mass transit facilities). Thus, the current revolving fund authorization for public facility loans (excluding mass transit loans) is \$600 million.

#### 4. Level of operations. (See table 1.)

Program: Public facility loans.

Department or agency, and office or bureau: Department of Housing and Urban Development; Land and Facilities Development Administration [formerly in Community Facilities Administration].

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Net approved loans:				
Number of projects.....	121	79	113	72
Amount (millions).....	\$45.2	\$75.3	\$30	\$30
(b) Participant local communities (number).....	110	73	101	65
(c) Unobligated appropriations available <sup>1</sup> (mil- lions).....	\$75	\$85	\$30	\$30
Obligations incurred (millions).....	\$45.2	\$75.3	\$30	\$30
(d) Additional expenditures by borrowers (mil- lions).....	\$1.2	\$0.76	\$0.4	\$0.4
(e) Federal employees administering program.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
(f) Non-Federal employees (number).....	None	None	None	None
(g) Other measures of performance.....	None	None	None	None

<sup>1</sup> Funds apportioned by Bureau of Budget.

<sup>2</sup> Not available.

5. *Estimated magnitude of program in 1970*

The program is expected to reach a net approval level of \$50 million in 1970.

6. *Prospective changes in program orientation*

There are no pending or currently foreseeable legislative proposals, administrative and organizational changes, or changed conditions under which the program will function in 1970, that will cause prospective or probable changes in program orientation or emphasis.

7. *Coordination and cooperation*

(a) Within the Community Facilities Administration, the policies, procedures, and functions of the PFL program are closely and continuously coordinated with all other operating programs of CFA and with the full technical staffs and administrative elements of the organization.

(b) Frequent meetings, informal discussions, and exchanges of program and administrative materials are effected between PFL program staff and other operating and administrative units of HUD to assure coordination and cooperation among the components of the Department.

(c) An interagency task force is currently reviewing the functions and objectives of the various Federal agencies engaged in financing local public works.

(d) HUD coordinates regularly with the National Legislative Committee of State Governments to suggest State legislation designed to facilitate use of public facility loan funds by local communities.

(h) HUD consults regularly with representatives of the investment banking industry to consider ways and means to make the PFL program dovetail most effectively with trends in the capital market to meet the public works financing needs of local communities. HUD is also in frequent touch with investment bankers to encourage private purchase of Government bond portfolios.

(e), (f), (g), and (i) None.

8. *Laws and regulations*

(a) Housing Amendments of 1955 (Public Law 84-345 (42 U.S.C.A. 149), Aug. 11, 1955).

(b) Housing Act of 1961 (Public Law 87-70, June 30, 1961).

(c) Public Law 87-808, October 15, 1962.

(d) Public Law 87-634, September 5, 1962.

(e) Housing Act of 1964 (Public Law 88-560, Sept. 2, 1964).

(f) Housing and Urban Development Act of 1965 (Public Law 89-117, Aug. 10, 1965).

Authorizations (Treasury borrowings):

(a) Housing amendment of 1955 (Public Law 84-345 (42 U.S.C.A. 149)).

(b) Public Law 86-788, September 14, 1960.

(c) Public Law 87-70, June 30, 1961.

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

(a), (b), and (d) No direct measurable effects.

(c) Direct effects are minor and incidental. The facilities assisted are generally and primarily for the direct use and benefit of the people

of the community as a whole; however, on occasion the facility (particularly in the case of sewer or water facilities) may include service to commercial or industrial customers thereby permitting such customers to operate more efficiently or to expand their operations, or to make possible the establishment of new business operations.

(e) The principal benefit and the major objective of the program is that of assisting small communities to finance public works essential to the local health and welfare. This includes not only such basic needs as sewer and water systems, but the cultural, recreational, and other facilities that are also essential to the well-being of the people of a dynamic society. The effects of such projects are of an environmental nature. Technically, the projects involve structures rather than people, but these structures are designed solely to serve people. As such, their impact on human resources is great. Indirectly but undeniably, they improve the productivity of workers and enhance social attitudes. By the same token they stimulate business activity and otherwise increase the viability of the local economy.

(f) About 80 percent of the applications are received from communities in Southeastern and Southwestern States and about 95 percent of the applications are from communities with populations under 10,000.

(g) The program is generally limited to assistance to relatively small communities and is specifically confined to financing projects for which credit is not otherwise available on reasonable terms. These limitations act to restrict the program to a small fraction of the total national public works construction. Over the past 10 years, for example, the average annual public works financing under the program has been less than \$40 million, whereas total public works construction costs have averaged about \$15 billion per year and the gross national product has been advancing to the \$678 billion level reached in 1965. Within this framework the contribution of the program to the magnitude or rate of growth of the gross national product is of no direct measurable significance.

(h) It is estimated that the program will finance 113 projects with loans totaling \$30 million in fiscal year 1966. These projects will generate approximately 6 million man-hours of employment and a payroll of about \$18 million. The remainder (\$12 million) of the loan funds will be allocated to materials used in project construction.

#### 10. *Economic classification of program expenditures.*

Program: Public facility loans.

Department or agency, and office or bureau: Department of Housing and Urban Development; Land and Facilities Development Administration [formerly in Community Facilities Administration].

In fiscal 1965 net approved loans of \$75.3 million were made to local governments.

NOTE.—In the national income accounts this program is classified as a government enterprise. In fiscal 1965 the net expenditures for this program were \$38.2 million.

### ADVANCES FOR PUBLIC WORKS PLANNING

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. *Objectives*

The program of advances for public works planning provides interest-free planning money. The objectives of this program are:

1. To help communities integrate their specific public works plans with overall community planning for future growth; to adjust planning to community financial abilities and prospects; to aid in the selection of proper sites and timely acquisition of land; to give residents and local businesses a chance to orient their future operations and plans;

2. To encourage States, counties, municipalities, and other local public agencies to maintain a reservoir of planned public works which can be placed under construction within a short time, particularly when national or local economic conditions make such action desirable; and

3. To promote economy and efficiency in planning and building public works.

### *2. Operation*

The program is administered by the Department of Housing and Urban Development through regional offices located in New York City, Philadelphia, Atlanta, Chicago, Fort Worth, San Francisco, Seattle, and Santurce, P.R. Applications are received and processed in the regional offices by legal, engineering, and finance technical staffs for general compliance with legal and policy requirements. The review at this time is directed toward the need for the facility, the legal basis of the applicant to plan and construct the contemplated public facility, the financial feasibility of the proposed project, and the likelihood that construction will actually be undertaken within the estimated period. The proposed project must be consistent with related State, regional, and local planning, and the applicant is encouraged to assess fully the priority of the project in relation to the total requirements of the community for planned public works.

Following the approval of the application for an advance, the community has a consulting engineer or architect prepare the plans for which the advance will be made. Plans thus completed are given detailed technical review by the community and by the State, regional, or local authorities as required. Approved plans are submitted to the HUD regional office for review as to completeness and consistency with the terms of the community's agreement with the Government. If approved, payment of the planning advance is made to the applicant, who in turn pays the consultant engineer or architect for services performed in preparation of the plans.

### *3. History*

Section 702 of the Housing Act of 1954 established a Public Works Planning Fund, a revolving fund, with an initial authorization for appropriations amounting to \$10 million. The authorization was augmented in legislation enacted in 1955, 1961, 1964, and 1965 and presently amounts to \$128 million.

Against this authorization, appropriations totaling \$83 million have been enacted by the Congress. Thus the unappropriated balance of the statutory authorization is \$45 million (see answer to No. 8).

Cumulative net planning advances amounting to \$105.8 million were approved through the end of fiscal year 1965. The construction cost of public facilities to be built upon these plans is estimated at over \$6 billion.

Fiscal year 1966 will be the 11th full year of operation under the current program of advances for public works planning. An analysis

of approved planning advances indicates that about 80 percent have been made in communities of populations 50,000 and under. Approximately 60 percent of the planning advances have been for water and sewerage facilities.

#### 4. Level of operations. (See table 1.)

Program: Advances for public works planning.

Department or agency, and office or bureau: Department of Housing and Urban Development; Office of Planning Standards and Coordination [formerly in Community Facilities Administration].

TABLE 1.—Level of operations or performance, fiscal years 1964–67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program:				
Number of planning advances approved.....	526	765	940	492
Amount (millions).....	\$10.5	\$21.1	\$24	\$10
(b) Applicants or municipalities.....	526	765	740	492
(c) Federal finances:				
Unobligated appropriations available (millions).....	\$12.6	\$22.1	\$25	\$11
Planning advances disbursed (millions).....	\$14.8	\$13.9	\$17	\$20
(d) Matching additional expenditures for the program.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
(e) Number of Federal employees administering program.....	62	68	67	55
(f) Non-Federal personnel.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Not applicable.

#### 5. Estimated magnitude of program in 1970

The probable magnitude of program activity in 1970 is not expected to increase significantly over the level of \$10 million estimated for fiscal year 1967. Notwithstanding the increasing and continued demand for planning and construction for new public facilities, this decline in program activity from fiscal years 1965 and 1966 is anticipated because of the contemplated application of more stringent eligibility and financial review criteria planned to be put into effect in the latter part of fiscal year 1966.

The imposition of more stringent eligibility and financial review criteria has been found necessary in order to (1) orient the program in the direction of the areawide planning requirements of section VII of the Housing and Urban Development Act of 1965, and (2) develop financially sounder projects with greater assurance of earlier construction and faster repayment of the Federal advances.

The more stringent eligibility and financial review criteria will of course result in attrition of a greater number of applications and consequently should result in the program activity estimated for fiscal year 1967 and continue at this level into 1970.

#### 6. Prospective changes in program orientation

There are no pending or foreseeable legislative proposals. Administrative and organizational changes may have some effect on program administration in the future. Contemplated immediate changes in program orientation will have the effect of making the program more responsive to the areawide planning requirements of title VII of the Housing and Urban Development Act of 1965, legislative program intent, and public needs as follows:

1. Processing of applications which are for public facilities that are part of an areawide or regional comprehensive plan will be

given priority. This is expected to make communities more responsive to the need of comprehensive planning and also to make the PWP program more consistent with the planning requirements of title VII of the Housing and Urban Development Act of 1965.

2. Emphasis will be placed on a more stringent financial analysis of applications in order to develop sounder projects with greater assurance of earlier construction and resulting in faster repayment of the Federal advances.

### 7. Coordination and cooperation

The PWP program is coordinated with other Federal agencies to extent necessary to insure that there is no duplication in planning and that the planning will not conflict with requirements of other agencies which may have an interest in the type of public facilities to be planned. In this respect, notices of applications received are sent to the U.S. Public Health Service in regard to water, sewerage, hospital, and related health facilities. The U.S. Office of Education is notified of educational facilities and, likewise, notices are sent to the Bureau of Public Roads, Federal Aviation Agency, Department of Defense, Office of the U.S. Corps of Engineers, the Department of Interior, Bureau of Reclamation, Department of Agriculture, Forest Service, etc., as applicable. Exceptions taken by other Federal agencies to the proposed planning are, of course, cleared before the application is approved.

### 8. Laws and regulations. (See table 2.)

TABLE 2.—Advances for public works planning

Act	Statutory authorization	Appropriation
Housing Act of 1954.....	\$10,000,000	-----
Housing Amendments of 1955:		
July 1, 1956.....	12,000,000	-----
July 1, 1957.....	12,000,000	-----
July 1, 1958.....	14,000,000	-----
Housing Act of 1961.....	10,000,000	-----
Housing Act of 1964.....	20,000,000	-----
Housing and Urban Development Act of 1965.....	50,000,000	-----
Supplemental AA, 1955.....		\$1,500,000
Independent Offices AA, 1956.....		3,000,000
Independent Offices AA, 1957.....		7,500,000
Independent Offices AA, 1958.....		5,000,000
Independent Offices AA, 1959.....		7,000,000
Independent Offices AA, 1960.....		6,000,000
Independent Offices AA, 1961.....		6,000,000
Independent Offices AA, 1962.....		7,000,000
Second Supplemental AA, 1962.....		1,000,000
Independent Offices AA, 1963.....		12,000,000
Independent Offices AA, 1964.....		2,000,000
Independent Offices AA, 1965.....		1 <sup>2</sup> (4,000,000)
Supplemental AA, 1965.....		10,000,000
Independent Offices AA, 1966.....		10,000,000
Supplemental AA, 1966.....		5,000,000
Subtotal, enacted appropriations.....		83,000,000
Estimated unused balance available, June 30, 1966.....		45,000,000
Total.....	128,000,000	128,000,000

<sup>1</sup> Nonadd.

<sup>2</sup> Contingent upon forgiveness of advances in accordance with sec. 6 of the Public Works Acceleration Act.

Source: Budget and Requirements Division, Oct. 26, 1965.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

The table below illustrates the economic effects of the program based on estimated activity in fiscal year 1966. It indicates that for every advance of \$1 in program funds, about \$26 worth of economic activity is generated. The table should not be construed as an economic analysis in depth. Its purpose is merely to illustrate the probable range between cost and benefit based on an approximate quantitative analysis.

TABLE 3.—*Advances for public works planning; estimate of costs and benefits, fiscal year 1966*

Item	Cost (-) (thousands)	Benefit (+) (thousands)	Net cost or benefit (thousands)
1. A. Advances disbursed in fiscal year 1966.....	-\$17,000	\$17,000	0
B. Repayments (40 percent over 5 years).....		6,800	+\$6,800
2. A. Cost of Treasury borrowing (\$17,000,000, at 3½ percent over 5 years).....	-3,100		
B. Administration agency expense in fiscal year 1966.....	-675		
C. Administration agency expense relative to repayment of advances (5 years, at \$25,000 per year).....	-125		-3,900
3. Increase in national dollar value of construction projects (40 percent times \$1,000,000,000).....		400,000	+400,000
4. A. Increase in labor employment, 50 percent (40 percent times \$1,000,000,000 project cost times 198 man-hours per \$1,000).....		( <sup>1</sup> )	
B. Increase in labor earnings generated: On-site, 16,000,000 man-hours times \$3.68 per hour equals \$59,000,000; off-site, 23,500,000 man-hours times \$2.60 per hour equals \$61,000,000.....		120,000	+120,000
5. A. Federal income taxes resulting from constructed plan- ning projects (\$120,000,000 times 15 percent).....		18,000	
B. State income tax (¼ times Federal tax).....		4,500	
C. State and local sales taxes (2 percent times \$200,000,000) .....		4,000	+26,500
6. Estimated population served by water and sewerage facili- ties (\$1,000,000,000 times 3 divided by \$500) <sup>2</sup> .....		( <sup>3</sup> )	
Total.....	-20,900	+570,300	+549,400

<sup>1</sup> 39,500,000 man-hours.<sup>2</sup> Assumes \$500 per household user.<sup>3</sup> 6,000,000 population.10. *Economic classification of program expenditures.* (See table 4.)

Program: Advances for public works planning.

Department or agency, and office or bureau: Department of Housing and Urban Development; Office of Planning Standards and Coordination [formerly in Community Facilities Administration].

TABLE 4.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government:

Purchases of goods and services: <sup>1</sup>

Wages and salaries..... 666

Other..... 76

Loans to State and local governments <sup>2</sup>..... 13,871Total Federal expenditures <sup>1</sup>..... 14,613<sup>1</sup> \$728,000 of the purchases of goods and services are financed from the appropriation for administrative expenses for the Office of the Secretary.<sup>2</sup> Gross expenditures for the public works planning fund were \$13,895,000 (including \$24,000 for purchases of goods and services). In fiscal 1965 there were repayments of \$6,043,000, resulting in net expenditures of \$7,852,000.



**Renewal Projects Administration****URBAN RENEWAL PROJECTS**

## PART I. DESCRIPTION OF THE PROGRAM

*1. Objectives*

The urban renewal program, authorized by title I of the Housing Act of 1949, as amended, has two parallel but closely related objectives:

1. The elimination of slums, blighting influences, deterioration, and other factors which create an unhealthy and undesirable environment for urban living and impede the adaptation of the community to changing conditions.

2. The redevelopment, rehabilitation, and conservation of areas to provide decent housing in a suitable living environment and to permit adjustments in urban development patterns to changing human and economic needs.

Because of the wide variety of problems faced in different localities and the breadth and flexibility of the title I program, there are many subobjectives to the program, differing from locality to locality, and among the projects in a given locality. Even a single project will normally have a multiplicity of subobjectives. Thus, in addition to the housing objectives, projects may be concerned with improving the earning capacity of local residents through the encouragement of industrial and commercial growth; improving the local tax base to provide support for the increasing demands for welfare and educational services; improving schools and other public facilities through the provision of sites; providing space for the development or expansion of such institutions as universities, hospitals, and museums; and improving the social structure of the community by making it attractive and viable to residents of all income levels. It would be impossible to develop any comprehensive list of all the objectives involved in urban renewal undertakings throughout the Nation.

*2. Operation*

Urban renewal activities are locally planned and carried out by local public agencies with Federal financial assistance being provided through advances, loans, and grants. Depending on State law, the local public agency may be the municipality itself, a semiautonomous agency, a county agency, or a State agency. Whatever the form of local public agency, the final approval of the project must be made by the local governing body.

Federal financial assistance is provided in the following forms:

1. Grants for community renewal planning to identify the overall community needs and resources for renewal actions of all types. Federal grants for community renewal planning cover two-thirds of the costs with the remaining one-third provided by the locality.

2. Planning advances to finance feasibility surveys, the preparation of neighborhood renewal plans, and the survey and planning work for the carrying out of specific projects. Planning advances are repaid by the project once it enters the execution phase.

3. Temporary loans used by the community as working capital for carrying out urban renewal project activities. The Federal

loan contract may be used by the local public agency to secure financing on the private market at lower interest rates than the going Federal rate. Temporary loans are repaid from proceeds of land sales made by the project and the local and Federal grants contributed toward the project.

4. Long-term "definitive" loans used to capitalize the value of land disposed of under lease agreements. These loans are repaid from lease proceeds.

5. Capital grants to cover the Federal share of net project cost—the total cost of carrying out the project less the proceeds derived from land sales and other proceeds of project operations. The Federal share may be (a) two-thirds of net project cost, or (b) three-fourths of net project cost for cities with a population under 50,000 or for cities located in areas designated under the Economic Development Act, (c) three-fourths of net project cost for cities which assume the costs of planning and administration without charge to the project, or (d) nine-tenths of net project cost for certain Alaskan cities affected by the 1964 seismic disturbance. The local share may be in the form of cash or public works which are a necessary part of the project undertaking. Some States make direct contributions to the locality to assist in meeting the non-Federal share of project costs.

In addition to the above forms of Federal financial assistance, see also the separate reports on relocation payments to displaced individuals, families, and businesses; loans and grants for rehabilitation; grants for code enforcement and demolition; and the various programs of the Federal Housing Administration to provide special mortgage insurance for the construction and rehabilitation of housing in urban renewal areas.

Of increasing significance in the urban renewal process has been the development of community renewal programs. Such programs are concerned with inventorying and evaluating the overall community needs and resources for renewal actions and the development of positive programs for carrying out renewal on a communitywide basis. Community renewal programs are very deeply concerned with the question of the human resources of the community and with integrating social welfare actions with programs for physical improvement.

The relocation of displaced families from existing substandard dwellings into decent, safe, and sanitary housing has been a cornerstone of the urban renewal program since its inception. See the separate discussion of relocation programs for a fuller exposition of the human resources aspects of this activity.

The rehabilitation of existing housing is an increasingly important part of the total urban renewal program. Experience has shown that rehabilitation cannot be successfully carried out without the full and active cooperation of the area residents. Considerable effort is devoted to the development of community organizations as a means of reaching the area residents and soliciting their cooperation. Projects involve extensive counseling service to the residents to assist them with the financial, architectural, and construction aspects of carrying out the rehabilitation of their housing. In many cases the technical counseling must be supplemented by the mobilization of the social service aids in the community to help the residents solve their personal

problems. See also separate discussion of loans and grants available to assist property rehabilitation.

In recent years a number of new mechanisms have been developed to make possible the construction of new housing for families of low and moderate incomes and an increasing proportion of the housing constructed in urban renewal project areas is for such families. The projects not only provide desirable sites supported by adequate public facilities, but they also provide lower land prices which help make the construction of such housing feasible.

### 3. History

The original enabling legislation was enacted in 1949 and the program was then known as slum clearance and urban redevelopment. In 1954, the name of the program was changed to urban renewal in recognition of its broader scope. The 1954 legislation introduced the workable program requirement as a prerequisite to undertaking urban renewal projects, emphasized the role to be played by rehabilitation, and added various forms of FHA mortgage insurance to aid in the redevelopment and rehabilitation of urban renewal areas. The Housing Act of 1956 first provided for relocation grants to displaced individuals, families, and business concerns. The Housing Act of 1959 introduced the community renewal program. The Housing Act of 1961 doubled the preceding authorization for the program and provided several other liberalizing amendments. The 1964 Housing Act expanded relocation assistance, authorized assistance for code enforcement, and provided for the system of direct Federal loans for rehabilitation. The Housing and Urban Development Act of 1965 provided Federal grants for rehabilitation, the new program for the demolition of unsound structures, and a number of other significant technical amendments.

TABLE 1.—*Brief summary of program growth*

[Dollar amounts in thousands]

Fiscal year	Number of localities	Number of projects	Grant reservations
1965 .....	770	1,592	\$4,502,987
1964 .....	743	1,466	3,935,765
1963 .....	679	1,310	3,300,892
1962 .....	546	1,013	2,546,681
1961 .....	470	813	1,868,948
1960 .....	455	797	1,638,713
1959 .....	385	647	1,311,488
1958 .....	331	554	1,193,553
1957 .....	264	435	894,106
1956 .....	232	377	657,078

### 4. Level of operations. (See table 2.)

Program: Urban renewal projects.

Department or agency, and office or bureau: Department of Housing and Urban Development; Renewal Projects Administration [formerly Urban Renewal Administration].

TABLE 2.—*Level of operations or performance, fiscal years 1964-67*

[Dollar amounts in millions]

Measure	Fiscal year 1964 actual	Fiscal year 1965 actual	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program:				
Cumulative projects approved (net).....	1,466	1,592	1,762	2,047
Cumulative projects completed.....	157	209	284	374
Federal grant reservations.....	\$3,965.5	\$4,539	\$5,389	\$6,114
(b) Applicants or participants: Local communities (cumulative).....	743	770	805	850
(c) Federal finances: <sup>1</sup>				
Authorization available.....	\$651.9	\$759.5	\$861	\$736
Usage of authority.....	\$642.4	\$573.5	\$850	\$725
Balance of authority.....	\$9.5	\$186	\$11	\$11
(d) Matching or additional expenditures <sup>2</sup> .....	\$298.2	\$266.2	\$394.5	\$336.5
(e) Number of Federal Government employees <sup>3</sup> .....	1,354	1,357	1,660	1,715
(f) Non-Federal personnel <sup>4</sup> .....				

<sup>1</sup> Until fiscal year 1966 this program was financed through the use of contract authorization with appropriations following years after obligation of funds. For fiscal years 1966 and 1967, this pattern is different—appropriations were made for advance liquidation of contract authority. In view of this, the presentation of Federal finances in terms of authorizations seems most meaningful. Amounts shown include grants for relocation, code enforcement, demolition, and rehabilitation.

<sup>2</sup> Estimated local contributions to match utilized Federal contract authority. In view of several formulas involved, the matching estimate is based on an overall experience ratio of 68.3 percent Federal to 31.7 percent local.

<sup>3</sup> Includes nonadministrative employment. Also includes employees working on relocation grants, code enforcement, demolition, and urban planning assistance.

<sup>4</sup> No estimates available.

##### 5. *Estimated magnitude of program in 1970*

The authorization of funds for the urban renewal program extends only through 1969. However, there is no reason to anticipate any decrease in the need for the program. In general, the stock of structures in the central cities is aging at a greater rate than it is being replaced or rehabilitated. Some traditional urban functions, such as heavy manufacturing and distribution, are tending to locate new facilities in the suburban areas. However, other central city functions such as quality retailing, office and administrative activities, and cultural and educational activities are continuing to expand. In terms of residential patterns, the trend of middle-class movement to the suburbs appears to have passed its peak and there appears to be some reverse movement back to the central city as new and attractive facilities are being developed. The need for low- and middle-income housing continues to grow and is aggravated by the lack of available sites. For most cities, the use of urban renewal techniques appears to be essential to make the adjustments to these changes.

##### 6. *Prospective changes in program orientation*

(a) *Pending legislative proposals.*—In his state of the Union message of January 12, 1966, the President stated "In some of our urban areas we must rebuild entire sections and neighborhoods containing in some cases as many as a hundred thousand people. Working together, private enterprise and government must press forward with the task of providing homes and shops, parks and hospitals, and all the other necessary parts of a flourishing community where people

can come to live the good life." No specific legislative proposals have been submitted to the Congress.<sup>1</sup>

(b) *Proposed administrative or organization changes.*—The Urban Renewal Administration has been incorporated as a part of the new Department of Housing and Urban Development. Aside from this, there are no announced organizational or administrative changes pending.

(c) *Probable changes in the conditions under which the program will function in 1970; for example, technological, economic, or social.*—At this time there are no estimates of possible impacts of changing technological, economic, or social conditions on the operations of the urban renewal program.

### 7. *Coordination and cooperation*

(a) *Within your bureau, division, or office.*—Coordination is achieved through normal administrative structure.

(b) *With other units of your department or agency.*—Extremely close and continuing relationships are maintained with the other agencies of the Department of Housing and Urban Development on both policy and operational matters. Some of the more significant ones are described below:

All urban renewal projects involving residential redevelopment are referred to the Federal Housing Administration for their comments as to the appropriateness for such uses. In determining land disposition prices for residential uses, FHA maximum values for mortgage insurance purposes are a major factor. FHA and URA have cooperated on the issuance of rehabilitation standards to meet specific city situations. There is continuing cooperation with FHA on the use of sections 220 and 221(d)(3) mortgage insurance for redevelopment of urban renewal areas and on the use of section 221(d)(3) housing as a relocation resource.

With the Public Housing Administration there is continuing liaison on the development of public housing units as a relocation resource and on the use of urban renewal project land as a site for the construction of new public housing units.

(c) *With other Federal Government departments or agencies.*—The following is a summary of some of the more significant cooperative relationships maintained with other Federal departments and agencies in carrying out title I urban renewal projects:

U.S. Army Corp of Engineers: Full coordination in planning and carrying out urban renewal projects proposed for flood control areas under the cognizance of the Corps of Engineers. The cooperative arrangements were implemented by issuing procedural instructions to our respective field offices, setting out the relationships that we expect in these cases.

General Services Administration—Public Buildings Service: URA notifies GSA's Public Buildings Service whenever we approve the

<sup>1</sup> On January 27, 1966, S. 2842 and H.R. 12341 were submitted, providing for the establishment of "city demonstration programs for rebuilding slum and blighted areas and for providing the public facilities and services necessary to improve the general welfare of the people who live in these areas." The initial fund authorization of \$12 million, requested in this proposed legislation, will support local planning activities; subsequent authorizations will be sought to fund the Federal program assistance. The approved programs in demonstration cities will encompass a broad spectrum of efforts in the field of human and physical resources development. It is expected that, in the localities which have been selected under this demonstration program, there will be an increase in the number of urban renewal projects which are proposed and undertaken. [A related bill, S. 3708, was enacted as Public Law 89-754, the "Demonstration Cities and Metropolitan Development Act of 1966," approved Nov. 3.]

planning of a proposed project in or near a locality's central business district. GSA compares this with its public buildings construction program, with an eye to acquiring suitable sites in renewal areas. The two organizations have developed a mutually acceptable form of contract to use when local renewal agencies sell land to GSA, which has reduced the incidence of delays resulting from misunderstandings at the field level on what conditions on the transfer of land are acceptable to both agencies.

**Post Office Department:** URA periodically notifies the Post Office Department of the location of urban renewal projects. They use this information in planning for the replacement of existing facilities and the addition of new facilities. They also review project locations to determine whether they may contain suitable sites for postal facilities. A guide form of contract for the sale of urban renewal sites to the Post Office Department has also been agreed upon by the respective agencies.

**Small Business Administration:** Under their enabling legislation SBA can provide assistance to eligible small businesses located in renewal areas. Under established procedures URA regional staff notify the appropriate SBA office when they receive an application for a renewal project in which displacement of businesses is indicated. Upon execution of the project SBA personnel work closely with local renewal agency personnel in arranging needed financing for eligible businesses.

**Veterans' Administration:** Arrangements have been made for VA regional offices to notify local renewal agencies of acquired properties which VA has available for sale. The local agencies use these listings to refer project displacees as a relocation resource.

**Office of Economic Opportunity:** Close relationship with personnel of this agency are being established at the Washington, regional, and field level. URA strives to secure assistance from OEO-sponsored organizations in assisting the low-income residents in urban renewal areas. To facilitate this arrangement URA permits as eligible costs in renewal projects expenditures to provide necessary temporary space for these agencies to use. At the same time OEO looks to urban renewal areas for opportunities to establish programs consistent with their own objectives. To this end they have issued advisory materials on opportunities for projects that may be found in renewal areas.

**Department of Labor:** URA, mainly, through its regional staffs, attempts to involve the Labor Department in urban renewal projects where it appears that manpower and job training programs, etc., are needed to help renewal area residents.

**Department of Commerce, Bureau of Public Roads:** URA requires the coordinated planning of urban renewal areas and major highway construction projects. To this end, URA regional staff, when it accepts an application for planning a renewal project, sends a copy of a map contained in the application, indicating the location of the proposed project, to the appropriate BPR field office. The BPR field office reviews this map, identifying conflicts with proposed highway projects. Also the two organizations have developed mutually acceptable policies for the transfer of land acquired by one program to the other, for pricing the land transferred, and for sharing the cost of work done under one of the programs which benefits both of the programs.

Department of Commerce, Economic Development Administration: Special provisions apply for urban renewal projects undertaken in localities designated depressed areas by EDA. The most significant provision is the increase in the Federal grant from two-thirds to three-fourths of the cost of the renewal project. Thus the urban renewal program may be a useful tool in a locality's efforts to improve its economic vitality.

Department of Health, Education, and Welfare: URA is one of the participants in an active task force, formally established by the Secretary, HEW, and the HHFA Administrator, in an effort to more effectively utilize available health, education, and welfare services in urban renewal areas. In addition to the many successes realized through this task force, their current main activity is to develop and sponsor demonstrations of concerted health, education and welfare services to residents in renewal areas in a number of selected cities. In the latter program, the Department of Labor and OEO have been active cooperating participants on an informal basis. URA has also worked with HEW on coordinating payments to persons eligible to receive funds under both programs, to insure that recipients of relocation payments upon displacement from a renewal project as a result do not lose their eligibility for welfare payments.

Department of the Interior, National Park Service: Efforts are being made to coordinate the historic preservation activities of both organizations. In this connection it is expected that joint publication will be issued illustrating how the programs may be used in concert in local historic preservation programs.

In addition URA regularly informs the Park Services of the location of new renewal projects, because of the effect they may have on such of the Park Service's programs as the registered national historic landmarks program, the historic American buildings survey, and certain archeological investigations activities.

(d) *With State governments or their instrumentalities.*—Several State governments (notably, New York, Massachusetts, Pennsylvania, and Connecticut) provide financial assistance to localities to assist them in the carrying out of title I urban renewal projects. This financial assistance takes a variety of forms, but is usually a long-term loan or a grant to the locality to assist it in meeting the non-Federal share of the cost of carrying out the project.

(e) *With local governments or communities.*—Local governments, either in themselves or acting through a local public agency, are the direct participants in the title I urban renewal program. In some cases county redevelopment authorities have been established to act as the local public agency for all localities within the jurisdiction. In Alaska, a State authority acts as the local public agency for all localities in the State. No matter what the form of the local authority, final approval of the project must be given by the governing body of the locality after a public hearing.

(f) *With foreign governments or international organizations.*—Officials of the Urban Renewal Administration are frequent participants in international seminars on the problems of planning and urban development. Coordination and liaison on these activities is handled through the Office of International Housing of the Office of the Secretary.

(g) *With nonprofit organizations or institutions.*—Liaison is maintained with a number of nonprofit institutions representing public

and professional viewpoints. Among those consulted are the National Association of Homebuilders, the National Association of Real Estate Boards, the National Association of Housing and Redevelopment Officials, the National Trust for Historic Preservation, the American Institute of Planners, Urban America (formerly the Action Council for Better Cities), the U.S. Conference of Mayors, the National League of Cities, the American Council on Education and the National Housing Conference.

(h) *With business enterprises.*—No direct relationships are maintained with business enterprises.

(i) *With others.*—None.

#### 8. *Laws and regulations*

Public Law 171, 81st Congress, approved July 15, 1949, 63 Stat. 413, 414, title I (see Basic Laws and Authorities on Housing and Urban Development, 1965, Committee on Banking and Currency, House of Representatives, 89th Congress, 1st session, p. 253).

Amended by:

Public Law 370, 82d Congress, approved June 3, 1952 (66 Stat. 98).

Public Law 94, 83d Congress, approved June 30, 1953 (67 Stat. 121, 127, sec. 24(a)).

Public Law 560, 83d Congress, approved August 2, 1954 (68 Stat. 590, 622, title III and title VIII secs. 801(e) and 814).

Public Law 345, 84th Congress, approved August 11, 1955 (69 Stat. 635, 637, secs. 106 and 108).

Public Law 1020, 84th Congress, approved August 7, 1956 (70 Stat. 1091, 1097, title III).

Public Law 85-104, approved July 12, 1957 (71 Stat. 294, 299, title III).

Public Law 86-372, approved September 23, 1959 (73 Stat. 654, 670, title IV).

Public Law 87-70, approved June 30, 1961 (75 Stat. 149, 165, title III).

Public Law 88-560, approved September 2, 1964 (78 Stat. 769, 785, title III).

Public Law 89-117, approved August 10, 1965 (79 Stat. 451, 453, 474, 485, title I, secs. 101(f) and (i), titles III and IV) (see Basic Laws and Authorities on Housing and Urban Development, 1965, pp. 253 and 408).

Current appropriations:

Public Law 89-128, approved August 16, 1965 (79 Stat. 520) (see Basic Laws and Authorities on Housing and Urban Development, 1965, p. 596).

Supplemented by: Public Law 89-309, approved October 31, 1965 (79 Stat. 1133, 1135) (see Basic Laws and Authorities on Housing and Urban Development, 1965, p. 603).

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

The economic effects of the urban renewal program are wide ranging and complex because of the tremendous variation in the nature of projects. There has been no acceptable generalized methodology developed for either describing all the effects or for quantifying them.



Some general observations can be made and a few can be roughly quantified.

Urban renewal projects do serve as a stimulus for private investment. It has been estimated that there will be over \$5 of private redevelopers' investment for every dollar of Federal capital grants involved in current urban renewal undertakings. This is in addition to the local investment in new public facilities.

For many localities, urban renewal represents an opportunity to improve their municipal revenue base through the upgrading of development and of the assessments thereon. It has been estimated that assessments will run about 4½ times the amount prior to redevelopment. It should be recognized that there are very wide variations in the tax effect among localities and projects. In many cases, projects have involved the expansion of universities, or hospitals, or the development of cultural or other public centers. In such cases the net effect on local taxes may be negative.

Most attempts to measure the economic effects of urban renewal have been limited to the area of the projects themselves. There is considerable evidence of a substantial "spillover" effect on surrounding areas and on the city as a whole. While efforts to measure this spillover effect are crude at their very best, it is our estimate that the economic effects on the surrounding area are at least as great as those in the project itself.

#### 10. *Economic classification of program expenditures.* (See table 3.)

Program: Urban renewal projects.

Department or agency, and office or bureau: Department of Housing and Urban Development; Renewal Projects Administration [formerly Urban Renewal Administration.]

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]	
Federal Government:	
Purchases of goods and services.....	14.8
Grants to State and local governments.....	282.5
Loans to State and local governments (net change of outstanding loan balances).....	41.8
Total, Federal expenditures.....	339.1

<sup>1</sup> These expenditures are included in the salaries and expenses appropriation of the Office of the Secretary.

## CODE ENFORCEMENT AND DEMOLITION PROJECTS

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

In many cases large residential areas can be kept viable through the concentrated enforcement of existing housing codes. In other cases the continued existence of unsound structures constitutes a blighting influence on the surrounding area. To deal with these two special problems, the Congress has authorized special programs which are a part of the basic urban renewal law but which do not have to conform to all of the requirements normally associated with urban renewal projects.

## *2. Operation*

Federal grants for code enforcement projects may be made to cities, other municipalities, and counties that have statutory authority to enforce building, housing, and related codes. Within designated areas, which must meet eligibility tests, the community will carry out a systematic program for intensive code compliance. That program must provide a definite plan and schedule for bringing all properties into code compliance; an adequate number of trained inspectors; an effective notice, permit, and records system; close coordination among all local governmental units responsible for inspections and other compliance actions; and administrative and legal procedures for the prompt and equitable handling of noncompliance and appeal cases. The municipality must have a satisfactory program and resources for providing all necessary improvements in the code enforcement area; however, some street repairs may be covered as part of the project cost for which Federal grants are available. The project may also include the provision of advisory services on the rehabilitation of structures, financing of repairs and rehabilitation, and on community organization within the affected areas. The municipality must accept the responsibility for the satisfactory relocation of any families which may be displaced through the assisted code enforcement activities.

The Federal grant for code enforcement may not exceed two-thirds (or three-quarters in the case of a municipality having a population of 50,000 or less) of the costs of planning and carrying out the program. Federal grants are also provided for any necessary relocation payments. The direct Federal rehabilitation loan and grant program are available to property owners in code enforcement areas.

Federal grants for demolition are available to municipalities with authority under State and local law to demolish unsound structures which constitute a public nuisance and a serious hazard to public health or welfare. The demolition must be carried out on a planned neighborhood basis and further the overall renewal objectives of the community. The Federal grant may cover two-thirds of the costs of demolition.

## *3. History*

The first code enforcement provisions were enacted in the Housing Act of 1964. However, these proved to be unworkable and were extensively amended in the Housing and Urban Development Act of 1965. The demolition grant program was also authorized in that latter act.

## *4. Level of operations.* (See table 1.)

Program: Code enforcement and demolition projects.

Department or agency, and office or bureau: Department of Housing and Urban Development; Renewal Projects Administration.

TABLE 1.—*Level of operations or performance, fiscal years 1966–67*<sup>1</sup>

Measure	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program:		
Code enforcement projects (cumulative).....	50	150
Demolition projects (cumulative).....	50	150
(b) Applicants or participants: Local communities:		
Code enforcement (cumulative).....	50	135
Demolition (cumulative).....	50	135
(c) Federal finances <sup>2</sup> .....		
(d) Matching or additional expenditures <sup>3</sup> .....		
(e) Number of Federal Government employees <sup>2</sup> .....		
(f) Non-Federal personnel <sup>3</sup> .....		

<sup>1</sup> Not in operation in fiscal 1964 and 1965.

<sup>2</sup> Included in urban renewal projects table.

<sup>3</sup> Not available.

### 5. *Estimated magnitude of program in 1970.*

Experience under the code enforcement and demolition grant programs is still too limited to justify any valid estimates of performance several years into the future.

### 6. *Prospective changes in program orientation.*

(a) *Pending legislative proposals.*—None.

(b) *Proposed administrative or organizational changes.*—The Urban Renewal Administration has been incorporated as a part of the new Department of Housing and Urban Development. Other than this there are no announced organizational or administrative changes pending.

(c) *Probable changes in the conditions under which the program will function in 1970, e.g., technological, economic, or social.*—At this time there are no estimates of possible impacts of changing technological, economic, or social conditions on the operations of the urban renewal program.

### 7. *Coordination and cooperation*

(a) *Within your bureau, division, or office.*—Coordination achieved through normal administrative channels.

(b) *With other units of your department or agency.*—Liaison has been established with the Federal Housing Administration on the provision of mortgage insurance under section 220 in areas covered by code enforcement projects.

(c) *With other Federal Government departments or agencies.*—Liaison is being established with the U.S. Public Health Service in the field of environmental health.

(e) *With local governments or communities.*—Operations under the code enforcement and demolition grant programs are carried out through local governments.

(g) *With nonprofit organizations or institutions.*—Liaison will be established with such organizations as the International Conference of Building Officials, Building Officials Conference of America, Southern Building Code Congress, American Public Health Association, National Association of Home Builders, and National Association of Housing and Redevelopment Officials.

For (d), (f), (h), and (i) None.

### 8. *Laws and regulations*

Public Law 89-117, approved August 10, 1965, 79 Stat. 451, 477, sec. 311(a). (See Basic Laws and Authorities on Housing and Urban Development, 1965, p. 285.)

Current appropriations:

Public Law 89-128, approved August 16, 1965, 79 Stat. 520. (See Basic Laws and Authorities on Housing and Urban Development, 1965, p. 596.)

Supplemented by: Public Law 89-309, approved October 31, 1965, 79 Stat. 1133, 1135. (See Basic Laws and Authorities on Housing and Urban Development, 1965, p. 603.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

Operations under the code enforcement and demolition grant programs are still too new to permit any valid judgment of economic effects.

### 10. *Economic classification of program expenditures*

There were no expenditures for code enforcement or demolition grants in fiscal year 1965.

## RELOCATION PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

Any program involving substantial physical changes in the urban environment will inevitably result in the displacement of individuals, families, and businesses. This is particularly true of urban renewal where the effort to change the urban environment is both conscious and concentrated. Recognizing this, the Congress provided for relocation programs as an integral part of urban renewal. The aim of these programs is to mitigate any hardships which may arise from the necessity of displacement and, to the extent feasible, to make relocation an opportunity for positive efforts to improve the living conditions of those who are displaced.

#### 2. *Operation*

The urban renewal relocation effort is carried out by the local public agency undertaking urban renewal projects with the aid of the Federal financial assistances described below. Basically, this effort involves three facets:

(a) *Relocation feasibility.*—As a prerequisite for the undertaking of an urban renewal project, the local public agency must demonstrate that the relocation of families and individuals who will be displaced will be feasible. During the survey and planning stage, estimates must be made of the number, character, and incomes of the families and individuals who will be displaced. Subject to Federal approval, the locality will establish a standard for decent, safe, and sanitary housing, including standards on ability to pay. Surveys will be made of vacancies, turnover in existing housing, and plans for the construction of new housing which would be available to those displaced.

Based on a general matching of needs and resources, the locality will determine whether it can meet the statutory requirement of relocation feasibility. This finding must be approved by both the governing body of the locality and the Secretary of Housing and Urban Development. Determining relocation feasibility is financed as part of its planning advance of a title I project.

(b) *Relocation assistance.*—As early as possible before the period in which relocation is to be carried out, the locality must establish a site office through which it offers assistance to displaced individuals, families, and businesses in the finding of new quarters. In the case of individuals and families, followup checks are made on those self-relocated to assure that their housing meets the standards for being characterized as decent, safe, and sanitary. As part of the process of relocation assistance, the local public agency may undertake diagnostic and referral services on the various human adjustment problems it encounters in working with residents. Relocation assistance is financed as part of the title I project and shared by the locality and the Federal Government.

(c) *Relocation payments.*—To help those who must be relocated meet the costs involved, a variety of special payments have been authorized—almost all of which are provided as a 100-percent Federal grant rather than shared as project costs. Displaced individuals and families may receive up to \$200 to cover moving expenses and losses of personal property. Low-income families and elderly persons are entitled to a relocation adjustment payment of up to \$500 to assist in meeting other costs incident to displacement. Displaced business firms are entitled to payments for their moving expenses and smaller firms may be eligible for a small business displacement payment in the amount of \$2,500.

### 3. *History*

The requirement for establishing relocation feasibility was established in the original Housing Act of 1949. The Housing Act of 1956 first authorized the making of relocation payments and the amounts thereof were increased by the Housing Acts of 1959 and 1961. In the Housing Act of 1964, relocation adjustment and small business displacement payments were first authorized, the relocation feasibility requirement was extended to individuals as well as families, and the Administrator was required to issue rules and regulations covering the nature of relocation assistance activities required. The Housing and Urban Development Act of 1965 increased the amount of the small business displacement payment from \$1,500 to \$2,500.

### 4. *Level of operations.* (See table 1.)

Program: Relocation program.

Department or agency, and office or bureau: Department of Housing and Urban Development; Renewal Projects Administration [formerly Urban Renewal Administration].

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

[Dollar amounts in millions]

Measure	Fiscal year 1964 actual	Fiscal year 1965 actual	Fiscal year 1966 estimated	Fiscal year 1967 estimated
(a) Magnitude of the program:				
Families displaced during year .....	18,232	18,061	25,000	25,000
Individuals displaced during year .....	10,489	9,780	12,000	12,000
Business concerns displaced during year .....	5,836	6,683	6,000	6,000
Relocation payments made in year .....	\$10.3	\$14.5	\$45	\$45
(b) Applicants or participants: <sup>1</sup> Urban renewal projects with relocation activity underway .....	418	520	660	795
(c) Federal finances <sup>2</sup> .....				
(d) Matching or additional expenditures <sup>3</sup> .....				
(e) Number of Federal Government employees <sup>4</sup> .....				
(f) Non-Federal personnel <sup>5</sup> .....				

<sup>1</sup> There may be more than 1 project in a locality with relocation activity.<sup>2</sup> Relocation activities are financed as an integral part of the carrying out of urban renewal projects.<sup>3</sup> Local staff expenses for administering relocation activities are included as a part of project costs. Almost all relocation payments are covered by 100 percent Federal grant coming from the overall Federal grant authorization for urban renewal projects. Business relocation payments in excess of \$25,000 each are shared by the locality, but the matching expenditures are very limited.<sup>4</sup> Federal employment for relocation is part of overall employment for urban renewal projects. No separate breakdown available.<sup>5</sup> Estimates not available.

### 5. *Estimated magnitude of program in 1970*

Relocation activities are directly tied into the operations of the urban renewal program for which authorizations of funds extend only to 1969. With the continued increased trend of population concentration in the urban areas of the United States, we can see no reason for any reduction in the need for urban renewal in 1970.

### 6. *Prospective changes in program orientation*

(a) *Pending legislative proposals.*—The Subcommittee on Intergovernmental Relations of the Senate Committee on Government Operations has conducted hearings on two bills, S. 1201 and S. 1681 which would establish uniform requirements and procedures with respect to persons and businesses displaced under all Federal and federally assisted programs. The substance of the relocation provisions of these bills grows largely out of the urban renewal experience with relocation and is concerned with extending this approach to other Federal programs. The only major change from present urban renewal approach would be to make some changes in the nature and size of relocation payments.

(b) *Proposed administrative and organizational changes.*—The Urban Renewal Administration has been incorporated as a part of the new Department of Housing and Urban Development. Other than this, there are no announced organizational or administrative changes pending.

(c) *Probable changes in the conditions under which the program will function in 1970, e.g., technological, economic, or social.*—At this time there are no estimates of possible impacts of changing technological, economic or social conditions on the operations of the urban renewal program.

### 7. *Coordination and cooperation*

(a) *Within your bureau, division, or office.*—Coordination is achieved through normal administrative channels.

(b) *With other units of your department or agency.*—There is a very close interlocking of urban renewal relocation activities with the

Public Housing Administration and the Federal Housing Administration. Housing construction assisted by these two agencies constitutes a major resource for the successful carrying out of relocation. At the Washington level, there is frequent consultation and discussion of proposed policies and procedures. At the regional office level, there are frequent consultations on the solution of operational problems, such as the amount of housing needed in a locality to meet relocation needs and the critical question of the timing of the housing so that it will be available when needed.

(c) *With other Federal Government departments or agencies.*—Procedures have been in force for some time for coordination and cooperation between the Urban Renewal Administration (URA) and the Small Business Administration. The Congress has provided the Small Business Administration with authority to assist displaced small business concerns. The two agencies have been cooperating in the provision of technical assistance and guidance to the small business concerns forced to relocate from urban renewal projects. Each local public agency administering the local renewal activities is administratively required to seek the assistance of the Small Business Administration at the earliest possible time during project development and execution. Currently, the SBA is assisting URA to develop informational material for local public agencies on the types of assistance available and the extent to which they can help to make the SBA assistance most effective.

URA has been an active participant in the activities of the Joint Task Force on Health, Education, and Welfare Services and Housing. The task force is comprised of representatives of constituent agencies of the HHFA (HUD) and the Department of Health, Education, and Welfare. The primary objective of the task force has been to increase the quality, quantity, range, and availability of services for the residents of public housing and urban renewal areas. Initially, the emphasis was on residents of low-rent public housing, but more of the work now includes urban renewal and community conservation.

The Office of Economic Opportunity and the Urban Renewal Administration have been working together to encourage joint efforts at the local level. Particular emphasis has been placed upon community action programs in conjunction with urban renewal projects, but other Office of Economic Opportunity programs have also been developed in cooperation with local urban renewal agencies. In some instances the local agency houses both Office of Economic Opportunity and urban renewal programs. In most instances, joint CAP-URA projects have been developed for the purposes of improving the environment, encouraging social rehabilitation, and providing improved opportunities for adequate employment, housing, and medical care.

(d) *With State governments or their instrumentalities.*—The relocation program of URA is not directly associated with State governments, since the statute provides for a Federal-local relationship. However, some States have laws which govern aspects of relocation requirements.

(e) *With local governments or communities.*—An explanation of cooperation and coordination with local governments or communities

is set forth in the response to this question as it relates to the overall urban renewal program.

(f) *With foreign governments or international organizations.*—The Office of International Housing occasionally requests that URA relocation personnel consult with visitors or provide other information and guidance. There are no formal organizational or operating agreements.

(g) *With nonprofit organizations or institutions.*—There are no formal arrangements between URA relocation and nonprofit organizations or institutions. Interested nonprofit organizations such as the Potomac Institute, the National Association of Housing and Redevelopment Officials, and academic institutions have provided some consultative services and have participated in conferences and workshops concerned with relocation. Through the urban renewal demonstration grant program institutions and nonprofit organizations have prepared studies and analyses of various aspects of relocation and related problems. Information on relocation has been made available to interested scholars and others whenever such data have been requested. In some instances research in specific areas of relocation which the Urban Renewal Administration itself has not been able to undertake has been suggested as beneficial to URA and in the public interest. Reports emanating from these research resources have been utilized for program improvement and simplification.

(h) *With business enterprises.*—Not directly applicable to relocation.

(i) *With others.*—Substantially answered under question 7(g) above.

#### 8. *Laws and regulations*

Public Law 1020, 84th Congress, approved August 7, 1956, 70 Stat. 1091, sec. 305.

Public Law 85-104, approved July 12, 1957, 71 Stat. 294, 300, sec. 304.

Public Law 86-372, approved September 23, 1959, 73 Stat. 654, 673, sec. 409.

Public Law 87-70, approved June 30, 1961, 75 Stat. 149, 167, secs. 304, 305.

Public Law 88-560, approved September 2, 1964, 78 Stat. 769, 788, secs. 310 (see Basic Laws and Authorities on Housing and Urban Development, 1965, p. 282).

Public Law 89-117, approved August 10, 1965, 79 Stat. 451, 453, 486, secs. 101(i) and 404 (see Basic Laws and Authorities on Housing and Urban Development, 1965, pp. 283, 409).

30 Federal Register 15145-15149, December 8, 1965, 24 CFR 3.100 et seq.

Current appropriations:

Public Law 89-128, approved August 16, 1965, 79 Stat. 520 (see Basic Laws and Authorities on Housing and Urban Development, 1965, p. 596).

Supplemented by Public Law 89-309, approved October 31, 1965, 79 Stat. 1133, 1135 (see Basic Laws and Authorities on Housing and Urban Development, 1965, p. 603).



## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

Very little is known about the economic impacts of the program since its main intent is to ameliorate the effects of necessary physical changes. An independent study by the Bureau of the Census indicated that 94 percent of the families displaced from urban renewal areas ended up in standard housing meeting Census Bureau criteria for such housing. However, that study also indicated that there was a cost to the improvement in housing quality—the median proportion of income spent for rent increased from 25 percent to nearly 28 percent.

Two studies of the economic impact of relocation on small business have been published:

“Rebuilding Cities: The Effects of Displacement and Relocation on Small Business,” Basil G. Zimmer, Quadrangle Books, Inc.

“The Impact of Dislocation from Urban Renewal Areas on Small Business,” William N. Kinnard, Jr., and Zenon S. Malinowski, The University of Connecticut.

10. *Economic classification of program expenditures.* (Shown as part of Urban Renewal Projects.)

## REHABILITATION LOANS AND GRANTS

## PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

One of the principal problems involved in trying to make rehabilitation an effective tool of urban renewal has been the difficulty of property owners in obtaining the necessary financing to bring their buildings up to the standards for the area. Rehabilitation cannot be successful on a piecemeal basis; all, or the great majority of the properties in the area must be brought up to standard if there is to be any long-term effect. In some cases, lending institutions have been unwilling to make credit available in blighted or deteriorated areas. In other cases, the cost of such credit was too high for low-income owners to afford. In still other cases, the financial costs of any borrowings, no matter how low, would make rehabilitation impossible for some families. To meet these financing needs, the Congress has authorized programs of direct Federal low-interest-rate loans and grants to make rehabilitation feasible in areas designated for urban renewal action.

2. *Operation*

Direct contact with the property owner requiring rehabilitation loan or grant assistance is maintained by the local public agency carrying out urban renewal activities in the area concerned. That local public agency provides advisory services to the property owner to determine the nature and extent of needed rehabilitation, the estimates of cost, and the value of the property. The local officials assist the property owner in preparing the necessary loan and grant applications and also gather the necessary additional data needed, such as credit checks, appraisals, etc. The applications are forwarded to the appropriate HHFA regional office for review and approval.

Requests for residential loans over \$3,500 are sent for review to the appropriate FHA office. Upon completion of the loan, the Federal National Mortgage Association assumes responsibility for loan servicing. Loans for rehabilitation of business properties are referred to the Small Business Administration for technical review and recommendations. After action by the HHFA regional office the SBA handles closing and servicing on such loans.

Rehabilitation grants may be made to homeowners in amounts not to exceed \$1,500. If the homeowner's income does not exceed \$3,000 per year, the amount of the grant may be the cost of the rehabilitation work. If the homeowner's income exceeds \$3,000 per year, the grant cannot exceed \$1,500 or that portion of the cost of repairs which cannot be paid for with an available loan which could be amortized, along with the borrower's other monthly housing expenses, with 25 percent of his monthly income.

Rehabilitation loans on residential properties are subject to the maximum limits for loans insurable under section 220(h) of the National Housing Act. Although subject to up to 45 percent increases in high-cost areas, the general maximum for such loans is \$10,000 per dwelling unit for the first three dwelling units in the structure with reduced maximums for additional dwelling units. Loans may not exceed the cost of rehabilitation only, or the cost of rehabilitation plus refinancing of existing debt secured by the property.

The maximum business rehabilitation loan may not exceed the least of (a) \$50,000; (b) the cost of rehabilitation; or (c) an amount which when added to any outstanding indebtedness related to the property creates a total outstanding indebtedness that could reasonably be secured by a first mortgage on the property.

The interest rate on rehabilitation loans is fixed by statute at a 3-percent maximum and the term may not exceed 20 years or three-fourths of the remaining economic life of the structure after rehabilitation. Loans are made only if the applicant is unable to secure a loan on comparable terms.

### 3. *History*

The provision of direct loans for rehabilitation was authorized in the Housing Act of 1964 with an authorization of \$50 million. The first appropriation for this purpose was enacted late in the fiscal year 1965. The rehabilitation grant program was authorized in the Housing and Urban Development Act of 1965.

### 4. *Level of operations.* (See table 1.)

Program: Rehabilitation loans and grants.

Department or agency, and office or bureau: Department of Housing and Urban Development; Renewal Projects Administration [formerly Urban Renewal Administration].

TABLE 1.—*Level of operations or performance, fiscal years 1965-67*<sup>1</sup>

[Dollar amounts in millions]

Measure	Fiscal year 1965 actual	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program:			
Residential rehabilitation loans approved.....		\$15.0	\$27.5
Business rehabilitation loans approved.....			\$7.5
Rehabilitation grants approved.....		\$1.5	\$10
(b) Applicants or participants:			
Individuals or families <sup>2</sup> .....		2,500	4,600
Other business firms.....			500
(c) Federal finances: <sup>3</sup>			
Unobligated appropriations available.....	\$10	\$50	\$35
Obligations incurred.....		\$15	\$35
Commitments made.....		\$15	\$35
(d) Matching or additional expenditures <sup>4</sup> .....			
(e) Number of Federal Government employees <sup>5</sup> .....	14	89	94
(f) Non-Federal personnel <sup>6</sup> .....			

<sup>1</sup> Not in operation in fiscal 1964.<sup>2</sup> Numbers used reflect estimated number of residential loans. The number of families or individuals per loan is unknown.<sup>3</sup> Finances reflect rehabilitation loans only. Grant amounts are title I projects costs and are therefore reflected in the urban renewal projects table.<sup>4</sup> Borrowers and recipients of grants may supplement the amounts provided by the Government but the amount of such supplements is unknown.<sup>5</sup> Employees for loans only. Employees for grant programs are included in figures provided for urban renewal projects.<sup>6</sup> No estimates available.

### 5. *Estimated magnitude of program in 1970*

Experience under the rehabilitation loan and grant programs is still too limited to justify any valid estimates of performance several years into the future. There has been a continuing increase in the extent to which rehabilitation is being used by localities in their overall urban renewal efforts and we can expect this increase to continue.

### 6. *Prospective changes in program orientation*

(a) *Pending legislative proposals.*—None.

(b) *Proposed administrative and organizational changes.*—The Urban Renewal Administration has been incorporated as a part of the new Department of Housing and Urban Development. Aside from this, there are no announced administrative or organizational changes pending.

(c) *Probable changes in the conditions under which the program will function in 1970; e.g., technological, economic, or social.*—At this time there are no estimates of possible impacts of changing technological, economic, or social conditions on the operations of the rehabilitation loan and grant programs.

### 7. *Coordination and cooperation*

(a) *Within your bureau, division, or office.*—Coordination achieved through normal administrative structure.

(b) *With other units of your department or agency.*—See question 3 for discussion of coordination with the Federal Housing Administration and the Federal National Mortgage Association.

(c) *With other Federal Government departments or agencies.*—See question 3 for discussion of coordination with the Small Business Administration.

(e) *With local governments or communities.*—The rehabilitation loan and grant programs are carried out through local public agencies and

municipalities engaged in undertaking urban renewal activities including code enforcement projects.

For (d), (f), (g), (h), and (i). None.

### 8. *Laws and regulations*

Rehabilitation loans:

Public Law 88-560, approved September 2, 1964 (78 Stat. 769, 790, sec. 312). Amended by: Public Law 89-117, approved August 10, 1965, 79 Stat. 451, 479, sec. 312 (see Basic Laws and Authorities, on Housing and Urban Development, 1965, p. 246).

Rehabilitation grants:

Public Law 89-117, approved August 10, 1965, 79 Stat. 451, 457, sec. 106 (see Basic Laws and Authorities on Housing and Urban Development, 1965, p. 284).

Current appropriations:

Public Law 89-128, approved August 16, 1965, 79 Stat. 520 (see Basic Laws and Authorities on Housing and Urban Development, 1965, p. 596). Supplemented by: Public Law 89-309 (rehabilitation grants only) approved October 31, 1965, 79 Stat. 1133, 1135 (see Basic Laws and Authorities on Housing and Urban Development, 1965, p. 603).

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

Operations under the rehabilitation loan and grant programs are still too new to permit any valid judgments on economic effects. It is believed that the programs will reduce the costs of housing or provide substantially better housing at the same or slightly higher costs for a significant number of families. As an integral part of urban renewal and code enforcement efforts, it will help arrest and reverse the decline of neighborhoods.

### 10. *Economic classification of program expenditures.* (Included under Urban Renewal Projects.)

There were no expenditures for rehabilitation loans and grants in fiscal year 1965.

## Urban Transportation Administration

### URBAN MASS TRANSPORTATION

#### PART I. DESCRIPTION OF THE PROGRAM

### 1. *Objectives*

The purposes of the urban mass transportation program are:

(a) To assist in the development of improved mass transportation facilities, equipment, techniques, and methods, with the cooperation of mass transportation companies, both public and private;

(b) To encourage the planning and establishment of areawide urban mass transportation systems needed for economical and desirable urban development, with the cooperation of mass transportation companies, both public and private; and

(c) To provide assistance to State and local governments and their instrumentalities in financing such systems, to be operated by public or private mass transportation companies as determined by local needs.

## 2. *Operation*

The program involves:

(a) Grants to assist public bodies (States, municipalities, and other political subdivisions of States; public agencies and instrumentalities of one or more States, municipalities, and political subdivisions of States; and public corporations, boards, and commissions established under the laws of any State) in the acquisition, construction, and improvement of facilities and equipment for use, by operation, lease, or otherwise, in mass transportation service in urban areas and in coordinating such service with highway and other transportation in such areas. Grants may not exceed two-thirds (one-half where certain planning requirements are not fully met) of that portion of project costs which cannot reasonable be financed from revenues.

(b) Loans to public bodies for the same purpose, in cases when revenues are sufficient to assure repayment but for whom funds are not available in the private market upon reasonable terms. The current interest rate is 4½ percent.

(c) Research, development, and demonstration projects, directly or by contract, in all phases of urban mass transportation. Funds authorized have generally been used for grants to public bodies for two-thirds of the net costs of demonstrating new ideas or methods for improving mass transportation systems or service

## 3. *History*

The Housing Act of 1961 (Public Law 87-70) authorized \$25 million for grants to public agencies to assist in demonstrating new ideas or methods for the improvement of urban mass transportation and \$50 million for low-interest rate loans for capital improvements to urban mass transportation systems.

Following a joint study by the Housing and Home Finance Administrator and the Secretary of Commerce, the President recommended to the Congress enactment of legislation to establish a continuing program of assistance in this area.

In 1964, the Congress enacted the Urban Mass Transportation Act of 1964, which provides Federal assistance through capital grants and loans and a program of research, development, and demonstration projects.

These programs, which are outlined in paragraph 2, above, are administered through the Urban Transportation Administration (formerly the Office of Transportation) in the Department of Housing and Urban Development.

## 4. *Level of operations.* (See table 1.)

Program: Urban mass transportation.

Department or agency, and office or bureau: Department of Housing and Urban Development; Urban Transportation Administration [formerly Office of Transportation].

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

[Dollar amounts in millions]

	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
Number of approved projects.....	11	28	55	55
Participants:				
Multistate authority.....	3	1	(1)	(1)
State government or agency.....	2	5	(1)	(1)
Local government or agency.....	6	22	(1)	(1)
Federal finances:				
Grant amount authorized.....	\$25	\$75	\$150	\$150
Grant amount appropriated.....	\$4.8	\$60	\$130	\$130
Grant funds committed.....	\$4.3	\$59.6	\$130	\$130
Matching expenditures: Funds committed by local and State bodies <sup>1</sup> .....	\$2.1	\$37.6	\$65	\$65
Number of Federal employees engaged in pro- gram administration at yearend.....	16	23	40	55
Number of non-Federal employees of partici- pating public bodies.....	(1)	(1)	(1)	(1)

<sup>1</sup> Not available, or indeterminate.<sup>2</sup> 1961 authorization.<sup>3</sup> The proportion of the Federal grant to the net project cost varies, depending upon the status of comprehensive and transportation planning in the urban area. These figures show the local contribution when all planning requirements are met, since fund reservations are made on this basis.

NOTE.—No loans were approved in fiscal years 1964 and 1965. In fiscal 1966, 1 loan of \$3,100,000 has been approved. No appropriation for loan program is being requested for fiscal 1967.

### 5. *Estimated magnitude of program in 1970*

It is not possible at this time to predict with any accuracy the 1970 program level. The authorization for appropriation in the 1964 act is only through 1967. Sufficient data concerning the industry is not yet available to project its long-term capital requirements or the portion of these requirements which can be met without grant assistance.

It is clear, however, that the needs by 1970 will be greater than those which have existed in the past. The vastly increased numbers of people who will live in cities and the absolute limits to which existing urban areas can be turned into roadway and parking areas make it inevitable that substantially larger numbers of persons must be moved by some type of public mass transit. Local government will place increasing dependence upon mass transit as an element of orderly and rational growth.

### 6. *Prospective changes in program orientation*

Modifications of the urban mass transportation program may occur as a result of anticipated legislation to amend and extend the authorization of the Urban Mass Transportation Act of 1964, or in connection with the organization of the new Department of Housing and Urban Development. The President's proposal for a new Department of Transportation, as mentioned in his recent state of the Union address, may also have a significant effect on the present program.

Several bills were introduced in the last session of Congress directly affecting the program. H.R. 9200 and 21 other identical bills were introduced in the House and S. 2599 in the Senate to establish a 2-year, \$20 million federally supported research program for the development of new urban transportation systems.

Bills have also been introduced (S. 2339 and H.R. 10126, 10170, 10171, and 10172) to increase the Federal funds available for urban mass transportation by permitting a State to use some of the highway trust funds for this purpose.

Other pending legislation of a general nature which would affect the program are: S. 2643, directing the ICC not to approve railroad mergers or consolidations unless they conform to ICC-approved regional plans; S. 1681, to provide for uniform relocation payments and various bills dealing with intergovernmental cooperation.

Predictions for social and economic conditions in 1970 all point to a higher percentage of the growing population living in urban areas. The President stated in his message to Congress on the "Problems and Future of the Central City and Its Suburbs," that the equivalent of 15 cities of 200,000 each will be added every year within the coming generation. This will greatly increase pressures on the cities for better public transportation facilities.

Traffic congestion will intensify with the projected growth of the automobile industry. It is estimated that by 1980 the number of private vehicles will pass the 120 million mark, as compared to the present 85 million. (Also, see comments under question 5.)

#### 7. *Coordination and cooperation*

(a) *Within the Office of Transportation.*—The staff of the Office of Transportation is now, and will be for the foreseeable future, sufficiently small that coordination problems among the several program activities are minimal. Communications are direct and informal.

(b) *With other units of HUD.*—Coordination with other HUD programs is essential in order to fulfill the overall objective of encouraging the planning and establishment of areawide urban mass transportation systems needed for economical and desirable urban development.

The principal means of coordination is through the requirement that capital facilities or equipment be found to be needed in carrying out a program for a unified or officially coordinated urban transportation system as a part of the comprehensively planned development of such area.

The Office of Planning Standards and Coordination, under an Assistant Administrator, has been established to coordinate the comprehensive planning requirements of this and other legislation administered by HUD. The Assistant Secretary for Metropolitan Development reviews all applications for capital assistance to determine whether the comprehensive planning requirement has been met and adequately provides a basis for a transit improvement program.

(c) *With other Federal departments.*—Comprehensive urban area planning is a prerequisite for aid under the Federal Highway Act, as well as under the Urban Mass Transportation Act. The coordination of these requirements is carried out through direct liaison between HUD and the Department of Commerce and joint committees at the regional level and in Washington.

The Department of Labor reviews all applications for assistance under the Urban Mass Transportation Act to determine that fair and equitable arrangements under section 10(c) of the act have been made to protect the interests of affected employees.

The Department of Health, Education, and Welfare, pursuant to section 11 of the act, has established air pollution control standards for facilities or equipment assisted through Federal mass transportation grants or loans. These standards are included in the grant or loan contract.

(d) and (e) *With State and local governments.*—Where State mass transportation agencies have been established (notably Massachusetts, New York, and Pennsylvania) liaison is maintained between HUD and the State agency. In general, however, no overall State agencies exist for the purpose of providing State assistance or coordinating assistance to local agencies on a statewide basis.

Financial assistance under the Urban Mass Transportation Act is in all instances channeled through a public agency, which may be a State or local governmental body, public authority, or an interstate body. The public agency must show that the assistance is needed to carry out a continuing transit improvement program based on adequate comprehensive planning. The public agency must also be able to provide sufficient continuing control to assure that the facilities and equipment are used for the purpose for which the grant or loan is made.

(f) *With foreign governments.*—There is a continuing exchange of ideas and experience through discussion with visiting officials of foreign countries who are interested in transportation problems. These contacts are coordinated through the Office of International Housing and with other Federal agencies, such as the Bureau of Public Roads in the Department of Commerce.

(g) *With nonprofit organizations.*—Such groups as the American Transit Association, Institute of Rapid Transit, Railway Progress Institute, National League of Cities, and the conference of mayors frequently request information and program data with regard to the urban mass transportation program for dissemination to their members. In turn, these organizations keep the Department informed concerning the views and needs of their constituents.

(h) *With business enterprises.*—Private companies providing urban mass transportation service participate in the program under contract or other agreement with the State or local public agency to which a Federal grant or loan may be made.

## 8. Laws and regulations

Urban Mass Transportation Act of 1964, Public Law 88-365, July 9, 1964.

Housing and Urban Development Act of 1965, Public Law 80-117, August 10, 1965, which repeals section 9(c) of the Urban Mass Transportation Act of 1964 relating to the use of American-made products (sec. 1109).

Independent Offices Appropriation Act of 1966, Public Law 89-128, August 16, 1965.

“Information for Applicants: Mass Transportation Demonstration Program.”

“Information for Applicants: Capital Grants and Loans for Urban Mass Transportation.”

“Urban Mass Transportation Program Planning Requirements Guide.”

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

Data quantifying the economic effects of the urban mass transportation program are not currently available. This is an area in which further research activity, both public and private, is needed.



There is general agreement, however, that public mass transportation (whether bus, rail rapid transit, or commuter rail) is a significant factor in shaping the developing urban complexes of the Nation, providing maximum mobility and choice for people living in these complexes, and preserving the economic vitality of downtown areas. The urban mass transportation program aids in the preservation and improvement of such systems through research and demonstration projects and through the provision of capital assistance where new facilities or equipment cannot be fully supported by transit revenues.

In major cities public transportation is critically essential to the movement of people. Without it, the daily flow of people between their homes and places of work would be virtually impossible. Even if it were physically possible to move these people by private automobile, the expenditures for street and parking facilities would exceed by many times the cost of providing adequate mass transportation facilities, and the land needed for streets and parking would divert land from other uses essential to the maintenance of the public and private economy of the urban area.

In smaller cities, the need for public transportation may be less dramatically apparent than in the great urban centers. This need still exists, however, in providing mobility to that large segment of the population which does not have ready access to private transportation—the young, the elderly, the physically handicapped, and the economically underprivileged.

The employable person who, for whatever reason, does not have an automobile is, in the absence of public transportation, restricted in his ability to seek or hold employment outside a relatively small area. This restriction adversely affects his individual earning power and choice of employment. It likewise restricts the ability of business enterprises to recruit from the entire labor force in the urban area.

The absence of public transportation may remove other choices from sizable groups of people, who are restricted in where they can shop, or where they can go for recreation, or in their participation in civic affairs. This adversely affects both the people whose mobility is restricted and the economic and social structure of the urban area in which they live.

#### 10. *Economic classification of program expenditures.* (See table 2.)

Program: Urban mass transportation.

Department or agency, and office or bureau: Department of Housing and Urban Development; Urban Transportation Administration [formerly Office of Transportation].

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government: Grants to State and local governments (total Federal expenditures).....	11.1
Non-Federal expenditures financed by State and local governments <sup>1</sup> .....	6.0
Total expenditures for program.....	17.1

<sup>1</sup> Estimated.

### Housing Assistance Administration

#### HOUSING FOR THE ELDERLY AND HANDICAPPED

##### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

Under the senior citizens housing loan program authorized by section 202 of the Housing Act of 1959, as amended, financial assistance

in the form of direct loans is provided to private nonprofit corporations, consumer cooperatives, and certain public bodies for the construction or rehabilitation of rental housing for the elderly (62 years of age or older) and the handicapped. Loans may be made up to 100 percent of the development cost for periods up to 50 years. The current interest rate on such loans is 3 percent.

This program of direct loans permits assistance for development of nonprofit projects intended to serve those elderly people whose incomes are generally above the levels established for admission to public housing projects but below that needed to pay the rentals for adequate private housing otherwise available.

Project design, site selection, and financial arrangements must be consistent with the ultimate purpose of achieving a pleasant living arrangement at minimum rentals, which promotes the independence and self-reliance of senior citizens. Project planning and design should take into account the desires and needs of older persons for privacy, participation in social and community activities, and access to community services.

## *2. Operation*

The senior citizens housing loan program is administered by the Housing Assistance Administration (formerly by the Community Facilities Administration) through the several regional offices of the Department of Housing and Urban Development. The processing of loan applications takes place within the regional offices where HUD program staff reviews basic loan proposals and technical staff of HUD evaluates the supporting documents. Final approval of the loan takes place in Washington by the Commissioner of the Community Facilities Administration. After loan approval and satisfaction of Federal requirements by the borrower, and receipt of an acceptable bid, the borrower is authorized to proceed with the construction of the project. The project is constructed by private contractors who are the successful bidders. The entire responsibility for project development and operation rests with the borrower after loan approval and bid acceptance. The Federal participation is limited to assuring proper use of loan funds during development and conformance to the general objectives of the program as well as to determining that the borrower can meet loan repayment obligations after the project is in operation.

## *3. History*

The senior citizens housing program came into being with the signing of the Housing Act of 1959 by President Eisenhower in September 1959. This bill authorized appropriations of \$50 million. Congress subsequently appropriated \$20 million to provide for 98-percent loans for a program that was to be considered a pilot program in an effort to meet the housing need of the well elderly. The program was originally administered directly under the Office of the Administrator of the Housing and Home Finance Agency. In May of 1961, this program was transferred to the Community Facilities Administration. Subsequent to the transfer of the program, additional housing legislation broadened the scope of the program and increased authorized appropriations.

The Housing Act of 1961 authorized 100-percent loans. It was administratively determined in December of 1962 that all senior

housing projects developed under this program would be subject to income limits established by the Administrator. In this same year, the size of the projects permissible under the loan program was increased from 50 units to 300. The program continued without significant legislative change until the Housing Act of 1964, which expanded the program to include housing for the handicapped.

Under the Housing Act of 1965, authorized appropriations were increased to \$500 million through 1968, with an interest rate of 3 percent. A supplemental appropriation also raised the funds available through June 30, 1966, from \$275 to \$325 million.

#### 4. Level of operations. (See table 1.)

Program: Housing for the elderly and handicapped.

Department or agency, and office or bureau: Department of Housing and Urban Development; Housing Assistance Administration [formerly Community Facilities Administration].

TABLE 1.—Level of operations or performance, fiscal years 1964-67

[Dollar amounts in thousands]

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program:				
Approved loans:				
This year:				
Projects.....	41	34	43	40
Dwelling units.....	5,128	4,719	6,584	6,000
Federal loan.....	\$57,953	\$57,806	\$80,698	\$73,200
Cumulative:				
Projects.....	109	150	193	233
Dwelling units.....	12,046	17,174	23,758	29,758
Federal loan.....	\$139,508	\$197,461	\$278,159	\$351,359
Construction starts:				
This year:				
Projects.....	30	35	25	45
Dwelling units.....	3,059	4,476	4,104	6,900
Federal loan.....	\$34,110	\$53,428	\$48,464	\$82,200
Cumulative:				
Projects.....	75	105	130	175
Dwelling units.....	7,878	10,937	15,041	21,941
Federal loan.....	\$92,197	\$126,307	\$174,771	\$256,971
Construction completed:				
This year:				
Projects.....	22	30	29	40
Dwelling units.....	2,291	2,737	3,293	5,600
Federal loan.....	\$26,667	\$31,586	\$38,963	\$67,200
Cumulative:				
Projects.....	45	67	96	136
Dwelling units.....	3,528	5,891	9,112	14,712
Federal loan.....	\$39,036	\$65,703	\$104,666	\$171,866
(b) Applicants (loan applications):				
This year:				
Number.....	38	37	64	50
Number of units.....	5,401	5,254	10,063	7,900
Amount.....	\$64,386	\$62,535	\$123,462	\$95,000
Cumulative:				
Number.....	361	398	462	512
Number of units.....	41,596	46,850	56,913	64,813
Amount.....	\$450,879	\$513,414	\$636,876	\$731,876
(c) Federal finances:				
Unobligated appropriation available.....	\$75,000	\$78,176	\$85,218	\$88,488
Obligations incurred.....				
Allotments made (fund reservations).....	\$49,296	\$46,858	\$85,000	\$85,000
(d) Matching or additional expenditures.....	None	None	None	-----
(e) Number of Federal employees.....	(1)	(1)	(1)	-----
(f) Non-Federal personnel.....	(1)	0	0	-----
(g) Other measures of level.....	(1)	(1)	(1)	-----

<sup>1</sup> Not available. It is difficult, if not impossible, to estimate the number of actual employees involved in this process. Activity ranges from the full-time program or policy staff person, specifically engaged in the direct loan program, to the hundreds of other staff members of the Department, who service smaller aspects of the program on a part-time or itinerant basis. These may include regional office technical review staff, such as attorneys, architect-engineers, finance men, field engineers, general administrative personnel, down to less specialized persons, including typists, file clerks, and the like.

5. *Estimated magnitude of program in 1970*

It is estimated that the program level in 1970 will be between \$150 and \$170 million per year.

6. *Prospective changes in program orientation*

We do not foresee any significant change in program orientation or emphasis within the next few years.

7. *Coordination and cooperation*

(a) Coordination of the senior housing program within CFA is accomplished through the Assistant Commissioner for Operations and Engineering. The program depends on other organization units for services and technical assistance.

(b) through (i) Coordination of the senior housing program with other Government or private agencies and groups is accomplished through the Assistant Administrator for Senior Housing for the Housing and Home Finance Agency. He provides policy guidance and assures that the objectives and policies of the program are coordinated with other programs as appropriate.

8. *Laws and regulations*

Housing Act of 1959, Public Law 86-372, September 23, 1959: Program was enacted with an authorization of \$50 million; related facilities limitation was \$5 million.

Housing Act of 1961, Public Law 87-70, June 30, 1961: Authorization was increased from \$50 million to \$125 million; related facilities limitation was removed; permitted 100-percent loans, deleting previous 2-percent equity requirement.

Senior Citizens Act of 1962, Public Law 87-723, September 28, 1962: Increased authorization from \$125 million to \$225 million; confined loans to new construction for both housing and related facilities.

Joint resolution, Public Law 88-158, October 24, 1963: Increased authorization from \$225 million to \$275 million.

Housing Act of 1964, Public Law 88-560, September 2, 1964: Authorization increased from \$275 million to \$350 million; handicapped families eligible regardless of age; loans may be made for the rehabilitation or conversion of existing structures to provide housing and related facilities.

Housing and Urban Development Act of 1965, Public Law 89-117, August 10, 1965: Increased authorization from \$350 million to \$500 million; reduced maximum interest rate to 3 percent.

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

(a) The direct loan program has made possible lower costs of housing for elderly persons, by virtue of the lower interest rate, and the longer term for the loans. This has freed older persons to use the money thereby released for other needs, such as food, medicine, and clothing. The elderly who do not actually have to enter homes for the aged and remain in living arrangements under 202 auspices are able to conserve their money until later medical emergencies require it.

For those families supporting older persons, the same benefit applies, in the case of lowered rents deriving from the lower interest rate, times the number of families involved each year.

(b) (c), (d), (e), and (f) not applicable.

(g) This program, developed in the past 6 years, has been rising very rapidly, out of any proportion to the GNP. However, the construction, salary, and other expenditure benefits do contribute to the GNP. [See (h) below.]

(h) Other economic effects:

(1) About four-fifths of loan goes for construction and other labor, which produces about 15 percent in Federal taxes, and one quarter of this in State and local taxes.

(2) About one-half of the loan is for materials, on which there is an average sales tax of 2 percent.

(3) Real estate values increase upon construction as a project, by about 75 percent of the value of the land, which is about 10 percent of the total cost of the project.

(4) Each project produces an increase in the number of man-years of labor, assuming that 80 percent of the project is construction cost, and that each \$1,000 produces 198 man-hours of labor, and an average of 2,000 man-hours makes up a man-year.

#### 10. Economic classification of program expenditures. (See table 2.)

Program: Housing for the elderly and handicapped.  
Department or agency, and office or bureau: Department of Housing and Urban Development; Housing Assistance Administration.

TABLE 2.—Economic classification of program expenditures for fiscal year 1965

[In millions of dollars]

Federal Government:	
Purchases of goods and services.....	1. 0
Loans to nonprofit organizations.....	42. 6
<b>Total Federal expenditures<sup>1</sup>.....</b>	<b>43. 6</b>

<sup>1</sup> \$43,600,000 represents gross expenditures. Applicable receipts are \$2,200,000, leaving net expenditures of \$41,400,000.

## Federal National Mortgage Association

### SECONDARY MARKET OPERATIONS

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. Objectives<sup>1</sup>

The secondary market operations of the Federal National Mortgage Association, basically a privately financed activity, have as their statutory objective the provision of supplementary assistance to the secondary market for home mortgages by providing a degree of liquidity for mortgage investments, thereby improving the distribution of investment capital available for home mortgage financing. FNMA accomplishes this objective by its purchases of acceptable Federal Housing-insured (FHA) and Veterans-guaranteed (VA) mortgages and Farmers Home-insured loans (FHDA) in areas where, and at times when, investment funds are in short supply and by selling such mortgages and loans in areas where and when investment funds are available. FNMA is also authorized to make bank-type short-term loans which are secured by FHA-insured or VA-guaranteed mortgages or FHDA-insured loans, and to purchase, sell, and deal otherwise in participations in such federally insured loans and mortgages.

<sup>1</sup> The secondary market operations of the Federal National Mortgage Association are authorized by the Federal National Mortgage Association Charter Act as set forth in 12 U.S.C. 1716 et seq. and more particularly in secs. 1716-1719 thereof.

## 2. *Operations*

The Federal National Mortgage Association is a national corporation that had its inception in 1938 as a wholly owned instrumentality of the Federal Government pursuant to title III of the National Housing Act as then amended (52 Stat. 8). In 1954, the Association was rechartered as a mixed-ownership corporation (68 Stat. 590); all of its common stock is freely transferable and is owned by private shareholders; the preferred stock is owned in part by the Federal Government (Secretary of the Treasury) and in part by FNMA in the form of corporate treasury stock. The capitalization of the Association pertains only to the secondary market operations, one of three compartments from which the Association's activities are conducted.

The corporation's mortgage activities are conducted under three separate functions or operations—(1) the secondary market operations, basically a privately financed activity; (2) the special assistance functions; and (3) the management and liquidating functions, both the latter of which are operated for the account of the Government with U.S. Treasury funds (excepting the interests of, and funds of, investors in FNMA's participation certificates.) Each of the three activities has separate accountability and operates in much the same way as though each was a separate corporation. For purposes of efficiency and economy, however, staff and common services for all three programs are consolidated so that there is a single legal staff, a single accounting staff, a single audit staff, et cetera. A majority of the corporation's employees work on, or serve, and their expenses are charged to, more than one program or activity. An expense distribution system to record costs on a program basis is kept in the official books which are subject to audit.

FNMA conducts its overall activities nationally through five field offices located throughout the country so as to best serve the needs of the organizations which do business with the Association. In addition to these field offices (located in Philadelphia, Pa., Atlanta, Ga., Chicago, Ill., Dallas, Tex., and Los Angeles, Calif.), FNMA maintains a fiscal agency office and a mortgage sales office in New York City and an administrative or central office in Washington, D.C.

## 3. *History*

FNMA is a corporation which was established in 1938 to provide a market for the purchase and sale of FHA-insured mortgages. The scope of the Association's activities was broadened in 1948 to provide similar facilities for VA-guaranteed mortgages and, in 1965, for rural housing loans insured by the Farmers Home Administration of the Department of Agriculture. The secondary market operations of the Association date from 1954 when the corporation was rechartered by statute to provide a secondary market facility for home mortgages and to provide that the operation shall be "financed by private capital to the maximum extent feasible" (68 Stat. 590).

The secondary market operations of the Association are financed, in the main, through the issuance of preferred stock to the Secretary of the Treasury and common stock to organizations that sell mortgages to, or that borrow funds from, the Association and by borrowings from private investors through sales to them of the corporation's

debentures and short-term discount notes not exceeding 10 times the sum of FNMA's capital and surplus in these operations. Other funds are derived from portfolio liquidation, fees, and charges for various services by the Association, interim borrowings from the Secretary of the Treasury, income from investments other than mortgages, and income from general operations.

The FNMA Charter Act provides that when all of the outstanding preferred stock held by the Secretary of the Treasury has been retired, the assets and liabilities of the corporation in connection with, and the control and management of, the secondary market operations shall be transferred to the owners of the outstanding common stock in order that the operations might thereafter be carried out by a privately owned and privately financed corporation.

As stated under question No. 1 of this part, the basic objective of the secondary market operations is to provide supplementary assistance to the secondary market for home mortgages by providing a degree of liquidity for mortgage investments, thereby improving the distribution of investment funds available for home mortgage financing. In achieving this objective, the Association purchases acceptable FHA-insured and VA-guaranteed mortgages and FHDA-insured loans from organizations (such as mortgage banking companies, State and federally supervised banks and savings and loan associations, insurance companies, and other such organizations) in areas where, and at times when, mortgage funds are in short supply and sells such mortgages or loans from portfolio in areas where and when investors (such as banks, insurance companies, and the like) have funds available for mortgage investment.

Under its secondary market operations, dating from November 1, 1954, FNMA has contracted to purchase 491,682 FHA and VA mortgages totaling \$5,904 million in 10½ years through June 30, 1965, and purchased 457,440 mortgages with unpaid principal balances aggregating \$5,411 million. During the same period, sales aggregated 199,206 mortgages totaling \$2,332 million. The purchases related to properties located in 48 States, the District of Columbia, Puerto Rico, and the Virgin Islands as indicated in the answer to question No. 9(f) of part II hereof.

*4. Level of operations.* (See table 1.)

Program: Secondary market operations.

Department or agency, and office or bureau: Department of Housing and Urban Development: Federal National Mortgage Association.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

[Dollars in millions]

Measure	Unit	1964		1965		1966 estimate		1967 estimate	
		Number	Amount	Number	Amount	Number	Amount	Number	Amount
(a) Magnitude of program.....	Mortgages:								
	Immediate and commitment contracts executed.....	18,295	\$183.5	32,969	\$356.7	185,000	\$2,000.0	104,000	\$1,300.0
	Purchases.....	17,888	179.2	28,286	\$04.8	168,000	1,900.0	96,000	1,200.0
	Sales.....	9,797	112.5	7,007	72.7	460	5.0	2,300	25.0
(b) Applicants or participants:									
State government agencies.....		None		None		None		None	
Local communities or governments.....		None		None		None		None	
Individuals or families.....		17,919		20,439		165,000		100,000	
Other.....									
	Units of housing.....	251		442		685			
	Mortgage banking organizations.....	64		91		125			
	Banks and trust companies.....	10		19		35			
	Savings and loan associations.....	1		6		10			
	Insurance companies.....								
(c) Federal finances:									
Unobligated appropriations available (borrowing authority available (trust revolving fund)) <sup>1</sup> .....			2,365.4		2,407.8		2,320.8		2,260.8
Obligations incurred.....			360.0		506.4		2,154.2		1,484.2
Allotments or commitments made.....			183.5		356.7		2,000.0		1,300.0
(d) Matching or additional expenditures for the program.....			None		None		None		None
(e) Number of Federal Government employees administering the program. <sup>2</sup>	Man-years.....	965		860		920		965	
(f) Non-Federal personnel employed in program. <sup>3</sup>	Number of persons:								
	Under contract (fiscal).....	4		4		4		4	
	Attorneys (individuals, firms, trustees).....	899		914		950		950	
	FNMA mortgage servicing organizations.....	1,080		1,035		1,035		1,035	
(g) Other measures of level or magnitude of performance.....	Portfolio liquidation other than sales.....	12,956	183.7	13,080	173.7	13,900	195.0	17,900	250.00

<sup>1</sup> FNMA's Secondary Market Operations are not financed with appropriated funds. Required funds are obtained, in the main, by borrowings from private investors or, on an interim basis, from the Secretary of the Treasury, subscriptions to preferred and common stock, and portfolio liquidation.

<sup>2</sup> As noted in answer to question No. 2, the association's employees are not segregated

in respect to the various functions or operations but operate as a single staff for all activities.

<sup>3</sup> Servicers utilized in connection with FNMA's overall activities are not identified with any one function or operation.



5. *Estimated magnitude of program in 1970.* (See table 2.)TABLE 2.—*Secondary market operations, fiscal year 1970*

Activity	Number of mortgages	Approximate volume
Immediate and commitment contracts executed to purchase mortgages.....	75,000	\$810,000,000
Purchases.....	69,500	750,000,000
Sales.....	13,900	150,000,000
Repayments and other liquidation.....	21,100	350,000,000

6. *Prospective changes in program orientation*

(a) *Pending legislative proposals.*—From time to time, there have been discussions among the various housing industry groups regarding the advisability and feasibility of expanding FNMA's secondary market operations to permit the Association to deal in conventionally financed mortgages in addition to those which are underwritten by an agency or instrumentality of the Federal Government. Such a bill was introduced in the Senate (S. 787) on January 27, 1965. No action was taken on the bill during the current session of the Congress. Should this bill, or its equivalent, be enacted into law, the Association's activities under its secondary market operations could be materially affected and would enable the corporation to expand the scope of its services to the housing industry and the housing economy generally.

(b) *Proposed administrative and organizational changes.*—None contemplated at this time.

(c) *Probable changes in the conditions under which the program will function in 1970.*—None anticipated at this time.

7. *Coordination and cooperation*

(a) *Within FNMA itself.*—None other than to the extent specified in answer to question No. 2.

(b) *With other units of agency—HUD.*—

(1) Under an arrangement entered into in March 1962 between the Association and the Federal Housing Commissioner, the Association has acquired, as of June 30, 1965, for the portfolio of its secondary market operations 27,889 Federal Housing Commissioner-owned mortgages, totaling \$263 million, in exchange for FNMA-held FHA debentures which FNMA had acquired in connection with the foreclosure of certain corporation-owned FHA mortgages. This action relieved the Federal Housing Administration of the necessity of servicing that volume of mortgages with staff employees. FNMA's purchases of these mortgages and their addition to its portfolio were accomplished with a minimum of adjustment to its personnel staffing. Since, as indicated, the mortgages in question were previously owned by FHA and had been serviced for that agency by FHA staff employees, the acquisition of the mortgages by FNMA effected substantial savings in personnel expenses to the FHA and simultaneously provided FNMA's contract servicers with additional servicing income under the corporation's arrangement of having its one- to four-family housing mortgages serviced by private servicers under contract.

Other examples (affecting FNMA as a whole and not specifically the secondary market operations):

(2) Between mid-March 1964 and October 1, 1965, administrative services for the voluntary home mortgage credit program (VHMCP),

which theretofore had been provided by the Office of the Administrator HHFA, were provided through FNMA pursuant to delegation by the Administrator. Under the Housing Act of 1954, general supervision of the program and the establishment of its operating policies were the responsibility of the National Voluntary Home Mortgage Credit Extension Committee composed of 14 representatives of the real estate, homebuilding, and home-financing industries. These representatives were appointed by the Administrator of HHFA, who was also Chairman of the Committee. At the time of the change referred to above, the National Committee operated through six regional subcommittees all of which were provided with administrative services by the respective regional offices of HHFA. That portion of the National Housing Act (68 Stat. 637.) which provided for the establishment and functioning of the VHMCP expired by act of law as of October 1, 1965.

(3) Pursuant to the provisions of 73 Stat. 654, 79 Stat. 451 and 79 Stat. 667, FNMA is authorized, under its management and liquidating functions, to make commitments to purchase, and to purchase, service or sell any obligations offered to it by the Secretary of Housing and Urban Development or any mortgages covering residential property offered to it by any Federal instrumentality. Under this arrangement, FNMA has taken over the management and servicing of approximately \$159 million of HHFA (now HUD) mortgages that were previously serviced for the agency by the Public Housing Administration (Lanham Act housing mortgages) and by the Community Facilities Administration. The Association, under its management and liquidating functions, has also acquired, as of June 30, 1965, 19,807 Federal Housing Commissioner-owned mortgages, totaling \$171 million, in exchange for FNMA-held FHA debentures or for cash.

(4) During 1965, pursuant to an arrangement entered into between FNMA and the Administrator, HHFA (now Secretary of Housing and Urban Development), this Association will undertake to service, on a temporary and experimental basis, rehabilitation loans that are created under section 312 of the National Housing Act (78 Stat. 769) and simultaneously will acquaint the personnel of local public agencies in respect to FNMA's servicing techniques with the view that servicing of the loans will eventually be assumed by the personnel of the local public agencies in the areas in which the properties in question are located.

(e) and (f) *With other Federal Government departments or agencies; with foreign governments or international organizations.*—The Association has made arrangements, from time to time, with the Agency for International Development (AID) under which certain corporation personnel have been assigned the responsibility of investigating the possibilities and feasibility of developing secondary market financing for home mortgages in Latin American countries and elsewhere, using domestic or foreign capital or a combination of the two. In this connection, a FNMA employee visited Chile on two different occasions in 1960 and 1961; three corporation employees spent approximately a month each in South America during 1965, one each in Peru, Venezuela, and Ecuador; and on two occasions a FNMA employee also spent a period of time in 1964 and 1965 in Jamaica, for similar purposes.

For (d), (e), (g), and (i).—None.

(h) *With business enterprises.*—

(1) FNMA's servicing of mortgages, as indicated in answer to question No. 4, is conducted for the Association by private servicing organizations under contract. During fiscal year 1965, the servicing of FNMA's 3 mortgage portfolios was performed by 1,035 servicing organizations on a contract basis for which the Association paid, under the secondary market operations alone, servicing fees aggregating \$9,796,584.

(2) FNMA's legal services, other than those which are conducted on a staff basis, are performed for the Association on a contract basis by individual attorneys, legal firms, or by trustees. During fiscal year 1965, the Association's overall legal services, including foreclosure litigation or other such matters, were performed by 914 different attorneys, legal firms or trustees to whom were paid legal fees totaling \$817,000 under the secondary market operations.

### 8. *Laws and regulations*

Federal National Mortgage Association Charter Act, as amended through September 9, 1965 (title III of National Housing Act, 12 U.S.C. 1716, et seq.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

(a) *Effects on personal incomes of persons served or involved.*—The effects, if any, of FNMA's activities, under the secondary market operations, on the personal income, etc., of its individual mortgagors cannot be specifically identified. However, as noted in answer to question No. 7(b) above, FNMA, during 1965 alone paid almost \$10 million of servicing fees to its 1,035 contract servicers and approximately \$817,000 of fees to attorneys, legal firms, and trustees under its secondary market operations.

(b) *Effects on the placement or productivity of workers, or both, and on their earnings.*—Not identifiable.

(c) *Effects on business or individual organizations and management; the stimulation of new business.*—See comments in respect to question 9(a) above. Under its secondary market operations, FNMA has purchased 274,658 FHA mortgages totaling \$3,186 million and 182,782 VA mortgages amounting to \$2,225 million from originating organizations providing in the aggregate financing for 460,243 family residences or dwelling units (approximately 182,800 units under VA financing and 277,450 under FHA financing). Far more significant than its actual purchases, however, is the fact that the Association's existence and known continuous availability of its secondary market operations as a sort of backstop for mortgage financing provides needed, and perhaps indispensable, assurances to those who buy, sell, and deal in mortgages in the broad general secondary market.

(d) *Effects on the stability, level, volume, or other aspects of sales, prices, or other phases of economic activity.*—The flexibility of FNMA's secondary market operations, which includes the ability to adjust readily to changing market conditions so as to meet effectively the financing needs of the housing industry, and the corporation's role as a stabilizing influence on the mortgage market, are widely recognized. A few of FNMA's services are cited:

(1) During the last 10½ years, the corporation, under its secondary market operations, has continuously been in the market for FHA and VA mortgages.

(2) When the market is "tight," FNMA's purchasing activities expand, thereby making a relatively greater volume of mortgage funds available in capital shortage areas. Thus, in 1957 and 1960, both tight money years, FNMA's secondary market purchases were \$1,021 million and \$980 million, respectively.

(3) When the market eases, and the need for liquidity furnished by FNMA decreases, mortgages are sold to private investors and the proceeds are used to buy more mortgages or to reduce borrowings. Illustrative are the \$446 million of sales in 1958, \$522 million in 1961, and \$780 million in 1963.

(4) FNMA's purchase prices are generally in the upper range of the market, thus providing stability to the price structures and interest rates for FHA and VA mortgages.

(5) Sales prices are sufficiently high to avoid undercutting the market for FHA and VA mortgages and to help to strengthen the position of such mortgages in the general market.

(6) In its financing program, FNMA is able to bring into the mortgage market a volume of investment funds (including those of public and private pension funds, foundations, personal and corporate trusts, foreign accounts, etc.) that would otherwise be channeled into other forms of investments.

(e) *Any other benefits.*—Generally speaking, FNMA's mortgage purchasing activities are heaviest when mortgage funds are in short supply and relatively expensive and lightest when the opposite conditions prevail. Thus, FNMA provides the housing industry with a volume of funds obtained from private sources at times when the regular outlets of mortgage originators are restrictive or nonexistent. Conversely, in times when funds of private mortgage investors are in excess of needs, the Association's portfolio provides a source from which investors can obtain FHA and VA mortgages for income purposes. FNMA thus operates as an important supplement to the general secondary market by acquiring a sizable portfolio of mortgages at times when private investment funds are in short supply and selling them when private investment funds are generally available. Such FNMA activities thus perform a valuable service in distributing private investment capital between capital shortage and capital surplus areas and help to smooth out the peaks and valleys of home financing which have long had an adverse effect on the efficient functioning of the housing industry.

FNMA's mortgage purchases under its secondary market operations are, in the main, oriented toward the financing of housing for low- and moderate-income families rather than for high-income groups and for luxury homes. Under its secondary market operations, FNMA has provided financing for more than 460,000 family residences or dwelling units having an average of \$11,753 per unit—a figure which is substantially below the statutory \$15,000 per dwelling maximum mortgage amount limitation for these operations that was established in 1954 and the \$20,000 limitation established in 1959. The dollar amount limitation on mortgage purchases under the secondary market operations was removed entirely in 1964 by 78 Stat. 769.

(f) *Pertinent geographic differentials.*—The following table shows the distribution of FNMA's purchases and sales of mortgages under its

secondary market operations from November 1, 1954, through June 30, 1965, on a State basis:

TABLE 3.—FNMA—Purchases and sales by States

[Dollar amounts in thousands]

State	Purchases		Sales	
	Number	Amount	Number	Amount
Total.....	457,440	\$5,411,238	199,206	\$2,332,259
Alabama.....	6,503	76,555	3,827	46,507
Alaska.....	56	1,378		
Arizona.....	14,786	164,404	7,685	84,547
Arkansas.....	6,266	67,917	1,470	16,304
California.....	81,597	1,038,499	34,639	436,942
Colorado.....	7,840	94,264	3,127	37,533
Connecticut.....	115	1,339	71	770
Delaware.....	923	10,081	759	8,149
District of Columbia.....	92	1,139	35	435
Florida.....	39,299	472,218	18,347	217,134
Georgia.....	10,412	115,906	6,922	77,260
Hawaii.....	1,939	29,670	759	11,296
Idaho.....	1,742	21,903	156	1,818
Illinois.....	9,958	129,061	2,259	28,656
Indiana.....	11,100	136,577	3,828	45,865
Iowa.....	1,586	19,282	366	4,149
Kansas.....	8,388	94,513	1,014	11,260
Kentucky.....	2,948	34,542	1,379	16,292
Louisiana.....	13,432	156,186	4,252	50,994
Maine.....	210	1,842		
Maryland.....	1,328	14,886	834	9,385
Massachusetts.....	322	3,099	297	2,833
Michigan.....	33,170	410,767	22,686	268,314
Minnesota.....	2,847	36,961	2,084	26,272
Mississippi.....	2,272	25,332	1,238	14,868
Missouri.....	6,825	82,231	3,397	40,916
Montana.....	889	11,967	46	608
Nebraska.....	2,316	28,734	934	11,820
Nevada.....	9,066	130,497	2,828	40,399
New Jersey.....	2,384	25,357	2,007	21,132
New Mexico.....	13,047	152,510	2,334	26,781
New York.....	1,269	24,308	600	6,875
North Carolina.....	2,761	31,051	1,725	19,224
North Dakota.....	96	1,242	23	359
Ohio.....	17,988	233,977	11,199	142,864
Oklahoma.....	14,971	157,028	4,013	40,647
Oregon.....	3,928	44,544	2,168	24,151
Pennsylvania.....	2,684	28,213	1,676	18,235
Puerto Rico.....	4,761	46,923	4,420	41,636
Rhode Island.....	63	603		
South Carolina.....	4,089	43,064	1,800	18,872
South Dakota.....	1,934	22,758	782	8,619
Tennessee.....	6,011	65,486	3,761	41,286
Texas.....	74,162	783,875	26,128	284,613
Utah.....	5,574	65,885	2,852	30,204
Virginia.....	6,754	76,866	5,629	62,030
Virgin Islands.....	27	415		
Washington.....	13,394	154,389	2,174	25,209
West Virginia.....	269	3,101	175	1,770
Wisconsin.....	886	11,001	382	4,570
Wyoming.....	2,161	26,892	149	1,856

(g) *The measurable contribution of the program to either the magnitude or the rate of growth of the gross national product.*—FNMA's contribution to the gross national product in 1965 is considered to be the in-place value of the housing applicable to the mortgages it purchased during the year, fees paid to private servicing organizations for servicing its mortgage portfolio, legal fees paid to individual attorneys, legal firms or trustees for foreclosure litigation and other matters, in-

terest on borrowings from the public, dividends paid to holders of its common stock and costs of administration, including wages and salaries of its employees. The total of these, detailed below, amounts to \$412.3 million or 0.06 percent of the estimated 1965 gross national product of \$678 billion.

Value of housing:	
FHA-insured mortgages.....	\$272.0
VA-guaranteed mortgages.....	48.9
Total housing value.....	320.9
Other goods and services.....	13.7
Interest (to public).....	74.3
Dividends (to public).....	3.4
Total contribution to gross national product.....	412.3
Ratio to \$678 billion GNP, 1965 (percent).....	.06

It should be noted that although many of FNMA's mortgage purchases are applicable to existing housing, it is assumed that such purchases serve to release private funds for the generation of new housing. In addition, FNMA's contribution to the gross national product may be duplicated by the FHA and VA to the extent of the value of housing applicable to the mortgages insured or guaranteed by each of those instrumentalities as detailed above and, as a consequence, allowance should be made for such duplications.

(h) *Other data or comments relevant to economic impacts of secondary market operations.*—FNMA's activities under the secondary market operations involved the purchase of 28,286 mortgages covering 29,439 housing units for a total mortgage value of \$304.8 million during 1965. Using the measurements provided by the U.S. Department of Labor, it is estimated that these purchasing activities generated 59.2 million man-hours of employment providing \$176.4 million in wages, for the year. The foregoing is applicable to FHA-insured and VA-guaranteed mortgages as follows:

[Dollar amounts in millions]

	FHA mortgages	VA mortgages
Mortgages purchased.....	24,661	3,625
Housing units.....	25,814	3,625
Amount.....	\$258.4	\$46.4
Employment:		
Hours.....	50,175,218	9,008,664
Amount.....	\$149.5	\$26.8

#### 10. *Economic classification of program expenditures.* (See table 4.)

Program: Secondary market operations.

Department or agency, and office or bureau: Department of Housing and Urban Development; Federal National Mortgage Association.

TABLE 4.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Category	Trust fund expenditures		
	Expenditures for operations	Expenditures to the Federal Government general and special accounts (intragovernmental exchanges)	Total expenditures financed by business enterprises and others (individuals)
Purchase of goods and services:			
Wages and salaries.....	3,371		3,371
Other (including administrative expense).....	6,344		6,344
Mortgage servicing fees.....	9,797		9,797
Legal services.....	817		817
Other categories:			
Operating costs:			
Interest on borrowings from:			
Public.....	74,315		74,315
Treasury.....		1,260	1,260
Provision for losses.....	1,386		1,386
Miscellaneous expenses.....	19		19
Dividends on preferred stock held by the Treasury.....		2,023	2,023
Dividends on common stock held by the public.....	3,399		3,399
Federal income tax equivalent.....		11,483	11,483
Program costs:			
Mortgages acquired from FHA in exchange for FHA debentures.....	51,552		51,552
Mortgage purchases from, and loans to, the public.....	248,268		248,268
Borrowings from the Treasury.....		4,460	4,460
Purchase of preferred stock from Treasury.....		38,000	38,000
Total program and operating expenditures.....	399,268	57,226	456,494

<sup>1</sup> Represents net repayments to the Treasury in fiscal 1965 (\$566,800,000 was repaid and \$562,400,000 was borrowed).

<sup>2</sup> The secondary market operations produce receipts from earnings of interest, fees, and other income, and from sales, repayments, and other liquidations of the mortgage portfolio. These receipts were used to reduce expenditures so that the net trust expenditure amounted to only \$91,468,000. Of the total \$57,226,000 in expenditures made to the Federal Government, \$42,460,000 represents the amount included in the Federal budget as administrative budget receipts.

NOTE.—In the national income accounts the secondary market operations of the Federal National Mortgage Association are classified as a Government enterprise. The administrative budget net expenditures of negative \$42,500,000 are combined with the net trust fund expenditures of \$91,500,000. After allowance is made for intragovernmental transfers, the net cash expenditures in fiscal 1965 are \$32,000,000.

## SPECIAL ASSISTANCE FUNCTIONS

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives <sup>1</sup>

The special assistance functions of the Federal National Mortgage Association have as their statutory objective the provision of special assistance (when, and to the extent that, the President or the Congress have determined that it is in the public interest) for the financing of (1) selected types of home mortgages (pending the establishment of their marketability) originated under special housing programs designed to provide housing of acceptable standards at full economic costs for segments of the national population which are unable to obtain adequate housing under established home financing programs, and (2) home mortgages generally as a means of retarding or stopping a decline in mortgage lending and homebuilding activities which threatens materially the stability of a high level national economy.

<sup>1</sup> The special assistance functions of the Federal National Mortgage Association are authorized by the Federal National Mortgage Association Charter Act as set forth in 12 U.S.C. 1716 et seq., and more particularly in secs. 1716 and 1720 thereof.

The special assistance functions of FNMA are conducted for the account of the Federal Government with U.S. Treasury funds (excepting the interests of, and funds of, investors in FNMA participation certificates). The objectives or purposes of this phase of FNMA's activities are accomplished by its purchases of Federal Housing insured (FHA) and Veterans Administration guaranteed (VA) mortgages covering new or special types of homes or housing in which the Federal Government has manifested a particular interest but in respect to which private financing is temporarily or permanently inadequate.

### *2. Operation*<sup>2</sup>

For practical purposes, the special assistance functions of FNMA may be regarded as an extension of the corporation's management and liquidating functions which, between 1938 and 1954, operated mainly with Federal funds to provide support for FHA- and VA-financed housing generally and specifically for special types or categories of housing such as cooperative, defense, military and disaster housing, housing located in Alaska, Hawaii, and Guam, and for multifamily and single-family rental housing projects.

FNMA conducts its special assistance functions nationally through five field offices located throughout the country so as to best serve the needs of the organizations which do business with the Association. In addition to these field offices (located in Philadelphia, Pa.; Atlanta, Ga.; Chicago, Ill.; Dallas, Tex.; and Los Angeles, Calif.) FNMA maintains a fiscal agency office and a mortgage sales office in New York City and an administrative or central office in Washington, D.C.

### *3. History*

FNMA is a corporation which was established in 1938 to provide a market for the purchase and sale of FHA-insured mortgages. The scope of the Association's activities was broadened in 1948 to provide similar facilities for VA-guaranteed mortgages. The special assistance functions of the Association date from 1954 when the corporation was rechartered by statute to provide special assistance for the financing of selected types or categories of housing for which private capital is inadequate (68 Stat. 590).

The special assistance functions of the Association are financed, in the main, by borrowings from the Secretary of the Treasury within limitations prescribed by the Congress and the sale of beneficial interests, or participations, in first mortgages owned by the Association under these functions. Other funds are obtained from portfolio liquidation, fees or charges for various services rendered by the Association, income from investments other than mortgages, interest income, and net income from operations.

As stated under question No. 1 of this part, the basic objective of the special assistance functions is to provide financial assistance for the financing of selected types or categories of housing that qualify under special programs designated by the President of the United States or by the Congress. In achieving this objective, the Association purchases the FHA-insured and VA-guaranteed mortgages on the related special types or categories of housing involved, holds them in portfolio

<sup>2</sup> See response to question 2 for the secondary market operations program of the Federal National Mortgage Association.



pending establishment of their marketability in the general secondary market and sells them to the extent feasible in areas where and when investors (such as banks, insurance companies, and the like) have funds available for investment in such mortgages.

Under its special assistance functions, dating from November 1, 1954, FNMA has contracted to purchase 165,160 FHA and VA mortgages totaling \$3,613 million in 10½ years through June 30, 1965, and purchased 137,244 mortgages with unpaid principal balances aggregating \$2,494 million. During the same period, sales aggregated 31,110 mortgages totaling \$666 million. The purchases related to properties located in 48 States, the District of Columbia, Guam, and Puerto Rico, as indicated in the answer to question No. 9(f) of part II hereof.

Effective in February 1962 FNMA adopted a policy of refunding three-fourths of its commitment fee charged in connection with outstanding and future commitments issued under its special assistance functions for the purchase of multifamily mortgages, provided the seller, within the commitment period, requested such a refund, agreed to immediate termination of the commitment contract and furnished evidence satisfactory to the Association that arrangements had been completed for financing the mortgages privately (expanded in November 1962 to include project mortgages containing five or more units of housing). Commitment contracts totaling \$391.0 million and involving 167 projects had been terminated under this procedure as of June 30, 1965. The procedure not only reduced the dollar amount of mortgages which the Association would otherwise have been required to purchase, but also, simultaneously, made the released authority available for other housing programs or for other governmental purposes and made it possible for private participation in the special assistance programs to be increased by an amount equal to the terminated contracts.

FNMA's special assistance programs which have been authorized by the President of the United States and by the Congress and activities thereunder as of June 30, 1965, are shown in table 5, below in this section.

*4. Level of operations.* (See table 1.)

Program: Special assistance functions.

Department or agency, and office or bureau: Department of Housing and Urban Development; Federal National Mortgage Association.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

[Dollar amounts in millions]

Measure	Unit	Fiscal year 1964		Fiscal year 1965		Fiscal year 1966 estimate		Fiscal year 1967 estimate	
		Number	Amount	Number	Amount	Number	Amount	Number	Amount
(a) Magnitude of program.....	Mortgages:								
	Immediate and commitment contracts executed.....	2,089	\$165.7	2,251	\$234.1	1,900	\$363.0	1,100	\$459.0
	Purchases.....	2,272	79.9	2,179	99.7	1,710	190.0	700	236.9
	Sales.....	4,490	86.5	1,761	203.7	200	2.0	2,700	25.0
(b) Applicants or participants:									
State government agencies.....		None		None		None			
Local communities or governments.....		None		None		None			
Individuals or families.....	Units of housing.....	6,894		8,929		15,600		19,500	
Other.....	Mortgage banking organizations.....	155		157		160			
	Banks and trust companies.....	24		26		30			
	Savings and loan associations.....	4		5		5			
	Insurance companies.....	2		2		2			
(c) Federal finances:									
Unobligated appropriations available (unobligated borrowing authority available). <sup>1</sup>			1,837.3		2,055.4		1,850.2		2,035.1
Obligations incurred.....			228.5		285.2		415.4		494.1
Allotments or commitments made.....			165.7		234.1		363.0		459.0
(d) Matching or additional expenditures for the program.....		None		None		None		None	
(e) Number of Federal Government employees administering the program. <sup>2</sup>	Man-years.....	965		860		920		965	
(f) Non-Federal personnel employed in program. <sup>3</sup>	Number of persons:								
	Under contract (fiscal).....	4		4		4			
	Attorneys (individuals, firms, trustees).....	899		914		950			
	FNMA mortgage servicing organizations.....	1,080		1,035		1,035			
(g) Other measures of level or magnitude of performance.	Portfolio liquidation other than sales.....	4,799	106.1	4,374	94.2	3,900	82.5	4,000	86.0
	Sales of beneficial interests or participations in mortgages.....	None			\$200.0		\$655.0		\$225.0

<sup>1</sup> The special assistance functions are not financed with appropriated funds but, instead, are financed mainly with funds borrowed from the U.S. Treasury subject to the limitations established by the Congress.

<sup>2</sup> As noted in answer to question No. 2, the Association's employees are not segregated

in respect to the various functions or operations but operate as a single staff for all activities.

<sup>3</sup> Services utilized in connection with FNMA's overall activities are not identified with any one function or operation.

5. *Estimated magnitude of program in 1970*TABLE 2.—*Special assistance functions, fiscal year 1970*

Activity	Number of mortgages	Approximate volume
Contracts executed.....	6, 500	\$770, 000, 000
Purchases.....	6, 200	725, 000, 000
Sales.....	2, 200	25, 000, 000
Repayments and other liquidations.....	8, 000	117, 000, 000

6. *Prospective changes in program orientation*

None contemplated at this time.

7. *Coordination and cooperation*

(a) *Within FNMA itself.*—None.

(b) *With other units of agency—HUD.*—

(1) Under an arrangement entered into in March 1962 between the Association and the Federal Housing Commissioner, the Association subsequently acquired for the portfolio of its special assistance functions 2,767 Federal Housing Commissioner-owned mortgages, totaling \$26 million, in exchange for FNMA-held FHA debentures which FNMA had acquired in connection with the foreclosure of certain corporation-owned FHA mortgages. This action relieved the Federal Housing Administration of the necessity of servicing that volume of mortgages with staff employees. FNMA's purchases of these mortgages and their addition to its portfolio were accomplished with a minimum of adjustment in its personnel staffing. Since, as indicated, the mortgages in question were previously owned by FHA and had been serviced by FHA staff employees, the acquisition of the mortgages by FNMA effected substantial savings in personnel expenses to the FHA and simultaneously provided FNMA's contract servicers with additional servicing income under the corporation's arrangement of having its one- to four-family housing mortgages serviced by private servicers under contract.

(2) FNMA and FHA have entered into a working arrangement under which (a) the Association requests the President of the United States to authorize it to expend some specified portion of its special assistance funds for commitments to purchase and purchases of FHA section 221(d)(3) below-market interest rate mortgages on housing for low and moderate income families and (b) the Federal Housing Commissioner maintains an effective control over the amount of FHA's outstanding commitments to insure mortgages under this category of housing by allocating related insuring authority among the agency's multifamily insuring offices on the basis of FNMA's authorization to commit to purchase such mortgages. In view of the low interest rate that is borne by this category of mortgages and the improbability that the related housing will be financed by private enterprise organizations, the total amount of FHA's allocations and its commitments to insure are limited to the total amount of FNMA's purchasing authority under this program of housing.

For (c), (d), (e), (f), (g), and (i). None.

(h) *With business enterprise.*—

(1) FNMA's servicing of mortgages as indicated in answer to question No. 4, is conducted for the Association by private servicing organizations under contract. During fiscal year 1965, FNMA's

overall servicing was performed by 1,035 servicing organizations on a contract basis for which the Association paid, under the special assistance functions alone, servicing fees aggregating \$4,336,704.

(2) FNMA's legal services, other than those which are conducted on a staff basis, are performed for the Association on a contract basis by individual attorneys, legal firms or by trustees. During fiscal year 1965, the Association's legal services, including foreclosure litigation or other such matters were performed by 914 different attorneys, legal firms or trustees to whom were paid legal fees totaling \$343,000 under the special assistance functions.

### 8. *Laws and regulations*

Federal National Mortgage Association Charter Act as amended through September 9, 1965 (title III of National Housing Act, 12 U.S.C. 1716 et seq.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

(a) *Effects on personal incomes of persons served or involved.*—The effects, if any, of FNMA's activities, under the special assistance functions, on individual mortgagors cannot be specifically identified. However, as noted in answer to question No. 7, FNMA, during 1965 alone paid more than \$4 million of servicing fees to its contract servicers under the Special Assistance Functions and over \$0.3 million of legal fees to attorneys, legal firms, and trustees under these functions.

(b) *Effects on the placement or productivity of workers, or both, and on their earnings.*—Not specifically identifiable.

(c) *Effects on business or individual organizations and management; the stimulation of new business.*—See comments in respect to question No. 9(a) above. Under its special assistance functions, FNMA has purchased 83,851 FHA mortgages totaling \$1,844 million and 53,393 VA mortgages aggregating \$650 million from originating organizations providing financing for 208,802 family residences or dwelling units (approximately 53,400 VA units and 155,400 FHA units). Also, as noted in connection with answer to question No. 3, FNMA commitment contracts totaling \$391 million were terminated by assignment to private enterprise organizations thereby making that volume of investments available to such organizations and simultaneously decreasing, by a like amount, the Government's contractual obligations to expend Federal funds to purchase the related mortgages.

(d) *Effects on the stability, level, volume, or other aspects of sales, prices, or other phases of economic activity.*—Under its special assistance functions, the Association helps to bring into existence a volume of housing which probably would not be constructed were it not for the financial backstop that is provided by the Government through this FNMA facility.

For example, one of FNMA's major special assistance programs involves the utilization of below-market interest rate financing to provide housing accommodations for low and moderate income families whose incomes are too high to permit them to qualify as occupants of publicly constructed housing and too low to permit them to acquire housing accommodations at full economic costs. Other programs provide financing for homes utilizing new and experimental types of

materials and technological processes, housing in Guam, and on restricted Indian lands. FNMA's special assistance functions activities have performed a particularly valuable service to the home-building industry and the overall economy by helping to popularize certain specific categories of housing which are now generally acceptable to private investors in the general secondary market, e.g., housing for cooperative groups, for the armed services (FHA secs. 803 and 809), in Alaska, for the elderly, in urban renewal areas and for victims of major disasters.

FNMA's special assistance functions provide an interim market for new programs of housing mortgages pending establishment of their marketability in the general secondary market. Generally speaking, FNMA's purchase prices, under its special assistance functions, are established at levels which are sufficiently high to provide reasonable assurance that the needed housing will be produced but not so high as to preempt the market and to exclude private enterprise from participating in the programs. Such prices provide stability for the price structure for FHA and VA mortgages. The prices at which FNMA sells mortgages from its special assistance functions portfolio are sufficiently high to avoid undercutting the market for FHA and VA mortgages and thus help to strengthen the position of such mortgages in the general secondary market.

(e) *Any other benefits.*—As previously stated, FNMA's special assistance functions are utilized to provide financing of homes for segments of the national population which are unable to obtain adequate housing of acceptable standards at full economic costs under established home financing programs. For the most part, FNMA's purchases under its special assistance functions have been oriented toward the construction of new housing and the rehabilitation of existing homes, thereby having a specific impact on activities of the building trades and related organizations as well as upon individual home buyers and renters. When new and previously untried types or categories of housing are introduced, private lenders are often reluctant to provide necessary financing until such time as the related mortgages have become generally acceptable to investors in the general secondary market. As a consequence, there is a definite need for an interim market in which mortgages covering special types or categories of housing can be financed pending establishment of their marketability. FNMA's special assistance functions provide such a market and thereby render a signal service to the housing industry, the housing economy, and to the segments of the national population benefited thereunder, some specific examples of which are cited in answer to question No. 9(d).

(f) *Pertinent geographic differentials*—The distribution of FNMA's purchases and sales of mortgages under its special assistance functions from November 1, 1954, through June 30, 1965, is as follows:

TABLE 3.—Purchases and sales by States

[Dollar amounts in thousands]

	Purchases		Sales	
	Number	Amount	Number	Amount
Total.....	137,244	\$2,493,567	31,110	\$665,803
Alabama.....	7,377	88,253	1,930	25,032
Alaska.....	2,598	60,193	2,136	48,440
Arizona.....	6,733	103,677	123	27,171
Arkansas.....	1,296	40,213	79	10,442
California.....	9,493	196,258	2,445	44,504
Colorado.....	3,231	47,445	414	7,328
Connecticut.....	80	14,210	53	1,509
Delaware.....	191	9,340	66	6,967
District of Columbia.....	202	11,474	2	4,618
Florida.....	16,998	231,865	2,515	62,301
Georgia.....	5,690	82,740	169	19,781
Guam.....	70	961		
Hawaii.....	960	40,173	4	5,192
Idaho.....	272	3,545	2	22
Illinois.....	2,569	49,054	437	13,259
Indiana.....	2,860	38,914	725	8,572
Iowa.....	1,231	16,671	54	500
Kansas.....	1,599	40,936	5	10,163
Kentucky.....	2,774	56,089	467	25,206
Louisiana.....	4,309	55,864	433	4,858
Maryland.....	343	6,770	189	1,926
Massachusetts.....	3	4,768	1	1,662
Michigan.....	11,356	157,818	5,086	60,812
Minnesota.....	1,114	17,182	62	1,288
Mississippi.....	1,736	11,741	186	2,099
Missouri.....	1,442	60,803	1	2,952
Montana.....	162	2,118	1	291
Nebraska.....	491	6,900	97	1,045
Nevada.....	1,868	37,709	48	2,906
New Hampshire.....	5	16,654		
New Jersey.....	343	52,341	279	6,297
New Mexico.....	3,956	53,973	32	1,729
New York.....	147	104,943	102	34,801
North Carolina.....	2,317	49,783	1,629	30,642
North Dakota.....	118	1,527		
Ohio.....	7,687	148,382	2,321	29,661
Oklahoma.....	2,374	48,916	146	16,831
Oregon.....	1,259	23,592	126	8,061
Pennsylvania.....	691	43,657	261	7,030
Puerto Rico.....	901	12,882	606	8,179
Rhode Island.....	1	1,206	1	1,027
South Carolina.....	976	49,544	398	10,303
South Dakota.....	26	867	1	246
Tennessee.....	6,325	71,962	933	12,333
Texas.....	12,829	186,778	3,554	58,962
Utah.....	2,552	29,939	28	303
Virginia.....	3,766	44,197	2,862	32,377
Washington.....	1,430	31,468	66	4,499
West Virginia.....	202	3,735		
Wisconsin.....	762	16,788	13	1,412
Wyoming.....	529	6,749	22	264

(g) *The measurable contribution of the program to either the magnitude or the rate of growth of the gross national product.*—FNMA's contribution to the gross national product in 1965 is considered to be the in-place value of the housing applicable to the mortgages it purchased during the year; fees paid to private servicing organizations for servicing its mortgage portfolio; legal fees paid to individual attorneys, legal firms, or trustees for foreclosure litigation and other matters; and costs of administration, including wages and salaries of its employees. The total of these items detailed below amounts to \$110.9 million or 0.016 percent of the estimated 1965 gross national product of \$678 billion.

[Amounts in millions]

Value of housing:		
FHA-insured mortgages.....	104.5	
VA-guaranteed mortgages.....	.5	
Total housing value.....	105.0	
Other goods and services.....	5.9	
Total contribution to gross national product.....	110.9	
Ratio to \$678,000,000,000 GNP, 1965 (percent).....	.016	

It should be noted that although many of FNMA's mortgage purchases are applicable to existing housing, it is assumed that such purchases serve to release private funds for the generation of new housing. In addition, FNMA's contribution to the gross national product may be duplicated by the FHA and VA to the extent of the separate value of housing applicable to the mortgages insured or guaranteed by those instrumentalities as detailed above, and, as a consequence, allowance should be made for such duplications.

(h) *Other data or comments relevant to economic impacts of special assistance functions.*—FNMA's activities under the special assistance functions involved the purchase of 2,179 mortgages covering 8,929 housing units for a total mortgage value of \$99.7 million during 1965. Using the measurement provided by the U.S. Department of Labor, it is estimated that these purchasing activities generated 19.7 million man-hours of employment providing \$59.1 million in wages for the year. The foregoing is applicable to FHA-insured and VA-guaranteed mortgages as follows:

[Dollar amounts in millions]

Category	FHA mortgages	VA mortgages
Mortgages purchased.....	2,144	35
Housing units.....	8,929	35
Amount.....	\$99.3	\$0.4
Employment:		
Hours.....	19,568,337	84,927
Amount.....	\$58.8	\$0.3

#### 10. Economic classification of program expenditures. (See table 4.)

Program: Special assistance functions.

Department or agency, and office or bureau: Department of Housing and Urban Development; Federal National Mortgage Association.

TABLE 4.—Economic classification of program expenditures for fiscal year 1965

[Dollars in thousands]

Categories	Federal Government expenditures
Purchases of goods and services:	
Wages and salaries.....	1,391
Other (administrative expense).....	222
Mortgage servicing fees.....	4,336
Legal services.....	343
Other categories:	
Operating costs:	
Interest on borrowings from Treasury.....	42,875
Provision for losses.....	1,182
Miscellaneous expenses.....	276
Program costs: Mortgage purchases.....	99,619
Total program and operating expenditures <sup>1</sup> .....	150,244

<sup>1</sup> The special assistance functions produce receipts from earnings of interest, fees, and other income, and from sales of mortgages and participations, repayments, and other liquidations of the mortgage portfolio. These receipts exceeded expenditures by \$375,849,000 for the year.

NOTE.—In the national income accounts these operations are classified as a government enterprise and treated as such.

TABLE 5.—Cumulative program activity, through June 30, 1965

[Dollar amounts are in thousands]

Program	Funds authorized <sup>1</sup>	Contracts			Purchased			Liquidations	Balance of funds available
		Executed	Canceled or withdrawn	Undisbursed	Dwelling units	Mortgages	Amount		
Presidential authorization.....	\$2,510,268	\$1,722,661	\$470,682	\$305,670	88,596	48,259	\$946,309	\$370,414	\$1,628,703
No. 1. Disaster.....	10,000	1,167	41	-----	105	105	1,126	355	9,229
No. 2. Guam.....	7,500	1,671	162	548	70	70	961	50	6,041
No. 3. Urban renewal.....	762,500	* 958,150	323,336	* 20,130	60,049	39,938	614,684	247,000	374,686
No. 4. Alaska (terminated).....	56,975	62,049	5,074	-----	2,455	2,455	56,975	53,326	( <sup>2</sup> )
No. 5. Military and defense (terminated).....	11,072	11,131	59	-----	1,320	203	11,072	10,095	( <sup>2</sup> )
No. 6. Consumer co-op (terminated).....	710	710	-----	-----	96	1	710	710	( <sup>2</sup> )
No. 8. Elderly persons.....	251,000	248,860	140,485	-----	10,811	5,066	108,375	49,777	192,402
No. 9. Low cost (terminated).....	1,744	2,294	550	-----	194	194	1,744	947	( <sup>2</sup> )
No. 11. Below market interest rate.....	1,412,500	433,525	973	283,429	13,372	103	149,123	8,136	988,084
No. 12. Experimental housing.....	15,000	2,462	2	1,563	66	66	887	2	12,552
No. 13. Restricted Indian lands.....	5,000	652	-----	-----	58	58	652	16	4,364
Liquidation recoveries <sup>2</sup> .....	(65,078)	-----	-----	-----	-----	-----	-----	-----	-----
Not yet allocated.....	41,345	-----	-----	-----	-----	-----	-----	-----	41,345
Congressional authorization.....	1,120,176	1,864,627	342,860	788	117,439	86,218	1,520,979	816,825	415,234
No. 6. Cooperative.....	225,000	287,464	90,480	-----	15,029	10,354	196,984	60,307	88,323
Consumer.....	65,150	68,317	34,985	-----	2,566	253	33,332	13,799	45,617
Nonconsumer.....	159,850	219,147	55,495	-----	12,463	10,101	163,652	46,508	42,706
No. 7. Armed services.....	500,000	576,404	94,660	788	31,929	5,383	480,956	308,655	326,911
Secs. 803 and 810.....	441,250	488,046	75,942	-----	26,705	159	412,104	274,027	303,173
Sec. 809.....	58,750	88,358	18,718	788	5,224	5,224	68,852	34,628	23,738
No. 10. Low and moderate (terminated).....	395,176	1,000,759	157,720	-----	70,481	70,481	843,039	447,863	0
Total.....	3,630,444	3,687,288	813,542	306,458	206,035	134,477	2,467,288	1,187,239	2,043,937

<sup>1</sup> Revolving authorizations except terminated programs. Liquidations may also be employed<sup>2</sup> Includes \$675 thousands obligated funds.<sup>3</sup> Terminated programs; liquidations restored to authorization.

NOTE.—Excludes mortgages received in exchange for FNMA-held FHA debentures.



## Federal Housing Administration

Questions 1, 2, and 3 are discussed separately for each of the seven basic programs of the Federal Housing Administration. The replies to the other questions follow and cover all the programs.

### SALES HOUSING PROGRAMS

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. Objectives

The broad objectives of the various FHA programs for sales housing mortgage insurance are contained in the Declaration of National Housing Policy, as described in section 2 of the Housing Act of 1949.

Pertinent among these are:

1. Increasing housing production to eliminate housing shortages;
2. Achieving as soon as feasible the goal of a decent house and suitable living environment for every American family, thus advancing the growth, wealth, and security of the Nation;
3. Enabling the housing industry to make its full contribution toward an economy of maximum employment, production, and purchasing power.

These programs further aim to:

1. Encourage private enterprise to serve as large a part of the total need as it can;
2. Employ government assistance where feasible to enable private enterprise to serve more of the total need than it otherwise might;
3. Encourage and assist the development of well-planned, integrated, residential neighborhoods, the development and re-development of communities and the production, at lower costs, of housing of sound standards of design, construction, livability, and size for adequate family life.
4. To facilitate provisions of adequate housing for urban and rural nonfarm families with incomes so low that they are not being decently housed in new or existing housing—where these needs are not being met through reliance solely upon private enterprise;
5. Stabilize the housing industry at a high annual volume of residential construction.

Departing from the general language of legislation, the more specific purposes of the sales housing programs include: (1) Broadening the opportunity for home ownership to include all who seek this form of tenure and from whom there is reasonable assurance of repayment of loans, and (2) encouraging private lenders to undertake a degree of risk which they might not otherwise be willing to assume, or which they might not legally assume in the absence of insurance.

These basic purposes, in general, apply to all 10 of the FHA sales housing programs. But in addition, the individual programs each have special objectives or priorities. These special objectives are listed below, by individual program (program designations are sections of the National Housing Act):

203(b) is the basic sales housing program for financing new or existing one- to four-family dwellings, under which 80 to 90 percent of FHA's sales home volume is insured. It has no special objective over and above the basic objectives outlined above.

203(b)(2) provides for financing of housing for veterans who have not used eligibility under the veterans home loan programs of the Veterans' Administration.

203(h) provides for financing replacement or reconstruction of owner-occupied homes damaged or destroyed by natural disaster.

203(i) provides for financing new or existing homes in small towns, and outlying urban and rural nonfarm areas.

213 provides for financing of mortgages on individual sale properties released from nonprofit cooperative sales projects.

220 provides for financing of newly constructed or rehabilitated homes in urban renewal areas.

221(d)(2) provides for financing of low-cost homes for families displaced by urban renewal and other government action, and for other low- and moderate-income families.

222 provides for financing of proposed or existing dwellings for servicemen.

234 provides for financing of mortgages on individual units in condominium projects. (Condominium ownership provides fee simple title to a dwelling unit but includes undivided interest in common property of the overall project. It permits ownership of individual units in multifamily structures as well as detached houses sharing common facilities.)

809 provides for financing of new sales housing for civilian employees at or near research or development installations of the Department of Defense, NASA, AEC, and employees of contractors thereof, on certification by the appropriate department or agency.

810 provides for financing of new sales housing after an initial rental period for military and essential civilian personnel of the armed services, NASA, and AEC, and for employees of contractors for these agencies, upon a finding by FHA of need.

## *2. Operation*

The mortgage insurance programs are a direct Federal operation, conducted by field offices with headquarters supervision.

The FHA sales house operations consist essentially of insurance to private lenders against the possibility of nonrepayment of long-term mortgage loans. A premium for this insurance is generally paid by the borrower, through the mortgage lender, to FHA. The insurance premiums provide both for reserves against losses and for operating and administrative costs. In addition, fees are assessed for various services such as appraisal, inspection, and processing actions. Overall, the operation is conducted without net cost to the Federal Government.

The section 222 program for servicemen is an exception to the statement that insurance premiums are paid by the borrower. These premiums are paid by the armed services until termination of the servicemen's ownership.

The objectives of the FHA sales house programs are achieved primarily through advantages in terms over mortgages typically available in the conventional mortgage market. These advantages in terms would ordinarily not be offered by private lenders due to increased risk of loss, or would be offered only at substantially higher interest charges commensurate with the acceptance of greater risk.

There are also various legal restraints on acceptable risk and permissible interest rates. FHA insurance is the operative factor which makes these higher risks and lower yields acceptable to private lenders, and which likewise permits exception to legal restraints on risk criteria. For the privilege of obtaining insurance, lenders, builders, and home purchasers comply with FHA minimum property standards, underwriting requirements, regulations, limitations on mortgage amounts, etc. The special purpose programs offer more liberal loan-to-value ratios, amortization periods, risk standards, appraisal standards, or construction standards, etc., as incentives toward achieving their special objectives.

### 3. History

*Section 203(b).*—The first FHA insurance program for sales home mortgages was the section 203(b) program, authorized by the National Housing Act adopted June 26, 1934. It provided for 80 percent, 20-year loans. Maximum interest rates were to be established by the Federal Housing Administrator at not more than 5 percent with authority to go up to 6 percent if the mortgage market so required in a given locality or for a given class of loan. Insurance premiums were required at not less than one-half percent nor more than 1 percent. By regulation, FHA established the requirement for level-term monthly payments, and later established a requirement for escrow payments for taxes and insurance premiums. These two requirements proved sound innovations and became established practices throughout the mortgage industry, replacing the short-term un-amortized mortgages which previously prevailed in the private mortgage market and which caused serious problems during the depression of the thirties.

The needs of the Nation for financing homeownership and for stimulating residential construction since 1934, however, have occasioned repeated liberalization of terms under the section 203(b) program. At present, loans for new homes and existing homes over 1 year old may be as great as 97 percent of the first \$15,000 of value, plus 90 percent of the next \$5,000, plus 80 percent of the remainder. The maximum loan amount for a one-family dwelling is \$30,000. New homes are entitled to a 35-year repayment term while existing homes are entitled to a 30-year term. Many other details of the program have also been gradually altered from time to time, as needs and experience have dictated. More than 2.6 million new homes and more than 3.9 million existing homes had been insured under 203(b) as of mid-1965. Over the 30-year period, these totals average out at about 220,000 mortgages insured per year.

*Section 203(b)(2).*—This is a new program authorized by the Housing and Urban Development Act of 1965. It provides special terms for veterans who have not previously used VA eligibility for home purchase. Favorable terms over 203(b) cover loan-to-value ratio only; viz, 100 percent on first \$15,000 of value, 90 percent on next \$5,000, and 85 percent of remaining value.

*Section 203(h).*—This program was authorized by the Housing Act of 1954 to assist owner-occupants whose homes are destroyed or damaged by disaster. It originally provided 100 percent mortgages with a maximum mortgage amount of \$7,000. The mortgage amount has been raised by subsequent amendments to a present limit of

\$12,000. Volume data are normally combined with 203(b), but when last tallied separately (March 1965) the cumulative total of homes insured under 203(h) was 113.

*Section 203(i).*—This program was authorized by the Housing Act of 1954, replacing a title I, section 8, program of similar character (adopted 1950) which in turn had replaced a class 3 program under title I, section 2, originally authorized by the National Housing Act Amendments of 1938. Sections 2 and 8 accounted for more than 84,000 units insured over their approximately 17-year life.

Through August of 1965, more than 75,000 units had been insured under section 203(i). The volume under this program ran much higher during the late 1950's than recently, probably because of the broadening of eligibility criteria of the 221(d)(2) program by the Housing Act of 1961. Section 221(d)(2) may now be used with at least equal advantage in a majority of cases that would have previously been eligible only under 203(i).

Section 203(i) terms have generally been amended from time to time as housing market conditions have indicated the need. The 1965 act increased the maximum mortgage limit to \$12,500, with a loan-to-value ratio of 97 percent.

*Section 213.*—The 213 cooperative housing program was authorized by the Housing Act of 1950, and the sales cooperative is a variation of the cooperative concept. Management cooperatives are also covered by the same section, and are described elsewhere in this report under rental housing programs. Section 213 superseded previous authority for financing housing cooperatives granted under section 207 in 1948.

The sales cooperative (as contrasted to a management cooperative) is best described as a purchasing cooperative. For example, a group of prospective home buyers can band together in a nonprofit corporation and use their collective bargaining power to obtain a more favorable purchase price for new homes, than they might otherwise secure as individuals.

With the passage of time, the 213 program has primarily evolved into a method for production of homes by operative builders, to be marketed through a cooperative with appropriate financing procedures, in contrast to early expectations that organized cooperative groups might use the program for bargaining with builders en bloc and thus achieve savings in contract construction of homes for individual ownership. Through August 1965, over 33,000 sales homes had been insured under section 213, though activity under the program has declined sharply since 1961. The reduced section 213 sales housing activity (mostly by operative builders) is believed due to the substantially improved terms made available under other sale home programs by the Housing Act of 1961. Such minor advantages of 213 sales financing as remained for operative builders were virtually eliminated by the Housing and Urban Development Act of 1965.

*Section 220(b) home mortgages.*—This program was enacted in 1954 because existing FHA home mortgage programs were often inappropriate for financing homes in urban renewal areas, owing to the requirement for a finding of economic soundness. Conventional mortgage loans were also unavailable for similar reasons. The 220 sales housing program authorized FHA insurance of mortgages on properties in areas with approved rehabilitation programs without a finding of

economic soundness. In 1955 the program was amended to base mortgage amounts on replacement costs rather than on appraised values. About 3,400 new homes and 850 existing homes had been insured under the program through August of 1965.

*Section 221(d)(2).*—This program was authorized by the Housing Act of 1954 to provide favorable terms for home purchase by families displaced by urban renewal and other Government action. In 1961 the program was amended to make nondisplacees eligible, though displacees retain a slightly lower downpayment privilege and FNMA special assistance financing.

The program now primarily services low- and moderate-income families. This is largely accomplished through relatively low mortgage ceilings, currently \$11,000 for a one-family unit (which may be increased by the Commissioner up to \$15,000 in high-cost areas).

Through August of 1965, nearly 60,000 new homes and over 100,000 existing homes had been insured under this program, with volume substantially accelerated since the 1961 amendment.

*Section 222.*—This section was authorized by the Housing Act of 1954 to permit certain active duty servicemen to obtain mortgage insurance on homeowner housing. The transitory nature of military service had previously tended to make mortgage loans unavailable to servicemen.

The program has been amended from time to time, the latest amendment occurring in the Housing and Urban Development Act of 1965. Mortgages are now authorized up to \$30,000 with 3 percent down on the first \$15,000 of value, plus 10 percent of the next \$5,000, and 15 percent of the remainder.

As of August 1965, about 58,000 new homes and 107,000 existing homes had been insured under the program.

*Section 234.*—This program was authorized by the Housing Act of 1961. It provides for insurance of mortgages on individual units when units are held under condominium conditions. Condominium ownership is permitted in any project insured under any of the FHA multifamily programs with the exception of section 213 management-type cooperatives. The Housing Act of 1964 provided that projects could be initiated as condominiums under section 234.

When this program was enacted, only Puerto Rico had legal provisions to accommodate condominium ownership. As of now, 47 of the 50 States plus the Virgin Islands and the District of Columbia have enacted condominium enabling laws, and 2 of the 3 remaining States have such action pending—all traceable to the original stimulus provided by the Federal program.

As of August 1964, only 556 individual units had been insured under the section 234 program, but application activity for both individual units and projects suggests that increasing activity is to be expected. The creation of the program is also believed to have stimulated substantial conventionally financed condominium activity.

*Section 809.*—This program was authorized by the Housing Act of 1955 because the nature of civilian employment at Federal research and development centers renders arrangement of mortgage financing for home purchase difficult for these employees, both through conventional sources and established FHA programs.

Mortgage terms and other features of the program are similar to section 203(b) but the requirement for economic soundness is omitted. The law provides that the Commissioner may require the Secretary of

Defense to guarantee the FHA insurance fund against loss, if he determines that the mortgage is not an acceptable risk.

As of August 1965, about 5,300 new homes and 6,500 existing homes had been insured under the program.

*Section 810.*—This program was authorized by the Housing Act of 1959. The units must be held for rental for a period of not less than 5 years, after which they may be sold. There had been no insurance or application activity under this section through August of 1965.

4. *Level of operations.* (See general answer covering all FHA programs.)
5. *Estimated magnitude of program in 1970.* (See general answer covering all FHA programs.)
6. *Prospective changes in program orientation.* (See general answer covering all FHA programs.)
7. *Coordination and cooperation.* (See general answer covering all FHA programs.)
8. *Laws and regulations.* (See general answer covering all FHA programs.)

#### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer covering all FHA programs.)
10. *Economic classification of program expenditures.* (See general answer covering all FHA programs.)

### RENTAL HOUSING PROGRAMS

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. *Objectives*

Nearly all of the objectives as outlined for FHA sales housing programs apply equally to the FHA rental housing programs. The obvious exception to this statement is the sales housing objective of "broadening the opportunity for home ownership \* \* \*." Rental housing programs, instead, have the objective of facilitating a continued availability of a diversity of structural forms, amenities, and means of tenure. Rental tenure may serve needs, or consumer preferences, or both. Rental housing frequently tends to serve those whose occupations or habits involve substantial mobility and for whom homeownership is, therefore, less suitable or less desirable.

Rental housing also serves those who do not wish to assume the risks or responsibility that homeownership implies. The largest market segment served by rental housing, however, tends to be those who have been unable to accumulate the required equity for homeownership investment or who are otherwise unable to qualify as acceptable credit risks for long-term mortgages. This group is composed in large part of younger families and individuals in early stages of the life cycle who will eventually become homeowners after assets accumulate, employment becomes more settled, and careers mature at higher earning levels.

A second objective of rental housing programs is to provide for higher density structural types which permit maximum economic use of strategically located land in high-cost urban areas, to the

extent that such accommodations are in adequate demand to be supported over the life of the mortgage.

Higher density development provides more efficient access to community facilities such as public transportation, libraries, parks, shopping, churches, etc., than does low-density detached housing. And it also permits efficient provision of management services and other amenities seldom available in single-family houses.

In addition to these basic objectives of all rental housing programs, each of the several FHA rental housing programs has one or more special purposes or objectives. These are indicated below for each program:

207 is the basic rental housing program for financing construction or rehabilitation of rental housing. It may be used for any structural type in a project of eight or more units. (It is not a special-purpose program.)

213 provides for financing of construction, rehabilitation, or acquisition of existing structures by a nonprofit cooperative association; or provides for construction or rehabilitation by a corporation intending to sell to a nonprofit cooperative. (For "management cooperatives" to be occupied by members, as distinguished from sales cooperatives covered under sales housing programs.) Provides for all structural types in projects of five or more units.

220 provides for financing construction or rehabilitation of rental housing projects in urban renewal areas. Provides for all structural types in projects of two or more units.

221(d)(3) provides for both market and below-market interest rate financing of construction or rehabilitation of rental and cooperative housing for moderate income families. Priority is given to families displaced by urban renewal or other government action. Handicapped and elderly persons also qualify as occupants. Sponsorship is limited to nonprofit organizations, cooperatives, limited dividend corporations, and public bodies (except those which are exclusively public housing authorities). Any structural type in projects of five or more units may be approved.

221(d)(4) provides for the same purposes as 221(d)(3) market rate, except this program is designed for private profit-motivated sponsors and may be built in areas that do not have a workable program.

810 provides for financing construction of rental housing for military and essential civilian personnel of the armed services, NASA, and AEC, and for employees of contractors for these agencies upon a finding by FHA of need. After initial 5 years as rental housing, or a shorter period if the Commissioner determines need for rental housing has ceased, units may be purchased with an insured mortgage.

## 2. Operation

The rental housing programs, as well as many of the special programs, are supervised by an Assistant Commissioner for Multifamily Housing, a Washington staff, and five regional representatives. There is also a separate Multifamily Insuring Office in New York. Otherwise, the regular FHA insuring offices administer the rental

housing and special programs, receiving and processing applications from project sponsors.

One special operational feature of rental housing programs is the availability of insurance for construction advances. This feature is unavailable for most sales home programs, although the FHA insurance commitment frequently provides the basis for builders to obtain separate temporary construction loans.

### 3. History

*Section 207.*—Section 207 was a part of the original National Housing Act adopted in 1934. During the depression, default on apartment mortgages had become so widespread that multifamily funds for rental project construction were virtually unavailable. Despite substantial apartment vacancies in many communities, there were unmet needs for rental accommodations in many places, especially for moderate- and low-income families.

Use of long-term amortized mortgage loans for multifamily projects were pioneered under section 207 in the mid-1930's. As with home mortgages, a thorough analysis of the project, its location, and prospective mortgagor constituted a new technique for review of rental and other multifamily projects. In addition, the detailed comparison of prospective project income with detailed estimates of operating, debt service, and maintenance cost may be considered an innovation in this field, now widely adopted by conventional lenders.

This program, of course, has been amended from time to time to keep it current with needs in market conditions, but has maintained its character as the basic model program for project financing. Despite the fact that 207 is the basic FHA multifamily program, it has not accounted for the largest volume of FHA-financed apartment construction. During the immediate postwar period, builder and investor sponsorship centered attention on the section 608 program (now terminated), which had more liberal terms and conditions, in an effort to overcome the postwar housing shortage of the late forties and early fifties. During its life the 608 program accounted for nearly 470,000 housing units. By comparison about 225,000 units had been insured under the 207 program as of August 1965.

Conventional financing has been used principally in the rental housing boom of the 1960's. Although section 207 reached new highs from 1960 through 1963, averaging over 70,000 units insured, its share of the total apartment market has been a declining one, due most probably to the lessened need for FHA insurance in the presence of more adequate capital supplies, more receptive attitudes on the part of lenders, and assured growth of future markets for multifamily housing. Less than 6,000 units were insured under section 207 in fiscal year 1965.

*Section 213.*—The section 213 program for financing management cooperatives was added to the National Housing Act in 1950. The legislation superseded previous authority to insure cooperative mortgages contained in 1948 amendments to section 207. At present mortgage amounts which may be insured under the program are equal to those permitted under section 207. However, loan-to-value ratios of 97 percent are permitted and may be based on replacement costs, rather than the 90 percent based on appraised value permitted under section 207.



The program has been amended from time to time and volume under the program has averaged about 4,000 to 5,000 units annually since enactment. As of August 1965, a total of 68,400 units have been insured under the program.

*Section 220.*—This program was authorized by the Housing Act of 1954, after it was determined that mortgage funds from customary sources were unavailable for development of rental housing in urban renewal areas. Existing FHA programs were often inappropriate for the special circumstances and requirements of urban renewal redevelopment. Over 48,000 rental housing units had been insured under section 220 as of August 1965.

*Section 221(d)(3).*—This program was originally authorized in the Housing Act of 1954 to provide housing at moderate rentals for families displaced by urban renewal. Only nonprofit sponsors were originally eligible as mortgagors. It had but limited success in achieving its relocation objective due to the extreme difficulty of synchronizing the availability of new units with the timing of displacement.

The program was substantially changed by the Housing Act of 1961 as follows:

1. The objective was redirected toward low- and moderate-income families generally, though displacees still have priority for initial occupancy and waiting list status.

2. New classes of sponsors were made eligible, including management cooperatives, limited dividend corporations, and investor sponsors planning sale to cooperatives.

3. A new, separate, below-market interest rate program was created under section 221(d)(3). This program has such substantial advantage over the market rate program in most circumstances that it generally is preferred by the special sponsor classes eligible for either program.

Activity data on the market rate 221(d)(3) program is not readily separated from that of the 221(d)(4) program. However, a tabulation of projects insured through May of 1965 showed 37 "old law" (d)(3) projects, 13 "new law" market rate (d)(3) projects, and 41 (d)(4) projects—for a total of 91 projects. Combined data for all market rate 221 projects as of August 1965 showed a new total of 99 projects insured, covering 12,435 dwelling units.

The "new law" 221(d)(3) market rate program offers a slight advantage over section 213 for financing low- and moderate-cost management cooperatives, and to date, nearly all of the limited activity under the program has been in cooperative development.

*Section 221(d)(4).*—This program was authorized by the Housing Act of 1959. It provides a program for profit motivated sponsors with objectives identical to those of the section 221(d)(3) market rate program, including the 1961 changes outlined above.

*Section 810.*—This program was authorized by the Housing Act of 1959. It originally required certification of need by the Department of Defense (DOD) and was subject to a possible FHA requirement for DOD guarantee of losses. The DOD responsibility was eliminated in 1961. No units were insured under the program prior to 1963, and only 17 projects containing 2,046 units have been insured to date.

4. *Level of operations.* (See general answer covering all FHA programs.)

5. *Estimated magnitude of program in 1970.* (See general answer covering all FHA programs.)
6. *Prospective changes in program orientation.* (See general answer covering all FHA programs.)
7. *Coordination and cooperation.* (See general answer covering all FHA programs.)
8. *Laws and regulations.* (See general answer covering all FHA programs.)

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer covering all FHA programs.)
10. *Economic classification of program expenditures.* (See general answer covering all FHA programs.)

BELOW MARKET INTEREST RATE RENTAL HOUSING PROGRAM FOR LOW- AND MODERATE-INCOME FAMILIES (SECTION 221(d)(3))

PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

The general objectives outlined for both sales and rental housing programs of FHA, of course, also apply to the 221(d)(3) below market interest rate (BMIR) program. However, the primary objective is to make adequate housing available at below market rentals to those families whose incomes are insufficient to afford decent housing available in the private market. The program is mainly intended to serve those families of low and moderate income whose incomes are above those eligible for public housing. A second objective is to serve as a relocation resource for families displaced by urban renewal and other Government action.

2. *Operation*

Responses to this question on operation of rental housing programs also apply to this program.

The below market interest rate feature of the program, however, involves additional unique operational features. The program achieves its objectives of lower rents through an interest rate substantially below market rates. It is therefore dependent on FNMA purchase of mortgages, and acceptance of applications under the program requires prior reservation of FNMA special assistance funds. Legislative intent also requires that FHA establish income limits for tenant eligibility in BMIR projects, to assure that the assistance serves those for whom it was intended.

The one-half percent insurance premium is waived on this program. Losses are to be provided for by appropriation.

3. *History*

This program was authorized by the Housing Act of 1961. It originally tied interest rates to the average interest cost of Federal borrowing as determined by the Treasury Department. But the Housing and Urban Development Act of 1965 has now fixed the interest rate at not to exceed 3 percent.

The program has been successful in achieving its moderate income goals, and applications covering nearly all of the special assistance funds allocated to the program through fiscal year 1965 had been committed. Applications covering over 84,000 dwelling units had been received as of August 1965, including more than 35,000 units already insured.

4. *Level of operations.* (See general answer covering all FHA programs.)
5. *Estimated magnitude of program in 1970.* (See general answer covering all FHA programs.)
6. *Prospective changes in program orientation.* (See general answer covering all FHA programs.)
7. *Coordination and cooperation.* (See general answer covering all FHA programs.)
8. *Laws and regulations.* (See general answer covering all FHA programs.)

#### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer covering all FHA programs.)
10. *Economic classification of program expenditures.* (See general answer covering all FHA programs.)

### EXPERIMENTAL HOUSING PROGRAM (SEC. 233)

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. *Objectives*

The objective of the program is to foster the testing and utilization of advanced housing technology aimed at reducing housing costs, improving housing standards, or enhancing neighborhood design.

##### 2. *Operation*

The program operates through insurance of mortgages on housing incorporating experimental designs or construction techniques or materials. This speeds the use of worthy new concepts by reducing the lender's potential risks. All experimental features of submissions are evaluated and accepted or rejected at the FHA central office. Nonexperimental features are processed by the insuring office. Mortgages that meet the eligibility requirements for insurance under any of the various FHA title II home or project mortgage programs may be eligible for insurance under the experimental housing program.

##### 3. *History*

The program was first authorized by the Housing Act of 1961. Though it was originally limited to housing meeting the requirements of 203(b) and 207, it was expanded to cover all additional types of title II housing by the Housing Act of 1964. To date, 112 homes have been insured under the program, and applications have recently been averaging about 12 cases per month.

4. *Level of operations.* (See general answer covering all FHA programs.)

5. *Estimated magnitude of program in 1970*

The 1970 dollar volume is estimated at about \$50 million—divided 40 percent single family and 60 percent multifamily housing.

6. *Prospective changes in program orientation*

None contemplated at this time.

7. *Coordination and cooperation*

(i) Aspects of the program in which opportunities for coordination and cooperation arise or might be created:

(a) Within the Studies and Experimental Housing Section the experimental housing program is coordinated with the technical studies program. These two programs supplement each other with respect to the production of beneficial research results.

There is also coordination between the experimental housing program and the activities of the Engineering and Architectural Sections of the Architectural Standards Division and the Valuation, Cost and Land Planning Sections of the Appraisal and Mortgage Risk Division. For example, when the Engineering Section lacks criteria by which to evaluate a new construction technique or material it may refer the sponsor or producer to the experimental housing program for submission of his innovation in experimental structures.

(b) There is extensive cooperation between the program and the Urban Renewal Division of FHA. To date rehabilitation of slum dwellings in New York City has been the primary cooperative project involved.

(c) Other Federal Government departments and agencies with which the program cooperates include the Office of the Administrator, Housing and Home Finance Agency; Department of Defense (Committee 12); and Office of Economic Opportunity.

The Office of the Administrator of the Housing and Home Finance Agency operates a low-income housing demonstration program. Submissions to that program are from time to time referred to the experimental housing program for technical evaluation and advise. The Office of the Administrator and all of the HHFA constituent agencies are kept informed of the work being done in the section 233 program through the HHFA Research Coordinating Board.

The Office of Economic Opportunity has, on a number of occasions, requested assistance from the experimental housing program in technical matters concerning low-cost residences for the poor. Reviews of designs and techniques for different styles of construction have been made for OEO under the program. There is substantial opportunity for further cooperation between OEO and FHA on housing matters.

(d) None at present.

(e) Very close cooperation is in effect between the New York City government and the program in relation to rehabilitation of slum dwellings in that city. Cooperation on similar projects with other city governments is anticipated.

(f) Liaison is maintained with the National Research Council of Canada.

(g) through (i) The program will consider submissions of experimental projects from and work with any kind of legitimate sponsor.

(ii) Arrangements developed to promote coordination and cooperation:

(a) An FHA consumer bulletin has been distributed widely to disseminate information on the purpose of the program, the general program rules, procedure for sponsors, and processing requirements.

(b) For the New York City slum dwelling rehabilitation work a task force has been created to determine methods and approaches to be followed and the design, materials, and techniques to be used; to provide a sociological and political environment conducive to the success of the undertaking; and to facilitate and expedite the undertaking in any other ways possible.

8. *Laws and regulations.* (See general answer covering all FHA programs.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

(a) Effects on personal incomes of persons served or involved and on the distribution of personal income:

As a consequence of the contemplated lowering of construction costs through the program home buyers should be able to buy the same or better quality homes for less money than at present or better homes for the same price. This will, in effect, increase the home buyers' income.

(b) through (h) Potentially the rehabilitation of slum dwellings in New York City alone involves approximately 43,000 buildings. Similar situations exist in varying degree in every city in the Nation. If the current project in New York proves successful, there will be a new rehabilitation industry creating thousands of jobs for skilled and unskilled laborers as well as an increased need for professional engineers, architects, technologists, and management people.

In addition, many large and small producers of building materials and components have become interested in the New York City rehabilitation work. These producers have visited the pilot project, now completed, and are studying the possibilities of developing new low-cost products or adapting present ones for a rehabilitation market. Such development and marketing work should significantly stimulate the building products industry thus creating many more jobs and increasing substantially the gross national product.

10. *Economic classification of program expenditures.* (See general answer covering all FHA programs.)

## LAND DEVELOPMENT INSURANCE PROGRAM (TITLE X)

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

Title X of the Housing and Urban Development Act of 1965 authorizes FHA to insure mortgages to assist private enterprise in the acquisition and development of land to serve the needs of a rapidly expanding urban population. The urban expansion that has already occurred since World War II has substantially depleted the supply of improved building sites to such an extent that the price of available improved lots has increased more than the costs of building houses. Difficulties in obtaining financing for land development have con-

tributed to this problem, and title X was devised to assist in the financing of land acquisition and especially land improvements such as water and sewerage facilities, streets, curbs, sidewalks, etc.

### 2. *Operation*

Although the field instructions have not yet been issued, title X provides that FHA shall administer a system of mortgage insurance under which up to 50 percent of the estimated value of land before development and 90 percent of the estimated cost of development, or not to exceed 75 percent of the estimated value of the property upon completion of the land development, may be borrowed with an insured mortgage. The total cost of a single land development undertaking may not at any time exceed \$10 million. The statute provides that public, private, or cooperatively owned water supply and sewerage disposal systems may be insured also, if it is necessary to build new systems. The land development must comply with all State or local laws and must be consistent with a comprehensive plan which covers, or with comprehensive planning being carried on for, the area in which the land is situated, and must meet other criteria established in the statute and regulations.

### 3. *History*

The land development insurance program has not begun to operate, although regulations and field instructions are being prepared and it is expected that they will be issued shortly. The legislative history of title X goes back a number of years to the late 1950's, when studies were made of methods by which financing of land improvements could be facilitated. A bill similar to title X was introduced by former Congressman Rains in 1960 and again in 1961. The program with some modifications was included in the Administration's legislative recommendations in 1964, but was deleted in the Housing Act of that year as enacted by the Congress. The present wording of title X of the Housing and Urban Development Act of 1965 is the result of careful study within the Congress and by both private and Government officials over a period of several years.

4. *Level of operations.* (See general answer covering all FHA programs.)
5. *Estimated magnitude of program in 1970.* (See general answer covering all FHA programs.)
6. *Prospective changes in program orientation.* (See general answer covering all FHA programs.)
7. *Coordination and cooperation.* (See general answer covering all FHA programs.)
8. *Laws and regulations.* (See general answer covering all FHA programs.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer covering all FHA programs.)
10. *Economic classification of program expenditures.* (See general answer covering all FHA programs.)

## NURSING HOME PROGRAM (SECTION 232)

## PART I. DESCRIPTION OF THE PROGRAM

*1. Objectives*

The purpose of the Federal Housing Administration's program of mortgage insurance for nursing homes is set forth in the enabling legislation, section 232 of the National Housing Act. It is, "to assist the provision of urgently needed nursing homes for the care and treatment of convalescents and other persons who are not acutely ill and do not need hospital care but who require skilled nursing care and related medical services." In general, the program is designed to help reduce the national shortage of nursing homes by providing facilities that are economically sound and structurally adequate for the safety and proper care of occupants.

*2. Operation*

The FHA helps sponsors of nursing homes to get mortgage loans on favorable terms through established lending institutions by insuring the lenders against possible loss. All nursing homes developed under the section 232 program are constructed or rehabilitated by private builders, and are owned and managed by private concerns or individuals.

The nursing home program is administered directly by local FHA insuring offices. Except for modifications necessitated by the nature of nursing home mortgage insurance transactions, FHA regulations and operating procedures for section 232 are similar to those for multifamily rental-housing projects insured at market interest rates.

Before insuring any mortgage under section 232, FHA must have certification from the appropriate State agency of the State in which the nursing home is to be located that there is a need for the home; that there are in force in the State (or its political subdivision) reasonable minimum standards for licensing and operating nursing homes; and that these standards will be applied and enforced with respect to any FHA-insured nursing home in the State.

*3. History*

Section 232, authorizing FHA insurance of mortgages to finance construction or rehabilitation of nursing home facilities providing accommodations for 20 or more persons, was added to the National Housing Act in 1959. Up to that time there had been a dearth of available funds to finance proprietary (organized for profit) nursing homes and limited familiarity of lending institutions with the problems and opportunities in this field.

Congressional action in 1961 increased the permissible ratio of loan-to-value for section 232 projects from 75 to 90 percent, thus reducing the required equity from 25 to 10 percent. This amendment, according to the legislative history, was designed primarily to encourage the smaller nursing homeowner to provide better physical facilities for the care of those who must be confined to nursing homes.

In 1964, section 232 was amended to make private nonprofit nursing home sponsors eligible for FHA mortgage insurance for nursing home construction on the same terms as proprietary sponsors. Since passage of the 1964 act, it has been possible for the sponsor of a nonprofit nursing home to qualify for a combination FHA-insured mort-

gage and Federal grant or loan made by the Department of Health, Education, and Welfare under the Hill-Burton program.

From the beginning of the section 232 program in 1959 through September 1965, applications for FHA insurance were received for 744 nursing homes. These applications involved nearly 68,000 beds, including some 43,000 in projects already insured. Of the total, six applications, involving 650 beds, were for homes to be operated by nonprofit groups.

4. *Level of operations.* (See general answer covering all FHA programs.)
5. *Estimated magnitude of program in 1970.* (See general answer covering all FHA programs.)
6. *Prospective changes in program orientation.* (See general answer covering all FHA programs.)
7. *Coordination and cooperation.* (See general answer covering all FHA programs.)
8. *Laws and regulations.* (See general answer covering all FHA programs.)

#### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer covering all FHA programs.)
10. *Economic classification of program expenditures.* (See general answer covering all FHA programs.)

### HOUSING FOR THE ELDERLY (SECTION 231)

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. Objectives

Many of the general objectives outlined for sales and rental housing programs also apply to the 231 elderly housing program. More specifically, however, the 231 program aims to provide financing for rental projects especially designed for elderly persons, 62 years of age and older.

Housing accommodations in the general market are not frequently well suited to the special needs of our growing elderly population and the private market incentives to build or finance such specialized housing have not developed to assure an adequate supply.

##### 2. Operation

Responses to this question on operation of rental housing programs, also apply to this program.

Special standards have been prepared to encourage designs specifically tailored to the needs of the elderly, even where some features may not be wholly suitable for family living as an alternative market. Mortgage amounts are based on replacement cost rather than market value and 100-percent mortgages are available to nonprofit sponsors. Profit-motivated sponsors may obtain 90-percent mortgages.



### 3. *History*

Special mortgage insurance for elderly housing projects was first provided by amendment to section 207 in 1956. However effective attainment of the objectives of these amendments was limited by requirement of the 207 program that units be designed for family living. Therefore, section 231 was added to the National Housing Act in 1959 to provide a program specifically adapted to the specialized need.

As of August 1965 more than 35,000 units of rental housing had been insured under the program.

4. *Level of operations.* (See general answer covering all FHA programs.)
5. *Estimated magnitude of program in 1970.* (See general answer covering all FHA programs.)
6. *Prospective changes in program orientation.* (See general answer covering all FHA programs.)
7. *Coordination and cooperation.* (See general answer covering all FHA programs.)
8. *Laws and regulations.* (See general answer covering all FHA programs.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer covering all FHA programs.)
10. *Economic classification of program expenditures.* (See general answer covering all FHA programs.)

### QUESTIONS 4-10 FOR ALL FEDERAL HOUSING ADMINISTRATION PROGRAMS

4. *Level of operations.* (See table 1.)

Program: FHA insurance operations. (Covers all FHA programs discussed in preceding sections.)

Department or agency, and office or bureau: Department of Housing and Urban Development; Federal Housing Administration.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure	Unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 con- gressional estimates	Fiscal year 1967 con- gressional estimates
(a) Magnitude of the program.....	Mortgages insured:				
Sales housing.....	Dwelling units.....	459,395	512,774	492,960	583,700
Rental housing, market rate of interest.....	do <sup>1</sup> .....	36,533	27,540	27,505	37,330
Rental housing, below-market rate of interest.....	do.....	10,286	14,569	22,960	31,680
Experimental housing.....	do.....		108	390	2,000
Land development mortgage insurance.....	Lots.....			18,900	38,000
Nursing homes.....	Beds.....	9,221	7,399	10,355	7,920
Housing for the elderly.....	Dwelling units.....	5,299	6,175	4,130	1,270
(b) Applicants or participants:					
State government agencies <sup>2</sup> .....					
Local communities or governments <sup>2</sup> .....					
Families.....					
	Insured mortgages in force, and com- missioner-held mortgages or prop- erties:				
Sales housing.....	Dwelling units.....	3,781,401	3,991,701	4,177,729	4,447,639
Rental housing, market rate of interest.....	do <sup>1</sup> .....	762,320	752,158	727,092	709,661
Rental housing, below-market rate of interest.....	do.....	20,055	34,772	57,742	89,663
Experimental housing.....	do.....		108	494	2,486
Land development mortgage insurance.....	Lots.....			15,900	38,000
Nursing homes.....	Beds.....	22,076	29,303	40,107	48,285
Housing for the elderly.....	Dwelling units.....	28,167	34,365	39,707	39,639
(c) Federal finances:					
Unobligated appropriations available <sup>2</sup> .....					
Obligations incurred.....	Debentures issued.....	\$499,717,360	\$559,667,000	\$240,000,000	0
Allotments or commitments made <sup>2</sup> .....					
(d) Matching or additional expenditures for the program <sup>2</sup> .....					
(e) Number of Federal Government employees administering, operating, or super- vising the activity.....		8,118	7,996	8,130	8,615
(f) Non-Federal personnel employed in the program.....	Fee appraisers <sup>3</sup> .....	24	64	172	111
(g) Other measures of level or magnitude of performance <sup>2</sup> .....					

<sup>1</sup> Excludes mobile home spaces.<sup>2</sup> Not applicable.<sup>3</sup> Estimated.

### 5. *Estimated magnitude of the program in 1970*

The level of activity that will materialize under FHA programs by 1970 will depend on a variety of influences, some of which can be reasonably anticipated while others will arise from actions and decisions evolving from interim events.

Aggregate population has been projected by the Census Bureau to rise to about 209 million by 1970. This would be an increase of about 7.3 percent from 1965. However, in the age bracket from 22 to 45 years, the increase would be only 6.2 percent. This is the group that contains most of the first-time home buyers and renters, and which would have the greatest impact on FHA's future activities. The number of elderly persons over 65 is expected to increase by 8.1 percent during the next 5 years and provide somewhat greater demands for senior citizen housing and nursing homes.

We do not visualize any technological or social innovations during the next 5 years that would have a notable impact on FHA activity. There are a number of forces now at work that can be expected to continue and perhaps accelerate, however, during this period. One of these, on the technological side, is the increasing use of manufactured and preassembled construction components. These factory-built parts reduce the amount of site labor required, speed up construction time, and counteract to some extent the upward pressures on building costs. Another, on the social policy side, is the increasing emphasis given to the provision of better housing for families of low and moderate income. The below-market-interest-rate program under section 221(a)(3) is making an important contribution toward meeting moderate income housing needs. The rent supplement program, authorized by Congress in 1965, can potentially make significant improvements in the housing conditions for low-income families, if and when funds for program operations are appropriated.<sup>1</sup>

The construction of planned development on a larger scale than heretofore is now occurring. This emergence of new towns and satellite communities might be classed as a socioeconomic innovation to cope with problems of urban sprawl and mass. The addition of title X to the National Housing Act by the 1965 housing legislation will enable FHA to insure loans for the development of large tracts and will facilitate development planning on larger scales than were previously feasible in many cases.

Events that now are unpredictable could have a significant impact on FHA's activity during the next 5 years. Future developments in the capital markets will influence both the structure of interest rates and the supply of funds available for investment in FHA-insured mortgages. Institutional shifts between different types of lenders in the accumulation of thrift funds could have a bearing on the demand for FHA mortgages as investment media. Also, major changes in the investment policy of lender groups would have a similar effect. Other changes in the capital markets might arise from actions by monetary authorities or from business and economic conditions. While we do not have any reason to anticipate major shifts, they have occurred in the past on short notice, and could happen again.

The level of activity in various FHA programs in 1970 is apt to be influenced more by competitive forces that govern the rate of the

<sup>1</sup> \$12 million authorized under Supplemental Appropriations Act of 1966 will cover contract authorizations for approximately 20,000 units.

agency's participation than by other factors. Other things being equal, FHA's sales and rental programs would be expected to share in the modest growth of families entering the ages of initial homeownership. However, the share of the market for new sales housing that has been financed with FHA-insured loans has declined substantially from the levels of 10 years ago. It is difficult to say whether this decline will halt in the next 5 years, and whether it will be reversed.

In the case of rental housing for families of low and moderate income, the role of FHA increased substantially between 1960 and 1965. Further increases may be expected because of recent legislative enactments. Nursing homes illustrate how financing participation patterns may change rapidly. When the Congress first authorized FHA mortgage insurance for proprietary nursing homes there was a shortage of private investment capital available for such facilities. However, in the last year or two there has been a growing interest in nursing homes by private investors and sponsors, and the press has reported that many new private projects are being proposed, constructed, and operated. In such a changed outlook on the need for proprietary nursing homes, it would not be surprising for FHA's proportionate role to decline even though its total activity might increase.

#### 6. *Prospective changes in program orientation*

(a) Pending legislative proposals with potential effect on FHA programs include:

(1) The proposed Demonstration Cities Act of 1966 (H.R. 12343). While this bill would not directly affect FHA programs, it might reasonably be expected to result in more intensive use of them.

(2) The proposed Housing and Urban Development Amendments of 1966 (H.R. 13064). In addition to technical and clarifying amendments to the National Housing Act, this bill proposes to raise mortgage limits on the section 221(d)(2) program, which should improve the effectiveness of this program under today's market cost conditions, thereby resulting in its more intensive use. The bill also proposes a program of research and applied technology which, while not an FHA program, would no doubt produce results that would affect FHA operations in various favorable respects.

(3) The proposed supplemental appropriation action to fund the rent supplement program (H. Doc. 380) would activate that program.

(b) Proposed administrative and organizational changes: The establishment of the Department of Housing and Urban Development by Public Law 89-174 has necessarily involved some administrative and organizational changes, and additional changes will undoubtedly follow. However, it is not anticipated that these changes will have a major substantive impact on the orientation or emphasis of FHA activities or programs.

(c) Changes in conditions under which FHA programs will function in 1970 have been discussed in question 5.

#### 7. *Coordination and cooperation*

The various programs of the Federal Housing Administration are coordinated with policies of the Department of Housing and Urban Development, and more broadly, with policies of the Administration.

Within the agency, this coordination is accomplished by frequent meetings between the Secretary and the Commissioners of the constituent agencies, as well as by use of the usual channels of communication on matters involving specific policy issues. Further, the staffs of FHA, the Office of the Secretary and the other constituent agencies, work together continually on problems involving common interests. Contacts may be by telephone, personal meetings, or through formal or informal ad hoc task groups or committees. The subject matter of such meetings and communications ranges from budget and legislative matters to correspondence and operating problems in which there are interests besides FHA's. Numerous examples of coordination and cooperation could be furnished from the daily work schedules of the staff and top officials.

Outside of the HUD network, various functions of FHA bring it into contact with other departments and agencies. For example, the nursing homes and senior citizens housing programs involve mutual interests with sectors of the Department of Health, Education, and Welfare. Nursing homes may also involve the Small Business Administration. Many facets of sales housing programs are closely related to the loan guarantee service of the Veterans' Administration, with whom close working relations are maintained in both field and central offices. Housing problems in small towns and rural areas lead to communications with the Farmers Home Administration of the Department of Agriculture. The testing and evaluation of new building materials involves arrangements with the Bureau of Standards of the Department of Commerce. The agency participates with the Bureau of the Census in planning the contents of new decennial census enumerations as well as in obtaining census data from time to time on such things as population, housing, building permits, and construction expenditures. Military housing and other special programs for employees working on Federal projects require liaison with the Department of Defense, Atomic Energy Commission, and the National Aeronautics and Space Administration. Special housing vacancy surveys are conducted for FHA by the Post Office Department. The international division of FHA provides technical assistance and guidance to the Agency for International Development under an agreement between HUD and that Agency.

Ordinarily, most FHA programs do not require coordination with State and local governments or their agencies. However, the nursing home program involves the participation of State health departments, and the insurance of mortgages within urban renewal projects involves working with local redevelopment agencies. The programs of FHA do not concern foreign governments or international organizations, although, as indicated above, FHA reviews housing project proposals on behalf of AID in Latin America, Africa, and the Far East.

In the case of housing for senior citizens, nursing homes and rental projects for families of low-and moderate-income, nonprofit bodies may be the sponsors of a project. In such cases, their status is examined, and each is specifically approved by FHA for the purpose for which it has applied.

Business enterprises are active participants in FHA programs. Applications for mortgage insurance are submitted to FHA by approved mortgagees who are usually institutional investors, viz, banks savings institutions, insurance companies, and mortgage bankers.

Basic statutes require that mortgagor applicants under many multi-family housing programs be corporations or cooperatives. The corporations may be proprietary, and in some cases, limited dividend or nonprofit.

### 8. *Laws and regulations*

The basic authority for FHA programs is contained in the National Housing Act, as amended. The original act is identified as Public Law 479, 73d Congress, H.R. 9620, approved June 27, 1934, 48 Stat. 1246; 12 U.S.C. 1701 et seq. (1946 ed.).

The amendments to the National Housing Act are cited below.

Following this is a list of additional laws and information pertaining to the Federal Housing Administration and a list of appropriation acts covering FHA programs for fiscal years 1955 through 1966.

#### THE NATIONAL HOUSING ACT AND ACTS AMENDATORY THERETO

- Public Law 479, 73d Cong., H.R. 9620, approved June 27, 1934, 48 Stat. 1246.
- Public Law 76, 74th Cong., H.R. 6021, approved May 28, 1935, 49 Stat. 293.
- Public Law 305, 74th Cong., H.R. 7617, approved August 23, 1935, 49 Stat. 722.
- Public Law 486, 74th Cong., S. 4212, approved April 3, 1936, 49 Stat. 1187.
- Public Law 525, 74th Cong., H.R. 11968, approved April 17, 1936, 49 Stat. 1233.
- Pub. Res. 6, 75th Cong., S.J. Res. 38, approved February 19, 1937, 50 Stat. 20.
- Public Law 44, 75th Cong., S. 1228, approved April 22, 1937, 50 Stat. 70.
- Public Law 424, 75th Cong., H.R. 8730, approved February 3, 1938, 52 Stat. 8.
- Public Law 111, 76th Cong., H.R. 5324, approved June 3, 1939, 53 Stat. 804.
- Public Law 24, 77th Cong., H.R. 3575, approved March 28, 1941, 55 Stat. 55.
- Public Law 138, 77th Cong., H.R. 4693, approved June 28, 1941, 55 Stat. 364.
- Public Law 248, 77th Cong., H.R. 5395, approved September 2, 1941, 55 Stat. 686.
- Public Law 559, 77th Cong., H.R. 6927, approved May 26, 1942, 56 Stat. 301.
- Public Law 15, 78th Cong., S. 677, approved March 23, 1943, 57 Stat. 42.
- Public Law 158, 78th Cong., S. 755, approved October 14, 1943, 57 Stat. 570.
- Public Law 159, 78th Cong., H.R. 3291, approved October 15, 1943, 57 Stat. 571.
- Public Law 392, 78th Cong., S. 1947, approved June 30, 1944, 58 Stat. 648.
- Public Law 27, 79th Cong., S. 681, approved March 31, 1945, 59 Stat. 47.
- Public Law 388, 79th Cong., H.R. 4761, approved May 22, 1946, 60 Stat. 207.
- Public Law 480, 79th Cong., S. 2341, approved July 1, 1946, 60 Stat. 408.
- Public Law 120, 80th Cong., S. 1230, approved June 26, 1947, 61 Stat. 182.
- Public Law 129, 80th Cong., H.R. 3203, approved June 30, 1947, 61 Stat. 193.
- Public Law 132, 80th Cong., S.J. Res. 135, approved June 30, 1947, 61 Stat. 202.
- Public Law 366, 80th Cong., S. 1720, approved August 5, 1947, 61 Stat. 777.
- Public Law 394, 80th Cong., S. 1770, approved December 27, 1947, 61 Stat. 945.
- Public Law 468, 80th Cong., S. 2361, approved March 31, 1948, 62 Stat. 101.
- Public Law 864, 80th Cong., S. 2790, approved July 1, 1948, 62 Stat. 1206.
- Public Law 901, 80th Cong., H.R. 6959, approved August 10, 1948, 62 Stat. 1268.
- Public Law 31, 81st Cong., H.R. 1731, approved March 30, 1949, 63 Stat. 18.
- Public Law 52, 81st Cong., S. 851, approved April 23, 1949, 63 Stat. 57.
- Public Law 171, 81st Cong., S. 1070, approved July 15, 1949, 63 Stat. 413.
- Public Law 211, 81st Cong., S. 1184, approved August 8, 1949, 63 Stat. 570.
- Public Law 278, 81st Cong., S.J. Res. 109, approved August 30, 1949, 63 Stat. 681.
- Public Law 387, 81st Cong., S.J. Res. 134, approved October 25, 1949, 63 Stat. 905.
- Public Law 475, 81st Cong., S. 2246, approved April 20, 1950, 64 Stat. 48.
- Public Law 498, 81st Cong., H.R. 7846, approved May 2, 1950, 64 Stat. 97.
- Public Law 107, 82d Cong., H.J. Res. 303, approved August 3, 1951, 65 Stat. 173.
- Public Law 139, 82d Cong., S. 349, approved September 1, 1951, 65 Stat. 293.
- Public Law 155, 82d Cong., H.R. 4914, approved September 28, 1951, 65 Stat. 365.
- Public Law 214, 82d Cong., S. 2244, approved October 26, 1951, 65 Stat. 647.
- Public Law 531, 82d Cong., S. 3066, approved July 14, 1952, 66 Stat. 601.
- Public Law 5, 83d Cong., S.J. Res. 27, approved March 10, 1953, 67 Stat. 4.
- Public Law 94, 83d Cong., S. 2103, approved June 30, 1953, 67 Stat. 121.
- Public Law 438, 83d Cong., S.J. Res. 167, approved June 29, 1954, 68 Stat. 320.
- Public Law 560, 83d Cong., H.R. 7839, approved August 2, 1954, 68 Stat. 590.
- Public Law 10, 84th Cong., S.J. Res. 42, approved March 11, 1955, 69 Stat. 11.
- Public Law 94, 84th Cong., S. 67, approved June 28, 1955, 69 Stat. 172.

- Public Law 119, 84th Cong., S.J. Res. 85, approved June 30, 1955, 69 Stat. 225.  
 Public Law 221, 84th Cong., S. 2630, approved August 4, 1955, 69 Stat. 471.  
 Public Law 345, 84th Cong., S. 2126, approved August 11, 1955, 69 Stat. 635.  
 Public Law 405, 84th Cong., H.J. Res. 471, approved February 10, 1956, 70 Stat. 11.  
 Public Law 574, 84th Cong., S. 3515, approved June 13, 1956, 70 Stat. 273.  
 Public Law 1020, 84th Cong., H.R. 11742, approved August 7, 1956, 70 Stat. 1091.  
 Public Law 85-10, 85th Cong., H.J. Res. 209, approved March 27, 1957, 71 Stat. 7.  
 Public Law 85-104, 85th Cong., H.R. 6659, approved July 12, 1957, 71 Stat. 294.  
 Public Law 85-240, 85th Cong., S. 1574, approved August 30, 1957, 71 Stat. 524.  
 Public Law 85-364, 85th Cong., S. 3418, approved April 1, 1958, 72 Stat. 73.  
 Public Law 85-442, 85th Cong., S.J. Res. 171, approved June 4, 1958, 72 Stat. 176.  
 Public Law 85-857, 85th Cong., H.R. 9700, approved September 2, 1958, 72 Stat. 1105.  
 Public Law 85-900, 85th Cong., H.R. 9147, approved September 2, 1958, 72 Stat. 1726.  
 Public Law 86-70, 86th Cong., H.R. 7120, approved June 25, 1959, 73 Stat. 141.  
 Public Law 86-149, 86th Cong., H.R. 5674, approved August 10, 1959, 73 Stat. 302.  
 Public Law 86-372, 86th Cong., S. 2654, approved September 23, 1959, 73 Stat. 654.  
 Public Law 86-500, 86th Cong., H.R. 10777, approved June 8, 1960, 74 Stat. 166.  
 Public Law 86-578, 86th Cong., S. 3226, approved July 5, 1960, 74 Stat. 314.  
 Public Law 86-624, 86th Cong., H.R. 11602, approved July 12, 1960, 74 Stat. 411.  
 Public Law 86-774, 86th Cong., H.R. 11573, approved September 13, 1960, 74 Stat. 915.  
 Public Law 86-788, 86th Cong., H.J. 784, approved September 14, 1960, 74 Stat. 1028.  
 Public Law 87-38, 87th Cong., S.J. Res. 89, approved May 25, 1961, 75 Stat. 85.  
 Public Law 87-70, 87th Cong., S. 1922, approved June 30, 1961, 75 Stat. 149.  
 Public Law 87-623, 87th Cong., S. 2876, approved August 31, 1962, 76 Stat. 418.  
 Public Law 87-756, 87th Cong., H.R. 13067, approved October 5, 1962, 76 Stat. 751.  
 Public Law 88-54, 88th Cong., H.J. Res. 467, approved June 29, 1963, 77 Stat. 73.  
 Public Law 88-127, 88th Cong., S. 1952, approved September 23, 1963, 77 Stat. 163.  
 Public Law 88-560, 88th Cong., S. 3049, approved September 2, 1964, 78 Stat. 769.  
 Public Law 89-117, 89th Cong., H.R. 7984, approved August 10, 1965, 79 Stat. 451.

ADDITIONAL LAWS AND INFORMATION PERTAINING TO THE FEDERAL  
HOUSING ADMINISTRATION

- Reorganization Plan No. 1 of 1939, approved April 25, 1939.  
 Executive Order No. 9070, approved February 24, 1942.  
 Reorganization Plan No. 3 of 1947, approved May 27, 1947.  
 Public Law 116, 80th Cong., H.R. 2872, approved June 25, 1947, 61 Stat. 180.  
 Public Law 139, 82d Cong., S. 349, approved September 1, 1951, 65 Stat. 293.  
 Public Law 161, 84th Cong., H.R. 6829, approved July 15, 1955, 69 Stat. 324.  
 Public Law 216, 84th Cong., H.R. 4904, approved August 3, 1955, 69 Stat. 448.  
 Public Law 221, 84th Cong., S. 2630, approved August 4, 1955, 69 Stat. 471.  
 Public Law 802, 84th Cong., H.R. 11077, approved July 25, 1956, 70 Stat. 653.  
 Public Law 968, 84th Cong., H.R. 12270, approved August 3, 1956, 70 Stat. 991.  
 Public Law 85-162, 85th Cong., H.R. 8996, approved August 21, 1957, 71 Stat. 403.  
 Public Law 85-241, 85th Cong., H.R. 8240, approved August 30, 1957, 71 Stat. 531.  
 Public Law 85-658, 85th Cong., H.R. 13015, approved August 20, 1958, 72 Stat. 636.  
 Public Law 86-3, 86th Cong., S. 50, approved March 18, 1959, 73 Stat. 4.  
 Public Law 86-73, 86th Cong., H.R. 2256, approved June 30, 1959, 73 Stat. 156.  
 Public Law 86-119, 86th Cong., S.J. Res. 124, approved July 31, 1959, 73 Stat. 266.  
 Public Law 86-275, 86th Cong., H.R. 8575, approved September 16, 1959, 73 Stat. 558.  
 Public Law 86-626, 86th Cong., H.R. 11776, approved July 12, 1960, 74 Stat. 425.

- Public Law 87-141, 87th Cong., H.R. 7445, approved August 17, 1961, 75 Stat. 342.
- Public Law 87-719, 87th Cong., S. 3580, approved September 28, 1962, 76 Stat. 664.
- Public Law 87-741, 87th Cong., H.R. 12711, approved October 3, 1962, 76 Stat. 716.
- Public Law 87-779, 87th Cong., H.R. 13044, approved October 9, 1962, 76 Stat. 778.
- Executive Order No. 11063, approved November 20, 1962.
- Public Law 88-25, 88th Cong., H.R. 5517, approved May 17, 1963, 77 Stat. 20.
- Public Law 88-507, 88th Cong., H.R. 11296, approved August 30, 1964, 78 Stat. 640.
- Public Law 89-117, 89th Cong., H.R. 7984, approved August 10, 1965, 79 Stat. 451.
- Public Law 89-128, 89th Cong., H.R. 7997, approved August 16, 1965, 79 Stat. 520.
- Public Law 89-174, 89th Cong., H.R. 6927, approved September 9, 1965, 79 Stat. 667.
- Executive Order No. 11246, approved September 24, 1965.
- Public Law 89-309, 89th Cong., H.R. 11588, approved October 31, 1965, 79 Stat. 1133.

## FHA INSURANCE AUTHORIZATIONS

- Active FHA Insurance Authorizations Under the National Housing Act as of December 31, 1965.
- Inactive FHA Insurance Authorizations Under the National Housing Act as of December 31, 1965.

APPROPRIATION ACTS PROVIDING FUNDS FOR OPERATIONS OF FHA PROGRAMS,  
FISCAL YEARS 1955 THROUGH 1966

- Fiscal year 1955:  
 Independent Offices Appropriation Act, Public Law 83-428.  
 Supplemental Appropriation Act, Public Law 83-663.  
 Urgent Deficiency Appropriation Act, Public Law 84-3.
- Fiscal year 1956:  
 Independent Offices Appropriation Act, Public Law 84-112.  
 Second Supplemental Appropriation Act, Public Law 84-533.
- Fiscal year 1957: Independent Offices Appropriation Act, Public Law 84-623.
- Fiscal year 1958:  
 Independent Offices Appropriation Act, Public Law 85-69.  
 Second Supplemental Appropriation Act, Public Law 85-352.  
 Federal Employees' Salary Increase Act, Public Law 85-472.
- Fiscal year 1959:  
 Independent Offices Appropriation Act, Public Law 85-844.  
 Supplemental Appropriation Act, Public Law 85-766.  
 Second Supplemental Appropriation Act, Public Law 86-30.
- Fiscal year 1960: Independent Offices Appropriation Act, Public Law 86-255.
- Fiscal year 1961:  
 Independent Offices Appropriation Act, Public Law 86-626.  
 Third Supplemental Appropriation Act, Public Law 87-14.
- Fiscal year 1962:  
 Independent Offices Appropriation Act, Public Law 87-141.  
 Supplemental Appropriation Act, Public Law 87-332.
- Fiscal year 1963:  
 Independent Offices Appropriation Act, Public Law 87-741.  
 Supplemental Appropriation Act, Public Law 88-25.
- Fiscal year 1964: Independent Offices Appropriation Act, Public Law 88-215.
- Fiscal year 1965:  
 Independent Offices Appropriation Act, Public Law 88-507.  
 Second Supplemental Appropriation Act, Public Law 89-16.
- Fiscal year 1966:  
 Independent Offices Appropriation Act, Public Law 89-128.  
 Supplemental Appropriation Act, Public Law 89-309.  
 Second Supplemental Appropriation Act, Public Law 89-426.



## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

(a) *Effects on personal incomes of persons served or involved and on the distribution of personal income.*—Ordinarily the insurance of a mortgage does not have a direct or measurable effect on the incomes of the persons served, or on the distribution of personal income. The decision of a mortgagor to buy or build a residential building for his own occupancy would usually have some effect on his income distribution pattern because of the need to maintain debt service payments. And in some situations, the location of housing in relation to places of work and other factors may have some influence on the income of its occupants. However, these are hypothetical concepts that are seldom measured and are often unmeasurable.

(b) *Effects on the placement or productivity of workers, or both, and on their earnings.*—It has often been observed that the lack of adequate housing has an adverse effect on the productivity of workers who are obliged to reside in such structures. However, we are not familiar with any studies that have sought to quantify the productivity gain that may be imputed to improved shelter. We have been advised that a study of this topic is underway at the University of California at Los Angeles, using data from underdeveloped nations.

(c) *Effects on business or industrial organization and management.*—Numerous housing experts contend that current and recent levels of home construction, about 1.5 million units annually, could not have been achieved without the "social invention" represented by the FHA program of home mortgage insurance. Prior to enactment of the National Housing Act, the home mortgage system in the United States was, indeed, a shaky institution. It was characterized by nonamortizing first mortgages of limited durations, requiring payment in full at the end of the mortgage term. These first mortgages usually had limited coverage, ordinarily no more than 50 or 60 per cent. In order to meet the remaining high equity requirements, the home purchaser resorted to second and third mortgage borrowings, which, although amortizing, were of very short duration and bore high interest rates.

The vulnerability of this system was exposed by the depression of the 1930's, when homeowners found themselves unable to make lump-sum payments on first mortgages, which banks, in turn, found themselves unable to renew.

The "social invention" of the FHA mortgage insurance program supplied a sound basis for financing of home purchases. Essentially, it provided for (1) a single mortgage that covered a very substantial portion of the value of the home, thus precluding the need for second mortgages, (2) fixed monthly payments throughout the life of the mortgage which covered both principal and interest and which were established at levels sufficient to amortize indebtedness completely at the end of the payment period, (3) an interest rate low enough to provide convenient financing terms for purchasers and sufficiently high in yield to attract private investment, and (4) a program of insurance, with premiums paid by the borrower, which gave protection

to the lender against possible loss in the event of foreclosures. The same general advantages applied, as well, to the FHA mortgage insurance programs for rental housing.

The mortgage insurance protection feature attracted private investment, and the long-term, low-interest, fixed monthly payment features of the mortgages greatly broadened the market for new housing by reducing monthly carrying costs to levels that could be afforded by many more households. The FHA-type of financing supplied a "yardstick" for private industry, and the same general lending pattern came to be used commonly by private lenders in their non-FHA-insured lending activities. In fact, it is interesting to note that several years ago, a system of private mortgage insurance was established to serve certain savings and loan associations.

During World War II, under a program to provide privately built housing for immigrant warworkers and after World War II, when FHA (as well as VA) bent every effort to provide housing for families of returning war veterans, the FHA programs supplied the basis for development of great efficiencies in "project" construction. These large-scale projects, sometimes involving thousands of homes, provided opportunities for introducing rationalization of production and for achieving large-scale economies of mass materials purchases. Under this stimulus, such techniques as precutting, and prefabrication of such components as roof trusses and rafters and module wall sections became commonplace. Standard floor plans allowed prefabrication of sheet metal ductwork, and some developers bench-assembled plumbing "trees," allowing rapid hookup with plumbing fixtures. Millwork items were standardized, and long production runs on windows and doors allowed great economies to be achieved. Large-scale mass production also supported development of mobile equipment for earthmoving and materials handling and lightweight power hand tools.

Industry responded with development of new products that helped lower material and labor costs. These included widespread use of dry wall construction for interior walls, packaged chimneys, new materials for siding, and roofing, etc.

Large-scale project construction also involved adherence to FHA standards for land development and planning. These concerned such items as provision for safe traffic flow, proper densities, provision of appropriate public utilities, etc. These standards, as well, became yardsticks for the entire industry. The development of a building industry capable of producing 1.5 million units a year has, in turn, stimulated the development of firms engaged in production of building materials, appliances and home furnishings. New firms have been formed and existing ones enlarged in response to market demands.

(d) *Effects on the stability, level, volume, or other aspects of employment, wages, costs, production, sales, prices, or other phases of economic activity.*—The availability of home loan credit at long maturities and with small initial equities because of FHA mortgage insurance, has undoubtedly broadened the base of effective demand for housing. On several occasions, the Federal Government has sought to stimulate residential construction as a countercyclical aid by liberalizing the

terms of FHA loans and by increasing the availability of secondary market support for such loans. Both executive actions and legislation have been used to achieve such ends.

The National Bureau of Economic Research has made studies of Federal credit programs, and has drawn some conclusions about the effect of Federal mortgage underwriting on the level, volume, costs and prices of housing. However, the U.S. Government has not, to our knowledge, accepted and adopted all of these conclusions as official positions.

(e) *Any benefits (not included above).*—Various FHA programs are designed to provide housing or housing finance for special groups of the population. More specifically, section 221 relates to displaced and families of low and moderate income; section 222 to military servicemen, as does title VIII; section 231 to elderly persons; and section 232 to nursing homes. In the 1965 legislation, three new special programs were added: (1) rent supplements were authorized for low-income families who will live in rental units constructed or rehabilitated under section 221(d)(3) and financed at market interest rates; (2) veterans who have not used their VA loan guarantee entitlement or who are not eligible under VA statutes, may obtain loans insured by FHA on somewhat more favorable terms than non-veterans; (3) land development loans up to \$10 million were authorized to be insured by FHA to foster a more orderly pattern of urban growth.

(f) *Pertinent geographic differentials.*—All FHA programs are operative nationwide without local or regional differentiation. However, when a surplus supply of housing develops in a particular local housing market area, a temporary curtailment in new FHA commitment activity may have to be made until the surplus is absorbed. Fees, charges and interest rates are uniform nationwide. The private capital markets generally reflect geographical differences in availability of funds for investment in mortgages in the secondary markets. As a rule, market prices vary so that yields are somewhat lower in the eastern metropolitan centers, and higher in the Southwest and West, as well as in small towns. A table follows showing cumulative State-by-State participation in FHA programs.

TABLE 2.—Volume of FHA-insured mortgages and loans by State of location of property, 1934-64

[Dollar amounts in thousands]

State	Total amount	Home mortgages <sup>1</sup>		Project mortgages <sup>2</sup>		Property improvement loans	
		Number	Amount	Units	Amount	Number	Net proceeds
Total *.....	\$96,483,518	7,305,066	\$68,208,960	1,122,426	\$11,760,627	27,324,012	\$16,508,616
Alabama.....	1,349,068	105,367	1,037,633	14,716	116,671	382,767	194,864
Alaska.....	208,705	7,590	152,790	3,973	48,093	5,438	7,821
Arizona.....	1,708,746	135,480	1,328,698	19,505	208,350	260,271	174,798
Arkansas.....	724,029	67,007	554,242	4,958	59,167	195,474	110,620
California.....	13,216,568	1,112,714	10,842,759	105,207	1,227,761	2,419,571	1,146,048
Colorado.....	1,153,324	90,025	900,814	7,541	82,249	272,944	170,261
Connecticut.....	1,247,721	90,801	961,170	15,458	169,999	206,585	116,515
Delaware.....	359,757	26,162	288,058	6,184	64,042	15,795	7,658
District of Columbia.....	438,390	9,095	80,962	29,521	263,562	146,260	93,866
Florida.....	3,969,921	302,412	2,993,805	37,847	466,737	733,701	510,379
Georgia.....	1,841,526	144,718	1,400,106	28,594	244,137	355,561	197,283
Hawaii.....	453,162	24,529	310,042	10,338	139,942	4,139	3,178
Idaho.....	497,237	39,351	359,502	1,812	21,551	164,460	116,184
Illinois.....	3,470,186	233,556	1,999,005	39,208	434,737	1,651,057	1,036,444
Indiana.....	2,348,613	207,729	1,752,429	11,422	99,956	915,745	596,227
Iowa.....	892,089	69,307	630,112	2,876	27,992	392,087	233,985
Kansas.....	1,238,208	112,084	942,753	10,138	113,291	313,035	182,164
Kentucky.....	901,789	66,706	592,473	10,752	108,902	376,068	200,414
Louisiana.....	1,551,036	125,633	1,240,120	13,658	133,775	286,644	177,140
Maine.....	354,830	29,747	244,038	4,307	48,826	112,452	61,967
Maryland.....	1,781,224	115,690	1,113,630	47,898	350,563	581,295	317,031
Massachusetts.....	1,551,102	85,053	928,117	14,817	207,925	688,768	415,059
Michigan.....	5,700,128	450,980	4,038,042	27,730	318,175	2,294,786	1,343,911
Minnesota.....	1,471,194	87,337	944,690	9,948	98,209	724,635	428,295
Mississippi.....	680,380	59,869	530,761	5,374	55,351	178,703	94,268
Missouri.....	2,252,590	172,280	1,559,212	21,459	263,711	804,440	429,667
Montana.....	383,372	28,312	281,320	2,665	37,929	83,554	64,124
Nebraska.....	892,757	69,306	640,598	6,601	82,058	170,619	107,100
Nevada.....	499,781	31,921	401,279	5,691	71,629	34,509	26,873
New Hampshire.....	184,298	13,973	127,030	1,344	18,631	68,381	38,636
New Jersey.....	3,702,979	250,648	2,281,463	84,146	844,687	816,735	576,829
New Mexico.....	656,138	52,440	527,200	5,914	69,746	74,453	59,194
New York.....	8,505,628	370,235	3,637,319	223,156	2,589,803	2,920,414	2,278,506
North Carolina.....	1,170,084	87,421	759,597	24,627	260,616	334,189	203,871
North Dakota.....	189,217	8,387	82,030	4,002	63,471	62,342	43,717
Ohio.....	4,657,040	343,517	3,375,505	34,640	310,336	1,726,684	971,199
Oklahoma.....	1,734,991	165,757	1,402,662	8,303	94,662	398,283	237,667
Oregon.....	1,191,323	101,587	898,618	9,659	106,909	307,681	185,896
Pennsylvania.....	3,771,841	330,714	2,701,273	33,903	339,161	1,326,725	731,406
Rhode Island.....	333,078	27,763	269,758	1,719	20,234	80,250	43,086
Rhode Island.....	738,311	67,107	561,064	11,628	111,191	124,838	66,056
South Dakota.....	278,705	24,050	204,695	2,483	29,792	63,881	44,218
Tennessee.....	1,723,590	149,458	1,318,798	14,767	112,801	578,018	291,990
Texas.....	5,739,824	489,492	4,232,193	49,673	457,977	1,721,174	1,049,654
Utah.....	815,189	65,117	627,102	2,682	33,515	263,323	154,572
Vermont.....	95,905	9,985	78,288	193	2,053	28,140	15,563
Virginia.....	2,269,915	167,336	1,665,866	51,166	385,946	387,996	218,103
Washington.....	3,234,062	284,249	2,599,212	16,602	177,909	710,554	456,941
West Virginia.....	408,230	36,542	304,082	900	5,383	152,662	98,765
Wisconsin.....	830,921	61,498	589,555	7,111	69,113	313,267	172,253
Wyoming.....	230,325	22,391	207,062	711	6,626	23,631	16,637
Canal Zone.....	5,689			530	8,689		
Guam.....	30,489	370	5,190	1,270	24,801	449	499
Puerto Rico.....	874,770	71,012	676,497	10,972	107,178	67,783	91,087
Virgin Islands.....	6,463	286	4,063	129	2,300	97	100

<sup>1</sup> For volume by sections, see Housing and Home Finance Agency, 18th Annual Report, table III-12.<sup>2</sup> For volume by sections see *ibid.*, table III-13.<sup>3</sup> Based on cases tabulated through 1964, including sec. 225 open end advances, sec. 609 manufactured housing loans, and adjustments not distributed by States.

(g) *The measurable contribution of the program to either the magnitude or the rate of growth of the gross national product, if such a contribution can be identified.*—By making certain assumptions, it might be possible to arrive at some estimates of the contribution that FHA activity makes to the gross national product. No formal and detailed study of this nature has yet been undertaken. The estimates which

are supplied below, therefore, are only the roughest of approximations, tentative in nature, and subject to substantial modification upon more detailed and precise study.

Some of the assumptions which could be made are:

1. The extremely liberal financing provisions under FHA home mortgages, as compared to other vehicles for home financing, suggest that the great bulk of new homes for purchase under FHA programs might not otherwise have been produced.

2. The insurance of mortgages for existing homes, which constitutes the bulk of FHA home mortgage insurance activity, frees mortgage funds for support of a certain amount of new conventionally financed construction that might not otherwise have been built. For purposes of these calculations, it is believed that a 30 percent indirect impact represents a reasonable and conservative estimate.

3. The extremely liberal financing provisions of FHA for multifamily rental housing, together with the recognition that the special purpose rental programs of FHA account for a very large part of the agency's rental housing insurance activity, suggest that rental development under FHA programs would not have occurred, otherwise.

In calendar year 1965, FHA issued mortgage insurance commitments, as follows:

Home mortgages: \$3.1 billion for new construction and \$11 billion for existing housing.

Rental mortgages: \$649 million for new construction and \$57.4 million for existing projects.

Property improvement: \$634 million.

On the basis of the foregoing, it is estimated that directly and indirectly, FHA mortgage insurance commitments in 1965 supported new construction borrowings in the amount of \$6.4 million for homes and \$666 million for rental housing, or a total of about \$7 billion. On the basis that mortgages do not cover the entire value of the property but the value includes raw land purchases which do not augment the national product, the estimated value of construction supported by the programs would amount to about \$6.9 billion. Values yielded by property improvements under FHA programs would bring this total to about \$7.5 billion, about 1.1 percent of the 1965 GNP.

Employment and payrolls directly and indirectly supported by FHA programs are estimated as follows:

Home mortgages, covering an estimated \$6.2 billion of new construction:

On-site employment: Based on Department of Labor estimates of 68 man-hours per \$1,000 of contract amount; 1,800 hours employment per year; and average hourly rate of \$3.68. Man-years employment, 234,000; annual payroll, \$1.6 billion.

Off-site employment: Based on Department of Labor estimates of 126 man-hours per \$1,000 of contract amount; 2,000 hours employment per year; and average hourly rate of \$2.60. Man-years employment, 391,000; annual payroll, \$2.0 billion.

Rental housing mortgages, covering an estimated \$645 million of new construction:

On-site employment: Based upon Department of Labor estimates of 76 man-hours per \$1,000 of contract amount; 1,800

hours employment per year; and average hourly rate of \$3.68. Man-years employment, 27,200; annual payroll, \$181 million.

Off-site employment: Based upon Department of Labor estimates of 122 man-hours per \$1,000 of contract amount; 2,000 hours of employment per year; and average hourly rate of \$2.60. Man-years employment, 39,400; annual payroll, \$205 million.

Property improvement, covering about \$634 million:

On-site employment: Based upon Department of Labor estimates of 121 man-hours per \$1,000 of contract amount; 1,800 hours employment per year; and average hourly rate of \$3.68. Man-years employment, 42,500; annual payroll, \$282 million.

Off-site employment: Based upon Department of Labor estimates of 85 man-hours per \$1,000 of contract amount; 2,000 hours of employment per year, and an average hourly rate of \$2.60. Man-years employment, 26,900; annual payroll, \$140 million.

Roughly estimated, therefore, FHA mortgage insurance commitment activity in 1965 would support 761,000 man-years of employment and an estimated \$4.4 billion in payrolls.

#### 10. *Economic classification of program expenditures.* (See Table 3.)

Program: FHA insurance operations.

Department and agency, and office or bureau: Department of Housing and Urban Development; Federal Housing Administration.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]	
Federal Government:	
Wages and salaries.....	84.1
Mutual mortgage insurance payments.....	8.0
Other.....	767.2
<b>Total Federal expenditures <sup>1</sup>.....</b>	<b>859.3</b>

<sup>1</sup> Represents gross expenditures.

NOTE.—In fiscal 1965 gross expenditures of the Federal Housing Administration were \$859,300,000. These were reduced by \$974,700,000 total receipts, leaving a negative net expenditure of \$115,400,000. In the national income accounts the FHA is classified as a Government enterprise and treated as such.

## Public Housing Administration

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

The objectives of the Public Housing Administration are sketched broadly in the preamble to the U.S. Housing Act of 1937, as amended:

To provide financial assistance to the States and political subdivisions thereof for the elimination of unsafe and insanitary housing conditions, for the eradication of slums, for the provision of decent, safe, and sanitary dwellings for families of low income, and for the reduction of unemployment and the stimulation of business activity \* \* \*

And developed further in the declaration of policy as introduced by section 1 of the same act:

It is hereby declared to be the policy of the United States to promote the general welfare of the Nation by employing its funds and credit, as provided in this act, to assist the several States and their political subdivisions to alleviate present and recurring unemployment and to remedy the unsafe and insanitary housing conditions and the acute shortage of decent, safe, and sanitary dwellings for families of

low income, in urban and rural nonfarm areas, that are injurious to the health, safety, and morals of the citizens of the Nation. In the development of low-rent housing it shall be the policy of the United States to make adequate provision for larger families and for families consisting of elderly persons \* \* \*

"The role of public housing," as pointed out by President John F. Kennedy, " \* \* \* is basically pragmatic: it is designed to strengthen our human resources—in the light of our own constructive self-interest." Public housing, then, to use a phrase from the title of the Joint Economic Committee's inquiry, is indeed a "human resources program."

"The basic philosophy of the housing program is that the end result must be better living \* \* \* better neighborhoods and \* \* \* better housing \* \* \* it all adds up to a better city," according to HHFA Administrator Robert C. Weaver.

"Public housing is a cornerstone in the national public welfare program \* \* \* pledging creation of economic and social opportunities for the less fortunate \* \* \*" (PHA Commissioner Marie C. McGuire).

## 2. Operation

The Public Housing Administration provides financial assistance to local housing authorities in order to help maintain the low-rent character of the locally owned federally aided dwellings. These are planned by the local agencies, constructed by private contractors under contracts let by the local agencies, and managed by the local agencies. Technical assistance is provided the local authorities by PHA, and supervision of local authority activity occurs to the extent directed by the Congress for the purpose of assuring that the projects achieve the purposes of the U.S. Housing Act. The following brief explanation of how the federally aided public housing program operates is—unless otherwise noted—an explanation of the rental (as distinguished from the "mutual help") program. Federally aided public housing has been most often provided through new construction (as distinguished from the purchase or leasing of existing properties) and unless otherwise noted, the following discussion will be in terms of new construction.

Based upon a showing of existing local need, the local housing authority makes application to the Public Housing Administration for a program reservation and preliminary loan for a given number of public housing units. This application must be approved by the local governing body, and is followed by the execution of an agreement of cooperation between the local housing authority and the local governing body. In this agreement the local government agrees to furnish the usual municipal services to the project. In turn, the local housing authority agrees to make a payment in lieu of taxes. The payment in lieu of taxes generally amounts to 10 percent of shelter rents, which payment is usually in excess of the tax revenue from the site prior to construction of the project. Upon independent verification of the existence of need, the Public Housing Administration will issue a program reservation for the requested units. This takes the form of a statement to the local housing authority that upon completion of certain prerequisites the Public Housing Administration is prepared to assist with the development of the dwellings.

*Planning the project.*—A preliminary loan contract is usually the first contract executed between the Public Housing Administration and the local housing authority. It provides funds with which the

local authority may proceed with preliminary planning of its project, including site selection and market surveys. If an authority wishes, it can, pursuant to procedures set forth in the Housing and Urban Development Act of 1965, plan to acquire existing housing either for use as is or after rehabilitation.

As planning advances, a development program is produced by the local authority. This program is a detailed account of the authority's plans and schedule for the development of the dwellings and is a prerequisite to the annual contributions contract.

*Construction.*—After the Public Housing Administration executes an annual contributions contract with the local housing authority, a construction contract is awarded to the lowest responsible bidder, subject to approval by the Public Housing Administration. The local authority then issues orders to proceed to the contractor and construction is started.

*Management.*—When the project is completed, the local housing authority, having established income limits and rents, will accept tenants and the management phase of the program will begin. Except in the case of the elderly (including the disabled and the handicapped) and those displaced by governmental action, there must be a gap of at least 20 percent between the upper rental limits for admission and the lowest rents at which private enterprise unaided by subsidy is providing a substantial supply of standard housing. Rents are set for each family in relation to its income. From the rents collected, the local authority pays all operating expenses, including a payment in lieu of taxes to the local taxing body.

Consistent with the principle of local autonomy, maximum income limits and rents are set by the local housing authority and are not disapproved by the Public Housing Administration unless they threaten the financial solvency or the low-rent character of the project. Similarly, the adoption of reasonable regulations establishing admission policies, including preferences, is a function of the local housing authority.

*Financing and Federal annual contributions.*—Local housing authority obligations are not a debt or liability of the State or of the municipality which they serve. The financing plan, therefore, relies upon the use of Federal funds and credit. The Public Housing Administration is authorized to lend the local housing authority up to 90 percent of the total development cost of its project. Planning funds as discussed under "Planning the Project," are provided by direct Public Housing Administration advances to the local housing authority. As construction proceeds, it becomes financially advantageous for a housing authority to market its short term notes (called temporary notes) to private investors. The security for these notes is a commitment by the Public Housing Administration to advance the amount needed to cover the principal and interest on the notes when they mature.

When the project approaches completion, the local housing authority, with the cooperation of the Public Housing Administration, will sell its long-term housing bonds on the private market. From the proceeds of the sale of these bonds the local housing authority retires all its temporary notes and repays all Federal loans, plus interest.



These bonds are secured by a pledge of the annual contributions unconditionally payable in an amount sufficient to retire the capital cost of the housing within 40 years. The faith of the United States is pledged to the payment of the annual contributions. Where the rental income exceeds the amounts needed for operating expenses and payments in lieu of taxes, such excess is used to reduce the amount of the Federal annual contribution.

Certain additional contributions may be made in respect to low-rent dwellings in which extremely low income elderly persons and families live and to those low-rent dwellings occupied by low-income families and individuals displaced by urban renewal or public housing projects after January 26, 1964.

*Leased housing.*—The Public Housing Administration provides financial assistance to local authorities for the housing of low income families in leased accommodations under sections 10(c) and 23 of the U.S. Housing Act of 1937. The maximum annual contribution with respect to leased housing is the fixed annual contribution which would be established for a newly constructed project in the community designed to accommodate the comparable number, sizes, and kinds of families. The leased accommodations must provide decent, safe, and sanitary dwelling accommodations, must satisfy minimum standards established by the PHA, and be in full compliance with local code requirements. It is anticipated that in some cases the owners of properties which do not meet the minimum standard will be willing to make necessary repairs in order to secure the advantage of a lease with a local authority. Such an approach would add to the supply of decent housing and would upgrade neighborhoods.

The neighborhood in which the housing is located must be primarily residential and free of any characteristics seriously detrimental to family life and one in which substandard dwellings do not predominate; or the neighborhood may be the subject of a concerted program, actively underway, which is designed to bring it up to this standard with the leasing by the local authority as an element of this program.

Under the section 23 program, which is expected to be the one most often used, the local governing body must approve use of the program in the locality. This program is exempt from some of the requirements applicable to the conventional program; among these are the requirements for tax exemption, a cooperation agreement with the local governing body, and the 20 percent gap between the upper rental limits for admission and the lowest rents at which private enterprise unaided by subsidy is providing a substantial supply of standard housing. Generally, the local authority may not lease more than 10 percent of the units in a structure, and its leases may be for a term of 1 to 3 years (renewable).

*Acquisition, or acquisition and rehabilitation, of existing housing.*—The use of existing housing is not a new field in this country or in the low-rent housing program. However, the will of the Congress, indicated in connection with the Housing and Urban Development Act of 1965, is that local authorities will strive to provide about 60,000 units in the next 4 years by this method.

In this program, the PHA has established minimum standards for the structures and the neighborhoods, and financial assistance will be provided where the structure and neighborhood meet these standards

or where there is assurance that they will be brought up to the standards. It is hoped that this program will (1) conserve and improve residential neighborhoods, (2) serve as the focus or as an integral part of the improvement and rehabilitation of neighborhoods in combination with the assistance provided in the Housing and Urban Development Act of 1965 for code enforcement, demolition of substandard housing, construction of neighborhood centers, open spaces in built-up areas and urban beautification, and (3) be utilized to maintain or enhance the heterogeneous social or economic characteristics of a neighborhood. Buildings of various types, ranging from apartment hotels and multifamily projects to row houses and free-standing single dwellings, may be appropriate to an acquisition and rehabilitation program. In determining the suitability of building types, careful consideration is to be given to the specific livability requirements of families in need of housing in the community who will occupy the buildings. In many situations the use of existing housing can produce low-rent housing more speedily than new construction, which may be especially important in meeting relocation needs; provide housing at a lower capital cost; provide housing for large families; provide housing on scattered sites; and be an integral part of rehabilitation in urban renewal areas.

Where rehabilitation of the structure is required to bring it up to the established standard, such rehabilitation may be accomplished before or after acquisition of the property by the local authority. Under a new method in this field, properties which have been selected or approved by the local authority are acquired and rehabilitated by qualified homebuilders or rehabilitators, and are then sold to the local authority. This method has the advantage of eliminating most of the problems and delays involved in direct local authority rehabilitation work and reducing the administrative burden on the local authority and the PHA. Such a program will also effectively mobilize and utilize the skills and resources of real estate brokers and agents, homebuilders, rehabilitators and lending institutions who do not ordinarily participate in new low-rent housing construction.

*Mutual help housing.*—A unique variation of the "low-rent" type of federally aided public housing was developed in 1962 to meet special conditions encountered on Indian reservations. In this program, the occupant of the PHA-aided housing is not a tenant, but a participant, who acquires an equity in his home by contributing labor and in some cases land and/or material. The participant makes regular monthly payments to cover the costs of insurance and administration, and in addition he makes payments toward equity in accordance with his income. The PHA pays annual contributions at the highest authorized rate, and when the total amount of such annual contributions and equity payments are sufficient to repay the funds borrowed by the tribal housing authority in the development of the housing, title to the property passes to the participant. Where the participant's contribution amounts to 20 percent of the development cost of the housing, he may achieve ownership in about 17 years.

### 3. History

A brief history of the program would take note of the fact that its present basic approach was established in the United States Housing Act of 1937. The process of establishment took note of predecessor activities in the Housing Division of the Public Works Administration.

The act established the U.S. Housing Authority. Activities of the Federal Security Agency (subsistence homesteads and green towns) were also transferred to it.

The low-rent public housing program was barely underway when World War II led to the necessity of providing first "defense housing" and later "war housing." For this purpose, low-rent housing was temporarily diverted to the needs of defense industry employees. New programs of "war housing" (especially Lanham Act housing under Public Law 849) were undertaken by the U.S. Housing Authority reconstituted as the Federal Public Housing Authority in 1942. Other war housing projects were transferred from other Federal agencies, such as the Federal Works Administration, the Defense Homes Corporation, the U.S. Maritime Commission, the Navy Department, the Mutual Homes Ownership Agency, the Public Buildings Administration, the Tennessee Valley Authority, the War Department, and the War Foods Administration, when the FPHA was created. In the war emergency local housing authorities were utilized to construct and manage public housing for war effort related purposes. For many local authorities this constituted their first public housing experience; for all local authorities it provided valuable experience that could be drawn upon in meeting postwar needs and emergencies.

The end of World War II brought the problems of conversion of permanent housing to low-rent occupancy, and disposal of emergency housing and permanent housing not desired for low-rent use by the localities. The construction of temporary housing for veterans took place in the immediate postwar period. In 1949 the low-rent public housing needs of the Nation were recognized by the Congress in the passage of the United States Housing Act of 1949, which authorized a new program of 810,000 federally aided low-rent units. However, the outbreak of hostilities in Korea in 1950 again led to imposition of severe restrictions on the low-rent program.

A series of amendments to the United States Housing Act of 1937, and of program limitations by Presidential directive and appropriation act limitations, followed from 1950 through 1964. Their impact ranged from the limitation upon and the outright prohibition of new programing in 1 year to permission to proceed with 100,000 units (over a 3-year period) in the Housing Act of 1961. The Housing Act of 1964 authorized 37,000 units, and the Housing and Urban Development Act of 1965 authorized 240,000 units of low-rent housing over a 4-year period. Ability to utilize new methods of providing such housing through leasing and acquisition with or without rehabilitation of existing structures was enhanced through that legislation.

In recent years efforts have been made to serve overlooked segments of our population. Chief among these new approaches have been those serving the elderly, for providing housing for the American Indians on their reservations, the needs of individuals displaced by public actions, and the needs of the disabled and handicapped.

#### 4. *Level of operations.* (See table 1.)

Program: Public Housing Administration.

Department or agency, and office or bureau: Department of Housing and Urban Development.

TABLE 1.—Level of operations or performance, fiscal years 1964-67 and 1969

Measure	Fiscal year				
	1964	1965	1966 estimate	1967 estimate	1969 estimate <sup>1</sup>
(a) Magnitude of the program (in housing units): Total (under annual contributions contract or further).....	710, 276	725, 551	766, 551	826, 551	984, 000
Designed for general family occupancy (other than Indian).....	628, 246	632, 647	646, 551	681, 551	775, 000
Designed for occupancy by elderly (other than Indian).....	79, 287	89, 990	116, 000	140, 000	200, 000
Indian program.....	2, 763	2, 914	4, 000	5, 000	9, 000
New construction.....	705, 276	719, 551	754, 551	803, 551	879, 000
Acquisition and rehabilitation.....	5, 000	6, 000	9, 000	13, 000	65, 000
Leasing.....			3, 000	10, 000	40, 000
(b) Applicants or participants:					
Local housing authorities.....	1, 541	1, 677	1, 845	2, 090	2, 300
Tenant families (including 1-person families). Total.....	550, 069	574, 439	614, 000	670, 000	800, 000
(Elderly).....	(142, 418)	(160, 496)	(184, 000)	(210, 000)	(270, 000)
(c) Federal finances (thousands of dollars):					
Unobligated appropriations available.....	744, 540	699, 025	921, 840	1, 164, 114	(?)
Obligations incurred.....					
Allotments or commitments made:					
(1) PHA annual contributions commitment balance at year end.....	333, 813	346, 027	375, 369	418, 156	(?)
(2) PHA undistributed loan commitment at year end.....	1, 152, 000	1, 049, 545	1, 104, 823	1, 168, 538	(?)
(d) Matching or additional expenditures for the program <sup>2</sup> .....	(?)	(?)	(?)	(?)	(?)
(e) Number of PHA employees, average for year.....	1, 478	1, 462	1, 538	1, 750	(?)
Administration.....	1, 389	1, 388	1, 467	1, 673	(?)
Project development or management.....	89	73	71	77	(?)
(f) Non-Federal personnel engaged in the program.....	24, 000	25, 000	27, 000	29, 000	34, 000

<sup>1</sup> The Housing and Urban Development Act of 1965 provides program authorizations only for a 4-year period ending in 1969.

<sup>2</sup> Not available.

<sup>3</sup> This is normally in the form of exemption from local property taxes, less the payments in lieu of taxes, which are generally at the rate of 10 percent of shelter rents.

5. *Estimated magnitude of program in 1970.* (See table 1 for estimate for 1969.)

6. *Prospective changes in program orientation*

(a) The Public Housing Administration does not make legislative proposals directly to the Congress.

(b) Administrative and organizational changes will be reflected in the organization of the Department of Housing and Urban Development, which will include the PHA.

(c) This office does not project any significant changes in technological, economic, or social conditions that would work a market change in the nature of the program. Any such changes will be reflected by the agency adjusting its program.

7. *Coordination and cooperation*

Coordination and cooperation with other programs and agencies have been both implicit and explicit in the nature of PHA operations, as a glance at the abbreviated history presented in response to question 3 would indicate. Our response to the question will be in terms of present posture of the agency.

(a) Within the Public Housing Administration there is both a geographic (regional offices) and a functional (program planning, housing development, housing management, and internal administration) organization of our personnel. Coordination and cooperation are required of all these organizational units for the purpose of allocating the limited supply of new housing units, and for preparing one organizational unit to undertake the sequence of operations that follow when another organizational unit has completed its assignment.

(b) Within the Department of Housing and Urban Development, both program and personnel data are furnished to the Office of the Administrator for coordination of reports outside the agency, and cooperation within the agency. Public Housing Administration personnel consult with staff (both in and out of Washington) of the Office of the Administrator, the Federal Housing Administration, the Urban Renewal Administration, and the Community Facilities Administration for program-planning purposes, exchanging information on surveys and analyses, FHA defaults, and programing plans.

(c) The Public Housing Administration actively cooperates with the Bureau of the Budget, the Office of Economic Opportunity, the Office of Emergency Planning, the Departments of Commerce, Defense, Health, Education, and Welfare (particularly the Division of Indian Health of the Public Health Service), Interior (particularly the Bureau of Indian Affairs), Justice, and Labor, the General Accounting Office, the Library of Congress, various congressional committees, and various boards, committees, and commissions, in carrying out its work. This cooperation takes the form of joint task forces, inter-agency committee memberships, memorandums of understanding, cooperation agreements, and information supplying and evaluation.

(d) State government coordination and cooperation are largely indirect, through the medium of local agencies operating under State enablements and State regulation. All pertinent provisions of State legislation are honored in administration of the federally aided low-rent public housing program.

(e) Local governments and communities are directly involved in PHA operations through their local housing agency, which usually has the form of a local housing authority. The local housing authority, or its equivalent, applies for, develops, and operates the federally aided low-rent programs made possible by the U.S. Housing Act of 1937. The local government approves the application and agrees, through a cooperation agreement, to provide certain forms of assistance, either through contributions or acceptance of payments in lieu of taxes.

(f) The Public Housing Administration has no ongoing relations with either foreign governments or international organizations.

(g) Nonprofit organizations and institutions of many types, such as the National Association of Real Estate Boards, National Association of Home Builders, National Association of Housing and Redevelopment Officials, National Housing Conference, American Institute of Architects, Boy Scouts of America, Boys' Clubs of America, American Red Cross, YMCA, YWCA, Goodwill Industries, National Council on Aging, and various settlement houses, health and welfare councils, and similar organizations, are in constant communication with this agency concerning matters of mutual interest impinging upon the well-being of low-income persons and families.

### 8. Laws and regulations

The U.S. Housing Act of 1937, as amended, constitutes the basic authorization for the federally aided public housing program. Appropriation bills have (among other things) imposed varying limitations on program activity in the several fiscal years since passage of the U.S. Housing Act of 1949.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

The economic effects of the public housing program administered by this agency may be measured directly by the impact of the planning, construction, and operating activity involved. There is an indirect economic impact of low-rent public housing that is much more difficult to measure, but that is much more significant. This is the economic effect of providing good housing at rents within the financial resources of low-income persons and families, and includes such elusive matters as the economic value of improved physical health, mental health, and social health.

Depending upon the quality of the local operation, and supporting social services brought to bear by local agencies, the short- and long-term effects upon the lives of public housing tenants and their neighbors will vary. The inevitable tendency of these operations, however, is toward the reduction of morbidity and death rates, increase in school attendance rates, decrease in fire and police call rates, and the heightening of the tenants' awareness that their community is concerned about their welfare—without regard to race, color, or economic condition.

Based on a construction rate of 35,000, and a rehabilitation rate of 15,000 units a year, it is estimated that the Public Housing Administration program will provide some 58,000 man-years of on- and off-site employment, and a payroll of \$340 million for the construction and/or rehabilitation of dwellings, in 1 year.

### 10. Economic classification of program expenditures. (See table 2.)

Program: Public Housing Administration.

Department or agency, and office or bureau: Department of Housing and Urban Development.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]	
Federal Government:	
Purchases of goods and services:	
Wages and salaries.....	13.6
Other.....	4.0
Grants to State and local governments.....	206.3
Loans to State and local governments.....	11.3
Interest on Treasury borrowings.....	.2
Receipts and reimbursements in excess of other expenditures.....	-5.2
<b>Total Federal expenditures<sup>1</sup>.....</b>	<b>230.1</b>
Non-Federal expenditures financed by local housing authorities <sup>2</sup> .....	263.8
<b>Total expenditures for program.....</b>	<b>493.9</b>

<sup>1</sup> Refers to net expenditures. Gross expenditures for the PHA were \$790,100,000. Estimated.

## INDEPENDENT AGENCIES

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### APPALACHIAN REGIONAL COMMISSION

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. *Objectives*

The Appalachian program objective is to promote the economic development of the Appalachian region comprising parts of 11 States: Alabama, Georgia, Kentucky, Maryland, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia; and all of West Virginia. Further, it is to assist the region in meeting its special problems and to establish a framework for joint Federal and State efforts toward providing the basic facilities essential to its growth and attacking its common problems and meeting its common needs on a coordinated and concerted regional basis. Funds are available to invest in public facilities in areas with significant potential for growth.

##### 2. *Operation*

The program operates through a State-Federal agency, the Appalachian Regional Commission, composed of 12 Governors, one of whom is State cochairman, and a Presidential appointee, the Federal Co-chairman. All decisions require the concurrent vote of a majority of the States and the Federal Cochairman, and no project can be implemented which has not been recommended and submitted by a State.

The Commission operates from a Washington headquarters. With the exception of small personal staffs for the Federal Cochairman and States' regional representative, the Commission staff is composed of "State-Federal" employees (i.e., not Federal Government). There are no field offices.

Project funding proposals are submitted to headquarters by the States, analyzed by the Commission staff, and submitted to the Commission for recommendation. Upon a favorable vote the projects may be funded by the Federal agency to which funds have been appropriated. No Appalachian money may be spent by such an agency without Commission recommendation. Through its staff and consultants the Commission conducts a program of research, intergovernmental development programing, and technical assistance to the States.

##### 3. *History*

The Appalachian program is the result of the work of the Conference of Appalachian Governors on interstate cooperation for economic development dating from 1960. The President's Appalachian Regional Commission produced a report on the region's situation in 1964, the Appalachian Regional Development Act was passed in March 1965, and the Appalachian Regional Commission held its first meeting in April. After a "quick-start" operation to get projects, particularly highways, underway during the summer construction season the Commission is working with the States on a strategy for

regional development and is continuing to recommend projects which fit objectives of the act.

4. *Level of operations.* (See tables 1 and 2.)

Program: Appalachian Regional Development.

Department or agency, and office or bureau: Appalachian Regional Commission.

TABLE 1.—*Level of operations or performance, fiscal year 1965-67*

	Fiscal year 1965	Fiscal year 1966	Fiscal year 1967
(a) Magnitude of program: Approved projects.....			
(b) Applicants or participants: States.....	11	12	12
(c) Federal finances:			
Appalachian Regional Commission, salaries and expenses finances:			
Unobligated appropriations available.....	<sup>1</sup> \$1,290,000		\$1,110,000
Obligations incurred.....	\$162,000	\$1,128,000	\$1,110,000
Appropriations to Federal Departments for Appalachian regional development:			
Unobligated appropriations available <sup>2</sup> .....	<sup>1</sup> \$306,550,000		\$200,101,000
Obligations incurred.....	\$7,881,000	\$265,202,000	\$233,407,000
(d) Non-Federal funds: States, local communities, etc. (computed as 25 percent of \$353,603,000 for fiscal year 1966 and \$311,209,000 for fiscal year 1967 total Federal-State-local).....		\$88,401,000	\$77,802,000
(e) Federal Government employees: Federal Cochairman, alternate, and staff (man-years).....	1.3	10	10
(f) Non-Federal personnel employed in program: Commission staff (number of employees).....	18	60	60

<sup>1</sup> This is for fiscal 1965 and 1966.

<sup>2</sup> Funds appropriated for Appalachian regional development to Federal departments and agencies by the 2d Supplemental Appropriation Act of 1965 (Public Law 89-18) to be spent on recommendation of the Appalachian Regional Commission. These programs are also included in the Department programs.

TABLE 2.—*Distribution of funds by department and program*

[Dollar amounts in thousands]

Appalachian Regional Development Act section	Program	Fiscal year 1965-66 NOA appropriated funds	Fiscal year 1967 NOA requested	Federal department or agency
201	Appalachian development highway system.....	\$200,000	\$130,000	Commerce.
202	Demonstration health facilities.....	21,000	2,500	Health, Education, and Welfare.
203	Land stabilization, conservation and erosion control.....	7,000	4,375	Agriculture.
204	Timber development organization.....	1,000	500	Do.
205	Mining area restoration:			
	Land reclamation.....	16,000	10,556	Interior:
	Fish and wildlife restoration.....	1,350	1,350	Do.
206	Water resource study.....	1,500	1,500	Army (Corps of Engineers).
211	Vocational education facilities.....	8,000	8,000	Health, Education and Welfare.
212	Sewage treatment works.....	3,000	3,000	Do.
214	Supplements to Federal grants-in-aid.....	45,000	35,000	Commerce:
302	Grant for local development district and research.....	2,500	3,000	Do:

NOA: New obligational authority.

5. *Estimated magnitude of program in 1970*

Approximately the same as the level estimated for fiscal year 1966.

6. *Prospective changes in program orientation*

(a) *Pending legislative proposals.*—None.

(b) *Proposed administrative and organizational changes.*—None.

(c) *Probable changes in conditions under which the program will function in 1970.*—The Appalachian economy will have benefited



from the improvements in the region's economic base made through the Appalachian and other development programs.

### 7. Coordination and cooperation

(a) *Within this office.*—The size of the staff (60) makes coordination relatively simple and the staff organization (see fig. 1) provides for effective administration.

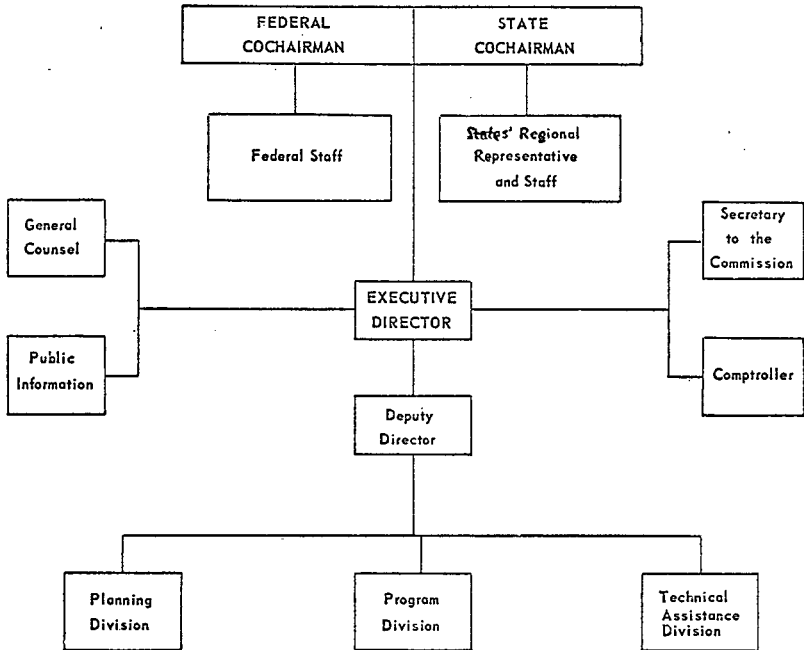


FIGURE 1.—Appalachian Regional Commission.

(b) *With other units of this agency.*—There are no other units.

(c) *With Federal Government agencies.*—One of the duties of the Commission as directed by Congress is to coordinate with the Federal Government on Appalachian development. To further this purpose the Federal Cochairman of the Commission is Chairman of a Federal Development Committee for Appalachia composed of representatives of pertinent Federal agencies. The Committee meets periodically to coordinate programs and discuss policy. In addition, the Federal Cochairman and his staff are in frequent touch with Federal agencies concerning projects, programs and policies affecting the Appalachian development program.

(d) *With State governments.*—The Governors of the 12 Appalachian States belong to the Commission, and they or their representatives attend the meetings and recommend projects and programs. The States have appointed a State's regional representative, who is the functional equivalent of the Federal Cochairman and whose office is at Commission headquarters. Members of the Commission staff are in frequent contact with State representatives on technical matters concerning projects and programs.

(e) *With local governments or communities.*—All such contacts are made either by the State representatives or by Commission staff with the permission of the States. The staff will be giving an increasing amount of technical assistance to local development districts created by the States.

(f) *With foreign governments or international organizations.*—There have been some informal discussions with representatives of foreign development programs for informational purposes.

(g) *With nonprofit organizations or institutions.*—Universities and nonprofit organizations are often the sources of information, research and technical assistance, and the Commission is in frequent touch with them both through the membership and the staff.

(h) *With business enterprises.*—The Commission draws on consultants for some of its studies. It is also in contact with businesses interested in the economic development program for their advice and cooperation.

8. *Laws and regulations*

Public Law 89-4, Appalachian Regional Development Act of 1965, March 9, 1965.

Appropriations authorizations: Public Law 88-635, October 7, 1964, and Public Law 89-16, April 30, 1965.

Executive Order No. 11209, March 25, 1965.

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

The Appalachian Regional Commission began operations in April 1965. Although public facility investments have been recommended by the Commission no project has yet been completed. Therefore, it is not yet possible to describe economic effects in any of the aspects requested.

10. *Economic classification of program expenditures.* (See table 3.)

Program: Appalachian Regional Development.

Department or agency, and office or bureau: Appalachian Regional Commission.<sup>1</sup>

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government:	
Purchases of goods and services:	
Wages and salaries.....	16
Other.....	25
Total Federal expenditures.....	41

<sup>1</sup> This covers the expenditures of the Commission. Expenditures made by the other Departments are included in their programs.

# ATOMIC ENERGY COMMISSION

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## INTRODUCTION

The entire atomic energy program, as with any program whose main thrust is the development of technology through research and development, has an impact on human resource development in a wide variety of ways. However, the Joint Economic Committee's purpose in conducting the Human Resources study is best served by a description of the comprehensive education program administered by the Division of Nuclear Education and Training. This is a clearly identifiable program of strengthening the Nation's educational system, primarily colleges and universities, in those specialized scientific and engineering areas of Commission responsibility. Funds for this educational program are subject to annual authorization and appropriation actions of Congress, based upon detailed submissions within the President's budget request. Descriptive matter concerning this organized education activity is provided by the answers to your specific questions as well as in the appendixes.

In addition to the formal nuclear education and training program, your committee's knowledge of the Commission's total involvement in manpower activities would not be complete without a realization that the participation of college and university faculty and students is an integral part of all the AEC research and development activities. This participation has the major purpose of accomplishing the Commission's research mission; it is not an educational activity which lends itself directly to your inquiry or to appraisal by the specific questions you have asked. However, since it does contribute to the Nation's output of scientists and engineers, your attention is called to a report, "Statement of the USAEC on the Impact on Scientific and Technical Manpower of Federal Research and Development Policies," which we recently provided to the Subcommittee on Employment and Manpower of the Senate Labor and Public Welfare Committee. An idea of the scope of this involvement of faculty and students throughout the AEC establishment is provided by the following summary.

1. During fiscal year 1965, the AEC administered more than 1,000 separate contracts with 174 educational institutions in 48 States at an approximate cost of \$67 million. Nearly 3,900 graduate students helped provide the manpower to accomplish

the purposes of these contracts, thus benefiting education though research was the major mission.

2. Similarly, the AEC in fiscal year 1965 had 13 on-campus Federal contract research centers which gave partial employment to approximately 1,100 graduate students.

3. All AEC facilities are encouraged to augment their permanent staffs with temporary staff drawn from the universities to the extent that is appropriate to their research, development, and production missions. Several thousand faculty and students per year are benefited in this way.

4. Finally, as in any industry dependent upon technological advances, AEC contractors conduct programs for upgrading the educational and technical backgrounds of their employees in areas which contribute to the accomplishment of their AEC mission.

## NUCLEAR EDUCATION AND TRAINING

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The major purpose of the AEC's nuclear education and training program is to help the Nation's education system, primarily colleges and universities, develop and maintain strong curriculums in the nuclear aspects of the life, engineering, and physical sciences so that the atomic energy program has adequate technical manpower. The continued graduation of well-qualified scientists and engineers well-versed in nuclear technology is of the utmost importance to the continued advancement of the United States in national security as well as the maximum peaceful utilization of atomic energy for power production, propulsion, desalination, agricultural, medical and industrial use of radioisotopes, and a wide variety of other uses which are being developed in the total AEC program.

The program has two major facets:

1. On-campus activities including equipment and nuclear material loans for specialized laboratory courses; nuclear fuel cycle grants and loans for university reactors; fellowships and traineeships for support of graduate students in nuclear science and engineering; faculty institutes and conferences for high school, college and university faculty in subjects relating to nuclear technology.

2. University-AEC laboratory cooperative activities through which faculty and students from colleges and universities can utilize AEC-owned facilities at national and other laboratories. This portion of the overall education program includes activities such as short courses in radioisotope utilization, summer engineering practice schools, visiting lecture programs, summer trainee assignments, use of AEC facilities to perform experiments as part of regularly scheduled college and university courses.

Descriptive material on these activities may be found in "Program Statistics,"<sup>1</sup> and "Guide to Nuclear Education Activities."<sup>1</sup> "Educational Programs and Facilities in Nuclear Science and Engineering"<sup>1</sup> provides descriptions of nuclear science and engineering curriculums in U.S. institutions of higher education, the current status of which reflects the accumulated effect of AEC educational assistance activities since the initiation of the program.

<sup>1</sup> Published by AEC, Division of Nuclear Education and Training.

## 2. Operation

The program is administered within AEC Headquarters by the Division of Nuclear Education and Training, which is responsible for the development of program and policies and for preparation of the annual budget request. Individual portions of the program are either directly administered in headquarters or through AEC field offices, under headquarters' guidance. Use of AEC facilities by colleges and universities is administered through the contractors which operate these facilities. Examples of the more significant administrative arrangements are:

(a) Nuclear equipment grants and loans of nuclear materials for use in college and university curriculums are administered in headquarters. Institutions submit unsolicited proposals which are evaluated on a competitive basis. The grant mechanism is used for equipment and for fabrication of materials, while loan agreements are used for nuclear materials provided from Commission stocks.

(b) Predoctoral fellowships are administered through field office contracts with associations of educational institutions, with the Oak Ridge Associated Universities, Inc., administering the major number of fellowships. Awards are made to applicants as a result of national competition. The administering agency makes stipend and dependency payments to the fellows and payments in lieu of tuition and fees to the universities in which the fellows are enrolled.

(c) Traineeships, currently provided for graduate study in nuclear engineering, are awarded to individual institutions after headquarters evaluation of proposals submitted on a competitive basis. These awards are then implemented by field office administered contracts with the individual universities, covering payments to students and institution alike. The university makes its own selection of participating students within the funding levels and criteria provided by the contract.

(d) College and university hosts for faculty institutes are selected as a result of joint evaluation of competitive proposals by the National Science Foundation and by the AEC Headquarters staff. Awards are then implemented by AEC field office contracts for operating expenses of the institutes while the NSF simultaneously makes grants to the host institution to cover stipends and dependency allowances for the faculty who attend.

(e) Faculty conferences are handled on an individual basis through contracts with educational associations or individual institutions.

(f) Most short, specialized courses supported by the program are presented by the Oak Ridge Associated Universities under their AEC contract administered by the AEC's Oak Ridge operations office.

(g) A wide variety of cooperative university-AEC laboratory activities for the utilization of AEC facilities are administered by AEC field offices, under general headquarters guidance. In some cases this is done by contracts between these AEC offices and associations of educational institutions such as the Oak Ridge Associated Universities, the Associated Midwest Universities, and the Associated Rocky Mountain Universities. More frequently this portion of the overall education program is accomplished within the overall field-administered contract for the operation of the specific site.

### 3. History

The history of the atomic energy activities of the United States is the story of the successful welding of education and research activities to produce an entirely new technology and a new industry. The complete story of the role of education in the total AEC activity is presented in the book "Education and the Atom," by Dr. Glenn T. Seaborg and Daniel M. Wilkes. The material presented below is restricted to the history of the organized effort of the AEC to aid college and university nuclear education programs.

The Manhattan Engineer District of the U.S. Army Corps of Engineers was established to undertake a massive production and research effort with a single military goal. An entire cadre of scientists and engineers, trained through the normal chain of academic enrollment followed by employment experience, had to be recruited by contractors working for the Manhattan District and then trained anew for their assignments in an entirely new field of nuclear technology. This was an effort conducted by many contractors outside the normal educational process of higher education. It was accomplished under stringent security measures, so that neither the technical manpower nor the developing technology could be made available to educational institutions.

The Atomic Energy Commission was established by the Atomic Energy Act of 1946, but military uses of atomic energy still predominated. Universities were encouraged to participate in Commission activities, mainly through the national laboratories initiated by the Manhattan Engineer District and a few other university centers. Courses on college campuses with any meaningful incorporation of the developing technology were few and far between. One of the main sources of formal course work was the AEC-supported, classified, Oak Ridge School of Reactor Technology (ORSORT) which provided training for AEC and contractor personnel and an occasional university faculty member.

In 1948, the AEC started a predoctoral and postdoctoral fellowship program in the life and physical sciences upon the recommendation of the National Academy of Sciences. This first large-scale Federal fellowship effort provided fellowships to 962 young scientists and physicians before it was terminated in 1952 with the establishment of a more comprehensive fellowship program by the National Science Foundation. Special fellowships in industrial medicine, health physics and industrial hygiene were initiated in 1950, 1951, and 1952 respectively.

The growing realization of the importance of peaceful uses of atomic energy led to the Atomic Energy Act of 1954, and subsequent amendments. It was immediately apparent that the growth of a private nuclear industry would be dependent upon the extent to which the Nation's colleges and universities could assume an active role in research participation and in the graduation of engineers and scientists well prepared for a variety of roles in nuclear research and development. To accomplish this task, faculty had to be developed, campus facilities established, graduate students supported, and a wide variety of mechanisms devised to make certain that the educational community kept abreast of nuclear technology developments.

Therefore the concept of a university-based nuclear education and training program of the AEC gained impetus.

In 1955 the International School of Nuclear Science and Engineering was established on an unclassified basis to provide educational opportunities primarily for individuals of other nations; American enrollments were maintained at approximately 15 percent of the total. The classified ORSORT program at Oak Ridge was continued. The two programs gradually expanded to include university participation in the presentation of preparatory work leading to more specialized courses at these two AEC schools.

In the summer of 1956, the AEC initiated the first of a series of faculty institutes, starting with an engineering technology program at the Argonne and Brookhaven National Laboratories, designed to acquaint engineering school staff with the need for incorporating nuclear technology in curriculum offerings. From engineering the program broadened to include radiation biology for both high school and college faculty, then broadened still further to include the physical sciences and isotope technology, with the National Science Foundation cooperating to provide faculty stipends while the AEC supported operating costs. Initially the institute program, especially in engineering, was held at AEC sites. Today, as a result of the growing university capability developed through AEC educational support programs, colleges and universities present thirty-odd institutes, with AEC facilities operating in a few special areas.

In the fall of 1956, following congressional approval of education and training as an AEC responsibility needed to implement its research mission, the AEC announced the formation of a broad program of support for nuclear education at colleges and universities. At first this program emphasized the reactor and nuclear engineering curriculums of the AEC-supported schools at Argonne and Oak Ridge. Mechanisms to help develop such courses were established, such as grants for specialized nuclear equipment including very low-powered reactors for teaching purposes; loans of nuclear materials required for such facilities; summer institutes mentioned above; specialized fellowships including new predoctoral fellowships in nuclear science and engineering; and a small program for faculty research participation for training purposes.

These initial engineering-oriented activities were conducted within the Division of Reactor Development. Within a few years these activities were expended to include the life and physical sciences, and to provide support for both undergraduate and graduate curriculums in contrast to the earlier concentration on graduate level courses. The Divisions of Biology and Medicine, Isotopes Development, and International Affairs each administered programs in their specialized areas. Segments of the overall education program were constantly modified to reflect changes in the AEC's research and development activities as well as growing capabilities of the educational community resulting from the AEC support. For example, the ORSORT course for reactor engineers was succeeded by more specialized courses in Reactor Operations Supervision and Reactor Hazards Evaluation.

As of the past year, the ORSORT activity has terminated and the Argonne Institute (which replaced the earlier school) has ceased giving organized courses. This action was taken because increases in nuclear educational capabilities of the American and foreign universities have made special AEC operated schools no longer necessary. The American educational capability is a direct result of the effective education mission of the AEC.

In 1962, the AEC established the Division of Nuclear Education and Training to provide for more centralized administration of the various individual educational assistance programs that had developed as described above. A significant change in program direction has involved increased emphasis upon the contribution AEC facilities can make to education through a variety of university-cooperative educationally oriented activities. The number of graduate students provided support for conducting thesis research in AEC laboratory facilities not available on their own campus has increased, as well as the number of individual sites participating. Another cooperative activity involves students in regularly scheduled campus courses going to AEC laboratories for 1 to 5 days to perform nuclear experiments on laboratory equipment which financial considerations have prevented their own institutions from obtaining. An engineering practice school which provides problem-solving opportunities for graduate students has been established at the Argonne National Laboratory, and a similar school is being reactivated at Oak Ridge.

As part of the national effort to aid the development of an increased number of centers of educational excellence, the AEC initiated a traineeship program in fiscal year 1965. The program emphasizes nuclear engineering, and complements the Special Fellowship in Nuclear Science and Engineering established in 1957. Since the participating universities are free to select their own trainees, as contrasted to national fellowships where individuals receive the awards and select universities to attend, the annually negotiated contracts under this program provide a good basis for universities to develop new or expanding curricula.

#### *4. Level of operations.* (See table 1.)

Program: Nuclear Education and Training.

Department or agency, and office or bureau: U.S. Atomic Energy Commission;  
Division of Nuclear Education and Training.



TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure	Unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimates	Fiscal year 1967 estimates
(a) Total enrollments <sup>1</sup> .....	Enrollments.....	3,138	4,944	6,085	6,925
(b) Individuals participating: <sup>2</sup>					
(1) Graduate fellows and trainees.....	Individuals.....	308	397	508	571
(2) Other college and university students.....	Enrollments.....	890	2,386	3,145	3,784
(3) High school faculty.....	Individuals.....	610	605	607	615
(4) College and university faculty.....	Enrollments.....	950	1,222	1,450	1,580
(5) Others.....	do.....	380	334	375	375
(c) Total number of institutions participating: <sup>3</sup>					
(1) Receiving equipment grants.....	Institutions.....	140	109	70	40
(2) Receiving loans of nuclear materials.....	do.....	70	150	50	40
(3) Participating in 1 or more activities.....	do.....	550	720	800	850
(d) AEC manpower <sup>4</sup> .....	Man-years.....	25	25	29	29
(e) AEC contractor site employment <sup>5</sup> .....	do.....	180	200	215	240
(f) Total AEC nuclear education cost.....	Thousands.....	\$8,668	\$9,009	\$9,617	\$9,975

<sup>1</sup> Total enrollments summarized from all segments of the program. Actual number of separate individuals may be 10 percent less than enrollment due to individuals enrolling in more than 1 short-term program in the course of a year.

<sup>2</sup> Enrollments of individual faculty, college, and university students, and others in various programs. Items (1), (3), and (5) are different individuals enrolled within these specific categories. Items (2) and (4) may include individuals with multiple enrollments. It should be noted that faculty participation generates multiple secondary effects as the faculty teach many students throughout their careers. We have no quantitative data to illustrate this, but typical student-faculty ratios are 25 to 1 in secondary school and undergraduate college classes while graduate level classes may be an 8-to-1 ratio.

<sup>3</sup> (1) and (2) represent the actual number of individual colleges and universities receiving equipment grants and material loans. For fiscal year 1965, (3) represents the number of individual institutions which participated in 1 or more AEC education programs, including (1) and (2). The number of institutions participating in fiscal year 1964 is an estimate.

<sup>4</sup> AEC personnel directly involved in administering the nuclear education program.

<sup>5</sup> Employees of AEC contract sites directly involved in the nuclear education program.

### 5. *Estimated magnitude of program in 1970*

Operating levels of the nuclear education and training program are subject to the annual budgetary process in close coordination with the entire AEC research, development, and production program. In addition, as mentioned under question 7, the educational staff maintains close liaison with their counterparts at other agencies so as to assure that the AEC educational activity is a coordinate part of the entire Federal involvement in support of education, research, and development. The rapid increase in Federal support of education approved by the 1st session of the 89th Congress, together with the many reviews of Federal research and development activities and their impact on manpower and training, has greatly complicated the task of program projection into the 1970's.

Within these limitations, the overall level of the AEC nuclear education and training program as measured by student and faculty participation is projected as increasing by 30 to 35 percent in the period fiscal year 1967 through fiscal year 1970. The bulk of this increase will occur in the cooperative educational utilization of AEC facilities by colleges and universities for educationally oriented purposes. The numbers of institutions participating in these cooperative activities may increase by about 25 percent.

The AEC educational assistance programs which are conducted primarily on college and university campuses—predoctoral fellowships, equipment grants and faculty institutes—may show a smaller increase in number of participants, perhaps about 10 percent higher than in fiscal year 1966. This different rate of growth between the major

facets of the program relates to the fact that the laboratory facilities utilized in the cooperative programs are relatively unique to the AEC and should play an increasing role in the total Federal involvement in education. On the other hand, alternative methods of financial support may become increasingly available for broad campus-oriented support programs, though the specialized nature of the atomic energy program is such that the AEC must continue to have a significant role.

*6. Prospective changes in program orientation*

(a) *Pending legislative proposals.*—At present the AEC does not have nor does it contemplate any legislative proposals that would significantly affect its educational activities.

(b) *Proposed administrative and organizational changes.*—The AEC is developing an ADP system for more extensive information retrieval regarding faculty, student, and institutional participation in its education and research activities. This will provide factual information for assessment of program impact and development of future programs.

(c) *Probable changes in the conditions under which the program will function in 1970, for example, technological, economic, social.*—AEC technological developments in power reactors, peaceful nuclear explosives, use of nuclear reactors in conjunction with desalination projects, radiation sterilization of foods, and the many uses of radioisotopes will all continue to develop widespread use of nuclear energy in most facets of American life. The educational activities of the Commission will have to continually provide a mechanism for incorporation of these developments into the curricula of colleges and universities, as well as to help insure that sufficient manpower is available to take advantage of these technological changes. This will mean adjusting individual programs to incorporate these changes, primarily in faculty institutes and special conference activities. Cooperative activities at AEC sites and at AEC research centers on university campuses are expected to expand in magnitude.

The rising Federal interest in helping more educational institutions develop capabilities as "centers of educational excellence" undoubtedly will include AEC activities in its specialized areas. We are examining the possibility of converting some of our fellowship activities to traineeship programs in order to be more effective in the impact on "rising institutions."

We anticipate the Federal Government will continue to increase its role in general support of education through the National Science Foundation and U.S. Office of Education. This means that the various AEC specialized education efforts will be reviewed continually to adjust for this growing support of the educational community. It is possible that eventually direct AEC support of on-campus activities, such as fellowships, faculty institutes and equipment grants, may be reduced if expanded activities of other agencies provide reasonable alternative methods of support. However, through fiscal year 1970 we do not currently anticipate significant changes in operating level of our on-campus activities. Conversely, we expect to strengthen our cooperative programs between colleges and universities and AEC facilities, and believe that the total Federal coordinated educational activities will add impetus to this expansion. Additional cooperative programs with NSF and perhaps other agencies may result.

Due to our specialized activities in nuclear education, as contrasted to broad educational activities, we do not conceive of any significant impact of social changes upon the AEC educational programs. The national educational effort will of course be affected by the rising aspirations of individuals for educational and economic betterment, and by the drive for equal opportunity by all segments of society. The AEC educational program will contribute to these efforts, but the scope and content will not significantly change.

#### *7. Coordination and cooperation*

(i) Throughout the history of the Nation's atomic energy program, education and training have been conducted in close conjunction with research and development in order to implement the mission of exploiting the peaceful and military uses of atomic energy. Thus, coordination and cooperation with other program divisions of the AEC is virtually automatic; education in a sense is an intergral part of all AEC activities. This is especially true in the activities of AEC sites where the educationally supported participants are witnessing research in action.

Within Government activities, most of the coordinating activities are maintained at the national level, including such efforts as: Commission participation in formal interagency committees which are aided by subcommittees composed of appropriate staff members; review of education and research publications of various agencies such as, the Department of Health, Education, and Welfare; Department of Defense; National Science Foundation; Department of Labor; and the National Aeronautics and Space Administration; informal meetings of personnel from many agencies with similar education programs for exchange of information and resolution of common problems; etc.

Relative to State and local governments and communities, the staff of the Division of Nuclear Education and Training have relatively few contacts; direct contact is mainly with individual educational institutions funded by State and local agencies. AEC field offices and contractors do maintain close ties with local governments and communities.

Considering the educational community as a whole, nuclear science and engineering education cannot operate as a separate, independent entity but rather concerns all scientific and engineering disciplines which contribute to AEC missions. Therefore, the AEC's educational staff have always maintained very close relations with individual colleges and universities as well as a wide variety of regional and national associations in which educational institutions hold membership. AEC staff have missed few opportunities to benefit from contacts with the Nation's educational establishment. Mechanisms utilized include maintaining a comprehensive library of educational source materials published by colleges, universities, and associations of educational institutions; staff attendance at national and regional meetings; professional society membership and participation of staff members; supply of informational materials and speakers by the AEC; use of professional societies as a source of educational advisers and consultants; contracts for administration of certain portions of the program.

Relative to the industrial segment of the atomic energy field, staff members have industrial contacts through the Atomic Industrial

Forum, and through the participation of industrial concerns and their personnel in various professional societies with which the staff maintains contact. Additionally, close liaison is maintained with the AEC's Division of Labor Relations which is responsible for contractor manpower policies.

(ii) We understand that the committee considers the coordinating efforts of various Federal agencies in conducting education and training programs to be one of the most important facets of their human resources inquiry. Therefore, without burdening you with all the many details of our coordinating activities, we have provided below a very comprehensive listing of various procedures which we feel have been most effective in accomplishing the purposes of the AEC educational mission.

(a) and (b) *Within the Atomic Energy Commission organization.*—The formal education and training program of the AEC is administered by the Division of Nuclear Education and Training (DNET), the Director of which reports to the Assistant General Manager for Research and Development (AGMRD). The AGMRD also supervises the Divisions of Biology and Medicine, Research, Isotopes Development, and Peaceful Nuclear Explosives. Thus, rather than education and training representing an independent activity, it is an integral part of an overall AEC development, research, education, and training program. Close liaison is maintained with other divisions of the AEC in order that education and training activities in the educational community can be kept abreast of technological developments throughout the AEC. As an example of coordinated activities, DNET has sponsored faculty participation in seminars on the peaceful use of atomic explosives and the educational implications of nuclear desalination activities.

(c) *With other Federal Government departments or agencies.*—A wide variety of formal and informal mechanisms are used to provide continued cooperation with education, training, and research activities throughout the Federal Establishment. Pertinent examples include:

(1) The AEC Chairman is a member of the Federal Council for Science and Technology. Appropriate AEC staff members are active on the working committees which prepare studies for review by the FCST.

(2) The news media recently reported that Francis Keppel, (then) Assistant Secretary (for Education) of the Department of Health, Education, and Welfare viewed the chairmanship of the Federal Interagency Committee on Education as one of his major functions. An AEC Commissioner is a member of this Committee. The Director, Division of Nuclear Education and Training, is an alternate member and active on the working level committee. A DNET staff member has been assigned to a subcommittee on higher education facilities.

(3) The AEC also participates in activities of the President's Committee for Manpower and the Federal interagency committee which advises the Commission on Technology, Automation, and Economic Progress.

(4) The AEC holds membership in the National Science Foundation's "Advisory Council for Manpower and Education Studies Programs." The staff provides information on AEC educational studies and obtains reports on manpower studies throughout the Federal establishment.

(5) An AEC research staff member sits on the Interagency Committee on Oceanography and the DNET staff of the AEC is represented on the ICO's Manpower and Training Panel.

(6) An interagency group to establish a coordinated effort in "water for peace" is just beginning, and a DNET staff member is assigned to an educational task force to identify and coordinate existing and proposed agency training functions related to water supply problems.

(7) Federal fellowship administrators from many agencies, including AEC, attend semiannual meetings, informally organized and chaired by NSF, to exchange information and discuss problems of mutual interest, thus promoting relatively uniform fellowship administration throughout similar programs.

(8) Most college and faculty institutes supported by AEC are administered through a joint program with NSF, in which proposals are reviewed in terms of the missions of each agency and awards are implemented by a combination of AEC-funded contracts and NSF grants for operating costs and faculty stipends, respectively.

(9) DNET staff at the operating level maintain frequent contacts with their counterparts in similar activities of other agencies administering fellowship, institute, equipment grant, and curriculums development programs.

(10) AEC staff have participated in many national and regional meetings designed to acquaint university personnel with the operating procedures of the various Federal agencies supporting educational activities.

(d) *With State governments or their instrumentalities.*—From an educational viewpoint, the DNET staff's prime contact with the State governments is through participation of State science supervisors and consultants held by the U.S. Office of Education. Many of the institutions which receive AEC educational assistance are State supported. No formal arrangements are established which are unique to State governments or their instrumentalities.

A small program of training assistance to States and local governments in radiation control is administered by the regulatory staff of the Atomic Energy Commission. The AEC continues to transfer certain regulatory functions to the States under section 274 of the Atomic Energy Act of 1954, as amended. AEC staff works with State groups in developing appropriate training of individuals needed to implement State responsibilities. Courses are maintained at three universities and at the Oak Ridge Institute of Nuclear Studies (a major operating segment of Oak Ridge Associated Universities.)

On a regional basis, the Southern Interstate Nuclear Board is the executive agency of the southern interstate nuclear compact, approved by Congress on July 31, 1962, in Public Law 87-563. The President appoints a U.S. representative to this Board, who reports to the President through the Chairman of the Atomic Energy Commission. The AEC educational program maintains liaison with the U.S. representative relative to education and training needs associated with this regional effort.

The AEC exchanges information and sends representatives upon request to meetings of organizations such as the Western Interstate Committee on Higher Education and the Governor's Conference for the Rocky Mountain States. In some States the Governors appoint

AEC staff to advisory committees on higher education. For example, a DNET staff member is on the Maryland Science Resources Advisory Board.

In California, DNET is supporting a nuclear science curriculums study at the high school level with active participation by staff from the State board of education. Testing of the curriculums is accomplished by arrangements with local secondary schools.

(e) *With local governments or communities.*—The formal DNET activities include the following activities with local communities:

(1) The California curriculums development project mentioned above.

(2) A contract with the Chicago School Board for a curriculums development project conducted in a number of Chicago secondary schools as well as close liaison with courses supported by an equipment grant to the Illinois Teachers College-Chicago-North.

(3) Considerable activity is conducted with the Montgomery County Junior College, Maryland, primarily in radiation biology, including a curriculums development project through which course materials and bibliography are being developed for undergraduate nuclear science curriculums.

In a more general way, AEC and contractor staff are encouraged to participate in community activities, including lectures to high school and other groups. They also arrange for educational courses of various types to be given to their employees by local educational institutions.

(f) *With foreign governments or international organizations.*—The AEC's Division of International Affairs (DIA) is responsible for liaison with foreign governments and international organizations, functioning through appropriate offices in the Department of State as well as frequent direct contacts with foreign representatives. With respect to nuclear education and training, DIA receives requests from foreign governments, U.S. Government agencies, and international and regional organizations which sponsor foreign nationals for training under the USAEC's policy to provide training, including formal training programs, in its facilities to assist friendly nations in the development of their own atomic energy programs. Assignments are arranged by DIA.

DNET, because of its responsibilities for the AEC's domestic educational and training program, maintains liaison with DIA as such programs may be involved in the training of foreign nationals, and in providing informational materials describing AEC education programs to interested foreign governments. Meetings for this purpose were held during the past year with representatives of Japan, Australia, and Turkey. Staff members have also participated in the fellowship activities of the International Atomic Energy Agency and the North Atlantic Treaty Organization.

Relative to the United States deep interest in Latin America, DNET is responsible for the coordination of the programs and objectives of the Puerto Rico Nuclear Center. This center was established as part of the atoms-for-peace program with the objectives of providing education, research, and training programs in the peaceful uses of nuclear energy for Latin American nations as well as for aiding nuclear developments of Puerto Rico itself. Relative to this center, DNET maintains close liaison with DIA to help assist the

active nuclear education and research activities of Latin American countries. Liaison is also maintained with the Organization of American States.

(g) *With nonprofit organizations or institutions.*—Most of the activities of the DNET involve frequent contacts with individual institutions of higher education, primarily by mail but also as time and staff permit by direct visitation. Lists of institutions directly benefiting from AEC educational programs are presented in "Program Statistics."<sup>1</sup> Other coordinating activities include the following:

(1) Close liaison, including receipt of routine publications, exchange of information and participation at meetings, is maintained with education and scientific organizations such as the following:

- American Society for Engineering Education (ASEE)
- National Academy of Science-National Research Council (NAS-NRC)
- American Physical Society
- American Chemical Society (ACS)
- Association of Higher Education (AHE)
- American Council on Education (ACE)
- American Institute of Biological Sciences (AIBS)
- Council of Graduate Deans
- National Association of State Universities and Land Grant Colleges
- American Nuclear Society (ANS).

(2) Contracts for administration of subprograms are maintained with:

- American Society for Engineering Education
- American Institute of Biological Sciences
- Oak Ridge Associated Universities (ORAU)
- Associated Rocky Mountain Universities (ARMU)
- Associated Midwest Universities (AMU).

(3) Although currently we have no formal contracts, cooperative activities are being sponsored in conjunction with member institutions of:

- Associated Colleges of the Midwest (ACM)
- Central State Universities, Inc. (CSUI)
- Associated Colleges of the Chicago Area (ACCA).

The above contracts provide for a wide variety of consultation regarding the needs of colleges and universities, recommendations as to how AEC can help meet these needs, supply of consultants to AEC for specific purposes, provision of AEC information to the associations and their members, and actual operation of certain parts of the AEC programs.

(4) From an operational viewpoint:

The AIBS administers a program of visiting lecturers for high schools and colleges.

The ARMU and AMU administer AEC laboratory graduate fellowships at sites in their geographical proximity and a variety of university-AEC laboratory cooperative programs.

ORAU administers many AEC fellowship activities, some faculty institutes, radioisotope courses, information and exhibit programs, and a variety of university-laboratory cooperative programs.

<sup>1</sup> Published by AEC, Division of Nuclear Education and Training.

The ASEE has administered a sizable portion of the engineering faculty institutes, conducted a program of short topical conferences and advances in nuclear technology, produced studies on "Objective Criteria in Nuclear Engineering," and in general been a constant source of consultation regarding nuclear science and engineering curriculums.

(h) *With business enterprises.*—Close liaison is maintained with the Atomic Industrial Forum to acquaint it with AEC education and training activities and to follow the development of nuclear industry, especially manpower needs.

Through the AEC's Labor Relations Division, the DNET obtains reports regarding contractor recruitment needs, layoffs, and general information regarding their in-house support of further training for their own employees and data regarding their temporary hiring of faculty and students.

The contacts with the American Nuclear Society and American Society for Engineering Education mentioned under (g) above also provide considerable contact with industrial concerns through their participation in the activities of these professional societies.

Certain AEC facilities participating in the nuclear education and training program are operated by industrial concerns; examples are the Union Carbide Corp., operating the Oak Ridge National Laboratory, the Phillips Petroleum Co., operating the National Reactor Testing Station, and the E. I. du Pont de Nemours & Co., operating the Savannah River Laboratory.

[The material presented above covers the coordinating activities conducted within and for the nuclear education and training program of the AEC. Information on the coordinating activities conducted within the various research activities of the AEC is contained in the "Statement of the USAEC on the Impact on Scientific and Technical Manpower \* \* \*", which was provided to the Subcommittee on Employment and Manpower of the Senate Labor and Public Welfare Committee.]

### 8. *Laws and regulations*

The basic authority for AEC activities is set forth by the Atomic Energy Act of 1954, as amended (42 U.S.C. sec. 2011, et seq.), first enacted as Public Law 83-703, approved August 30, 1954. The publication, "Atomic Energy Legislation Through 88th Congress, 2d session" printed for the Joint Committee on Atomic Energy, contains the 1954 act, as amended, as well as authorization and appropriation acts through fiscal year 1965. Legislation through the 89th Congress, 1st session, will be published in the near future.

The specific portion of the Atomic Energy Act of 1954 which sets forth the AEC education and training missions is found in chapter 4, subsection 31 a.<sup>1</sup> and b.<sup>1</sup> (42 U.S.C. sec. 2051), which state:

a. The Commission is directed to exercise its powers in such manner as to insure the continued conduct of research and development and training activities in the fields specified below, by private or public institutions or persons, and to assist in the acquisition of an ever-expanding fund of theoretical and practical knowledge in such fields \* \* \*.

b. The Commission is further authorized to make grants and contributions to the cost of construction and operation of reactors and other facilities and other equipment to colleges, universities, hospitals, and eleemosynary or charitable

<sup>1</sup> Public Law 84-1006, approved Aug. 6, 1956, added the words "and training" to subsec. a. and the entire subsec. b., to the original act.



institutions for the conduct of educational and training activities relating to the fields of subsection a.

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See tables 2 to 6.)

(a) *Effects on personal incomes of persons served.*—

(1) The graduate students provided support through fellowships and traineeships (nearly 400 in fiscal year 1965) receive an immediate financial benefit in terms of their economic ability to obtain advanced degrees. These degrees in turn significantly increase their lifetime earnings, for example, recent Ph. D.'s in nonsupervisory positions in research and development work received median salaries of \$11,800 compared to \$7,400 for recent B.S. recipients according to a recent NSF report.

(2) Similarly, on a larger scale but less susceptible of measurement, all faculty and students participating in AEC nuclear education and training activities have improved their technical backgrounds and thus their potential earning capacities.

(b) *Effects on the placement or productivity of workers, or both, and on their earnings.*—As mentioned earlier, the original cadre of scientific and technical personnel employed in the atomic energy program were largely trained through the in-house training activities of the Manhattan District and its contractors and through the 1946–56 education program of the AEC. All of these individuals had their technical productivity and therefore their potential earning powers increased by these efforts. Since 1956, educational institutions, largely through the encouragement and assistance of the AEC have developed increased capacity for training individuals preparing themselves to enter the nuclear field, as well as providing additional education for working individuals who wished to improve their technical capabilities.

Specific data on the effects of the educational component of the AEC program as sought by your question are lacking. However, the atomic energy field as a whole now employs approximately 186,000 individuals and accounts for the employment of perhaps another 110,000 individuals who provide standard goods and services to the atomic energy industry. We suggest that this total employment has largely resulted from the multiple effects of the AEC research, development, and educational activities over a 20-year period. We confidently anticipate that the atomic energy field and resultant employment will continue to grow. Similarly, through the impetus provided by the AEC educational program, colleges and universities will continue to develop and strengthen their nuclear science education capabilities contributing to the output of scientists and engineers well prepared to utilize existing technology in ever-broadening areas as well as develop new technology.

It should be noted that technical manpower is quite mobile. Individuals from AEC research and development activities as well as graduates from nuclear education curriculums also migrate to other fields, so that the ultimate economic benefit is far greater in scope than the confines of the atomic energy field itself.

(c) *Effects on business or industrial organization and management; the stimulation of new business enterprises or expansion of existing*

ones; business location; and effect on competition; and (d) Effects on the stability, level, volume or other aspects of employment, wages, costs, sales, prices, or other phases of economic activity.—As described in the earlier reference "Education and the Atom," the genesis of the atomic energy program stemmed from the academic world. The early history of the atomic energy program describes the impact of institutions such as Columbia University, the University of Chicago, Iowa State University, the University of California and many others in the research and production efforts that led to the first atomic bomb. Ever since, educational institutions have carried a leading role in the total research and development efforts for military and peaceful uses of atomic energy. The present state of development of the atomic energy industry is in no small part due to this research activity and the parallel manpower productivity of the Nation's colleges and universities. The nuclear education and training program of the AEC has significantly contributed to the rapid growth of college and university nuclear education capability.

Due to the complete interrelationship between research and education and training we find it difficult to separate out in a meaningful way the specific contribution of the DNET activity to economic development as requested in your questions. We believe your basic purpose is well served by the following material on "Relationship to Employment," reproduced from "Statement of the USAEC on the Impact on Scientific and Technical Manpower of Federal Research and Development Policies."

(d) *Relationship to employment.*—

(i) *Direct and secondary impact.*—With the exception of straight employment statistics, \* \* \* we have no quantitative data to describe the impact of our research and development dollars upon a region. We suspect, however, that professional salaries, family housing needs, and localized laboratory procurements are the main instruments through which the sponsored research and development directly affects the nearby community. Considered solely on the basis of dollar flow into a region, we have no evidence which would lead us to believe that this one phase of governmental spending is in any way a unique or more effective mechanism for stimulating local economies than the many others now in being.

There are usually some new small businesses which develop close to our installations and which owe their genesis to the AEC activity. For example, a number of activities have located at Oak Ridge and Albuquerque to take advantage of the nearby technology, people and related sources, or markets. One such firm at Oak Ridge sells science kits, taking advantage not only of proximity to the source of much of the technology but also of the technical information resources at hand. As another case in point, the far-ranging research and development activities of the Los Alamos Scientific Laboratory and the Sandia Corp. have spawned some expansion in Albuquerque of the electronic-support function.

At Hanford (Richland, Wash.), where we are attempting to foster and encourage diversification activities, several of the new contractors who are to operate Government-owned facilities have plans to establish private plants or laboratories in the area. Such new private facilities will not necessarily be related to the AEC-supported work there, but the presence of key management personnel, technical

competence, support facilities, etc., are important factors in deciding to locate such facilities at Hanford. With several successful private facilities in existence, the prospects of others being established would seem to be good.

(ii) *Short-term and long-term regional effects.*—Aside from the actual flow of Federal funds to support a given research or development effort, scientific-technological activities have another important influence on the economic well-being of an area and its people. The opportunities and facilities for education at all levels usually are markedly improved. Secondary education systems tend to benefit from the presence of scientific personnel in the community. They often show marked interest in establishing high standards for the school system and at times will participate in the development of curriculums in their field of specialization. If opportunities for higher education do not exist in the community, they are often established. For example, the University of Tennessee and the University of Washington now have extension programs in Oak Ridge and in Richland, Wash., respectively.

Further, the existing institutions of higher education in a region, if they are properly motivated, can benefit considerably by the presence of a sizable Federal research and development installation in the area. Cooperative programs between such institutions and AEC laboratories have already been mentioned.

One has only to look at the many new industrial concerns that have sprung up about the Harvard-MIT and Berkeley-Stanford complexes to see the effects which strong centers of education have on the economics of an area. We can identify several factors which undoubtedly have contributed to this contribution to local economic growth by educational centers. Faculty members have often been instrumental in initiating local commercial ventures which draw heavily on the scientific competence available on the campus. In addition to such personal participation in industrial development, many faculty members also serve as consultants to industry. The availability within the local community of such highly competent technical people contributes to growth of the area. Further, industry can arrange with nearby universities for extension courses and other educational opportunities for their employees. Industrial employers often make participation in such educational activities more attractive to employees by adjusting their work schedules. Such additional education leads to more scientific and technical competence, thereby further strengthening the growth potential of the complex. Thus, the gravitation of Government contracts and other enterprises to those areas which have strong centers of graduate education and research is both evident and logical.

It is also interesting to note that there is usually a rather pronounced effect upon a community's cultural facilities traceable to research and development personnel. For example, the level of interest in and support of local symphonic activity, community drama, and artistic functions in Oak Ridge, is considerably above that of other communities of comparable size.

(iii) *Transmission of technology within a region.*—We have very little data about the transmission of specific items of technology to the commercial interests in the same area. Probably the greatest such transmission occurs through the subcontracting process. In the case

of the AEC, central New Mexico is a good example. The transfers occur by frequent contact between the AEC sites and the neighboring vendors.

By and large, however, AEC-sponsored research and development tends not to be regionalized. Nuclear research and development usually has national significance and would relate to national markets more than to specific regions. For example, the companies that are in the reactor business and the auxiliary equipment business connected with reactors are not particularly clustered around our national laboratories, and when it comes to the use of isotope sources and radiation sources, the companies are not so situated. Further, in some cases a laboratory in one region may be investigating a technology which would not necessarily be applicable locally. Possible examples of this might be: radiation pasteurization of selected foods, irradiation of wood to produce a product with improved strength and durability, conversion of coal products to gas, or development of nuclear reactors to power desalting plants. Each of these "products" may have distinct regional application; however, the associated research and development is not, necessarily, done in those geographical areas.

While we do not coordinate awards of research and development contracts with Federal depressed areas or regional development programs, we do cooperate with regional groups, such as the Southern Interstate Nuclear Board and with other Government agencies, such as the Department of Commerce that utilize regional approaches to technology and information transfer. In addition, the AEC has 97 depository libraries located throughout the United States which are valuable, locally available sources of information on the results of AEC-sponsored developments.

(iv) *Effect upon the States receiving the largest amounts of research and development expenditures.*—The States receiving the largest amounts of AEC research and development funds are (in decreasing order) California, New Mexico, Nevada, New York, and Pennsylvania. Of these, only in New Mexico and Nevada do we have activities which are large enough, in relation to the balance of the State's economy or recognizable enough in relation to the number of other federally funded activities, so that their impact could be identified with any assurance. However even in these cases we have no readily available impact data.

In the other three States, our research and development expenditures, although significant in terms of absolute dollars, are probably of less relative significance. Further, the major AEC activities in these States<sup>1</sup> are located either in or close enough to metropolitan centers of such size that the economic chain reaction of AEC dollars would be virtually undistinguishable from that of other activities.

In the case of Nevada, in fiscal year 1964 we allocated about \$139 million of research and development funds, of which the majority went for underground weapons test activities. These funds most certainly have a pronounced short-term effect through the large expenditures for construction worker salaries and building supply procurement; however, it is not at all clear what the long-term effect of these current expenditures is on the local economy.

<sup>1</sup> Lawrence Radiation Laboratory, Brookhaven National Laboratory, Knolls Atomic Power Laboratory, Bettis Atomic Power Laboratory.

(e) *Other benefits.*—While not specifically answering your questions, it is worthy of note that the AEC and its predecessor, the Manhattan District, was a pioneer in large-scale research and related educational efforts. The experience gained by the atomic energy program in its successful efforts to develop a new technology through a combined industrial and university program benefited many other Federal programs as they established large-scale research, development, and educational efforts. The AEC was an innovator in educational assistance programs, and other agencies now supporting either broad or specialized educational activities have consulted with AEC staff and examined AEC procedures preparatory to designing or expending their own programs. Thus, AEC's educational activities have had a significant though immeasurable impact upon the entire scientific manpower development programs of the country.

(f) *Pertinent geographic differentials.*—The AEC's nuclear education and training program is designed to assist those institutions of higher education which either have or are developing significant engineering and science curriculums whose graduates will contribute to the utilization of nuclear technology or whose faculty and students may participate in atomic energy research activities. Therefore the program is nationwide in scope affecting every State to the extent that educational institutions within the state have science and engineering curriculum. The broad geographical distribution of awards to institutions and individuals is shown in the following tables and in greater detail in "Program Statistics."

It should be noted that cooperative university-AEC laboratory programs are located at research centers which are regionally distributed. Therefore, the degree of institutional participation in these cooperative activities will be affected by the distance between a given institution and these centers. Despite this, virtually every State has had some participation at these centers. A discussion of the regional impact of these centers is presented in "Impact on Scientific and Technical Manpower," pages 32 through 35.

TABLE 2.—AEC dollars awards for nuclear equipment and numbers of educational institutions assisted in physical sciences and engineering and life sciences through June 30, 1965

State	Life sciences		Physical sciences		Life sciences and physical sciences combined	
	Number of institutions	Dollars	Number of institutions	Dollars	Number of separate campuses	Dollars
Alabama.....	5	\$93,819	6	\$310,566	9	\$404,385
Alaska.....			1	14,000	1	14,000
Arizona.....	2	50,795	2	332,026	2	382,821
Arkansas.....	3	45,768	9	90,310	10	136,078
California.....	27	466,117	23	1,387,205	40	1,853,322
Colorado.....	4	41,296	7	283,123	9	324,419
Connecticut.....	9	85,818	6	162,408	11	248,226
Delaware.....	1	20,500	1	138,818	1	159,318
District of Columbia.....	7	209,396	4	313,818	7	523,214
Florida.....	3	106,899	7	448,082	8	554,981
Georgia.....	5	123,627	9	252,647	11	376,274
Hawaii.....	1	11,115	1	47,716	1	58,831
Idaho.....			2	100,432	2	100,432
Illinois.....	13	255,268	22	819,226	28	1,074,494
Indiana.....	14	261,258	8	510,173	18	771,431
Iowa.....	6	97,758	14	560,430	17	658,188
Kansas.....	7	116,445	7	512,522	12	628,967
Kentucky.....	6	119,967	12	274,435	15	394,402
Louisiana.....	7	69,255	9	231,360	11	300,615
Maine.....	2	31,436	2	39,925	3	71,361
Maryland.....	11	177,172	9	326,171	15	503,343
Massachusetts.....	24	385,527	22	855,001	35	1,190,528
Michigan.....	14	241,155	16	762,892	22	1,004,047
Minnesota.....	8	170,172	17	431,858	20	602,030
Mississippi.....	3	49,245	5	120,794	7	170,039
Missouri.....	7	155,251	12	541,421	16	696,672
Montana.....	2	16,803	1	100,494	2	117,297
Nebraska.....	5	74,497	6	111,605	8	186,102
Nevada.....			1	48,415	1	48,415
New Hampshire.....	4	41,389	3	75,333	5	116,722
New Jersey.....	7	106,112	12	401,882	16	507,994
New Mexico.....	3	39,896	2	156,021	4	195,917
New York.....	40	661,855	44	1,872,245	64	2,534,100
North Carolina.....	11	227,856	8	432,178	15	660,134
North Dakota.....	2	35,559	3	72,725	3	108,284
Ohio.....	21	290,679	21	1,121,274	29	1,411,953
Oklahoma.....	3	109,375	7	415,247	8	524,622
Oregon.....	6	70,063	11	316,208	13	386,271
Pennsylvania.....	38	515,738	33	1,449,865	56	1,965,603
Puerto Rico.....	1	29,776	1	340,648	1	370,424
Rhode Island.....	3	66,099	2	64,019	4	130,118
South Carolina.....	1	1,100	4	60,699	5	61,799
South Dakota.....	2	29,825	3	42,861	4	72,686
Tennessee.....	9	123,703	14	362,515	19	486,218
Texas.....	19	293,265	24	1,058,461	34	1,351,726
Utah.....	3	66,369	3	190,067	3	256,436
Vermont.....	3	32,178	2	15,907	3	48,085
Virginia.....	8	122,593	17	813,052	20	935,645
Washington.....	6	112,122	13	638,809	14	750,931
West Virginia.....	3	51,332	10	252,680	11	304,012
Wisconsin.....	9	122,004	11	450,188	16	572,192
Wyoming.....			1	164,708	1	164,708
Total.....	398	6,575,347	490	20,895,515	690	27,470,862

TABLE 3.—Faculty participation at AEC institutes, summarized by State, (through June 1965)

State	Number of institutions sponsoring faculty at AEC institutes	AEC-ASEE			AEC-NSF		Total individuals <sup>1</sup>
		Basic		Advanced engineering faculty	Physical science	Radiation biology	
		Technical institute	Engineering faculty				
Alabama.....	12		13	3	7	11	33
Arizona.....	5		1	4	4	8	17
Arkansas.....	14		3	5	20	7	27
California.....	83	5	9	4	84	77	169
Colorado.....	12	1	11	13	16	12	45
Connecticut.....	8	3	8	3	6	6	22
Delaware.....	2			1	2	2	5
District of Columbia.....	6	1	10	13	1	4	20
Florida.....	27	2	3	7	17	22	49
Georgia.....	17	1	9	7	14	16	42
Hawaii.....	3		1	6	2	8	11
Idaho.....	4		2	6	8	4	17
Illinois.....	31		17	15	26	14	60
Indiana.....	24	3	18	9	19	16	58
Iowa.....	26		8	11	25	25	65
Kansas.....	16		3	7	18	6	32
Kentucky.....	15		2	6	17	9	31
Louisiana.....	16		9	3	31	16	56
Maine.....	6				2	6	8
Maryland.....	14		4	3	10	10	23
Massachusetts.....	35	13	31	20	29	23	96
Michigan.....	32	2	30	38	30	30	99
Minnesota.....	26		2	1	36	16	52
Mississippi.....	14		1	1	7	14	23
Missouri.....	23	1	10	14	20	12	47
Montana.....	7		1	3	2	6	11
Nebraska.....	13		3	1	15	6	25
Nevada.....	1		1	1	4		6
New Hampshire.....	6		3		2	7	12
New Jersey.....	19		20	12	22	16	59
New Mexico.....	5		3	3	3	7	14
New York.....	93	16	52	47	84	75	237
North Carolina.....	25		15	4	18	25	61
North Dakota.....	6		9	8	10	5	24
Ohio.....	36	2	31	28	35	31	105
Oklahoma.....	18	1	5	4	28	10	45
Oregon.....	10	5	5	7	8	11	27
Pennsylvania.....	71	6	31	16	65	55	158
Puerto Rico.....	2		13	22	4	7	34
Rhode Island.....	3		4	6	5	2	14
South Carolina.....	9		3	3	8	6	19
South Dakota.....	6		7	2	9	4	20
Tennessee.....	26		6		21	22	46
Texas.....	51	2	13	7	67	39	120
Utah.....	7		4	7	7	15	28
Vermont.....	6		5	3	1	8	15
Virginia.....	20		4	3	17	12	34
Washington.....	24	1	10	7	16	26	56
West Virginia.....	10	1	1	3	11	5	17
Wisconsin.....	23	2	4	4	29	10	45
Wyoming.....	4		1	3	4	5	13
Total.....	972	68	459	404	946	789	2,352

<sup>1</sup> An individual may participate in more than 1 institute.

TABLE 4.—AEC special fellowships, summarized by State, through June 1965

State	Number of fellows by undergraduate school					Number of fellows by fellowship school				
	HP	AHP	NSE	IH	IM <sup>1</sup>	HP	AHP	NSE	IH	IM
Alabama.....	7		5					1		
Arizona.....			4					4		
Arkansas.....	9									
California.....	14		71	5		35	4	169		5
Colorado.....	9		7	2						
Connecticut.....	4		10	2						
Delaware.....			3							
Florida.....	4		9					18		
Georgia.....	18	1	10	1				4		
Hawaii.....	1									
Idaho.....	12		5	1						
Illinois.....	31	1	32	3				40		
Indiana.....	27		53	1				27		
Iowa.....	22	2	7	1				10		
Kansas.....	16	1	27			51		18		
Kentucky.....	32	1	3	4						
Louisiana.....	17		3	3				2		
Maine.....	7		1	1						
Maryland.....	3		8				1	3		
Massachusetts.....	24		55	4		8	1	179	40	22
Michigan.....	12	1	38	3		17	3	66	9	1
Minnesota.....	28	1	10	2			1	9		
Mississippi.....	18			1						
Missouri.....	18	2	18					7		
Montana.....	3		2							
Nebraska.....	9		3							
Nevada.....	1									
New Hampshire.....	2			1						
New Jersey.....	5	1	15							
New Mexico.....	7	1	2	3				2		
New York.....	67	2	137	13		194	5	78		20
North Carolina.....	14	2	35	1				35		
North Dakota.....	1		2							
Ohio.....	28		19	3				3	4	19
Oklahoma.....	10	1	14	1				9		
Oregon.....	16	3	8					1		
Pennsylvania.....	32	1	45	9			1	22	27	18
Rhode Island.....	6		1							
South Carolina.....	2	1	6							
South Dakota.....			2	1						
Tennessee.....	55	2	20	2		323	7	20		
Texas.....	27	1	22	3			1	12		
Utah.....	6	1	7	1			1			
Vermont.....	1									
Virginia.....	21		24	2				21		
Washington.....	19	1	20	1		90	1	23		
West Virginia.....	7		1	2						
Wisconsin.....	33		24	1				15		
Wyoming.....	6		2	1						
District of Columbia.....										
Puerto Rico.....	3		3					2		
Philippines.....	7		9	1		3		3		
Philippines.....	1		1							
Total.....	721	26	803	80	85	721	26	803	80	85

<sup>1</sup> Statistics unavailable at this time for industrial medicine fellows.

NOTE.—Total institutions producing fellows, 430; total institutions receiving fellows, 54; total fellows, 1,715; total fellowships, 2,484.

Key to abbreviations: HP, health physics; AHP, advanced health physics; NSE, nuclear science and engineering; IH, industrial hygiene; IM, industrial medicine.



TABLE 5.—*Summary by State, participation in the mobile radioisotope laboratory program (through June 30, 1965)*

State	Number of institutions having faculty or students attending laboratory	Number of host institutions	Number of participants	
			Faculty	Students
Alabama.....	6	5	24	53
Arizona.....	1			1
Arkansas.....	4	2	11	10
California.....	1		1	
Connecticut.....	2	2	17	14
District of Columbia.....	2	2	10	20
Florida.....	5	2	16	11
Georgia.....	5	5	30	33
Illinois.....	1	1	4	7
Indiana.....	4	3	10	33
Iowa.....	1	1	8	4
Kansas.....	1	1	9	5
Kentucky.....	6	3	19	22
Louisiana.....	7	7	64	25
Maine.....	1		1	
Maryland.....	3	2	13	18
Massachusetts.....	2	1	4	1
Michigan.....	1		1	
Minnesota.....	5	2	15	10
Mississippi.....	4	4	16	34
Missouri.....	2	1	3	9
Nebraska.....	1	1	8	4
New Hampshire.....	1	1	2	21
New York.....	6	2	11	34
North Carolina.....	6	2	19	8
North Dakota.....	1		1	
Ohio.....	3	1	1	2
Oklahoma.....	3	3	16	23
Pennsylvania.....	11	3	29	13
Rhode Island.....	2	1	18	4
South Carolina.....	7	4	26	16
Tennessee.....	17	10	61	63
Texas.....	13	12	75	81
Virginia.....	8	6	42	38
Washington.....	1		1	
West Virginia.....	4	3	17	17
Wisconsin.....	2	1	10	6
Total.....	150	94	613	640

NOTE.—In addition to the participants listed above, this course was attended by 82 high school faculty, 3 high school students, 8 hospital staff, and 50 people from industry and government.

TABLE 6.—*Geographical distribution of fiscal year 1965 participation at AEC sites by educational institutions*

	Total number of institutions		Total number of institutions
Northeast.....	63	North Central.....	222
New England.....	17	West North Central.....	59
Maine.....	3	North Dakota.....	2
Vermont.....	0	South Dakota.....	5
New Hampshire.....	0	Minnesota.....	6
Massachusetts.....	9	Nebraska.....	3
Rhode Island.....	1	Iowa.....	29
Connecticut.....	4	Kansas.....	5
Middle Atlantic.....	46	Missouri.....	9
New York.....	20	East North Central.....	163
Pennsylvania.....	20	Wisconsin.....	27
New Jersey.....	6	Michigan.....	26
South.....	157	Illinois.....	58
West South Central.....	45	Indiana.....	22
Texas.....	23	Ohio.....	30
Oklahoma.....	7	West.....	37
Arkansas.....	5	Mountain.....	14
Louisiana.....	10	Montana.....	2
East South Central.....	49	Idaho.....	1
Mississippi.....	8	Wyoming.....	0
Alabama.....	10	Nevada.....	0
Tennessee.....	22	Utah.....	2
Kentucky.....	9	Colorado.....	3
South Atlantic.....	63	Arizona.....	3
Maryland.....	5	New Mexico.....	3
District of Columbia.....	2	Pacific.....	23
Delaware.....	1	Alaska.....	0
West Virginia.....	4	Hawaii.....	0
Virginia.....	11	Washington.....	3
North Carolina.....	12	Oregon.....	5
South Carolina.....	8	California.....	15
Georgia.....	14	Puerto Rico.....	2
Florida.....	6	Grand total.....	481

10. *Economic classification of program expenditures.* (See table 7.)

Program: Nuclear education and training.

Department or agency, and office or bureau: Atomic Energy Commission;  
Division of Nuclear Education and Training.TABLE 7.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government:	
Purchases of goods and services.....	0.7
Transfer payments to individuals and nonprofit organizations.....	4.4
Aid to State and local governments:	
Grants.....	.5
Other aid.....	3.4
Total Federal expenditures.....	9.0

## DIVISION OF BIOLOGY AND MEDICINE

## PART I. DESCRIPTION OF THE PROGRAM

*1. Objectives*

The major objectives of this portion of the research program of the AEC's Division of Biology and Medicine are (a) the development of new and unique applications of radioisotopes and special radiation sources to medical diagnosis and therapy for cancer and other diseases; (b) an understanding of the manner in which neoplastic tissue interacts with radiation; and (c) the new and unique use of radioisotopes in studying physiological processes. Costs for this program are included annually as budgeted medical and health-related research in the report on this subject prepared by the National Institutes of Health and which appears as a special analysis in the President's budget to the Congress. Not included in this statement are research activities within the program of the Division of Biology and Medicine which are expected to provide information which will permit the AEC: (1) to conduct its activities with regard to the health and safety of persons employed with AEC operations; and (2) to understand the somatic and genetic effects of radiation exposure as a basis for predicting potential biological hazards from these operations. These research projects are related to health, but are supportive to the accomplishment of the AEC's overall mission. This statement also excludes activities of other AEC divisions which are included in the NIH report.

In fiscal year 1965 the cost of these additional activities was \$76,758,000. This classification of the total biology and medicine program and other AEC programs corresponds to the definitions of "budgeted medical and health-related research" and "research activities directly related to medical and health-related research" as used by the National Institutes of Health in its report mentioned above. Only the "budgeted medical and health-related research" was considered to be germane to the present inquiry relating to human resources programs.

*2. Operation*

The research program is conducted through contracts with educational institutions, hospitals, independent research foundations and other institutions. The largest portion is conducted in federally owned research centers; the balance is performed through project-type contracts in individual laboratories.

*3. History*

This represents a portion of the total biomedical research program which has as its overall objective assistance to the development of atomic energy for national security and general welfare by learning to overcome its biological hazards and by taking advantage of its beneficial aspects. Accordingly, since the establishment of the AEC in 1947, research has been conducted to increase basic knowledge of the effects of radiation on all living systems and to utilize this knowledge in evaluating the consequences for man and in solving the practical health and safety problems of atomic energy operations.

#### 4. Level of operations. (See table 1.)

Program: Division of Biology and Medicine: Biomedical research program (budgeted as medical or health related).

Department or agency and officer or bureau: Atomic Energy Commission; Division of Biology and Medicine.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (contracts).....	39	38	32	32
(b) Applicants or participants:				
Educational.....	25	25	18	18
Hospitals.....	6	5	6	6
Nonprofit.....	1	1	1	1
Federal Government.....	1	2	2	2
Foreign.....	2	2	2	2
Federal research centers.....	4	3	3	3
(c) Federal finances: Amounts shown are costs; AEC has no-year or indefinite appropriation.....	\$7,514,000	\$7,827,000	\$8,271,000	\$8,845,000
(d) Matching or additional expenditures: not required in research contract program.....	0	0	0	0
(e) Number of Federal Government employees administering program (man-years, estimated):				
Headquarters.....	8	8	9	9
Operations Offices.....	4	4	4	4
Total.....	12	12	13	13
(f) Number of non-Federal personnel employed (man-years, estimated).....	659	687	723	775
(g) Other measures of level or magnitude of performance (none available).....				

#### 5. Estimated magnitude of program in 1970

Taking into consideration the factors mentioned above, and subject to the annual budget process, it is estimated that this program will reach a level of approximately \$10 million in fiscal year 1970, with a manpower level of about 900 man-years.

#### 6. Prospective changes in program orientation

There will be no significant changes in program orientation or emphasis; it is expected that cost-of-living increases will be experienced consistent with the increase in the overall economy.

#### 7. Coordination and cooperation

Coordination and cooperation occurs primarily among the various programs of the Atomic Energy Commission, between the AEC and other agencies of the Federal Government, and between the AEC and nonprofit and business organizations.

As stated in paragraph 3 above on the history of the program, the biomedical research program is conducted with the needs of other AEC operations in mind. These are reviewed at the agency level throughout the year, but particularly in conjunction with the budget submission.

Close cooperation exists between the Division of Biology and Medicine and other agencies having an interest in radiation biology and medicine, particularly the Public Health Service of the Department of Health, Education, and Welfare, the Department of Defense, and the National Aeronautics and Space Administration. This liaison takes the form of consultation on panels and study sections, regular meetings to discuss projects of mutual interest, interagency agreements for research support, and exchanges of budget documents.

There is also close cooperation with private institutions, particularly in the educational community and with hospitals but also with business enterprises, through the individual research contracts mentioned in paragraph 2 above.

#### 8. Laws and regulations

This research program is conducted under the general authority of section 31 of the Atomic Energy Act of 1954, as amended, and of the annual authorization and appropriation acts.

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

#### 9. Economic effects. (See table 2.)

Long-range direct economic effects of medical and health-related research are not predictable. The following table indicates the geographical distribution of research support in fiscal year 1965.

TABLE 2.—Distribution of research support, fiscal year 1965

State	Costs in thousands	State	Costs in thousands
California.....	\$1,302	Ohio.....	\$11
Georgia.....	25	Tennessee.....	1,462
Illinois.....	2,830	Texas.....	74
Maryland.....	29	Washington.....	15
Massachusetts.....	221	Foreign and Puerto Rico.....	51
Michigan.....	32		
Minnesota.....	41	Total.....	7,827
New York.....	1,734		

#### 10. Economic classification of program expenditures. (See table 3.)

Program: Division of Biology and Medicine: Biomedical research program (budgeted as medical or health related).

Department or agency, and office or bureau: Atomic Energy Commission; Division of Biology and Medicine.

TABLE 3.—Economic classification of program expenditures for fiscal year 1965

[In thousands of dollars]

Federal Government:	
Purchases of goods and services:	
Wages and salaries.....	36
Other.....	7
Transfer payments:	
To individuals and nonprofit organizations.....	6,083
To others (foreign).....	37
Grants to State and local governments.....	1,664
<b>Total Federal expenditures.....</b>	<b>7,827</b>

# CIVIL SERVICE COMMISSION

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## CIVIL SERVICE RETIREMENT PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The civil service retirement program provides a retirement system for civilian employees of the Federal Government. The objective of this system is to provide insurance against the loss of income to employees and their families due to retirement, disability, or death of covered employees.

#### 2. Operation

The retirement program is conducted wholly by the Federal Government. The Civil Service Commission administers the system primarily at its headquarters offices in Washington, D.C., with some assistance from its regional offices in obtaining medical examinations for disability applicants or annuitants. Overall administrative responsibilities include: (a) Issuing regulations and instructions, (b) adjudicating and determining benefits under the law, (c) performing actuarial and legal work, (d), maintaining individual records of separated employees, the prior records of employees who have transferred between agencies, and designations of beneficiary, (e) accounting for and depositing retirement moneys received, (f) maintaining retirement control accounts, (g) determining the financial condition of the civil service retirement and disability fund and recommending amounts of appropriations required, and (h) recommending changes to improve the retirement system.

Federal agencies are delegated general responsibility in retirement matters, with respect to their own personnel, for (a) determining eligibility for coverage under the regulations, (b) withholding retirement deductions from employees' salaries, making matching contributions, and transmitting these for deposit with the Commission, (c) preparing and maintaining individual retirement records for covered employees, (d) maintaining control accounts and preparing accounting reports, (e) counseling and informing employees on their rights and obligations under the law, giving assistance to claimants including survivors of deceased employees, and (f) transmitting re-

tirement claims and records to the Commission. Agencies usually decentralize a large part of these responsibilities to their local operating offices.

The retirement system is classed as a contributory system because employees share in the expense of the annuities to which they may become entitled. The current active membership of the system consists of approximately 2,300,000 civilian employees. Generally, each employee contributes 6½ percent of his basic salary and each employing agency matches the contributions of its employees. These moneys are placed in the civil service retirement and disability fund, classed as a trust fund on the books of the Government. Other sources of retirement moneys are congressional appropriations as required, interest earnings, gifts, and contributions by employees who wish to increase their annuities. Currently, receipts amount to over \$2.7 billion annually, from all sources. This fund is used to pay monthly annuities to retired employees or their survivors, to make refunds for former employees who have left the service, and to pay claims for employees who have died before retirement or before their annuities are paid in full. Currently, over 750,000 retired employees and survivors receive benefits totalling more than \$1.5 billion annually. The balance in the fund, which represents the difference between what has been credited to it and what has been withdrawn, totals \$15.9 billion cumulated through December 1965. The retirement act requires that any balance in the fund not needed for current payments will be invested in public-debt obligations of the United States under the market yield interest basis provided by a recent amendment to the act.

The civil service retirement fund differs from a private trust fund in that credits to the fund are not cash, but just entries on the books of the Government. When funds are needed to make benefit payments, the Treasury Department, acting as trustee for the fund, must obtain cash for the purpose through its normal channels of tax and other receipts or by borrowing from the public.

### *3. History*

The original Civil Service Retirement Act of May 22, 1920 (effective August 20, 1920) provided a retirement system for Federal civilian employees in the executive branch who had permanent competitive status. It included certain limited groups of noncompetitive employees and regular employees of the District Government. About 330,000 employees were covered during the first year after passage of the act. Since that time there have been more than 150 laws passed by Congress and many Executive orders have been issued affecting this statute, but basically the fundamental objectives of the system have not changed. The act now covers all regular employees in or under the executive, judicial, and legislative branches of the Government and employees of the District of Columbia Government, except those excluded by law or regulation. Coverage is automatic, except for Members of Congress and congressional employees, who may elect coverage.

There have been six major amendments to the act which have had a vital effect on the development of the system. The most recent complete reenactment of the law was the act of July 31, 1956, under which the system now operates. A listing of these and other laws is included in the answer to question 8.

4. *Level of operations.* (See table 1.)

Program: Civil service retirement program.

Department or agency, and office or bureau: Civil Service Commission.

TABLE 1.—*Level of operations, fiscal years 1964-67*

Measure and unit	Fiscal year 1964 actual	Fiscal year 1965 actual	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program: 1 Number of active employees covered by program (millions).....	2.3	2.3	2.3	2.3
(b) Participants-individuals: 2 Average number of annuitants on the roll for fiscal year (thousands)....	667	710.3	752	794
(c) Federal expenditures (obligations incurred) trust funds (millions):				
For payment of claims and refunds.....	\$1,329	\$1,447	\$1,626	\$1,798
For administrative expenses (proposed for 1967).....				\$4.3
(d) Matching or additional expenditures (included in (c)).....				
(e) Number of Federal Government employees administering the program 3 (man-years).....	404	393	400	413
(f) Non-Federal personnel employed in program.....	0	0	0	0
(g) Other measures of level of performance 4 (number processed):				
Annuity and death claims.....	101,140	101,803	105,210	107,100
Refund claims.....	128,615	119,639	119,800	119,900
Claims for deposit.....	25,962	25,523	25,300	25,600
Inquiries.....	249,912	257,656	262,000	260,000
Maintaining a file of retirement records and related materials (millions).....	14	14	14	14

<sup>1</sup> All covered employees will be direct beneficiaries. Coverage represents approximately 92 percent of Federal civilian employees.

<sup>2</sup> Includes employee annuitants and survivors (such as widows and children) each counted as an individual.

<sup>3</sup> This number is for the Civil Service Commission only. Work performed by other agencies, such as Treasury Department disbursing activity and employing agency counseling of employees, is not included. Data on time spent by others is not available.

<sup>4</sup> Included are measurable major workload activities conducted by the Commission. Other functions performed by the staff represented in man-years for item (e) are not identifiable with specific measurable workloads.

5. *Estimated magnitude of program in 1970*

We do not anticipate any significant change will take place by 1970 in the level of Federal civilian employment. Hence, we can make no estimated revision in the total number of employees covered by the retirement system.

The average number of annuitants on the roll continues to increase each year and may be expected to reach approximately 900,000 by 1970. We are not in a position to make an accurate estimate at this time with respect to receipts and expenditures of the fund by that year as many factors enter into these computations; e.g., salary rates, benefit provisions, financing of the fund, etc. If these factors were held constant, both receipts and expenditures would nevertheless rise because of (1) interest earnings on the balance in the fund and (2) payments to a larger number of annuitants.

6. *Prospective changes in program orientation*

There are no acceptable specific legislative proposals pending at the present time which might have a significant effect on the retirement program, nor do we anticipate any organizational, administrative or other changes that may affect the condition under which the program would function in 1970. The subcommittee is, of course, aware that a thorough study has been underway by a Cabinet-level committee concerning all Federal retirement systems, their interrelationships with one another and with the social security system. This Com-



mittee was established by White House directive to develop a realistic and comprehensive framework for considering changes and improvements in existing civilian and military retirement programs, problems relating to the future financing of the retirement fund and benefits provided for the survivors of Federal employees. The Committee has made recommendations to the President, concerning retirement and fringe benefits for civilian and military personnel. As a result of these recommendations it is probable that some changes in program orientation and emphasis will take place which may well have an impact on future expenditures and financing of the retirement system.

#### *7. Coordination and cooperation*

The Civil Service Commission is responsible for the development, direction, coordination, and evaluation of the Government-wide retirement, life insurance, and health benefits programs. The carrying out of these responsibilities is delegated, with certain reservations, to the Commission's Bureau of Retirement and Insurance. This bureau provides leadership and technical guidance to Federal agencies that share in specific responsibilities for these programs by: (a) initiating and preparing instructional material through the Federal Personnel Manual, handbooks for agency, regional office and internal bureau use and other similar media; (b) developing and recommending Government-wide policies and programs; (c) analyzing proposed legislation; (d) initiating and conducting research and studies on all elements of these programs; (e) negotiating for group insurance contracts and health insurance carriers to provide the services authorized; and (f) consulting with specific agencies whose functions include services required in carrying out our programs. For example: adjudication of an application for disability retirement requires coordination and cooperation of the applicant's employing agency in submitting appropriate documents concerning not only his service history and retirement deduction account, but also medical statements and supporting statements from his supervisor, and in some cases additional medical examinations. The Bureau of Retirement and Insurance also makes arrangements through the Treasury Department for the actual disbursement of moneys to pay claims and issue monthly checks to annuitants. Careful coordination and adherence to strict deadlines is required to insure timely payment of claims. Further coordination takes place with the Treasury Department in arranging for conversion of invested trust funds to cash as needed for the payment of claims.

Concurrently with the processing of the retirement claim, arrangements are made for the continuance of life insurance and health benefits coverage during retirement, as provided by law. In the case of health benefits, a deduction may be made from the annuity check, and premiums paid to the appropriate carrier of health insurance. The bureau is in constant communication with the group life insurance contractor (Metropolitan Life Insurance Co.) and health benefits carriers (Blue Cross-Blue Shield, Aetna Life Insurance Co., etc.) concerning matters of individual coverage, payments of premiums, questions concerning payments of claims by the contractors, and required reports. Arrangements also are being made with the Social Security Administration for withholding premiums of civil service annuitants entitled to supplemental medical benefits under the medicare legislation administered by that agency.

### 8. *Laws and regulations*

Reference to specific laws, regulations, and other material relating to the retirement program are contained in the following listed items:

(a) Annual Report of the Civil Service Commission for fiscal year 1964, retirement, life insurance and health benefits programs.

(b) Forty-third Annual Report of the Board of Actuaries (H. Doc. No. 48) as of June 30, 1963.

(c) Independent Offices Appropriation Act, fiscal year 1966.

(d) Organic Retirement Act (Public Law 215, 66th Cong., approved May 22, 1920).

(e) Current Retirement Act, as amended, and regulations (Federal Personnel Manual Supplement 831-1, appendixes E, F, and G).

(f) Survey of Income of Civil Service Annuitants, transmitted to Committee on Post Office and Civil Service, House of Representatives, March 19, 1965.

(g) History of Civil Service Retirement System which will be included in the annex to House Document No. 402.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

The economic effects of various aspects of the retirement program, specifically payments to individuals which become personal income, may best be summarized by referring to the results of a recent survey of income of civil service annuitants conducted in January 1965. This study covered employee annuitants only (survivors were excluded) and was made by sampling the 1964 income of these individuals. The object of the survey was to develop facts on total annual income, income by source, and the relationship between total income, civil service annuity amount, years of service, and average salaries. The survey shows that civil service annuity constitutes 61 percent of these annuitants' total income for 1964; their average annuity is \$2,212; other income is \$1,400; and average total income is \$3,612.

Of the annuitants surveyed, 23.9 percent have civil service annuity only, averaging \$2,542. The remaining 76.1 percent have civil service annuity averaging \$2,108; other income, \$1,840; and total income, \$3,948.

Another study made recently may be of interest to the committee in evaluating the impact of "fringe benefits" costs as a contribution to the personal income or prospective personal income of Federal employees. This study will be published in the very near future by the Bureau of Labor Statistics as a bulletin entitled "Supplementary Compensation for Nonproduction Workers, Selected Employer Expenditures and Practices, 1963." The Bureau of the Budget and the Civil Service Commission requested the Bureau of Labor Statistics to conduct a study of supplementary compensation in private industry which could be analyzed in conjunction with the BLS salary survey and used in comparing rates of salary fixed by statute for Federal employees, taking into account the total compensation package.

### 10. *Economic classification of program expenditures.* (See tables 2 and 3.)

Program: Civil service retirement program.

Department or agency, and office or bureau: Civil Service Commission.

TABLE 2.—Trust fund expenditures for fiscal year 1965

Category	Federal Government expenditures (millions)	Remarks
Transfer payments to individuals.....	\$1, 438	Payment of claims and refunds from trust fund.

NOTE.—These Federal expenditures are classified in the national income accounts as transfer payments, for which no current output or services have been rendered. These are payments to individuals, in cash, for which no contribution to national production is made during the time period under consideration. Although these transfer payments do not directly enter into gross national product calculations, they do enter into the income stream and have an impact on national output when respent by the recipient.

In further explanation of the relationship of Federal receipts and expenditures on a national income basis, the following statement is furnished covering the status of the retirement fund:

TABLE 3.—Economic classification of program expenditures for fiscal year 1965

	Fiscal year 1965 actual (millions)	Remarks
Balance of fund brought forward:		
U.S. securities (par).....	\$14, 279	
Cash (unexpended balance).....	106	
Total.....	14, 386	
Cash income during year:		
Deductions from employees' salaries.....	1, 050	Intragovernmental transaction.
Payments from other funds:		
Employing agency contribution.....	1, 050	Trust fund receipts which are administrative budget expenditures.
Federal contributions.....	65	
Voluntary contributions, donations, service payment, etc.....	16	
Interest and profits on investments.....	482	Trust fund receipts.
Total.....	2, 664	
Cash outgo during year:		
Payment of claims.....	1, 308	Trust fund expenditures.
Refunds.....	130	
Total.....	1, 438	
U.S. securities (par).....	15, 492	
Cash (unexpended balance).....	120	
Balance of fund, end of year.....	15, 612	

NOTE.—Because of rounding, sums of individual items may not equal totals.

## FEDERAL EMPLOYEES' HEALTH BENEFITS PROGRAMS

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The Federal employees' health benefits programs provide a system of health insurance for the Federal Government's active and retired civilian employees, their spouses and children. These programs give financial protection against the costs of illness of covered persons.

#### 2. Operation

Overall responsibility for administration of these health benefit programs rests with the Civil Service Commission in its headquarters office in Washington, D.C. The Commission's responsibilities include: (a) Negotiating with insurance underwriters, employee organizations,

and other health benefits carriers to provide the health benefits authorized; (b) prescribing the regulations, rules, procedures, and forms for the Commission, carriers, employing agencies, and enrolled employees and annuitant; (c) arranging for eligible employees, retirees, and their survivors to receive appropriate brochures, notices, and information concerning their rights, privileges, and benefits; (d) withholding and depositing subscription charges or making additions to annuity payments of retirees and survivors; (e) determining that annuitants enrolled in private plans continue to be eligible to receive Government contributions; (f) receiving, depositing in the Treasury, and accounting for withholdings from employees and annuitants, as well as Government and agency contributions to the fund, and maintaining necessary control accounts and records; (g) authorizing payments from the health benefits funds to the carriers underwriting the program; (h) developing and maintaining financial and statistical data for management use, and for annual reporting to Congress; (i) auditing records of the carriers and insurance underwriters to insure conformity with the law and with contracts and agreements.

Individual health benefits claims are paid by the health insurance carriers underwriting these programs. Federal agencies are delegated health benefits responsibilities with respect to their own active personnel, such as determining eligibility for coverage, counseling and advising employees, withholding from employees' salaries and transmitting withholdings and agency contributions to the Commission for deposit in the Treasury, maintaining records and reporting changes in coverage to the health insurance carriers, etc. Agencies usually decentralize a large part of these functions to their local operating offices.

### *3. History*

The Federal Employees' Health Benefits Act of 1959 (Public Law 86-382, 73 Stat. 708) authorizes the program of health insurance for active employees, qualified annuitants retired since its effective date, July 1960, and their family members. The act established an employees' health benefits fund in the Treasury. The fund is available for (1) payment of subscription charges to health insurance carriers for the cost of protection and (2) payment of expenses incurred by the Commission in administering the act. Some 2 million employees and over 200,000 annuitants are participating in this program.

All covered employees have a choice between two types of governmentwide plans: (1) a service-benefit type plan; and (2) an indemnity-benefit type plan. Many employees may also choose from among (1) employee organization plans, (2) group practice prepayment plans, or (3) individual-practice prepayment plans. Most plans offer a further choice between two options, thus offering two levels of benefits. Contributions by participants are based on the type of enrollment (self or family) plan, and option they select. New enrollments and changes in existing enrollments are permitted upon the happening of certain events, e.g. marriage. Additionally, employees are by regulation guaranteed an unrestricted opportunity (i.e. an open season) to enroll or change an existing enrollment at least once every 3 years. The next general open season will be scheduled for sometime before February 15, 1968.

The Government contribution to the cost of any plan is at the minimum amount authorized by law, including an add-on for adminis-

trative expenses and a contingency reserve. In no case does the Government contribution exceed 50 percent of the total charge for any plan. An amount equal to 3 percent of the employee and Government contributions toward each plan is set aside in the fund to provide a contingency reserve for that plan. The contingency reserve is used to defray future increased rates, to reduce contributions, or to provide increased benefits. In addition, an amount equal to 1 percent of contributions is set aside for administrative expenses incurred by the Commission in the administration of the act. An amendment to section 8(b) of the act provides that the Commission, from time to time and in such amounts as it considers appropriate, may transfer unused funds for administrative expenses to the contingency reserves of the plans then under contract. Since enactment, there have been a total of six amendments to the act, but basically the fundamental objectives have remained unchanged.

The Retired Federal Employees' Health Benefits Act of 1960, 5 U.S.C. 3051-3060, authorizes the program of health insurance for qualified annuitants separated before July 1960, and their family members. The act established a retired employees' health benefits fund in the Treasury. The fund is available for (1) payment of subscription charges to the carrier of a health insurance plan contracted by the Commission, (2) contributions added to the annuities of retired employees and survivors who carry qualified private health insurance, and (3) payment of administrative expenses incurred by the Commission.

As of June 30, 1965, there were approximately 225,000 participants in this second program. Enrollees in the Government-sponsored uniform plan numbered over 123,000, and in private plans the enrollment was about 103,000. All qualified retired employees and survivors may elect to enroll in and receive a contribution to the Government-sponsored uniform plan (for which the Commission has contracted with the Aetna Life Insurance Co.), to receive a Government contribution toward payment of other qualified health insurance they may have, or not to enroll under the act. Enrollees in the Government-sponsored uniform plan initially had three choices: (1) "Basic" health coverage, providing first-dollar hospital and surgical benefits; (2) "major medical" health coverage, providing protection against catastrophic medical expenses; and (3) both "basic" and "major medical" coverages. However, "major medical" coverage is not now available to those retirees and survivors who failed to elect it on initial enrollment. The amounts paid by annuitants enrolled in the uniform plan are withheld from their monthly annuity payments and together with the Government contribution are paid as premiums to the Aetna Life Insurance Co. Those who have private health insurance receive a Government contribution, which is added to their monthly annuity, equal in amount to that fixed for self only or family enrollment in the uniform plan.

The amount of Government contribution toward enrollments of annuitants depends on the type of enrollment (self only or family) and the amount specified by the Commission, within a range authorized by law, as the Government's contribution toward their subscription charges. This amount is currently specified at \$3.50 a month for self only and \$7 a month for a family enrollment.

4. *Level of operations.* (See table 1.)

Program: Federal employees' health benefits programs.

Department or agency, and office or bureau: Civil Service Commission.

TABLE 1.—*Level of operations or performance, fiscal years 1964–1967*

Measure and unit	Fiscal year 1964 actual	Fiscal year 1965 actual	Fiscal year 1966 esti- mate	Fiscal year 1967 esti- mate
(a) Magnitude of program <sup>1</sup> (millions).....	6.8	7.1	7.4	7.6
Number covered (millions):				
Active employees.....	2.0	2.0	2.0	2.0
Annuityants.....	.3	.4	.5	.5
Dependents.....	4.5	4.7	4.9	5.1
(b) Participants (individuals): <sup>2</sup>				
Number enrolled (millions):				
Self-only plan.....	0.6	0.6	0.6	0.6
Family plan.....	1.7	1.8	1.9	1.9
(c) Federal expenditures (millions):				
Obligations incurred (from trust revolving funds):				
Payment of subscription charges to carriers and individuals.....	\$407.1	\$486.1	\$557.4	\$596.8
Administrative expenses of CSC.....	\$1.4	\$1.3	\$1.5	\$1.5
(d) Matching or additional expenditures (included in (c)).....				
(e) Number of Federal Government employees administering the program (man-years) <sup>3</sup> .....	130	127	134	130
(f) Non-Federal personnel employed in program.....	(4)	(4)	(4)	(4)
(g) Claims paid to individuals by health benefits carriers: <sup>4</sup>				
Number of recipients (millions).....	1.5	1.8	(4)	(4)
Amount of claims paid (millions).....	\$357.7	\$412.1	(4)	(4)

<sup>1</sup> All covered employees, annuityants, and dependents will be direct beneficiaries. Coverage of active employees represents about 90 percent of eligible Federal civilian employees.

<sup>2</sup> The number of individuals, active and retired employees or survivors covered, by type of plan (excludes dependents).

<sup>3</sup> This number is for Civil Service Commission only. Time spent on work performed by other agencies, such as employee counseling, withholding contributions, etc., and Treasury Department disbursing activity not available.

<sup>4</sup> Data not available.

<sup>5</sup> Excludes a small amount paid by private carriers under the 1960 act.

5. *Estimated magnitude of program in 1970*

With respect to level or magnitude of the programs in 1970, it is not expected that any significant change will occur in Federal civilian employment which could affect enrollments of active employees. Under normal circumstances, growth in the number of annuityants retaining coverage in the active employee program will be largely offset by a decline in the retired program due to deaths, with no significant increase in size.

6. *Prospective changes in program orientation*

Based on past experience, industry trends, and rising medical costs, there is a strong probability of higher subscription charges, with Government bearing a larger share of the cost by 1970. Experience also indicates the probability of broader benefit coverage, particularly in the area of mental or nervous disorders. At this point, however, it is impossible to know the impact that medicare legislation under social security will have on other health insurance plans, both public and private, by 1970.

7. *Coordination and cooperation.* (See retirement program for response to this question.)

### 8. *Laws and regulations*

References to specific laws, regulations, and other material relating to the health benefits programs are contained in the following items: (a) annual report for fiscal year 1964, retirement, life insurance, and health benefits programs; (b) Independent Offices Appropriation Act, fiscal year 1966; (c) Current Federal Employees' Health Benefits Act, as amended, and Regulations (Federal Personnel Manual Supplement 890-1); and (d) Retired Federal Employees' Health Benefits Act, as amended, and regulations.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

(a) In fiscal year 1965 the health benefits programs benefited 1.8 million employees, annuitants and their dependents to the extent of \$412.1 million,<sup>1</sup> while all the 2 million enrollees participating in the programs contributed \$329.4 million<sup>2</sup> with respect to 7.1 million individuals covered under them. For the 1.8 million who benefited the programs provided very substantial financial help in meeting the cost of illness.

(b) To the extent that health benefits coverage improves the health and morale of employees, the program has a positive effect on employee productivity. Also, the availability of an employee health benefits program to which the Government, as an employer, makes a contribution is an aid in attracting and retaining new employees.

(c) The programs are carried out through private insurance organizations, employee organizations, and individual and group-practice medical groups. These organizations in fiscal year 1965 received over \$479.5 million in premiums and subscription charges, most of which was used for payments to providers of medical care and related items (hospitals, physicians, pharmacists, etc.), and the remainder for underwriting and other charges, and reserves. These moneys, of course, were spent throughout the country—a tiny part in foreign countries.

(d) Undoubtedly, the funds flowing out of the programs to insurance carriers, hospitals, physicians, etc., have a stabilizing influence on the various segments of the economy affected.

(e) The basic purposes of the programs are (1) the maintenance of a desirable level of health in the Federal civilian labor force, and (2) to encourage and assist employees to obtain the medical care they and the members of their families need.

(f) Tables C-5 and D-5 in the fiscal year 1964 annual report on the health benefits programs indicate the geographic distribution of claims paid.

### 10. *Economic classification of program expenditures.* (See table 2.)

Program: Federal employees' health benefits programs.

Department or agency, and office or bureau: Civil Service Commission.

<sup>1</sup> Exclusive of benefits paid under private plans under the 1960 act.

<sup>2</sup> Exclusive of retired employee payments to private plans under the 1960 act.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal expenditures for health benefits programs:	
Administrative budget funds:	
Government contributions to Federal employees health benefits funds for retired employees and annuitants:	
1959 act.....	12.2
1960 act.....	14.8
Subtotal.....	27.0
Contributions by Federal agencies to employees' health benefits fund.....	138.7
Trust revolving funds:	
Expenditures for employee health benefits (gross):	
1959 act.....	455.3
1960 act.....	26.7
Subtotal.....	482.0
Receipts from employee and Government contributions:	
1959 act.....	-464.6
1960 act.....	-27.5
Subtotal.....	-492.1
Net expenditures from trust revolving funds.....	-10.1
Transfer payments to insurance carriers—subscription charges:	
1959 act.....	459.1
1960 act.....	20.4
Subtotal.....	479.5
Transfer payments to annuitants with private health insurance plans (1960 Act).....	6.6
Total <sup>1</sup> .....	486.1

<sup>1</sup> NOTE.—These Federal expenditures are classified in the national income accounts as transfer payments.

## FEDERAL EMPLOYEES' GROUP LIFE INSURANCE

## PART I. DESCRIPTION OF THE PROGRAM

## 1. Objectives

The Federal Employees' Group Life Insurance program provides term life insurance for Federal employees under a group policy. Its objective is to make available an immediate financial protection in the event of death or dismemberment of covered employees, at a time when financial needs are usually most urgent.

## 2. Operation

Overall responsibility for administration of the life insurance program rests with the Civil Service Commission. This program is conducted primarily in the Commission's headquarters offices in Washington, D.C. The Commission's responsibilities include: (a) purchasing a group policy from a private insurance company to provide the benefits authorized, (b) receiving, depositing in the Treasury and accounting for all employee withholdings and agency contributions to the fund, (c) authorizing payments of insurance premiums from the fund to the company underwriting the program,



(d) prescribing the policies, rules, regulations, and operating procedures for employing agencies and the Commission, (e) determining whether retiring employees are eligible to continue their group life insurance coverage and (f) developing and maintaining financial and statistical reporting data.

Individual insurance claims are paid by the administrative office of the insurance companies underwriting the program. The primary underwriter is the Metropolitan Life Insurance Co. of New York and approximately 250 other insurance companies participate in the program as reinsurers, as provided in the Federal Employees' Group Life Insurance Act.

Federal agencies are delegated responsibilities for the insurance program with respect to their own personnel, such as determining eligibility for coverage, certification of insurance status, counseling and advising employees, withholding from employees' salaries and transmitting withholdings and agency contributions to the Commission for deposit in the Treasury, maintaining records, etc. Agencies usually decentralize a large part of these functions to their local operating offices.

The life insurance program is classed as a contributory system because employees share in the expense of the benefits to which they may become entitled. The amount of insurance that an employee may carry is limited to the amount of his annual salary, raised to the next higher multiple of \$1,000, with a maximum coverage of \$20,000. Participation in the program is voluntary and over 95 percent of eligible employees have elected coverage. Employees pay as their share of the premium cost 25 cents each biweekly pay period for each \$1,000 of insurance. The Government contributes one-half of the amount contributed by employees. These amounts are transferred from the employing agency accounts and appropriations to the employees' life insurance fund in the Treasury. Under prescribed conditions, life insurance is provided free to retired employees but the amount of insurance is reduced 2 percent each month after retirement or after age 65, whichever is later, until it reaches 25 percent of the original amount.

Benefits are paid in case of death and for accidental loss of limb or sight; benefits are doubled if death is accidental. All claims for benefits are paid directly by the insurance company. The Commission makes payments to the insurance company for the premium cost of providing these benefits from the life insurance trust revolving fund. Since these are revolving funds, with receipts offsetting expenditures, only the net effect of these transactions is reflected as Federal program expenditures.

### *3. History*

The life insurance program has been in existence for over 10 years. The original act, Public Law 83-598 (5 U.S.C. 2091), was approved August 17, 1954. With the exception of certain employees excluded by law or regulation, mainly temporary or part-time employees, all employees of the Federal Government are eligible to participate in the program, including those who currently retire on an immediate annuity with at least 12 years of service or who retire on disability. Since enactment, there have been 12 amendments to the act, but basically the fundamental objectives of the program have not changed. A listing of these laws is given in response to question 8.

#### 4. Level of operations. (See table 1.)

Program: Federal employees' group life insurance.

Department or agency, and office or bureau: Civil Service Commission.

TABLE 1.—Level of operations or performance, fiscal years 1964—67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program: Life insurance in force (billions).....	<sup>1</sup> \$18.1	<sup>1</sup> \$18.5	\$18.9	\$19.3
(b) Participants (individuals):				
Active employees <sup>2</sup> (millions).....	2,255	2,255	2,255	2,255
Annuitants <sup>3</sup> (millions).....	0.3	0.35	0.38	0.42
(c) Federal expenditures (millions):				
Obligations incurred (from trust revolving funds):				
Payment of premium to contractor.....	\$128.2	\$167.0	\$157.1	\$147.0
Administrative expenses of CSC.....	\$0.3	\$0.3	\$0.3	\$0.3
(d) Matching or additional expenditures (included in (c)).....				
(e) Number of Federal Government employees administering the program (man-years) <sup>4</sup> .....	32	32	33	33
(f) Non-Federal personnel employed in program.....	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
(g) Claims paid to individuals by insurance carriers:				
Number of recipients (thousands).....	21.8	23.4	( <sup>5</sup> )	( <sup>5</sup> )
Amount of claims paid (millions).....	\$120.9	\$128.9	( <sup>5</sup> )	( <sup>5</sup> )

<sup>1</sup> Estimate.

<sup>2</sup> All covered employees or their survivors will be direct beneficiaries. Coverage represents approximately 95 percent of eligible Federal civilian employees.

<sup>3</sup> The number of annuitants covered increases each year as active employees retire and continue their insurance.

<sup>4</sup> This number is for Civil Service Commission only. Time spent on work performed by other agencies, such as employee counseling, withholding contributions, etc., and Treasury Department disbursing activity not available.

<sup>5</sup> Data not available.

#### 5. Estimated magnitude of program in 1970

We know of no specific changes that would affect the level or magnitude of this program in 1970. It is expected that Federal civilian employment will not change significantly from the current level. Annuitants continuing their coverage of life insurance will, of course, increase in number at approximately the same rate as experienced in the past, but this increase is not significant in size.

#### 6. Prospective changes in program orientation

There is a possibility of enactment in 1966 of pending legislation which would improve some aspects of the Federal employees' group life insurance program. As passed by the House of Representatives H.R. 6926 would have the effect of raising the life insurance maximum from \$20,000 to \$30,000 and providing for the strengthening of program financing. Senate action, when taken, will probably involve some additional features, one of which would be a desirable provision for extending insurance coverage to retired employees upon reemployment in the Government.

#### 7. Coordination and cooperation. (See retirement program for response to this question.)

#### 8. Laws and regulations

References to specific laws, regulations, and other material relating to the life insurance program are contained in the following listed items:

(a) Annual report for fiscal year 1964, retirement, life insurance, and health benefits programs.

(b) Independent Offices Appropriation Act, fiscal year 1966.

(c) Current Federal Employees' Group Life Insurance Act, as amended, and regulations (Federal Personnel Manual Supplement 870-1).

A list of laws follows:

*U.S. Civil Service Commission Life Insurance Act and amendments*

Public Law No.	Date of act	Remarks
83-598-----	Aug. 17, 1954	Original act.
83-763-----	Sept. 1, 1954	Coverage, official reporters of the Senate and their employees.
84-356-----	Aug. 11, 1955	General amendments.
84-541-----	May 28, 1956	Continued coverage while earning BEC.
84-881-----	Aug. 11, 1956	Termination of insurance upon entering military service.
84-935-----	Aug. 2, 1956	Coverage, Gallaudet College.
85-377-----	Apr. 11, 1958	Beneficial associations.
86-377-----	Sept. 23, 1959	General amendments.
86-91-----	July 17, 1959	Exchange teachers, overseas dependents' schools.
86-568-----	July 1, 1960	Coverage, ASC county committee employees.
87-611-----	Aug. 28, 1962	Escheat to fund.
88-531-----	Aug. 31, 1964	Coverage, U.S. commissioners.
88-631-----	Oct. 6, 1964	Coverage, temporary District of Columbia teachers.

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

Quantitative data showing the effect on personal income of recipients of life insurance benefits is not available. However, the amount of the life insurance paid the beneficiary on the death of the employee has the effect of continuing his salary (without the usual deductions) for another year, or for 2 years in the case of accidental death. Although not intended as a substitute for the regular individual insurance program which reasonably prudent persons customarily maintain, Federal employees' group life insurance is considered as providing a significant added low-cost measure of family security to help adjust to the loss of income resulting from the death or dismemberment of a wage earner. Table B-3 (pp 16 and 17) in the fiscal year 1964 annual report on the group life insurance program indicates the geographic distribution of claims paid.

10. *Economic classification of program expenditures.* (See table 2.)

Program: Federal employees' group life insurance.

Department or agency, and office or bureau: Civil Service Commission.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

(In millions of dollars)

Federal expenditures for life insurance program:	
Administrative budget funds: Government contributions to Federal employees' life insurance fund by Federal agencies-----	54.5
Trust revolving funds:	
Gross expenditures for life insurance-----	169.2
Applicable receipts from employee and agency contributions..	—195.6
Net expenditures from trust revolving funds-----	—26.4

NOTE.—In National income terminology the benefit payments are classified as a transfer payment to individuals. In 1965 these were \$128.9 million. See Question 4.

## EDUCATION AND TRAINING PROGRAMS

## PART I. DESCRIPTION OF THE PROGRAM

## 1. Objectives

The Civil Service Commission promotes and coordinates programs, and training operations thereunder, in carrying out the declared policy of Congress as stated in section 2 of the Government Employees Training Act of 1958—

\* \* \* (1) that, in order to promote efficiency and economy in the operation of the Government and provide means for the development of maximum proficiency in the performance of official duties by employees thereof, to establish and maintain the highest standards of performance in the transaction of the public business, and to install and utilize effectively the best modern practices and techniques which have been developed, tested, and proved within or outside of the Government, it is necessary and desirable in the public interest that self-education, self-improvement, and self-training by such employees be supplemented and extended by Government-sponsored programs, provided for by this act, for the training of such employees in the performance of official duties and for the development of skills, knowledge, and abilities which will best qualify them for performance of official duties;

(2) that such programs shall be continuous in nature, shall be subject to supervision and control by the President and review by the Congress, and shall be so established as to be readily expandable in time of national emergency;

(3) that such programs shall be designed to lead to (A) improved public service, (B) dollar savings, (C) the building and retention of a permanent cadre of skilled and efficient Government employees, well abreast of scientific, professional, technical, and management developments both in and out of Government, (D) lower turnover of personnel, (E) reasonably uniform administration of training, consistent with the missions of the Government departments and agencies, and (F) fair and equitable treatment of Government employees with respect to training \* \* \*.

## 2. Operations

To accomplish its Federal training and development responsibilities more efficiently and systematically, the Civil Service Commission set up the Office of Career Development in 1960. This office was assigned the functions of coordinating, conducting, and planning training and, responsive to Presidential urging, the function of executive utilization.

In each of the Civil Service Commission's 10 regions, beginning in January 1962, training and career development activities were assigned full time to an employee development officer.

Functions now managed by the Office of Career Development are as follows:

(a) *At headquarters.*—

- (1) Coordination of training among Federal agencies.
- (2) Promotion of improved training in Federal agencies.
- (3) Consultation among Federal agencies and outside training resources, including universities, for improved use and relationships.
- (4) Conduct of interagency training, usually on a reimbursable basis.
- (5) Incentive awards promotion, improvement, and reporting.
- (6) Career development planning.
- (7) Executive development and utilization.

(b) *In regions.*—The employee development officer in each region is responsible, with technical guidance from the Office of Career Development, for program execution in the field of the first four functions listed above.

In addition, the programs of the Office of Career Development are coordinated with the overall Civil Service Commission program of personnel management.

With rare exceptions, the training programs of the Office of Career Development are conducted solely for Federal Government employees.

### *3. History*

Under the Government Employees Training Act, the Federal Government sponsors a variety of education and training programs for its civilian employees. This landmark law, enacted in 1958, recognized a need for continuous programs to update and upgrade the training of Government personnel. The U.S. Civil Service Commission was given the responsibility of promoting and coordinating education and training programs of the various Federal agencies. To carry out this responsibility, the Commission established the Office of Career Development (OCD) in 1960.

The initial program emphasis of OCD was placed upon the development and conduct of management training courses to meet pressing needs in (1) adapting to automatic data process technology, (2) updating and upgrading of management skills in financial and personnel management, (3) broadening the managerial outlook of middle managers, and (4) providing an opportunity for an exchange and expansion of skills and concepts among top level Federal executives.

Also, OCD began its program in coordinating Federal training efforts by (1) inventorying Federal training needs, and (2) examining the utilization of the widest possible variety of training resources—from short courses in management training to yearlong educational experiences at universities. As needs have been identified and resources coordinated, OCD has responded in the following way:

In an effort to communicate the Government's training needs to the academic community, the Civil Service Commission conducted a university-Federal agency conference on career development at Princeton University in 1961 and another at the University of California at Berkeley in 1962. Early in 1964 the Commission sponsored a conference of senior Federal administrators in Washington to explore ways of using university resources more effectively in the training, education, and career development of Government employees. In 1965 a university-Federal agency conference on training of Federal scientists and engineers was held at Purdue University.

In 1962, to increase the Commission's capabilities to meet training responsibilities, it established and filled full-time positions in each of its 10 regions for the coordination of employee development programs. These regional coordinators have promoted and coordinated interagency training programs, ascertained the needs for interagency management training, located and developed resources to meet those needs, and provided consultation to Federal field activities on career development and training programs.

In 1963 the Civil Service Commission established the first Executive Seminar Center at the U.S. Merchant Marine Academy, Kings Point, N.Y. With the establishment of the Center, the Commission further expanded the scope of Government-wide interagency training. It offered career executives GS 14-15 in all Federal agencies an opportunity to increase their understanding of significant and continuing

Government responsibilities and operations. The Commission plans to open a second center on the west coast this fall.

During fiscal year 1964, the Civil Service Commission found itself called upon, increasingly, to provide training advice and assistance to various Government agencies in such categories as:

- (a) Assisting agencies to review and assess their career development and training plans and programs;
- (b) Advising agencies on the administration of their training or career development programs, including needs determination, organization of training service, and evaluation of training;
- (c) Assisting agencies in the establishment of training programs or career development systems;
- (d) Conducting training programs especially for individual agencies.

The combined efforts of OCD and regional coordinator activity increased the number of interagency training programs from fewer than 10 in 1959 to over 1,300 in 1965 and provided training opportunities for an estimated 40,000 Federal employees by 1965. They developed a network of about 120 off-campus study centers throughout the Nation where an estimated 30,000 employees studied in 1965. In addition, an estimated 20,000 employees are enrolled in evening or part-time study on college and university campuses each year.

#### 4. Level of operations. (See table 1.)

Program: Education and training programs.

Department or agency, and office or bureau: Civil Service Commission; Office of Career Development.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program, Civil Service Commission only (number of trainees).....	14, 699	15, 617	16, 000	17, 000
(b) Federal finances, Civil Service Commission:				
Conducting training programs (obligations)....	\$815, 800	\$1, 085, 000	\$1, 292, 000	\$1, 732, 000
Coordinating training programs (obligations)....	\$396, 200	\$391, 000	\$416, 000	\$414, 000
(c) Federal finances:				
Out-service training <sup>1</sup> (obligations).....	\$33, 870, 000	\$33, 650, 000	\$33, 700, 000	\$33, 800, 000
Interagency training <sup>2</sup> (obligations).....		\$510, 000	\$650, 000	\$650, 000
(d) Number of Federal Government employees administering the Civil Service Commission activity (man-years).....	81.2	99.3	103	122

<sup>1</sup> Total obligated by all Federal agencies (under the authority of the Government Employees Training Act) for training given to Federal employees at non-Government institutions.

<sup>2</sup> Training given by the General Services Administration Institute, the only formal interagency training program outside of the Civil Service Commission.

#### 5. Estimated magnitude of program in 1970. (See table 2.)

The Civil Service Commission does not anticipate any significant increase in its educational and training activities. The reimbursable training program will shift in response to agency needs—(1) new areas will be entered, and (2) established responses will be dropped if the need ceases to exist. Unless there is a significant new area opened (such as ADP training in the early 1960's or PPBS in this fiscal year), which requires a major staff buildup, such shifting changes should be handled with limited staff additions. The Commission feels that greater returns can be obtained from existing staff resources

by increasing the emphasis upon its coordinating role. For these reasons, the program level is shown in table 2, below, as not changing significantly by 1970. However, other forces which, potentially, may have a tremendous impact upon program levels in Federal training and education will be discussed in response to question No. 6.

Other Federal agencies have maintained a plateau of expenditures for outservice training at between \$33 and \$34 million since fiscal year 1963. This plateau was reached after a sharp increase which followed Commission promotional efforts in fiscal year 1962. No significant change in the level of this activity is anticipated, unless it would be prompted by a major technological change, national emergency, or renewed Commission promotional activity.

Program: Education and training programs.

Department or agency, and office or bureau: Civil Service Commission; Office of Career Development.

TABLE 2.—*Level of operations or performance, fiscal year 1970*

Measure	Unit	Fiscal year 1970
(a) Magnitude of program (CSC only) .....	Number of trainees....	18, 000
(b) Federal finances (Civil Service Commission):		
Conduction training programs .....	Obligations .....	\$1, 750, 000
Coordinating training programs .....	do .....	\$425, 000
(c) Federal finances:		
Out-service training <sup>1</sup> .....	do .....	\$34, 000, 000
(d) Number of Federal Government employees administering the CSC activity.	Man-years .....	125

<sup>1</sup> Total obligated by all Federal agencies (under the authority of the Government Employees Training Act) for training given to Federal employees at non-Government institutions.

## 6. *Prospective changes in program orientation*

### (a) *Pending legislation.*—

† S. 561—Intergovernmental cooperation bill: If passed, this would give authority to all Federal agencies to accept State and local Government employees for Federal training programs relevant to State-local needs.

Educational legislation: Educational bills to be considered in this session of Congress may have provisions which will necessitate the development of Commission training responses or coordinating activities.

Other legislation: Training responses have been and may be developed to speed executive branch implementation of congressional legislation; for example, the Commission developed training programs for Federal executives related to recent civil rights legislation.

(b) *Changes in environmental conditions.*—In this time of social change and ferment, training activity is subject to many potential environmental forces which can effect significant changes in program emphasis. Major factors that are being examined in terms of impacts upon training program plans are:

- (1) increased emphasis on manpower development.
- (2) evolving relationships between Federal, State, and local government jurisdictions.
- (3) expanding concern for adult and continuing education.
- (4) expansion to meet national emergencies.
- (5) elements of technological change.

### 7. *Coordination and cooperation*

Since a significant portion of the Civil Service Commission's education and training activity is directed to coordination and cooperation with other governmental jurisdictions and non-Government institutions, the response to this question will treat (ii) before (i).

(ii) Organizational arrangements, operating agreements, administrative regulations or procedures, and other devices or methods developed to promote coordination and cooperation:

(a) and (b) Not applicable.

(c) *With other Federal Government departments or agencies.*—

1. Encouraging the opening of new facilities or increasing the availability of existing Federal training facilities for Government-wide training.

2. Promoting and coordinating interagency training activity by:

(a) publishing regulations on interagency training activity in chapter 410 of the FPM;

(b) publishing and distributing annual interagency training programs bulletins in the central and regional offices;

(c) publishing and distributing annual and monthly interagency training programs calendars in the central office; and

(d) promoting the concepts of interagency training through publications and presentations.

(d) and (e) *With State and local governments.*—The Commission lacks legislative authority to receive reimbursement for training services provided to State and local officials except when contracted for through another Federal agency. However, lacking a third party, a decision of the Comptroller General (B-151540) allows the Commission to accept State and local officials on a space available basis, with any funds received being deposited in the Treasury. Under this authorization the regions and central office of the Commission have accepted a limited number of State and local government employees in training courses in the area of personnel management.

(f) *With foreign governments or international organizations.*—

1. Foreign nationals: The Commission has responded to State and AID requests for providing personnel management guidance to foreign nationals through (a) series of 1-hour conferences for foreign visitors with Commission experts in the foreign visitors' area of interest or (b) attendance at formal training programs. By using section 402 of the U.S. Information and Educational Exchange Act, it is possible for the Civil Service Commission to train foreign nationals and accept reimbursement for the training provided.

2. Staff members of international organizations: The Civil Service Commission can provide reimbursable training for staff members of international organizations through the legislative authority contained in section 607 of the Foreign Assistance Act.

(g) *With nonprofit organizations or institutions.*—Promoting and coordinating use of non-Government resources by—

1. permitting establishment of off-campus study centers which meet the needs of more than one agency in areas of Government-wide significance;

2. conducting university-Federal agency conferences to sharpen perceptions about the educational needs of the Federal service and to suggest lines of action to serve these needs;



3. assisting in designing curriculums which will enable universities to meet the educational needs and professional requirements of Federal employees;

4. cooperating with foundations in the design, conduct and evaluation of non-Government programs for Federal employees and Federal programs for non-Government employees; and

5. on a limited basis, extending Commission cosponsorship to nonprofit, non-Government organizations.

(i) Aspects of the program in which opportunities for coordination and cooperation arise or might be created.

(a) and (b) Not applicable.

(c) *With other Federal Government departments or agencies.*—The possibility of conducting an inventory of existing Federal facilities in order to:

1. Determine the extent of training resources and areas of substantive knowledge and training competence;

2. Match available Federal training facilities with unmet Government-wide training needs; and

3. Negotiate with agencies possessing appropriate facilities to provide training for the identified clientele.

(d) and (e) *With State and local Governments.*—The opportunity to provide interjurisdictional training in response to State and local requests, by seeking statutory authorization for all Federal agencies to extend current Federal training programs and services to State and local employees on a reimbursable basis, when such programs will facilitate the administration of State and local governmental activities or contribute to the improvement of public service. (Title III of the intergovernmental cooperation bill (S. 561), introduced in 1965, will, if enacted, grant reimbursable training authority to all Federal agencies.)

(f) *With foreign governments or international organizations.*—

1. The possibility of the Commission, State Department and AID increasing responses by Federal agencies to appropriate training requests from foreign governments or international organizations.

2. The possibility of advising and encouraging other agencies to create programs in areas of their prime mission responsibilities for these clientele.

3. The possibility of serving as a contractual agent to provide training for the clientele groups of appropriate technical assistance agencies (USIA, AID, etc.) in areas where the Commission has special expertise or facilities.

(g) *With nonprofit organizations or institutions.*—Develop a systematic approach for identifying and promoting the use of university and foundation training which is especially designed or suitable for Federal personnel.

## 8. Laws and regulations

(a) Government Employees Training Act, 1958.

(b) Bureau of the Budget Circular No. A-48, February 13, 1959.

(c) Special report on Federal programs, volume III, No. 2, published by American Council on Education, March 1965.

(d) Résumé of activities under Commission's responsibilities established by Government Employees Training Act, approved July 7, 1958, prepared January 1964.

(e) Chapter 410, employee development, from Federal Personnel Manual.

(f) Source of appropriation, Independent Offices Appropriation Act.

(g) Interagency training programs bulletin.

(h) Interagency training programs annual calendar.

(i) Automatic data processing directory.

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

Training is only one of many factors which can influence economic effects on income, productivity, business enterprises, etc. Trained employees gain qualifications to enter new job areas. This may or may not result in income or earning increases. Productivity increases following a training program are difficult to relate solely to training when factors of individual ability and motivation or technological advance are coincidental to the training. GETA forbids training solely for the purpose of promotion or reassignment. Therefore, the combination of these elements has made it difficult to correlate economic impacts as resulting directly from training.

However, the Commission has received many anecdotal reports from agencies in which the dollar returns for training investments support the belief that training and education lead to significant increases in productivity and quality of performance. Many of these cases have been included in the Commission's annual reports to the Congress.

Efforts have been made to correlate training and education program effects to economic activity measures, both in Government and non-Government studies. However, such studies to date can only conclude that training appears to have a positive effect. Controls have not yet been devised that conclusively relate training to economic activity.

10. *Economic classification of program expenditures.* (See table 3.)

Program: Education and training programs.

Department or agency, and office or bureau: Civil Service Commission; Office of Career Development.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government:

Office of Career Development, Civil Service Commission:

Purchases of goods and services:

Wages and salaries.....	1, 100
Other.....	400

Total, Office of Career Development.....	1, 500
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Other Federal agencies: <sup>1</sup> purchases of goods and services.....	34, 200
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Total, Federal expenditures.....	35, 700
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<sup>1</sup> Amount obligated for out-service and interagency training programs by Federal agencies for training authorized under the Government Employees Training Act. It does not include the Office of Career Development, C.S.C.

# FEDERAL POWER COMMISSION

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## Bureau of Power

### WATER RESOURCES APPRAISAL PROGRAM

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. Objectives

The purposes of the water resources appraisal program are to provide framework plans of development for selected river basins and to assist the Federal Power Commission in carrying out its licensing and related activities. All purposes of development are considered, including hydroelectric power production. The Commission staff studies are printed and copies are made available to interested persons and agencies. Thus, they provide information contributing to regional development.

##### 2. Operation

This is a wholly Federal operation. Most of the studies are made in the Commission's regional offices under direction of the Washington office.

##### 3. History

This program was initiated in 1963 in order to meet a long-felt need for up-to-date basin plans to assist the Commission in its licensing activities. Authority for the program is contained in the Federal Power Act.

##### 4. Level of operations. (See table 1.)

Program: Water resources appraisal program.

Department or agency, and office or bureau: Federal Power Commission; Bureau of Power.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 <sup>1</sup> estimate
(a) Magnitude of program:				
(i) Status reports completed <sup>2</sup> (number).....	6	51	61	0
(ii) Appraisal reports completed <sup>2</sup> (number)....	0	2	4	7
(b) Applicants or participants: <sup>4</sup>				
State government agencies.....				
Local agencies.....				
Individuals.....				
Other.....				
(c) Federal finances:				
Unobligated appropriations.....	0	0		
Obligations.....	( <sup>5</sup> ) 0	\$209,006	\$226,380	\$226,380
Allotments or commitments.....	0	0	0	0
(d) Matching or additional expenditures for program....	0	0	0	0
(e) Number of Federal Government employees involved in program.....	19	19	19	19
(f) Non-Federal personnel involved.....	0	0	0	0
(g) Other measures of performance.....				

<sup>1</sup> From budget estimates for 1967 submitted to the Bureau of the Budget.

<sup>2</sup> These reports summarize existing development and the status of studies completed or underway in each basin, and provide a basis for relating those basins for which detailed appraisal studies are to be made.

<sup>3</sup> These are more detailed studies deriving general framework plans of development.

<sup>4</sup> Not applicable.

<sup>5</sup> Not available.

\* Funds to cover financing are recovered through payments of fees by licensees.

### 5. *Estimated magnitude of program in 1970*

It is estimated that the 1970 level of magnitude of the program will approximate that of the present.

### 6. *Prospective changes in program orientation*

No prospective changes are known which might affect the program.

### 7. *Coordination and cooperation*

This program is carried out by the Commission's Bureau of Power, including the regional offices. The work is coordinated with the Commission's Offices of the General Counsel and Economics. Information is obtained for the studies from other Federal agencies, State and local agencies, and on occasion from certain nongovernmental entities.

### 8. *Laws and regulations*

Authorizations for the program are provided in sections 4(a), 4(c), 7(b), and 10(a) of the Federal Power Act (16 U.S.C. 791a et seq.). Funds for the program are included in the Commission's annual appropriations.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

This program has no direct economic impacts. However, the planning studies provide the Commission with background information for more effective administration of its licensing activities. The preparation and implementation of basin plans of development can contribute to the economy of the regions affected. The effects would be long-range in scope since the projects would require several years for completion and, once constructed, would have long periods of usefulness. We know of no research on the effects or impacts of such a program.

### 10. *Economic classification of program expenditures*

All expenditures under this particular program constitute amounts spent by the Federal Government for salaries and related items.

## RECREATION, FISH, AND WILDLIFE PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

The purpose of the FPC recreation, fish, and wildlife program is to carry out the authority delegated to the Commission by part I, section 10(a) of the Federal Power Act (as amended Aug. 26, 1935) to consider recreation and natural resource conservation as beneficial public uses of water development projects under its jurisdiction. The program is consistent with the policy of the Congress to conserve, develop, and utilize outdoor recreation resources for the benefit and enjoyment of American people of both present and future generations and is intended to provide optimum development of outdoor recreation and fish and wildlife resources at federally licensed projects.

#### 2. *Operation*

Development of public outdoor recreation at hydroelectric projects is primarily the responsibility of the licensees, and they are expected to obtain the technical assistance and cooperation needed to plan for such development. Section 4.41-R of the Commission's rules and regulations requires the filing of a recreational use plan as a part of each application for major licenses filed after June 1, 1963. Prior to that date, use plans were required by a special license condition.

Regional office personnel assist applicants or permittees in the preparation of materials to be filed for consideration by the Commission; make field studies, including preclicensing inspection of completed projects; and work at the field level on matters concerning projects during and following construction.

Washington office personnel furnish guidance to applicants by setting up criteria and standards; act as advisers and consultants to the Commission on recreation, fish, and wildlife matters; and analyze and process applications for Commission consideration, giving full attention to the suitability of the project in the overall development of the river section or river basin and to the adequacy of the plan in light of public health, safety, and needs, in addition to economic feasibility and engineering adequacy.

The exhibit R's required since June 1, 1963, and recreational use plans submitted under special license requirements partially inventory recreation at licensed projects. This inventory will be completed by the use of special inventory forms, now being processed for use in obtaining information on existing and planned recreational facilities at the remainder of our licensed projects.

The staff makes recommendations for the Commission to consider in the issuance of licenses or amendments approving recreational plans. Upon approval, recreational access and use facilities are developed at licensed projects for public enjoyment.

#### 3. *History*

Following enactment of the 1935 amendment of the Federal Power Act, the practice of imposing requirements on licensees with respect to

recreation developed slowly. Initially, the new statutory language of section 10(a) was incorporated in each license issued. Periodically special conditions dealing with recreation were inserted in a license and by 1953 recreation requirements pertaining to access and beneficial public use were incorporated in the standard "L" forms used in licensing major projects. In 1962 the Commission began to give more attention to outdoor recreation. A new standard article was added to several of the "L" forms requiring that the licensees construct, maintain, and operate such recreational facilities as the Commission may order after notice and opportunity for a hearing. In January of 1963, a special condition, requiring the filing of a recreational use plan, was added to major licenses. Subsequently this condition was strengthened by requiring Commission approval of the plan filed. On April 18, 1963, and January 8, 1965, the Commission issued orders amending section 4.41 of the regulations under the Federal Power Act, requiring a recreational use plan (exhibit R) as part of each application for a major license filed after June 1, 1963.

On June 17, 1966, the Commission amended its regulations to require applications for licenses for major unconstructed projects and applications for relicensing under section 15 of the Federal Power Act to include an exhibit S. This exhibit is a report on the project's effect, if any, upon fish and wildlife resources in the project area or in other areas. It includes proposals for measures considered necessary to conserve and, if practicable, to enhance fish and wildlife resources affected by the project. The new regulation became effective August 1, 1966.

#### 4. Level of operations. (See table 1.)

Program: Recreation, fish, and wildlife program.

Department or agency, and office or bureau: Federal Power Commission; Bureau of Power.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program:				
Number of major licensed projects.....	295	308	333	358
Recreation use plans filed each fiscal year.....	62	51	127	64
(b) Applicants or participants: <sup>1</sup>				
Public utility districts.....				
Municipalities.....				
Private individuals.....				
Companies or corporations.....				
Federal, State, and local officials.....				
(c) Federal finances: Funds required for financing are recovered through payment of fees by licensees.....	(?)	(?)	(?)	(?)
(d) Matching or additional funds: (None).....				
(e) Number of Federal employees involved:				
Washington office.....	3	3	3	5
Regional offices.....	3	4	5	5
(f) Non-Federal personnel engaged in program:				
Public users.....	(?)	(?)	(?)	(?)
Non-Federal employment opportunities.....	(?)	(?)	(?)	(?)

<sup>1</sup> Included to show type of participants; breakdown figures are not readily available.

<sup>2</sup> Not available.

<sup>3</sup> Figures not available; inventory not yet completed.

#### 5. Estimated magnitude of program in 1970

It is estimated the 1970 FPC program in recreation will be about three times as large as our present programs.

#### 6. Prospective changes in program orientation

(a) Pending legislative proposals or new legislation affecting program.—S. 4, "Water Quality Act of 1965" [enacted as Public

Law 89-234], creates a new Federal Water Pollution Control Administration, provides for the establishment of water quality criteria, and otherwise strengthens the Federal Water Pollution Control Act.

(b) *Proposed administrative and organizational changes.*—None known.

(c) *Probable changes in functioning of program.*—Many of the problems, such as pollution and insufficient public access, may be solved by programs presently underway or under consideration. Anticipated social and economic changes point to an accelerated program.

#### 7. *Coordination and cooperation*

We cooperate with and coordinate our programs through other Federal agencies having applicable statutory responsibilities. State and local agencies cooperate with applicants and licensees, and such cooperation and coordination is encouraged but the FPC does not participate directly in planning. State agencies and other Federal agencies are kept informed of recreation, fish, and wildlife plans and development, and they make recommendations on such plans or development.

The FPC program deals directly with public utility districts, municipalities (or their representatives), company officials or individuals applying for permits, licenses, or amendments to licenses.

#### 8. *Laws and regulations*

Part I, section 10(a) of the Federal Power Act (amended August 26, 1935). Public Law 88-29 (77 Stat. 49) of May 28, 1963—Bureau of Outdoor Recreation Organic Act of 1963.

Fish and Wildlife Coordination Act of 1958 (16 U.S.C. 661).

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to question 10.)

10. *Economic classification of program expenditures.* (General answer to questions 9 and 10 follows.)

Recreation developments at hydroelectric projects benefit the public physically, mentally, and economically. In every instance where any appreciable amount of recreation development has taken place at a hydroelectric project, the local economy has benefited. Operation, maintenance, and major improvements, as well as the original construction costs, help the local economy. Recreation supplies, equipment, lodging, food, and services also bolster the economy and add to the tax structure. Surrounding land values increase and tax revenues rise accordingly.

Recreational development undertaken by State and local governments at licensed projects qualifies for various programs of Federal aid to State and local governments, other than the Land and Water Conservation Act—for example, under the Appalachian Regional Development Act (Public Law 89-4); and the Public Works and Economic Development Act of 1965 (Public Law 89-136).

# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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## PREDOCTORAL TRAINING PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The objective of the NASA predoctoral training program is to increase the supply of highly trained scientists and engineers in space-related science and technology to meet the growing needs of the national space program.

#### 2. Operation

NASA training grants are awarded to universities, not individual students. It is the responsibility of the institutions receiving a training grant to select the students who will participate. In selecting trainees, the university is expected to consider the candidates' academic records and personal qualifications, as well as their study plans and research programs for the training period. The prospective trainees may be just entering predoctoral graduate study or already engaged in a course of study leading to the doctorate.

Each recipient of a traineeship receives a basic annual stipend of \$2,400, plus an additional allowance of up to \$1,000 (mainly for dependents and escalation) which is administered by the university in accordance with its established policy. Trainees under these grants are not permitted to accept concurrently other educational assistance in such forms as grants, fellowships, or assistantships. Except in unusual cases, trainees must be citizens of the United States.

Each institution receives a negotiated sum of money to strengthen its program in space-related science and technology. It may include such items as small amounts for minor specialized equipment, a modest amount for course content improvement, an appropriate share of special faculty augmentation, as well as similar items normally covered by income from tuition and fees.

Training grants are awarded to universities which provide support for predoctoral students for up to 3 years providing they maintain a satisfactory academic record.



## 3. History

Fiscal year	Number of participating universities	Number of new trainees
1962.....	10	100
1963.....	88	786
1964.....	131	1,071
1965.....	142	1,275

## 4. Level of operations. (See table 1.)

Program: Predoctoral training program.

Department or agency, and office or bureau: National Aeronautics and Space Administration.

TABLE 1.—Level of operations or performance, fiscal years 1964–67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 <sup>1</sup>	Fiscal year 1967 <sup>1</sup>
(a) Universities.....	131	142	152	155
(b) Number of participants.....	1,957	3,132	3,681	3,610
(c) Federal obligations (thousands).....	\$19,376	\$23,653	\$25,000	\$22,000
(d) Matching or additional expenditures <sup>2</sup> .....				
(e) Staff (Federal):				
Professional.....	1	3	3	3
Secretarial.....	2	2	2	2
(f) Non-Federal personnel.....	0	0	0	0
(g) Ph. D. degrees awarded.....	20	66	500	750

<sup>1</sup> Estimate.

<sup>2</sup> Not applicable.

## 5. Estimated magnitude of program in 1970

When the predoctoral training program was initiated in 1962, an output goal of 1,000 Ph. D.'s per year was established as NASA's fair share of the responsibility for continuously replenishing the country's trained manpower resources. Since the program was designed to support students for 3 years, there is a built-in 3-year lag in the program. Under present funding, the number of new trainees starting in the program may reach the projected goal in 1966. Consequently, the goal of 1,000 Ph. D.'s awarded per year cannot be reached before 1969 or 1970. It is anticipated that a great need for trained scientists and engineers will still exist in the 1970's and the program will continue to help meet this need.

## 6. Prospective changes in program orientation

Any aeronautical or space activity in coming decades will certainly require numbers of highly trained scientists and engineers. In addition, it is reasonable to assume that new industries will grow from the new technology of space research, and trained people will be needed to staff them.

We assume that the United States will try to retain leadership in aeronautical and space science and engineering. This dictates a continuation of this program to produce highly trained people. Since that projected level of output cannot be reached before 1969–70, it is anticipated that the program will continue in the 1970's, taking into account any changes of emphasis pertaining to certain disciplines. The program is flexible so that it may be changed to meet certain

needs which are not now known but may become apparent in the 1970's.

### 7. *Coordination and cooperation*

(a) Activities of the training program are coordinated with the personnel in the facilities and multidisciplinary research programs of the Office of Grants and Research Contracts.

(b) Activities are coordinated with other program offices as the need arises.

(c) The activities of the NASA predoctoral training program are coordinated with the other Federal agencies through an informal group called the Federal Fellowship Administrators. Agencies represented include: NSF, NIH, OE, NASA, AEC, State Department, Department of the Interior, Smithsonian, etc. This group has no authority but meets regularly to help all agencies keep informed regarding the establishment of new programs, changes in emphasis of some programs, or other administrative features.

(d), (e), (f), (g), and (h) *not applicable.*

(i) None.

### 8. *Laws and regulations*

These activities are carried out in direct support of NASA's responsibilities under the National Aeronautics and Space Act of 1958 as amended, 42 U.S.C. 2451 et seq., as supplemented by the annual NASA authorizations acts (see, for example, the National Aeronautics and Space Administration Authorization Act of 1966, 79 Stat. 192).

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

(a) The predoctoral training program provides a student with a basic stipend of \$2,400 and an additional amount up to \$1,000 for dependents and escalation. The specific amount received by each student is determined by the institution he attends. During the 1964-65 and 1965-66 years, 1,957 and 3,132 students were supported by the program.

(b) The universities encourage the students to become affiliated with space-related activities. These may include universities, space-related industries, or Government laboratories. With the Ph. D. degree it is anticipated that their services will be desired and their production and earning power will be enhanced.

(c) After trainees complete their doctorates, they will help to increase the output of whatever activity they become affiliated with.

(d) This program provides for up to 3 years of support for a student. During this time he can be assured of continuing support as long as his academic standing is satisfactory to the university. After the student completes his training, he will help to increase the level of employment and production of the activity he is engaged in.

(e) In addition to the stipend and student allowance, the grant includes an allowance for the university. NASA recognizes that certain university resources are required in the operation of this program. NASA makes available a negotiated amount of money to assist the university in improving its capabilities in space-related science and technology.

(f) We now have trainees in all 50 States and the District of Columbia. Figure 1 gives the regional distribution of the NASA predoctoral trainees per 100,000 population.

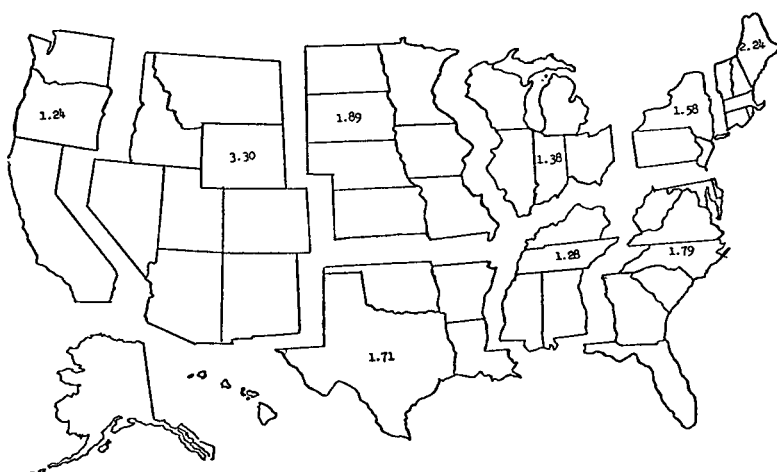


FIGURE 1.—Regional distribution of NASA trainees 1965-66, per 100,000 population.

(g) and (h) Not applicable.

10. *Economic classification of program expenditures.* (See discussion of question 10 for all NASA programs.)

## SUMMER FACULTY FELLOWSHIP PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The objective of the NASA faculty fellowship program is to increase and update the scientific knowledge of the scientists in our universities.

#### 2. Operation

Training contracts are awarded to one or more universities to carry out the program in cooperation with a NASA field center. Young science and engineering faculty are selected to participate in a 10-week program, which permits them to devote a portion of their summer to updating their skills by receiving training and research experience in the most advanced techniques in their respective fields.

#### 3. History

Fiscal year	Number of participating universities	Number of participating NASA field centers	Number of participants
1964.....	3	3	40
1965.....	12	7	100

#### 4. Level of operations. (See table 1.)

Program: Summer faculty fellowship program.

Department or agency, and office or bureau: National Aeronautics and Space Administration.

TABLE 1.—Level of operations or performance, fiscal years 1964–67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966	Fiscal year 1967 <sup>1</sup>
(a) Universities.....	3	12	12	12
(b) Participants.....	40	100	150	150
(c) Federal obligations (thousands).....	\$162	\$488	\$528	\$650
(d) Matching or additional expenditures.....	0	0	0	0
(e) Staff (Federal):				
Professional.....	1	1	1	1
Secretarial.....	1	1	1	1
(f) Staff (non-Federal) <sup>2</sup> .....	-----	-----	-----	-----

<sup>1</sup> Estimate.

<sup>2</sup> Not applicable.

#### 5. Estimated magnitude of program in 1970

The need for updating the skills of our young faculty engineers and scientists in space-related projects continues to grow. Also, with the increased interdisciplinary approach to the problems in space science, it becomes increasingly important that NASA provide specialized training for young faculty in these areas. It is, therefore, anticipated that the need for this type of program will increase over the next few years.

#### 6. Prospective changes in program orientation

Any aeronautical or space activity in coming decades will certainly require trained faculty in the space-related sciences and engineering. We assume that the United States will try to retain leadership in aeronautical and space sciences and engineering. This dictates a continuation of this program to produce highly trained people.

#### 7. Coordination and cooperation

(b) Activities are coordinated with other program offices and field centers as the need arises.

Other items not applicable.

#### 8. Laws and regulations

These activities are carried out in direct support of NASA's responsibilities under the National Aeronautics and Space Act of 1958 as amended (42 U.S.C. 2451 et seq.) and as supplemented by the annual NASA authorization acts (see, for example, The National Aeronautics and Space Administration Authorization Act of 1966, 79 Stat. 192).

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

#### 9. Economic effects

(a) Participants in the NASA faculty fellowship program receive compensation in proportion to the basic salary at their home institution.

(b) These programs have led to research grants with participants and improved courses at the fellows' home institutions. With this training, it is anticipated that their production and earning power will be greater.

(c), (d), (g), and (h) Not applicable.

(e) The participants in these programs become valuable to their home institutions and expand the research and teaching capabilities of the institution.

(f) By necessity the NASA faculty fellowship grants are located at institutions near NASA field centers.

10. *Economic classification of program expenditures.* (See discussion of question 10 for all NASA programs.)

## MISCELLANEOUS TRAINING ACTIVITIES

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

Specialized training must be provided in certain areas to help train individuals needed to carry out NASA's mission.

#### 2. Operation

NASA training grants or contracts are awarded to universities to carry out special training activities. In many instances, they may involve cooperation with a NASA center. These programs are designed to meet the special needs of NASA in increasing and updating the knowledge of scientists and engineers in the most recent scientific developments in the space sciences and engineering. Personnel in these programs are generally graduate scientists and engineers; however, a few programs have involved outstanding undergraduates at the senior level. The period of training may be from a few weeks to 2 years, depending on the specific training program.

These special programs provide for support of the participants as well as an allowance to the university for carrying on the program.

#### 3. History

Fiscal year	Number of participating universities	Number of participants
1962.....	2	82
1963.....	4	147
1964.....	6	285
1965.....	7	343

#### 4. Level of operations. (See table 1.)

Program: Miscellaneous training activities.

Department or agency, and office or bureau: National Aeronautics and Space Administration.

TABLE 1.—Level of operations or performance, fiscal years 1964–67

	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966	Fiscal year 1967 <sup>1</sup>
(a) Universities.....	6	7	5	8
(b) Participants.....	285	343	200	300
(c) Federal obligations (thousands).....	\$273	\$362	\$264	\$500
(d) Matching or additional expenditures.....	0	0	0	0
(e) Staff (Federal):				
Professional.....	1	1	1	1
Secretarial.....	1	1	1	1
(f) Staff (non-Federal) <sup>2</sup> .....				

<sup>1</sup> Estimate.

<sup>2</sup> Not applicable.

### 5. *Estimated magnitude of program in 1970*

With the increased interdisciplinary approach to the problems in space science, it becomes increasingly important that NASA provide specialized training for scientists in these areas. It is, therefore, anticipated that the need for this type of program will increase over the next few years.

### 6. *Prospective changes in program orientation*

Any aeronautical or space activity in coming decades will certainly require highly trained scientists and engineers. In addition, it is reasonable to assume that new industries will grow from the new technology of space research, and trained people will be needed to staff them.

We assume that the United States will try to retain leadership in aeronautical and space science and engineering. This dictates a continuation of this program to produce highly trained people.

### 7. *Coordination and cooperation*

(a) Not applicable.

(b) Occasionally, one of the NASA program offices may be interested in cooperating with the Training Division on a special training activity. Funds may be combined from two offices to carry out a special program.

(c) NASA has cooperated with other Federal agencies in supporting specialized training activities. An example is a 4-week seminar on "Relativity Theory and Astrophysics," conducted by the American Mathematical Society, which was supported jointly by NSF, AEC, USAFOSR, ARO, ONR, and NASA.

Other items not applicable.

### 8. *Laws and regulations*

These activities are carried out in direct support of NASA's responsibilities under the National Aeronautics and Space Act of 1958, as amended, 42 U.S.C. 2451 et seq., as supplemented by the annual NASA authorization acts (see, for example, the National Aeronautics and Space Administration Act of 1966, 79 Stat. 192).

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

(a) Participants in the NASA specialized training program receive compensation which is consonant with their professional stature.

(b) These programs provide the participants with an opportunity to become more aware of the types of research in which NASA is interested.

These programs have led to involvement of the senior undergraduate participants in graduate study in the space sciences and the establishment of a new program of aerospace medicine at a university.

With this training it is anticipated that the production and earning power of participants will be greater.

(c), (d), (g), and (h) not applicable.

(e) The participants in these programs become valuable to the universities and expand the research and teaching capabilities of the institution which they may be attending or may subsequently join.

(f) By necessity most, but not all, of the special grants are located at institutions near NASA centers.

10. *Economic classification of program expenditures.* (See discussion of question 10 for all NASA programs.)

## RESIDENT RESEARCH ASSOCIATESHIP PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The purpose of the resident research associateship program (RRA) is to provide to investigators of unusual ability at the postdoctoral and senior postdoctoral level an opportunity to do advanced research of interest to NASA in the various areas of science concerned with space exploration. Tenure of these associateships may be held only at NASA research centers, and is normally for 1 year.

#### 2. Operation

The RRA program is funded by NASA on a contract to the National Academy of Sciences-National Research Council (NAS-NRC). That organization receives applications from prospective senior investigators and, with the aid of its Evaluation Board and in concert with NASA center personnel, makes the final selection.

#### 3. History

The original contract for support of the RRA program was made in April 1959 and supplements were made to the original contract in 1961, 1964, and 1965.

Initially, the RRA awards were for tenure at the Goddard Space Flight Center, Greenbelt, Md., and the Institute for Space Studies, New York City. The successful program has now been expanded, and opportunities are presently available at NASA's Ames Research Center, Moffett Field, Calif.; Langley Research Center, Langley, Va.; Marshall Space Flight Center, Huntsville, Ala.; and the Manned Spacecraft Center, Houston, Tex. In fiscal year 1966, it is planned to make a limited number of awards tenable at the Jet Propulsion Laboratory (JPL), a major research (contract) center of NASA, and the Electronics Research Center, Cambridge, Mass.

From the inception of the program until May 31, 1965, 151 individuals had held RRA appointments. In May 1965, 75 associates were on tenure at NASA centers. Appointments may be awarded to both U.S. citizens and foreign nationals.

Research interests of the associates have extended across the scientific spectrum and include, among others, studies in the following areas: cosmic rays, plasma physics, interplanetary magnetic fields, ionospheric plasmas, space radiation, meteorology, astrophysics, biophysics, stellar dynamics, planetary atmospheres, general relativity, acoustics, structures and materials, environmental biology and biotechnology. Participants in the program have included such eminent scientists as Nobel Laureate Dr. Harold D. Urey; Dr. Jacques Blamont, now Director of the French National Center for Space Studies (CNES); and Dr. B. K. G. Hultquist, Director of the Kiruna Geophysical Observatory in Sweden.

4. *Level of operations.* (See table 1.)

Program: Resident research associateship program.

Department or agency, and office or bureau: National Aeronautics and Space Administration.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966	Fiscal year 1967 estimate
(a) NASA centers.....	5	6	8	8
(b) Associateships.....	78	75	80	80
(c) Federal obligations (thousands).....	\$1,000	\$1,900	\$2,000	\$2,000
(d) Matching or additional expenditures (none).....				
(e) Staff (Federal):				
Professional administrators.....	1	1	1	1
Professional supervisors <sup>1</sup> .....	78	75	80	80
Secretarial.....	1	1	1	1
(f) Staff (non-Federal):				
Professional.....	2	2	2	2
Secretarial.....	2	2	2	2

<sup>1</sup> There is a 1-to-1 ratio of supervisory personnel to holders of an associateship.5. *Estimated magnitude of program in 1970*

The program has been extremely well received by the research centers, and it appears that additional centers will participate in the program by 1970. The probable level of operation will be 250-300 awards, subject to the availability of funds.

6. *Prospective changes in program orientation*

(a) and (b) None.

(c) Technological problems do not show any indication of becoming less complex. Indeed, the trend clearly lies in the other direction. NASA will probably have to continue to rely heavily upon highly trained, even supertrained, individuals for the solution of its problems. Thus, we envision an increased demand for these postdoctoral and senior postdoctoral scientists in the coming years.

7. *Coordination and cooperation*

(b) Funds are combined from several program offices within NASA to carry on this project. The National Academy of Sciences, under contract, administers the program for NASA.

(f) Appointments may be given to foreign nationals; therefore, coordination and cooperation between the National Academy of Sciences and foreign governments is an essential part of the operation of the program.

(g) By contract, the National Academy of Sciences, a nonprofit organization, administers the resident research associateship program for NASA.

Other items not applicable.

8. *Laws and regulations*

These activities are carried out in direct support of NASA's responsibilities under the National Aeronautics and Space Act of 1958 as amended, 42 U.S.C. 2451 et seq., as supplemented by the annual NASA authorization acts (see, for example, the National Aeronautics and Space Administration Authorization Act of 1966, 79 Stat. 192).



## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

(a) Regular participants are normally paid at the rate of \$10,750 per annum. Senior investigators receive a higher allowance, which in each case is established by the NAS-NRC Evaluation Board. There are presently about 75 people participating in the program.

(b) The participants are usually appointed for a 1-year period, during which time they are expected to pursue advanced research which will be of direct interest to the space program. At the end of their tenure they are expected to return to industries or universities where they were originally employed.

(c) By pursuing research in space science at a NASA installation, it is expected that these participants will improve the relation between NASA and their home institution. It is also expected that this relationship will prove to be productive in expanding research efforts of institutions or industries in the country of origin of the participant.

(d) This program provides support for each participant for a specified time. After termination of the appointment, it is expected that the participant will return to his country of origin and be more productive in the space sciences.

Other items not applicable.

10. *Economic classification of program expenditures.* (See discussion of question 10 for all NASA programs.)

## EDUCATIONAL PROGRAMS DIVISION

## PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

The Educational Programs Division, Office of Public Affairs, is responsible for developing and conducting programs which make available to schools, colleges, and other educational organizations, space-related facts and concepts in forms suitable for dissemination through established curricula and educational activities. Specific programs include coordination with the educational community in providing space-related materials and services, provision of teacher education services such as space science seminars and workshops, materials of instruction development, and a lecture-demonstration program. The Educational Programs Division insures nationwide responsiveness to the needs of the educational community by close coordination and functional management of NASA regional educational programs.

2. *Operation*

In performing the above functions, the Educational Programs Division makes available to the educational community the advice and assistance of 12 headquarters educational specialists, and functionally supervises specialists at 10 field centers who provide similar services in their regions. The Division also funds (through contracts) and supervises curriculum conferences (e.g., for science or mathematics supervisors), materials of instruction development projects, youth

activities, and other pilot activities designed to stimulate and facilitate the communication of current aerospace-related knowledge to students, teachers, and adults. It conducts and assists in the conduct of teacher education workshops and courses, performed on a personnel and materials basis rather than a funding one. In addition, the Division manages a contractor-operated lecture demonstration program (Space-mobile) that brings directly to students and teachers an up-to-date overview of U.S. goals and achievements in space.

### 3. *History*

In September 1960, as part of its implementation of the Space Act provision cited in paragraph 8 below, NASA headquarters employed a small group of professional educators to meet the demands (1) by schools for assistance in updating programs to include space-related developments and (2) by students for aerospace information. The first field education officers were employed in 1962.

Division activities, as outlined in paragraphs 1 and 2 above, began with conducting and assisting at conferences, encouraging and assisting in the production of instructional materials, and encouraging and assisting teacher education programs. Soon after, a lecture-demonstration (Spacemobile) program was begun. This program, initially limited to providing informational-motivational talks at school assemblies, now includes substantive teaching in workshops and classes as well. The Division's adult education activities, youth services (for example, to science congresses and science fairs), and career counseling and guidance assistance began in 1962 and 1963.

The program operates on a low-budget, limited-manpower basis. For example, the summer workshops and courses for teachers which the Division assists and encourages receive no financial assistance from NASA; and the contractors on materials of instruction projects recognize an obligation to share costs. Another principle evolved by the Division to enhance effectiveness is that of placing a high priority on teacher education programs, particularly activities that reach those responsible for the training of teachers.

### 4. *Level of operations.* (See table 1.)

Program: Educational Programs Division.

Department or agency, and office or bureau: National Aeronautics and Space Administration; Office of Public Affairs.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966-67 estimates
(a) Magnitude of the program (direct):			
1. Lecture-demonstrations: Live audience (individuals) . . . .	2,800,000	3,600,000	3,500,000
2. Teacher workshops assisted (unfunded) (about 50 teachers per workshop—or 10,000 teachers; 500,000 to 1,000,000 students indirectly) . . . . .	163	276	200
3. Materials of instruction (15 to 30 "NASA Facts" and other classroom-oriented publications per year) (teachers) . . . . .	100,000	100,000	100,000
4. Presentations describing programs and services at selected national conventions of educators, average attendance 12,000 (conventions) . . . . .	0	2	10
5. NASA participation in science fairs and youth science congresses (events) . . . . .	175	190	200
(b) Participants (estimated):			
1. State education departments . . . . .	40+	40+	40+
2. School systems . . . . .	5,000	5,000	5,000
3. Individuals (please see 4(a) above) . . . . .			
(c) Federal finances (obligations incurred) . . . . .	\$1,129,000	\$1,605,000	\$1,464,000
(d) Matching expenditures (primarily salaries and expenses of co- operating educators) . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
(e) Number of Federal employees:			
1. Headquarters professional (man-years) . . . . .	13	12	12
2. Headquarters clerical (man-years) . . . . .	6	6	6
3. Field professional (man-years) . . . . .	10	11	12
4. Field clerical (man-years) . . . . .	10	10	10
(f) Non-Federal personnel (contract lecturers) (man-years) . . . . .	62	62	65

<sup>1</sup> No estimates available.

### 5. *Estimated magnitude of program in 1970*

It is expected that these educational programs will continue to 1970 at about the present level of magnitude (staffing and funding). Anticipated quantitative increases in demand will be met through increasingly effective use of established communication channels within the educational community.

### 6. *Prospective changes in program orientation*

Since the basic program orientation is toward continuing aerospace research and technology development, no significant change in the rationale of associated educational activities is expected.

### 7. *Coordination and cooperation*

(a) Educational programs are closely coordinated with other public affairs activities for program balance, and for optimum use and cross-use of common resources.

(b) Coordination is maintained with NASA major program offices through their public affairs officers; activities to be conducted at field centers are cleared with the appropriate headquarters program managers.

(c) Programs are closely coordinated with USOE, NSF, State, and others as indicated by mutual interests.

(d) Work with State governments plays an increasingly important part in program execution. Several State departments of education are currently in the development of statewide plans for systematic inclusion of aerospace-related facts and concepts within established curriculums.

(e) School systems cooperate in the scheduling of lecture-demonstrations, participate in pilot classroom projects, and form a vital link in the program's chain of communication.

(f) As initiated by the White House, State Department, foreign governments, or foreign organizations through NASA's Office of

International Affairs, this Division provides spacemobile lecture-demonstration equipment and training personnel needed to execute limited-duration lecture-demonstration tours overseas.

(g) Cooperation with nonprofit organizations focuses primarily on the National Education Association and organizations of educational specialists in fields closely allied with NASA's interests.

(h) The Division seeks to insure that business enterprises interested in developing aerospace-related educational materials receive full NASA cooperation in gathering needed information.

### 8. *Laws and regulations*

These activities are carried out in direct support of NASA's responsibilities under the National Aeronautics and Space Act of 1958 as amended, 42 U.S.C. 2451 et seq.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

Since the program's principal concern is with the amount and quality of aerospace-related knowledge imparted to students in basic subject matter courses, its economic impact in such terms as numbers of students motivated to prepare for careers in higher paying fields—and the salary differentials involved—cannot be measured at this time.

10. *Economic classification of program expenditures.* (See discussion of question 10 for all NASA programs.)

## TRAINING AND EMPLOYEE DEVELOPMENT PROGRAM<sup>1</sup>

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

It is the policy of NASA to encourage and support the self-development of NASA employees when such developmental experience will promote the highest standards of effectiveness and efficiency in the performance of the NASA aeronautical and space mission. Further, it is the policy of NASA to sponsor and promote a training process, employing the most modern and reliable techniques and practices that will stimulate and facilitate the continual professional development of NASA employees for the purpose of organizing and retaining skilled and efficient employees well abreast of scientific, professional, technical, and management developments.

#### 2. *Operation*

The NASA training and employee development program is wholly a direct Federal operation, conducted at 12 field installations with headquarters supervision.

#### 3. *History*

The Government Employees Training Act of 1958 (Public Law 85-507) enabled the National Aeronautics and Space Administration to expand original training programs of the predecessor agency (the National Advisory Committee for Aeronautics) into a training program designed to achieve effective utilization of its human resources and attain its program goals. To this end NASA field installations have established programs in the following areas:

<sup>1</sup> Included also in Civil Service Commission report on education and training programs.

(a) *Graduate study.*—Since the agency's inception, NASA installations have recognized that bachelor-degree graduates are only partially trained to meet the demands of modern research and development. Therefore, emphasis has been placed on the development of NASA's available staff by continued education through graduate study.

(b) *Cooperative education.*—The NASA cooperative education program is a work-study arrangement which provides undergraduate students with an opportunity to integrate academic study with planned work experience at NASA installations. Over 90 percent of our co-op students are in the fields of science and engineering. There are several co-ops in such professional positions as accounting, economics, and statistics.

(c) *Apprentice training.*—The NASA apprentice training program is designed to prepare, by organized on-the-job and classroom training, qualified young men to become journeymen and potential leaders in those skilled trades which have particular application to the research needs of NASA.

(d) *Specialized training.*—With today's rapid technological change, even highly trained people lose utility unless training is continuous. Therefore, NASA provides seminars and short courses, sponsored by universities and private industry, in a wide variety of specialized up-to-date subjects not yet available in the standard college or university curriculums. In addition, seminars and noncredit short courses are offered in such areas as supervisory and management development, oral and written communication, reliability and quality assurance, etc.

#### 4. Level of operations. (See table 1.)

Program: Training and employee development program.  
Department or agency, and office or bureau: National Aeronautics and Space Administration.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimates	Fiscal year 1967 estimates
(a) Magnitude of the program:				
1. Graduate study program: Universities	67	70	75	80
2. Cooperative education program: Universities	54	57	60	60
3. Apprentice training program: Field installations	6	5	5	5
4. Specialized training programs:				
Universities	50	54	60	65
Contractors	450	460	500	500
Other Government agencies	21	25	25	25
(b) Participants (NASA employees):				
1. Graduate study program	2,325	2,764	3,000	3,300
2. Cooperative education program	1,049	1,022	950	900
3. Apprentice training program	535	616	550	500
4. Specialized training programs	26,448	23,949	27,000	28,000
(c) Federal finances (all programs): Obligations incurred (tuition and related fees, travel and per diem)	\$1,665,917	\$1,915,800	\$2,300,000	\$2,700,000
(d) Not applicable				
(e) Number of Federal employees administering, operating, or supervising activities (employee development officers (headquarters and field installations) (man-years)	40	46	50	50
1. Graduate study program	15	19	22	24
2. Cooperative education program	10	12	13	11
3. Apprentice training program	5	5	5	4
4. Specialized training programs	10	10	10	11
(f) Not applicable				

5. *Estimated magnitude of the program in 1970*

The Space Act of 1958 gave NASA the task of preserving "the role of the United States as a leader in aeronautical and space science and technology." This task demands a staff committed to the exploitation of its own potential. A necessary concomitant to this commitment is a management philosophy which views employee training as an essential and continuous learning process spanning the career of the employee. NASA training programs will continue to grow as the agency attains its program goals.

6. *Prospective changes in program orientation*

NASA deals constantly with change. This factor flows from our mission. "Expansion of knowledge" and "improvement" of technology inevitably result in change from the status quo. Change often results in shifts in organizational structures, goals, strategies, and operations. New skills, knowledges, and attitudes must be developed. Training is an essential ingredient in management's efforts to effectively introduce, engineer, and handle change.

7. *Coordination and cooperation*

Activities of the training programs are coordinated with the Personnel Division, other program offices, field centers, and the Civil Service Commission as the need arises.

8. *Laws and regulations*

The Government Employees Training Act, 5 U.S.C. 2301 et seq. Federal Personnel Manual, chapter 410-3, part II.

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

The economic effects of NASA's training and employee development programs can be felt to various degrees by universities located near NASA installations. In many cases, these universities have greatly extended their graduate schools to accommodate NASA employees. This is especially noticeable in Houston (University of Houston) and at the Kennedy Space Center (University of South Florida).

10. *Economic classification of program expenditures.* (See answer to question 10 for all NASA programs.)

ALL NASA PROGRAMS—GENERAL ANSWER TO QUESTION 10

10. *Economic classification of program expenditures.* (See table 1.)

Program: Programs related to human resources.

Department or agency, and office or bureau: National Aeronautics and Space Administration.

TABLE 1.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]	
Predoctoral training <sup>1</sup> .....	9,357
Summer faculty fellowship <sup>1</sup> .....	137
Miscellaneous training activities <sup>1</sup> .....	203
Resident research associateship.....	733
Educational programs.....	1,605
Training and employee development <sup>2</sup> .....	1,916
<b>Total Federal expenditures</b> .....	<b>13,951</b>

<sup>1</sup> NOTE.—As noted in the textual discussion of these programs, these expenditures represent grants awarded to universities. In the national income accounts a distinction is made between state and local universities and private nonprofit universities. Government payments to private nonprofit institutions to finance research and development are classified as a government purchase of goods and services. Government payments to State and local institutions are classified as a grant to State and local governments.

<sup>2</sup> Included also in Civil Service Commission report on Education and training.

# NATIONAL SCIENCE FOUNDATION

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## Letter of Transmittal

Portions of the letter of transmittal dated February 9, 1966, from Dr. Leland J. Haworth, Director of the National Science Foundation, to Congressman Wright Patman, chairman of the Joint Economic Committee, are included, since information is given concerning estimates of the level of operations in 1967.

\* \* \* It will be of interest to you that our estimates for the fiscal year 1967 (see following table) indicate that we will assist about 86,000 individuals to enlarge their contribution to science as research scientists, teachers and students. For the research scientists these programs provide laboratories, scientific equipment, major instrumentation and facilities such as telescopes, nuclear particle accelerators and oceanographic vessels, and salaries for the research and technical staffs. Teachers of science and mathematics are provided opportunities to participate in institutes to improve their subject competence and, in many instances, to earn an advanced degree. Teachers, in cooperation with research scientists, also participate in the development and improvement of science curricula for all educational levels.

Advanced students and science faculty members are granted fellowships for graduate or postgraduate study in scientific fields of their choice. Undergraduate and secondary school students of exceptional merit are offered study and research opportunities largely during the summer period.

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TABLE 1.—*Estimated numbers of individuals participating in National Science Foundation programs, fiscal year 1967 budget estimates*

Program	Secondary school students	Undergraduate students	Graduate, postdoctoral, and science faculty <sup>1</sup>	Total
Basic research project grants:				
Principal investigator.....			3,900	3,900
Research associates.....			2,800	2,800
Graduate students <sup>2</sup> .....			6,000	6,000
National research programs.....			1,000	1,000
National research centers.....			250	250
Science education programs:				
Fellowships and traineeships.....			8,798	8,798
Institutes (for teachers of science).....			43,339	43,339
Science education projects.....	7,400	5,700	4,650	17,750
Institutional grants.....		500	1,100	1,600
Science development program.....			600	600
Total.....	7,400	6,200	72,437	86,037

<sup>1</sup> Includes precollege science teachers and college science faculty at the undergraduate and graduate levels, as well as graduate students and scientists working at the postdoctoral level.

<sup>2</sup> Research assistants and students doing thesis research who receive compensation from basic research project grants.

Neither the statistics nor the above account of the participants in the Foundation's programs takes into consideration the number of high school and undergraduate college students who are receiving improved education in the sciences as a result of the better preparation of their teachers and the superior instructional tools and curricula that are available because of the support that has been provided through these programs.

In accordance with the inquiry, information on science education and basic research facilities programs is shown below.

## Science Education

### INTRODUCTION

Through its Divisions of Pre-College Education in Science, Undergraduate Education in Science, and Graduate Education in Science, the Foundation supports the following science education programs: Fellowships and Traineeships, Institutes, Research Participation and Scientific Activities for Teachers, Science Education for Undergraduate Students, Science Education for Secondary School Students, Specialized Advanced Science Education Projects, Course Content Improvement, and Instructional Equipment for Undergraduate Education. Answers to all of the committee's questions except 5, 6(a), 6(b), 8, and 9, which are covered separately, are included for each of these programs in the attachments.

Our response to question 4(f), non-Federal personnel employed in the program, as it relates to the Education Programs, requires some explanation. No estimates are available on the total number of non-Federal personnel who are engaged in the various science education activities that are funded by the Foundation. However, one group of such employees can be readily identified: Consultants who assist the Foundation in the evaluation of proposals submitted to the various programs. Two types of consultant services are utilized by the Education Divisions: (1) regular consultants, and (2) panelist consultants. The former are appointed for a period of service for which they may receive personal compensation, travel allowances, etc. The latter are called for ad hoc working sessions and usually only receive travel and per diem allowances. Since the same person may be used in the

evaluation process of several programs separate program identification would result in an overstatement of the number of people participating. The total number of consultants employed by NSF in education programs is as follows:

Fiscal year	Regular consultants	Panelist consultants
1964.....	81	1,000
1965.....	105	1,425
1966.....	115	1,500

A somewhat different situation exists with consultants and the evaluation of fellowship applicants. Evaluation panelists are chosen by the evaluating contractors (National Academy of Sciences-National Research Council, American Association for the Advancement of Science, and the Association of American Colleges). The Foundation is responsible for final selection of the fellow based on the evaluation of the panels. Panelists are considered to be employees of the contractor rather than the Foundation. The estimated total employed in such a capacity in fiscal years 1964, 1965, and 1966 were 507, 534, and 377, respectively.

These data are not repeated in the tables that accompany each program response.

The budget estimates for the science education programs for fiscal year 1967 are as follows:

Program	Amount (millions of dollars)
Total.....	140.0
Fellowships and traineeships.....	48.0
Institutes.....	42.0
Research participation and scientific activities for teachers.....	4.5
Science education for undergraduate students.....	6.0
Science education for secondary school students.....	4.5
Specialized advanced science education projects.....	2.0
Course content improvement.....	19.0
Instructional equipment for undergraduate education.....	4.0
College science improvement.....	10.0

The economic classification of program expenditures shown in response to question 10 is in accord with the treatment of these funds by the National Income Division of the Department of Commerce in the preparation of statistics on national income and product.

## FELLOWSHIPS

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The fellowship programs provide support to scientists and science teachers in a course of study or in scientific work designed to meet their individual needs. Support is available for well-qualified graduate students, college teachers, and advanced scholars.

#### 2. Operation

Mechanism of support: Grants to institutions and individuals.

#### 3. History

Graduate and postdoctoral fellowship programs were initiated in 1952; the senior postdoctoral program in 1956; the science faculty

in 1957; the teaching assistant, cooperative graduate (combined with traineeships in 1966) and the secondary school teacher (discontinued in 1965) fellowship programs were started in 1959; the senior foreign scientist program began in 1963.

4. *Level of operations.* (See table 1.)

Program: Fellowships.

Department or agency, and office or bureau: National Science Foundation.

TABLE 1.—*Level of operations or performance, fiscal years 1964-66*<sup>1</sup>

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate
(a) Magnitude of the program:			
1. Stipends paid to individuals (millions).....	\$15.7	\$16.8	\$14.8
2. Funds paid to institutions (millions).....	\$8.3	\$8.4	\$7.3
(b) Applicants or participants: Individuals (number of fellows).....	4,825	4,754	4,048
(c) Federal finances:			
Unobligated appropriations available (millions).....			<sup>2</sup> \$16.4
Obligations incurred (millions).....	\$24.0	\$25.2	<sup>3</sup> \$5.8
(d) Matching or additional expenditures from non-Federal funds.....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
(e) Number of Federal Government employees administering the program (man-years).....	19.5	19.5	19.5
(f) Non-Federal personnel employed in the program.....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )

<sup>1</sup> For information on 1967, see Introduction and letter of transmittal.

<sup>2</sup> Reflects the status of funds as of Dec. 31, 1965.

<sup>3</sup> Not available.

<sup>4</sup> Not available. See Introduction for Science education.

5. *Estimated magnitude of program in 1970.* (See general answer to this question, in a later section.)

6. *Prospective changes in program orientation*

(a) and (b) (See general answers to these questions, in a later section.)

(c) Probable changes in conditions under which program will function in 1970.—The programs will continue to operate on a nationally competitive basis, essentially under the same guidelines now in existence.

7. *Coordination and cooperation.* (See table 2.)

Program: Fellowships.

Department or agency, and office or bureau: National Science Foundation.

TABLE 2.—*Coordination and cooperation on purposes, policies, operations, and financing*

Entities for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division.....	All.....	Staff consultation.
(b) Other units of NSF.....	Balance between fellows supported and individuals supported through research grants.	Do.
(c) Other Federal Government agencies.....	Balance between student support by other agencies. Programs involving foreign scientists are operative with the advice and approval of the Secretary of State.	Do.
(d) State governments.....	Not applicable.....	
(e) Local governments.....	do.....	
(f) Foreign governments or international organizations.....	do.....	
(g) Nonprofit organizations.....	do.....	
(h) Business enterprises.....	do.....	
(i) Other.....	do.....	

8. *Laws and regulations.* (See general answer to this question, in a later section.)

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question, in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Fellowships.

Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government: Transfer payments to individuals and nonprofit organizations.....	25.2
Total Federal expenditures <sup>1</sup> .....	25.2
Non-Federal expenditures.....	(2)

<sup>1</sup> Expenditures here refer to obligations.

<sup>2</sup> If additional funds are contributed from other sources, their amount and distribution are unknown.

TRAINEESHIPS (GRADUATE)

PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

The principal objective of this program is to help meet the Nation's future needs for scientific manpower by bringing about an increase in the number of qualified individuals who undertake and complete advanced study leading to masters' and doctoral degrees in the fields covered. In view of this objective, emphasis is placed on making grants to institutions whose resources of staff and facilities allow them to accommodate increased numbers of first-year graduate students on a full-time basis in programs of high quality, or to institutions that, although now operating at full (or nearly full) capacity, can effectively utilize these grants to enable students to complete their programs of graduate study at a more rapid rate than would otherwise be possible.

2. *Operation*

Mechanism of support: Grants to institutions.

3. *History*

The program was established in fiscal year 1964. In the first year 1,220 traineeships were allotted in engineering only to 109 Ph. D. degree granting institutions. In fiscal year 1965, field coverage was extended to cover the physical sciences and mathematics, as well as engineering; in fiscal year 1966, the program will be extended to full science field coverage.

4. *Level of operations.* (See table 1.)

Program: Traineeships (graduate).

Department or agency, and office or bureau: National Science Foundation.

TABLE 1.—*Level of operations or performance, fiscal years 1964-66*<sup>1</sup>

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate
(a) Magnitude of the program (grants awarded) .....	109	163	174
(b) Applicants or participants: Other (number of traineeships) .....	1, 220	2, 784	4, 150
(c) Federal finances:			
Unobligated appropriations available (millions) .....			* \$22. 3.
Obligations incurred (millions) .....	\$6	\$15. 1	
(d) Matching or additional expenditures from non-Federal funds .....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
(e) Number of Federal Government employees administering the program (man-years) .....	2	3	5
(f) Non-Federal employees employed in the program .....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )

<sup>1</sup> For information on 1967 see introduction and letter of transmittal.

<sup>2</sup> Reflects the status of funds as of Dec. 31, 1965.

<sup>3</sup> Not available.

<sup>4</sup> Not available. See introduction of Science education.

5. *Estimated magnitude of program in 1970.* (See general answer to this question, in a later section.)

6. *Prospective changes in program orientation*

(a) and (b). (See general answers to these questions, in a later section.)

(c) Probable changes in conditions under which program will function in 1970.—In fiscal year 1966 all fields of science, mathematics, and engineering will be included in the program. The results of the 1966 competition will be analyzed carefully and attention will be directed toward simplifying evaluation procedures. By 1970 it is anticipated that traineeships will be made in such a way as to permit even greater flexibility of traineeship assignments to individuals by the participating institutions.

7. *Coordination and cooperation.* (See table 2.)

Program: Traineeships (graduate).

Department or agency, and office or bureau: National Science Foundation.

TABLE 2.—*Coordination and cooperation on purposes, policies, operations, and financing*

Entities for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division .....	Balance between graduate traineeships and fellowships.	Staff consultation.
(b) Other units of NSF .....	Balance between graduate traineeships and graduate students supported through research grants.	Do.
(c) Other Federal Government agencies .....	Balance between student support through various programs of Federal Government.	Do.
(d) State governments .....	Not applicable.	
(e) Local governments .....	do.	
(f) Foreign governments or international organizations .....	do.	
(g) Nonprofit organizations .....	do.	
(h) Business enterprises .....	do.	
(i) Others .....	do.	

8. *Laws and regulations.* (See general answer to this question, in a later section.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question, in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Traineeships (graduate).

Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government:	
Transfer payments to individuals and nonprofit organizations.....	11.3
Grants to State and local governments.....	3.8
Total Federal expenditures <sup>1</sup> .....	15.1
Non-Federal expenditures.....	(2)

<sup>1</sup> Expenditures here refer to obligations.

<sup>2</sup> If additional funds are contributed from other sources, their amount and distribution are unknown.

## INSTITUTES

## PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

Institutes for Science and Mathematics Teachers are group training activities stressing the subject matter of science, conducted by institutions of higher education to provide upgrading and updating of experienced teachers. Institutes (and conferences) are held in the summer or in the academic year (full-time or part-time) and enroll as participants teachers from the college, secondary, and elementary levels of education.

2. *Operation*

Mechanism of support: Grants to institutions.

3. *History*

Summer institutes began in 1953 with 2 institutes involving 104 participants. Institutes in the academic year began in 1956-57 with two full-time and two part-time institutes. In fiscal year 1957, a total of 128 institutes were supported, at a cost of \$9.36 million; in fiscal year 1959, about 600 institutes and conferences costing \$33 million. In fiscal year 1965, an appropriation of approximately \$43 million supported 1,088 institutes and conferences involving a broad variety of scientific disciplines and science education personnel from all levels of education.

4. *Level of operations.* (See table 1.)

Program: Institutes.

Department or agency, and office or bureau: National Science Foundation.

TABLE 1.—*Level of operations or performance, fiscal years 1964-66*<sup>1</sup>

Measure	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate
(a) Magnitude of the program (number of institutes) (projects).....	1,025	1,088	1,029
(b) Applicants or participants (individuals).....	42,451	45,465	42,419
(c) Federal finances:			
Unobligated appropriations available (millions).....			<sup>1</sup> \$1.6
Obligations incurred (net) (millions).....	\$43.3	\$43.5	<sup>2</sup> \$39.7
(d) Matching or additional expenditures from non-Federal funds.....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
(e) Number of Federal Government employees administering the program (man-years).....	31.7	30.7	24.6
(f) Non-Federal personnel employed in the program.....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )

<sup>1</sup> For information on 1967 see introduction and letter of transmittal.

<sup>2</sup> Reflects the status of funds as of Dec. 31, 1965.

<sup>3</sup> Not available.

<sup>4</sup> Not available. See introduction for Science education.

5. *Estimated magnitude of program in 1970.* (See general answer to this question, in a later section.)

6. *Prospective changes in program orientation*

(a) and (b). (See general answer to these questions, in a later section.)

(c) Probable changes in conditions under which program will function in 1970.—No major changes expected.

7. *Coordination and cooperation.* (See table 2.)

Program: Institutes.

Department or agency, and office or bureau: National Science Foundation.

TABLE 2.—*Coordination and cooperation on purposes, policies, operations, and financing*

Entities for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division.....	All.....	Staff consultation.
(b) Other units of NSF.....	do.....	Staff consultation, announcements, and joint publications.
(c) Other Federal Government agencies.....	do.....	Staff consultation, interagency briefing sessions with college and university officials, joint funding of projects, and exchange of staff for site visits.
(d) State governments.....	Not applicable.....	
(e) Local governments.....	do.....	
(f) Foreign governments or international organizations.....	Project operation.....	Cooperation with international organizations for placement of about 100 foreign teachers in NSF institutes annually.
(g) Nonprofit organizations.....	All.....	Through the usual proposal and grant mechanism.
(h) Business enterprises.....	Not applicable.....	
(i) Other: Colleges and universities.....	Scheduling of announcements and award dates; terms of participation, etc.	Informal consultation.

8. *Laws and regulations.* (See general answer to this question, in a later section.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question, in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Institutes.

Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]	
Federal Government:	
Transfer payments to individuals and nonprofit organizations.....	18.0
Grants to State and local governments.....	25.5
Total Federal expenditures <sup>1</sup> .....	43.5
Non-Federal expenditures.....	(*)

<sup>1</sup> Expenditures here refer to obligations.<sup>2</sup> Amount and distribution of any funds contributed from other sources not available.

## RESEARCH PARTICIPATION AND SCIENTIFIC ACTIVITIES FOR TEACHERS

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

A. Research participation for teachers supports summer participation by well-qualified teachers in scientific research projects in university laboratories under the tutelage of experienced scientific investigators. Through the academic year extension, college teachers from small institutions who participate in training opportunities during the summer are given an opportunity to continue their activities at their home institution during the balance of the year.

B. Scientific activities for teachers supports a miscellany of teacher seminars, conferences, and other activities directed toward the improvement of science teaching in the schools and colleges.

#### 2. Operation

Mechanism of support: Grants to institutions and professional societies.

#### 3. History

Research participation for teachers has been supported by the Foundation since 1957. Scientific activities for teachers have been supported under varying titles since the establishment of the Foundation in 1951, for the purpose of aiding the development of significant ideas and prototypes of future programs in teacher training.

#### 4. Level of operations. (See table 1.)

Program: Research participation and scientific activities for teachers.  
Department or agency, and office or bureau: National Science Foundation.

TABLE 1.—*Level of operations or performance, fiscal years 1964-66* <sup>1</sup>

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate
(a) Magnitude of the program (number of projects supported).....	307	316	320
(b) Applicants or participants: Individuals (number of participants) (teachers).....	3,640	6,150	6,300
(c) Federal finances:			
Unobligated appropriations available (millions).....			\$2.0
Obligations incurred (millions).....	\$3.7	\$4.0	\$2.3
(d) Matching or additional expenditures from non-Federal funds (millions).....	(*)	(*)	(*)
(e) Number of Federal Government employees administering the program (man-years).....	6	6	7.4
(f) Non-Federal personnel employed in the program.....	(*)	(*)	(*)

<sup>1</sup> For information on 1967 see introduction and letter of transmittal.<sup>2</sup> Reflects status of funds as of Dec. 31, 1965.<sup>3</sup> Not available.<sup>4</sup> Not available. See introduction for Science education.



5. *Estimated magnitude of program in 1970.* (See general answer to this question, in a later section.)

6. *Prospective changes in program orientation*

(a) and (b). (See general answers to these questions, in a later section.)

(c) Probable changes in conditions under which program will function in 1970.—Increase in number of institutions affected through academic year extension phase of research participation for college teachers.

7. *Coordination and cooperation.* (See table 2.)

Program: Research participation and scientific activities for teachers.  
Department or agency, and office or bureau: National Science Foundation.

TABLE 2.—*Coordination and cooperation on purposes, policies, operations, and financing*

Entities for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division.....	All.....	Staff consultation.
(b) Other units of NSF.....	do.....	Staff consultation, announcements and joint publications.
(c) Other Federal Government agencies.....	do.....	Staff consultation, interagency briefing sessions with college and university officials, joint funding of projects, exchange of staff for site visits.
(d) State governments.....	Not applicable.....	
(e) Local governments.....	do.....	
(f) Foreign governments or international organizations.....	do.....	
(g) Nonprofit organizations.....	All.....	Through the usual proposal and grant mechanism.
(h) Business enterprises.....	Not applicable.....	
(i) Others: Colleges and universities.....	Scheduling of announcement and award dates; terms of participation, etc.	Informal consultation.

8. *Laws and regulations.* (See general answer to this question, in a later section.)

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question, in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Research participation and scientific activities for teachers.  
Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

(In millions of dollars)

Federal Government:

Transfer payments to individuals and nonprofit organizations..... 1.8

Grants to State and local governments..... 2.2

Total Federal expenditures <sup>1</sup>..... 4.0

Non-Federal expenditures <sup>2</sup>.....

<sup>1</sup> Expenditures here refer to obligations.

<sup>2</sup> Source and distribution of any additional funds required to support this activity not available.

## SCIENCE EDUCATION FOR UNDERGRADUATE STUDENTS

## PART I. DESCRIPTION OF THE PROGRAM

## 1. Objectives

The program provides opportunities in the scholarly development of outstanding undergraduates who may pursue careers in science. In an ideal project a participant will confront all aspects of a research problem which are calculated to develop his independence in intellectual endeavors. Experience with this more open approach to the education of young scholars has led and is leading many institutions to incorporate opportunities for research participation and independent study into normal curricular patterns.

## 2. Operation

Mechanism of support: Grants to institutions.

## 3. History

Funds were first made available for the program in fiscal year 1959 when 300 requests for \$3.4 million to support 4,659 participants were received. A total of 213 grants for \$1.7 million supported 2,686 participants. Program expenditures neared \$6 million in fiscal year 1963, 1964, and 1965, and grew to \$6.5 million in fiscal year 1966. Requests are at the rate of 12,000 participants and \$13 million annually, growing approximately 10 percent per year.

## 4. Level of operations. (See table 1.)

Program: Science education for undergraduate students.

Department or agency, and office or bureau: National Science Foundation.

TABLE 1.—Level of operations or performance, fiscal years 1964–66<sup>1</sup>

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 (estimated)
(a) Magnitude of the program (number of grants awarded).....	576	585	640
(b) Applicants or participants: Individuals (number of participants).....	5,885	5,874	6,300
(c) Federal finances:			
Unobligated appropriations available (millions).....			<sup>2</sup> \$2.5
Obligations incurred (millions).....	\$6.1	\$5.5	<sup>3</sup> \$4.0
(d) Matching or additional expenditures from non-Federal funds.....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
(e) Number of Federal Government employees administering the program (man-years).....	7	6.5	9.0
(f) Non-Federal personnel employed in the program.....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )

<sup>1</sup> For information on 1967 see Introduction and letter of transmittal.

<sup>2</sup> Reflects status of funds as of Dec. 31, 1965.

<sup>3</sup> Not available.

<sup>4</sup> Not available. See Introduction for Science education.

5. *Estimated magnitude of program in 1970.* (See general answer to this question, in a later section.)

6. *Prospective changes in program orientation*

(a) and (b). (See general answer to these questions, in a later section.)

(c) Probable changes in conditions under which program will function in 1970.—No major changes expected.

7. *Coordination and cooperation.* (See table 2.)

Program: Science education for undergraduate students.

Department or agency, and office or bureau: National Science Foundation.

TABLE 2.—*Coordination and cooperation on purposes, policies, operations, and financing*

Entities for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division.....	All.....	Staff consultation.
(b) Other units of NSF.....	do.....	Staff consultation, announcements and joint publications.
(c) Other Federal Government agencies.....	do.....	Staff consultation, interagency briefing sessions with college and university officials, joint funding of projects, exchange of staff for site visits.
(d) State governments.....	Not applicable.....	
(e) Local governments.....	do.....	
(f) Foreign governments or international organizations.....	do.....	
(g) Nonprofit organizations.....	All.....	Informal consultation.
(h) Business enterprises.....	Not applicable.....	
(i) Others: Colleges and universities.....	Scheduling of announcements and award dates; terms of participation, etc.	Informal consultation.

8. *Laws and regulations.* (See general answer to this question, in a later section.)

#### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question, in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Science education for undergraduate students.

Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government:	
Transfer payments to individuals and nonprofit organizations.....	2.7
Grants to State and local governments.....	2.8
Total Federal expenditures <sup>1</sup> .....	5.5
Non-Federal expenditures.....	(?)

<sup>1</sup> Expenditures here refer to obligations.

<sup>2</sup> Source and distribution of any additional funds required to support this activity not available.

### SCIENCE EDUCATION FOR SECONDARY SCHOOL STUDENTS

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. Objectives

To provide academically talented students with a variety of educational experience in science and mathematics distinct from those available to them in their normal high school or early college curriculums and to make it possible for schools systems, in cooperation with nearby colleges and universities, to obtain advice and assistance in the development and implementation of an improved instructional program in science.

##### 2. Operation

Mechanism of support: Grants to institutions and professional societies.

### 3. History

The first experimental programs for secondary school students were begun in 1958, although visiting scientist lectures to high schools were first supported in 1957 and have continued to the present. In 1959 the major secondary school student program, which provides science training opportunities for high school students during the summer, was begun and is now in its 7th consecutive year of operation. As an outgrowth of this activity, the cooperative college-school science program for teachers and students was begun in 1961 to bring to bear on the problems of local school systems the resources of nearby institutions of higher education.

### 4. Level of operations. (See table 1.)

Program: Science education for secondary school students.

Department or agency, and office or bureau: National Science Foundation.

Table 1.—Level of operations or performance, fiscal years 1964–66<sup>1</sup>

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 (esti- mated)
(a) Magnitude of the program (number of projects).....	303	305	325
(b) Applicants or participants:			
Individuals:			
Teachers.....	1, 114	1, 649	2, 700
Students.....	11, 835	11, 398	11, 000
Visiting scientists (days of visit).....	7, 500	6, 970	6, 500
(c) Federal finances:			
Unobligated appropriations available (millions).....			<sup>2</sup> \$0.4
Obligations incurred (millions).....	\$4.1	\$4.1	<sup>2</sup> \$3.6
(d) Matching or additional expenditures from non-Federal funds.....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
(e) Number of Federal Government employees administering the program (man-years).....	( <sup>4</sup> ) 6¼	( <sup>4</sup> ) 6¼	( <sup>4</sup> ) 6¼
(f) Non-Federal personnel employed in program.....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )

<sup>1</sup> For information on 1967 see introduction and letter of transmittal.

<sup>2</sup> Reflects status of funds as of Dec. 31, 1965.

<sup>3</sup> Not available.

<sup>4</sup> Not available. See introduction for Science education.

5. *Estimated magnitude of program in 1970.* (See general answer to this question, in a later section.)

6. *Prospective changes in program orientation*

(a) and (b). (See general answer to this question, in a later section.)

(c) Probable changes in conditions under which program will function in 1970.—More experimental approaches to the identification and development of science-gifted students will be built into grants. Increased attention will be paid to finding talent among the less-privileged elements of the population. Projects for the rapid acceleration in subject matter for the most gifted will be more widespread, without removing them entirely from their age group. There will be greater emphasis placed on the development of cooperative techniques between colleges and school systems to seek solutions to problems in science education at all levels.

7. *Coordination and cooperation.* (See table 2.)

Program: Science education for secondary school students.

Department or agency, and office or bureau: National Science Foundation.

TABLE 2.—*Coordination and cooperation on purposes, policies, operations, and financing*

Entities for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division.....	All.....	Staff consultation.
(b) Other units of NSF.....	do.....	Staff consultation, announcements, and joint publications.
(c) Other Federal Government agencies.....	do.....	Staff consultation, interagency briefing sessions with college and university officials, joint funding of projects, and exchange of staff for site visits.
(d) State governments.....	Not applicable.....	Conferences, brochures, and proposal support information.
(e) Local governments.....	Joint support of school system improvement programs.	
(f) Foreign governments on international organizations.....	Not applicable.....	Through the usual proposal support mechanism.
(g) Nonprofit organizations.....	All.....	
(h) Business enterprises.....	Not applicable.....	Informal consultation.
(i) Other: Colleges and universities.....	Scheduling of announcements and award dates, terms of participation, etc.	

8. *Laws and regulations.* (See general answer to this question, in a later section.)

#### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question, in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Science education for secondary school students.

Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government:	
Transfer payments to individuals and nonprofit organizations.....	2.3
Grants to State and local governments.....	1.8
Total Federal expenditures <sup>1</sup> .....	4.1
Non-Federal expenditures.....	( <sup>2</sup> )

<sup>1</sup> Expenditures here refer to obligations.

<sup>2</sup> Source and distribution of any additional funds required to support this activity not available.

### SPECIALIZED ADVANCED SCIENCE EDUCATION PROJECTS

#### PART I. DESCRIPTION OF THE PROGRAM

##### 1. *Objectives*

To search for and test new approaches to the improvement of science education in colleges and universities and in associations of institutions and to explore and test various mechanisms which will lead to a greater public understanding of the nature of science and its relationship to the contemporary world.

## 2. Operation

Mechanism of support: Grants to institutions, inter-institutional associations and professional organizations.

## 3. History

Since 1959 a variety of conferences, colloquia, special courses and field training have been supported under this activity. Since 1962 special emphasis has been placed on means by which institutions might meet rapidly rising standards of quality as well as the need for more specialized programs and faculties. Since 1958 several different types of approaches have been explored, leading to a more thorough understanding of science and its impact on the general public.

## 4. Level of operations. (See table 1.)

Program: Specialized advanced science education projects.

Department or agency, and office or bureau: National Science Foundation.

TABLE 1.—Level of operations or performance, fiscal years 1964-66<sup>1</sup>

[Dollar amounts in millions]

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate
(a) Magnitude of the program (number of projects).....	84	85	97
(b) Applicants or participants: Individuals (number of participants).....	2,302	2,939	3,400
(c) Federal finances:			
Unobligated appropriations available (millions).....			<sup>2</sup> \$1.3
Obligations incurred (millions).....	\$1.6	\$1.4	<sup>2</sup> \$0.9
(d) Matching or additional expenditures from non-Federal funds.....	(*)	(*)	(*)
(e) Number of Federal Government employees administering the program (man-years).....	5	5.5	
(f) Non-Federal personnel employed in the program.....	(*)	(*)	(*)

<sup>1</sup> For information on 1967 see introduction and letter of transmittal.

<sup>2</sup> Reflects status of funds as of Dec. 31, 1965.

<sup>3</sup> Not available.

<sup>4</sup> Not available. See introduction for Science education.

## 5. Estimated magnitude of program in 1970. (See general answer to this question, in a later section.)

## 6. Prospective changes in program orientation

(a) and (b). (See general answers to this question, in a later section.)

(c) Probable changes in conditions under which program will function in 1970.—Greater emphasis will be given to inter-institutional associations, preservice education of teachers, and the strengthening and upgrading of specific departments.

## 7. Coordination and cooperation. (See table 2.)

Program: Specialized advanced science education projects.

Department or agency, and office or bureau: National Science Foundation.

TABLE 2.—*Coordination and cooperation on purposes, policies, operations, and financing*

Entities for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division.....	All.....	Staff consultation.
(b) Other units of NSF.....	do.....	Staff consultation, announcements and joint publications.
(c) Other Federal Government agencies.....	do.....	Staff consultation, interagency briefing sessions with college and university officials, joint funding of projects, exchange of staff for site visits.
(d) State governments.....	Not applicable.....	
(e) Local governments.....	do.....	
(f) Foreign governments or international organizations.....	do.....	
(g) Nonprofit organizations.....	All.....	Through the usual proposal and grant mechanism and joint funding.
(h) Business enterprises.....	Not applicable.....	
(i) Others: Colleges and universities.....	Terms of participation and administration.....	Staff consultation.

8. *Laws and regulations.* (See general answer to this question, in a later section.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question, in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Specialized advanced science education projects.

Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government:	
Transfer payments to individuals and nonprofit organizations.....	0.9
Grants to State and local governments.....	.5
Total Federal expenditures <sup>1</sup> .....	1.4
Non-Federal expenditures.....	( <sup>2</sup> )

<sup>1</sup> Expenditures here refer to obligations.

<sup>2</sup> Source and distribution of any additional funds required to support this activity not available.

## COURSE CONTENT IMPROVEMENT

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

To bring the scientific resources of the Nation to bear on providing the best materials and methods for instruction in science attainable at the present time and to see that there is continuing research and development in this vital area on a scale commensurate with that in other great national enterprises, public and private.

#### 2. Operation

Mechanism of support: Grants to institutions and professional societies.

### 3. History

During World War II it became apparent that instructional materials in schools and colleges, as well as teacher preparation, were highly inadequate. Early in its history the Foundation undertook support of projects designed to update curricular materials, particularly in physics and mathematics. Starting at high school level, and soon spreading to the elementary school and college levels, support was made available "across the board" in all scientific disciplines and mathematics to groups engaged in curriculum improvement through the development of new courses and instructional materials.

### 4. Level of operations. (See table 1.)

Program: Course content improvement.

Department or agency, and office or bureau: National Science Foundation.

TABLE 1.—Level of operations or performance, fiscal years 1964-66 <sup>1</sup>

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate
(a) Magnitude of the program, grants awarded (projects).....	(?) 71	(?) 60	(?) 76
(b) Applicants or participants, other.....	(?)	(?)	(?)
(c) Federal finances:			
Unobligated appropriations available (millions).....			<sup>3</sup> \$5.6
Obligations incurred (millions).....	\$14.3	\$14.7	<sup>3</sup> \$10.4
(d) Matching or additional expenditures from non-Federal funds.....	(?)	(?)	(?)
(e) Number of Federal Government employees administering the program (man-years).....	(?) 13	(?) 10	(?) 11
(f) Non-Federal personnel employed in the program.....	(?)	(?)	(?)

<sup>1</sup> For information on 1967 see introduction and letter of transmittal.

<sup>2</sup> Number of participants not available since these undertakings are conducted by the various grantees under dissimilar circumstances using diverse methods, and the number of participants varies widely.

<sup>3</sup> Reflects the status of funds as of Dec. 31, 1965.

<sup>4</sup> Not available.

<sup>5</sup> Not available. See introduction for Science education.

5. *Estimated magnitude of program in 1970.* (See general answer to this question, in a later section.)

6. *Prospective changes in program orientation*

(a) and (b). (See general answers to these questions, in a later section.)

(c) Probable changes in conditions under which program will function in 1970.—Basic operation will be little changed; probable extension from the national level to a regional-State system, and, in some cases, local level. There will be increased emphasis on (a) problems of elementary education, by innovative experiments, (b) followup and second wave projects, and (c) increased support for college level projects at individual institutions.

7. *Coordination and cooperation.* (See table 2.)

Program: Course content improvement.

Department or agency, and office or bureau: National Science Foundation.



TABLE 2.—*Coordination and cooperation on purposes, policies, operations, and financing*

Entities for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division.....	All.....	Staff consultation and cooperative budgetary transactions.
(b) Other units of NSF.....	do.....	Do.
(c) Other Federal Government agencies.	do.....	(1) Correspondence; (2) transfer of funds; (3) conferences, panel discussions; and (4) reciprocal membership on advisory committees.
(d) State governments.....	Not applicable.....	
(e) Local Governments.....	do.....	
(f) Foreign governments or international organizations.	Use and translations of materials.	Correspondence with NSF International Science Liaison Staff and grantees; conferences.
(g) Nonprofit organizations..	All.....	Through the usual proposal and grant mechanism.
(h) Business enterprises.....	Publication and distribution.....	Conferences, reports, and correspondence.
(i) Other: Colleges and universities.	Terms of participation and administration.	Do.

8. *Laws and regulations.* (See general answer to this question in a later section.)

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question, in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Course content improvement.

Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*  
(In millions of dollars)

Federal Government:	
Transfer payments to individuals and nonprofit organizations.....	9.2
Grants to State and local governments.....	5.5
Total Federal expenditures <sup>1</sup> .....	14.7
Non-Federal expenditures.....	( <sup>2</sup> )

<sup>1</sup> Expenditures here refer to obligations.

<sup>2</sup> Amount and distribution of any funds contributed from other sources not available.

INSTRUCTIONAL EQUIPMENT FOR UNDERGRADUATE EDUCATION

PART I. DESCRIPTION OF THE PROGRAM

1. *Objective*

To aid the undergraduate departments of the Nation's educational institutions to update laboratory equipment in order to improve the quality of instruction in science. Such updating is necessary because of the advances in instrumentation that have revolutionized scientific research at the graduate level.

2. *Operation*

Mechanism of support: Grants to institutions.

3. *History*

In fiscal year 1962, the Foundation initiated a program of matching grants which assisted junior colleges, 4-year institutions, and the

undergraduate units of universities to purchase instruments and other equipment. In its 4 years of operation, grants totaling almost \$30 million have been awarded to over 800 institutions.

4. *Level of operations.* (See table 1.)

Program: Instructional equipment for undergraduate education.  
Department or agency, and office or bureau: National Science Foundation.

TABLE 1. *Level of operations or performance, fiscal years 1964-66*<sup>1</sup>

[Dollar amounts in millions]

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 (estimate)
(a) Magnitude of the program (number of grants).....	1,163	992	840
(b) Applicants or participants: Other (universities and colleges receiving grants).....	648	554	450
(c) Federal finances:			
Unobligated appropriations available.....			\$7.5
Obligations incurred.....	\$8.9	\$8.2	
(d) Matching or additional expenditures for the program.....	\$8.9	\$8.2	\$7.5
(e) Number of Federal employees administering the program..	7	7	7
(f) Non-Federal personnel employed in the program.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> For information on 1967 see introduction and letter of transmittal.

<sup>2</sup> Reflects status of funds as of Dec. 31, 1965.

<sup>3</sup> Amounts represent minimum additional expenditures since grantees must provide at least an equal sum from non-Federal sources.

<sup>4</sup> Not available. See introduction for Science education.

5. *Estimated magnitude of program in 1970.* (See general answer to this question in a later section.)

6. *Prospective changes in program orientation*

(a) and (b). (See general answer to these questions in a later section.)

(c) Probable changes in conditions under which program will function in 1970: As sophistication in instrumentation increases, institutions will need aid in planning their needs and accommodations for instructional equipment. Limited funds will be necessary to meet this need, but aside from this innovation the program will probably operate as it is currently administered.

7. *Coordination and cooperation.* (See table 2.)

Program: Instructional equipment for undergraduate education.  
Department or agency, and office or bureau: National Science Foundation.

TABLE 2.—*Coordination and cooperation on purposes, policies, operations, and financing*

Entities for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division.....	All.....	Staff consultation.
(b) Other units of NSF.....	do.....	Staff consultations on proposal evaluation, other support, and announcements.
(c) Other Federal Government agencies.....	do.....	Conferences and exchange of program information with pertinent agencies.
(d) State governments.....	Not applicable.....	
(e) Local governments.....	do.....	
(f) Foreign governments or international organizations.....	do.....	
(g) Nonprofit organizations.....	do.....	
(h) Business enterprises.....	do.....	
(i) Other colleges and universities.....	Terms of participation.....	Consultations.

8. *Laws and regulations.* (See general answer to this question in a later section.)

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Instructional equipment for undergraduate education.

Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government:	
Transfer payments to individuals and nonprofit organizations.....	4.0
Grants to State and local governments.....	4.2
	8.2
Total Federal expenditures <sup>1</sup> .....	8.2
Non-Federal expenditures.....	(?)

<sup>1</sup> Expenditures here refer to obligations.

<sup>2</sup> Not available, but grantees must provide at least an equal sum from non-Federal sources.

## Basic Research Facilities

### INTRODUCTION

The Foundation provides support for basic research facilities through two major activities: (1) Specialized research facilities and (2) graduate science facilities. Answers to all the committee's questions except 5, 6(a), 6(b), 8, and 9, which are covered separately, are included for each of these activities.

The budget estimates for these programs for fiscal year 1967 are as follows:

<i>Activity</i>	<i>Millions of dollars</i>
Specialized research facilities support.....	30.0
Graduate science facilities.....	20.0
	50.0
Total.....	50.0

The economic classification of program expenditures shown in response to question 10 is in accord with the treatment of these funds by the National Income Division of the Department of Commerce in the preparation of statistics on national income and product.

## SPECIALIZED RESEARCH FACILITIES SUPPORT

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The Foundation provides support for specialized research facilities and major items of research equipment at colleges, universities, and other research institutions. The absence or inadequacy of facilities and equipment at many institutions is a key limiting factor in the advancement of basic scientific research, and the resources of most institutions are inadequate to acquire the required facilities without Federal assistance. These research facilities are provided to make

research scientists more productive and to make possible investigations which could not otherwise be carried out. The program thus is an important contribution to the ultimate objective of building and maintaining the national strength in science.

## 2. Operation

Mechanism of support: Grants to institutions.

## 3. History

The specialized research facilities support programs have grown slowly from a modest start in fiscal year 1958 and in parallel with the growing realization that in many fields of science continued progress in research is increasingly dependent upon the availability of ever-more complex and specialized equipment and facilities. Unfortunately, as the required facilities become more and more expensive, the universities and other nonprofit research institutions become less able to provide the necessary funds. Therefore, the Foundation has been providing limited assistance to these institutions for the acquisition of specialized facilities, but only when the need is urgent, when it is clearly in the national interest, and when necessary funds cannot be obtained from other sources. There is no fixed requirement as to the amount of funds the institution must itself raise before becoming eligible. Specialized research facilities are supported in conjunction with the support of basic research in the biological, physical, social, and engineering sciences. Funds are also made available for university computing facilities. Oceanographic research facilities for both physical oceanography and marine biology are supported. Other specialized biological facilities and equipment, such as centers to house research collections for taxonomic and systematic biology, genetic stock centers, and special devices such as controlled environment facilities have been funded by the Foundation. Instruments for research in chemistry and facilities for research in atmospheric sciences, astronomy, physics, and engineering have been supported by the Foundation during the period since fiscal year 1958.

## 4. Level of operations. (See table 1.)

Program: Specialized research facilities support.

Department or agency, and office or bureau: National Science Foundation.

TABLE 1.—Level of operations or performance, fiscal years 1964–66<sup>1</sup>

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 (estimated)
(a) Magnitude of the program (number of grants awarded).....	94	153	210
(b) Applicants or participants (number of institutions receiving grants): Other (universities, colleges, and other nonprofit research organizations).....	60	104	95
(c) Federal finances in millions of dollars: Unobligated appropriations available.....			<sup>2</sup> 17.8
Obligations incurred.....	19.6	27.7	<sup>2</sup> 9.8
(d) Matching or additional expenditures from non-Federal funds.....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
(e) Number of Federal Government employees administering the program in man-years.....	6.0	8.5	8.5
(f) Non-Federal personnel employed in the program (number of consultants) <sup>4</sup> .....	50	50	50

<sup>1</sup> For information on 1967 see introduction and letter of transmittal.

<sup>2</sup> Reflects the status of funds as of Dec. 31, 1965.

<sup>3</sup> Not available. Matching or additional expenditures from non-Federal funds are not required for these programs. However, such expenditures are frequently made and the amount varies widely from case to case.

<sup>4</sup> Data represent number of people who serve on panels of those Specialized Research Facilities programs which have formal advisory panels. A number of other consultants serve on an ad hoc basis. No estimates are available for the number of non-Federal employees required for the construction, operation, and maintenance of facilities provided by these programs nor the number of "employees engaged in the assisted activity."

5. *Estimated magnitude of program in 1970.* (See general answer to this question in a later section.)

6. *Prospective changes in program orientation*

(a) and (b). (See general answers to these questions in a later section.)

(c) Probable changes in conditions under which program will function in 1970.—It is anticipated that by 1970 the number of graduate students will have increased greatly, resulting in the need for increased specialized research facilities. Additionally, the methods of research will continue to change and require increasingly complex research instruments.

7. *Coordination and cooperation.* (See table 2.)

Program: Specialized research facilities support.

Department or agency, and office or bureau: National Science Foundation.

TABLE 2.—*Coordination and cooperation on purposes, policies, operations and financing*

Entities for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division.....	Proposal evaluation.....	Staff reviews, formal coordination, informal liaison.
(b) Other units of NSF.....	.....do.....	Staff reviews, formal coordination informal liaison.
(c) Other Federal Government agencies.	Coordination with other agencies...	Exchange of data (especially compilations of proposals received and actions taken), informal liaison arrangements for loan of equipment, etc.
(d) State governments.....	Occasional special features.....	
(e) Local governments.....	.....do.....	
(f) Foreign governments or international organizations.	Not applicable.....	
(g) Nonprofit organizations.....	.....do.....	
(h) Business enterprises.....	.....do.....	
(i) Others.....	.....do.....	

8. *Laws and regulations.* (See general answer to this question in a later section.)

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Specialized research facilities.

Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government:	
Transfer payments to individuals and nonprofit organizations.....	18.2
Grants to State and local governments.....	9.5
Total Federal expenditures <sup>1</sup> .....	27.7
Non-Federal expenditures.....	( <sup>2</sup> )

<sup>1</sup> Expenditures here refer to obligations.

<sup>2</sup> Not available. Institutions are not required to report to the Foundation the sources of additional funds that may be expended by them for these programs.

## GRADUATE SCIENCE FACILITIES

## PART I. DESCRIPTION OF THE PROGRAM

## 1. Objectives

To strengthen the graduate science programs of the Nation's colleges and universities by providing funds for the construction or renovation of facilities for basic research and graduate research training.

## 2. Operation

Mechanism of support: Grants to institutions.

## 3. History

After 2 years of consideration, the Foundation, in fiscal year 1960, initiated an experimental program offering support for the renovation or construction of graduate level science facilities. The budget was \$2.1 million. The overwhelming institutional response attested to the urgent need for a program of this type. The graduate science facilities program was then established on a permanent basis by the Foundation in fiscal year 1961.

## 4. Level of operations. (See table 1.)

Program: Graduate science facilities.

Department or agency, and office or bureau: National Science Foundation.

TABLE 1.—Level of operations or performance, fiscal years 1964-66<sup>1</sup>

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 (estimated)
(a) Magnitude of the program (number of grants awarded)....	130	105	100
(b) Applicants or participants (institutions receiving grants): Other (universities, colleges, and other nonprofit re- search organizations).....	88	74	65
(c) Federal finances: Unobligated appropriations available (millions).....			<sup>2</sup> \$24.2
Obligations incurred (millions).....	\$30.5	\$21.4	<sup>2</sup> \$7.4
(d) Matching or additional expenditures from non-Federal funds <sup>3</sup> (millions).....	\$30.5	\$21.4	\$31.6
(e) Number of Federal Government employees administering the program (man-years).....	30	25	28
(f) Non-Federal personnel employed in program (number of consultants) <sup>4</sup> .....	24	51	61

<sup>1</sup> For information on 1967, see introduction and letter of transmittal.

<sup>2</sup> Reflects the status of funds as of Dec. 31, 1965. Includes \$6,600,000 of fiscal year 1965 funds committed for specific projects in that year and carried forward to fiscal year 1966 pending completion and approval of architectural plans.

<sup>3</sup> Minimum amount. At least equal matching by the university from non-Federal funds is required, but in many cases the university overmatches.

<sup>4</sup> Includes panel members and ad hoc consultants. No estimates are available for the number of non-Federal employees required for the construction, operation, and maintenance of facilities provided by these programs nor the number of "employees engaged in the assisted activity."

## 5. Estimated magnitude of program in 1970. (See general answer to this question in a later section.)

## 6. Prospective changes in program orientation.

(a) and (b). (See general answer to these questions in a later section.)

(c) Probable changes in conditions under which program will function in 1970.—All indications suggest that by 1970 the number of graduate students will have increased greatly, resulting in a need for vastly expanded laboratory space. Research projects will have be-

come more complex, and greater use will be made of interdisciplinary science teams. These factors, as well as the shortage of available laboratory space, will result in the need for large and expensive high-rise laboratory buildings. Hence it is anticipated that both the number and size of requests submitted to the facilities program will increase accordingly. Not only is it anticipated that the amount of graduate science activity will increase but a rise in the quality of such programs is desirable. Therefore, a larger percentage of facilities requests will deserve support. It is also expected that as science education is emphasized at the lower educational levels, research will be initiated earlier in a student's career, again increasing the need for laboratories. The need to expand and renovate outmoded laboratory facilities will continue to constitute a significant demand upon the facilities program.

7. *Coordination and cooperation.* (See table 2.)

Program: Graduate science facilities.

Department or agency, and office or bureau: National Science Foundation.

TABLE 2.—*Coordination and cooperation on purposes, policies, operations, and financing*

Entitles for coordination and cooperation	Aspects of program amenable to coordination and cooperation	Devices or methods developed to promote coordination and cooperation
(a) Within division.....	Proposal evaluation.....	Proposals reviewed by staff members of this program as well as other appropriate people within division. Such review includes site visits. Proposals referred to appropriate people in other NSF offices.
(b) Other units of NSF.....	do.....	
(c) Other Federal Government agencies.	Coordination where another agency is involved in a facilities project.	Division head sits on NIH Council. NSF is represented at OE facilities panel meetings. Proposals and information exchanged.
(d) State governments.....	Not applicable.....	
(e) Local governments.....	do.....	
(f) Foreign governments or international organizations.	do.....	
(g) Nonprofit organizations.....	do.....	
(h) Business enterprises.....	do.....	
(i) Other.....	do.....	

8. *Laws and regulations.* (See general answer to this question in a later section.)

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general answer to this question in a later section.)

10. *Economic classification of program expenditures.* (See table 3.)

Program: Graduate science facilities.

Department or agency, and office or bureau: National Science Foundation.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government:

Transfer payments to individuals and nonprofit organizations.....	8.0
Grants to State and local governments.....	13.4

Total Federal expenditures <sup>1</sup> .....	21.4
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Non-Federal expenditures.....	(2)
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<sup>1</sup> Expenditures here refer to obligations.

<sup>2</sup> Not available, but institutions are required to provide at least equal matching of the Federal funds from non-Federal sources. In many instances the institutions overmatch the Federal contribution.

## GENERAL ANSWERS FOR QUESTIONS 5, 6, 8, AND 9

*5. Estimated magnitude of program in 1970*

Precise estimation of the magnitude of these programs in 1970 is most difficult at this time even though it is reasonable to assume that the total requirement for Federal support will be greater than now for most of the activities toward which these programs are directed. All indications suggest that student enrollment at all levels, including the graduate level, will continue to rise at a rate of 8 to 10 percent per year. This means a cumulative increase, between 1966 and 1970, of between 36 and 50 percent in the numbers of students. It may be further assumed that at least the same proportion of our young people will aspire toward careers in science and engineering. Therefore, it is a reasonable assumption that most activities directed toward providing opportunity for scientific study, for continued improvement of science curriculums and programs, for improving teachers of science, for expanding and modernizing facilities for research and graduate training in the sciences and engineering—all these will engender increased costs in at least the same proportion as the increase in student population. Even if the Federal proportion of the costs remains constant, the absolute level will have to increase significantly in most instances if we are to maintain the same quality of education as is now being provided. If we are to attempt to accelerate the rate of improvement of the educational process, as we undoubtedly should, then the total costs will rise even more sharply, with a concomitant increase in the need for Federal support.

The National Science Foundation is but one of several Federal agencies that support activities such as those outlined in the individual program descriptions of this report. The total Federal effort in relation to any one of these is of considerably greater significance than that of any single agency. Therefore, the Foundation's level of operation in any of the programs described in this report must be related to that of its sister agencies with respect to similar or related activities. Thus, for example, the passage of the Higher Education Act of 1965 and the probable increase by Office of Education activities in certain areas in the future will make necessary careful evaluation by the Foundation of its own level of operations during the coming years in similar or related areas.

It is not known at present at what levels the programs of other agencies will be operating in 1970. Nor is it precisely known how various activities will be divided among these agencies. Therefore, the Foundation is not now in a position to estimate the 1970 levels of the programs described in this report.

*6. Prospective changes in program orientation*

This question was revised in the October 22, 1965, letter from the chairman of the committee to read as follows:

The reply should cover pending legislative proposals and proposed administrative and organizational changes which are in the President's program or in the departmental or agency program as of late January 1966. The reply should include recommendations or proposals set forth in the President's annual messages in January 1966, including recommendations which are made in the budget for fiscal year 1967.

The National Science Foundation, created by the National Science Foundation Act of 1950 (Public Law 507, 81st Congress), has a statu-



tory vehicle particularly well adapted to serve the ever-changing and varied needs of science. Under this act it is not necessary to seek specific authorizing legislative approval for new and innovative programs designed to meet these ends. For example, the budget for fiscal year 1967 includes \$10 million for each of two such programs: (1) the departmental development program, and (2) the college science improvement program. The former is an extension of the science development program which has sought to increase the number of institutions recognized as having outstanding scientific strength by making a limited number of very large grants which may support several scientific fields. The extended program, departmental development, has the more modest aim of producing significant improvement in the quality of research and education in a single field at institutions which are not yet ready to move into the top rank on a broad front but have already displayed sufficient strength in a field to provide a basis for further improvement. Grants under the new program will be made to a limited number of institutions, will be smaller than those in the science development program, and each will be restricted to a specific area of science.

The primary purposes of the college science improvement program, the latter of the two new programs identified above, are to accelerate the development of the science capabilities of a selected number of predominantly undergraduate institutions and to enhance their capacity for continuing self renewal. The program seeks to improve the quality of these undergraduate institutions in the sciences and to expand the opportunities for undergraduates in these institutions to become interested in and to pursue careers in science. The program has been designed to have a beneficial effect on professors and students; subject matter and methods of instruction; curriculums and individual courses; and facilities, equipment, and teaching materials.

The Foundation has undertaken a broad continuing review of science education at the undergraduate level. This educational level offers the greatest challenge and is a critical element of the national effort to bring scientific excellence to all regions of the country. To a very limited extent the fiscal year 1967 budget proposal reflects the Foundation's plans to assist institutions in the improvement of undergraduate science education within existing budget policy. However, a massive program over a period of several years is necessary to achieve significant gains in quality.

Three changes are being proposed in the appropriation language for fiscal year 1967, none of which has direct relevance to the basic research facilities and science education programs, identified for coverage in the questionnaire provided by the Joint Economic Committee.

Several conclusions and recommendations for changes in the organic act of the Foundation and for alterations in the structure and/or practice of the Foundation's administrative machinery were proposed by the Subcommittee on Science, Research, and Development of the Committee on Science and Astronautics, U.S. House of Representatives, after a thorough review of the Foundation's operations. The findings of the review, based on extensive hearings and other investigations, were published for release on January 9, 1966, in the committee's report, "The National Science Foundation, Its Present and Future." The recommendations are undergoing thorough review and consideration in the Foundation and with the National Science

Board but too little time has elapsed since their release for the Foundation to have formulated conclusions.

### 8. *Laws and regulations.*

(a) National Science Foundation Act of 1950 (Public Law 507—81st Cong.), as amended.

(b) Reorganization Plan No. 2 of 1962, effective June 8, 1962.

(c) Reorganization Plan No. 5 of 1965, effective July 27, 1965.

(d) Executive Order 10521, March 17, 1954, as amended by Executive Order 10807.

(e) Executive Order 10807, March 13, 1959.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

#### INTRODUCTION

The recipients of the bulk of NSF expenditures, as the preceding tables and figures show, are institutions, organizations, or individuals in the nonprofit sector of the economy. Moreover, the dimensions of NSF expenditures are small in absolute terms and relative to the expenditures for scientific and technological purposes by the Federal Government as a whole. These facts are central to any attempt to assess the economic significance of NSF expenditures. It is probably not necessary, but it may be useful, to point out that the conventional concepts of economic theory and the tools of economic analysis have been developed in attempts to describe and understand the behavior of the private sector of the economy in which profit maximization is the overriding objective. Any simple, unqualified transfer of these concepts and analytical tools to the nonprofit sector may, consequently, lead to misconceptions and invalid conclusions.

Thus, while it is customary to speak of employment, competition, and productivity, for example, in analyses of the nonprofit sector of the economy, these terms may not carry the same connotations they have when used in connection with the profit sector of the economy. As concepts, they cannot always be used as solid building blocks to construct a body of theory for the nonprofit sector. One speaks of the "productivity" of a scientific research institution (even in the absence of agreed-upon measures of scientific productivity), but it does not follow that increased productivity will necessarily result in lower prices for the final "product." Similarly, one speaks of competition among universities for students, but it does not follow that intensive competition leads to the elimination of "marginal" academic enterprises. Many other examples could be cited to demonstrate the hazards of applying conventional tools of economic analysis to the nonprofit sector. In the nonprofit sector, motivations, the forms of remuneration, and institutional incentives and restraints may not be of the same order as in the private sector. In many instances, it is often very difficult to measure, quantify, or even define the final product in the nonprofit sector. What is the output of a university, of a scientific research laboratory, a hospital, or a religious establishment? How should their outputs be expressed quantitatively?

The difficulties and problems here suggested are well known to economists. To overcome them, it is necessary either to adapt the traditional concepts of economic analysis to the nonprofit sector, or to construct a new body of economic theory for economic behavior and activities in that sector.

The specific questions of the Joint Economic Committee are answered chiefly with reference to NSF support of academic research although as has been shown, the Foundation also spends considerable sums on the direct support of education in the sciences. Appraisals in economic terms of the consequences or effects of both types of expenditures encounter major difficulties.

Recently, several economists have developed methods for determining the returns in personal income or to the economy of investments in education.<sup>1</sup> However, these techniques cannot now be applied to NSF expenditures on research and education. The data available and the state of the art preclude microanalysis of this kind which would result in reliable quantitative findings. Moreover, it should be noted that not all economists are convinced that the returns on investments in education are meaningfully measured by the methods now being employed.

In any appraisal of the economic implications of NSF expenditures in support of basic research, it should be noted, an educational function must be assumed. It is generally thought that research is a critical and inseparable aspect of higher education, particularly of graduate education. Outlays for basic research, consequently, are frequently counted as outlays for education.

The long-range economic implications of basic scientific research have been widely discussed by economists and others, but chiefly in qualitative terms.<sup>2</sup> There seems to be general agreement that basic research, more specifically the knowledge resulting from basic research, may be the most important single factor in economic growth for the next few decades. It is also generally agreed that Federal expenditures for the support of basic research are necessary, because private industry cannot reasonably be expected, in view of the uncertainty of return, to risk sufficiently large-scale and wide-ranging investment in basic research, and because the nonprofit sector lacks the financial resources required.

The ensuing discussion indicates the role played by the National Science Foundation in the support of basic research in the United

<sup>1</sup> See for example, Becker, Gary S., "Human Capital." New York: National Bureau of Economic Research, 1964.

<sup>2</sup> See Ames, Edward. "Research, Invention, Development and Innovation," American Economic Review, vol. LI, (June 1961), p. 370.

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Wolfe, Dael, Editor, American Association for the Advancement of Science, "Symposium on Basic Research." Sponsored by the National Academy of Sciences, The American Association for the Advancement of Science, and The Alfred P. Sloan Foundation. Washington, D.C.: American Association for the Advancement of Science, 1959. Publication No. 56.

States, particularly in the academic sector. It has been found advantageous in seeking to provide answers to question 9 to combine parts (a) and (b) and parts (d) and (g). Such information as could be provided on parts (e) and (h) is given in the course of replies to the other parts of question 9.

(a) Effects on personal incomes of persons served or involved and on the distribution of personal income.

(b) Effects on the placement or productivity of workers, or both, and on their earnings.

Precise data on the economic impact of NSF support of basic research at universities and colleges are not available. However, during the past decade, increasing numbers of faculty members, research associates, and research assistants have received support through NSF basic research project grants. NSF obligations for such grants increased from about \$5 million in 1954 to approximately \$120 million in 1965. An analysis of basic research project grants in 1965 showed that nearly two-thirds of the direct costs was allocated to wages and salaries. Roughly 20 percent of the wage and salary costs was for the employment of graduate students as research assistants.

It is reasonable to assume that the increased NSF allocations to basic research project grants have contributed in part to the overall increase in the employment of scientists and engineers engaged in research and development in universities and colleges; however, no precise data on the specific impact of NSF programs in this respect are available. Likewise, there are no data presently available indicating the impact of NSF programs on income distribution or on the personal incomes of academic scientists and engineers, their salary structures, or their productivity.

(c) Effects on business or industrial organization and management; the stimulation of new business enterprises or expansion of existing ones; business location; and effect on competition, if any.

No systematic studies have been carried out to determine whether NSF programs have had any effects on business and industrial activity, organization, and management. Effects of this kind are not likely to occur, but, if they were to, would probably be both indirect and relatively slight. Since NSF programs are directed toward support of academic research and education in the sciences, the main impact on the profit-oriented sector of the economy is that derived from (a) the availability of a supply of educated scientists and engineers and (b) an enriched store of knowledge in the life sciences, physical sciences, social sciences, and engineering. Support of academic research in engineering perhaps results in the greatest immediate utility—or transferability—to the production processes of business enterprises. However, it is assumed that academic research in the life, physical, and social sciences has great utility to the research and innovative activities of business enterprises over the long run, although the measurement of utility still faces great difficulties.

To the extent that new business enterprises involve innovation based upon new research and technology, or existing business enterprises are expanded, it may be assumed that NSF programs have a stimulating effect in general, although the precise causal relationship involved may not be identified.

National Science Foundation programs are likely to have only an indirect effect on business location. Studies dealing with this general problem by the Stanford Research Institute, "An Exploratory Study of the Structure and Dynamics of the R. & D. Industry, June 1964;" by the Denver Research Institute, "The Scientific Complex—Challenge to Colorado;" by the House Select Committee on Government Research, "Impact of Federal Research and Development Programs;" and by a subcommittee of the Committee on Science and Astronautics, "Geographical Distribution of Federal Research and Development Funds," for example, provide no conclusive answers. They do, however, show that academic institutions having strong scientific departments sometimes attract the location of new business firms which themselves are significantly involved in or dependent upon research activity.

The general relationships which may exist are thus set forth by Dr. Charles Stewart of George Washington University, who has been investigating with NSF support the local impact of R. & D. programs:

A sizable local concentration of R. & D. usually has upgraded the quality of local education, both through the influence of researchers and their families as individual members of the community and through the demonstrated availability of interesting and well-paid jobs for those who can qualify through training. The interrelations of university education and R. & D. are quite varied, however. A university is a part of a cultural environment attractive to research professionals, though such an environment may exist without a university. Second, a local university may offer advanced training facilities for lower level research professionals, though this may not be an important attraction for research itself. Third, a university may contribute both to the initiation of local research, largely through the independent contributions of its faculty; and to the growth of a research complex, by providing advanced training, consultants, and research aids. This kind of university must be first rate in fields relevant to the local research community and [must be one] which allows or encourages a close interaction between university personnel and local research facilities. Also it is likely that research knowledge originating in a university, once it achieves commercial success, tends to be produced wherever markets, materials, labor, etc., dictate.

A causal connection between the location of R. & D. and long-range economic growth has to date not been proven. It is likely that a reciprocal relationship exists in many instances. The most advanced regions are attractive to R. & D.; it is there that research has local roots with a long history, and there is where it flourishes. There are instances where substantial R. & D. activities located in less developed regions of the United States have not so far led to self-sustaining growth, and may not do so in the near future. \* \* \*

NSF programs have as their objectives both the maintenance of excellence in research and education in the sciences where it exists and the building up of the scientific capability of educational institutions throughout the country. The Foundation's science development program, for example, seeks to help strengthen a number of near-excellent institutions and to build upon pockets of academic capabilities. Whether this and other related NSF programs will have any direct effect upon the stimulation, growth, location, or competitive behavior of business firms remains to be seen.

One NSF program, commonly called Project Mohole, although concerned with the discovery of knowledge not having a direct connection with business or industry, does have a direct impact on commercial competitive activity. The scientific purpose of this program is to explore the earth's core, but because it involves the design and construction of radically new drilling equipment, and involves deepwater drilling, it has significant implications for the drilling, petroleum, and other extractive industries. However, this program is not sufficiently

advanced to permit assessment of its full consequences for private industry.

The effect of the Foundation's programs on business and industry organization and management is even more difficult to establish and quantify. However, it may be speculated that the Foundation's research support programs have stimulated new concepts of interdisciplinary approaches to the solution of research problems, which have influenced the organization and management of research laboratories maintained by business and industry.

(d) Effects on the stability, level, volume, or other aspects of employment, wages, costs, productions, sales, prices, or other phases of economic activity; and

(g) The measurable contribution of the program to either the magnitude or the rate of growth of the gross national product, if such a contribution can be identified.

It is not possible to measure the contribution of NSF basic research support to the GNP or the level of employment. The support programs of NSF account for a very small fraction of total Federal expenditures for R. & D., and even represent a small factor in total Federal support of basic research. However, some data are available from which it is possible to gain some perspective on the dimensions of any inputs that are likely to flow from NSF programs with respect to the gross national product and its relation to the total level of research and development, the level of performance of basic research, and Federal support of basic research, particularly in colleges and universities.

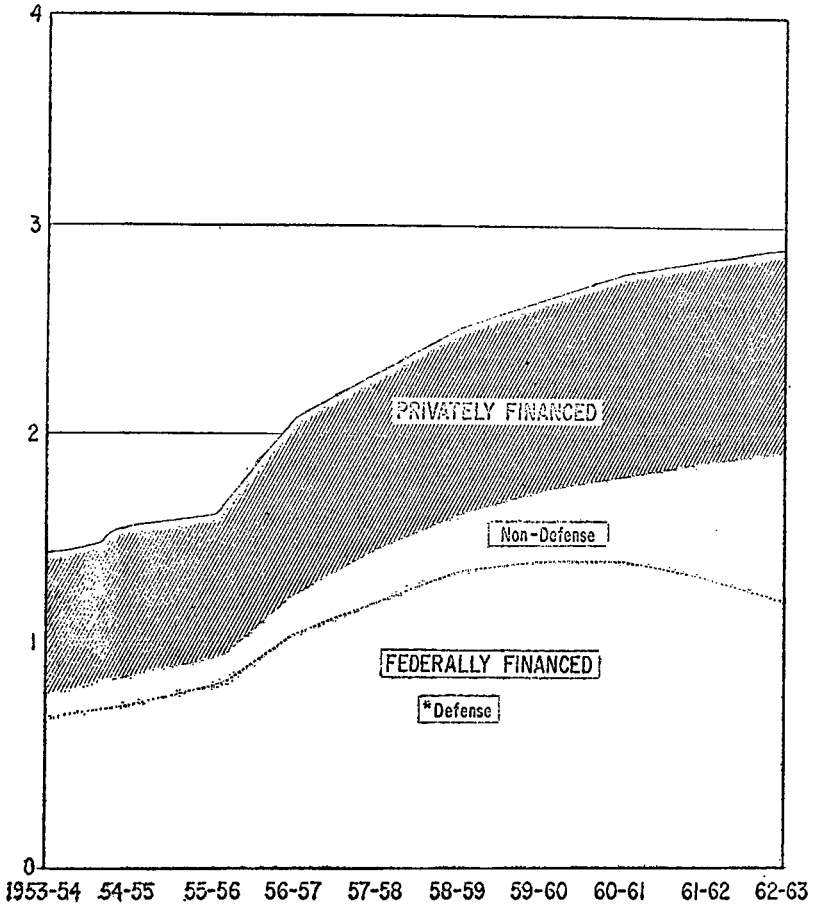
Chart 1 shows R. & D. as a percent of the gross national product for the decade of 1953-63. It is often said that R. & D. activity has a stability of its own and does not follow closely the business cycle, that is, the level of the GNP. In this sense, R. & D. activity may be viewed as a stabilizing influence in the economy. For example, table 1 shows the percentage change of the GNP between 1953 and 1963 as compared with the percentage change in total R. & D. activity during the same decade. With the exception of 1954-55, the rate of increase in R. & D. has been consistently higher than the rate of increase in the GNP. Even in 1958, when the GNP increased only 0.4 percent, R. & D. went up by 10.2 percent and, even more dramatic, in 1954 when the GNP decreased by 0.6 percent, R. & D. underwent an upward change of 9.7 percent.

Table 2 shows the growth rates in total basic research performance between 1952 and 1966 (projected) in relation to Federal support of basic research and NSF support of basic research. With two exceptions, in the years 1958 and 1961, the increase in NSF support in relation to total Federal support has been at a considerably higher rate, and a similar relationship is apparent in table 3, showing NSF support and total Federal support of basic research in colleges and universities. These trends reflect basic differences in the support role of NSF and that of other Federal agencies. Differences in agency mission as well as changes in economic and political environment account for the observed differences in the rates of growth of Federal and NSF support of R. & D.

CHART 1

*R&D AS A PERCENT OF THE GROSS NATIONAL PRODUCT, 1953-54-1962-63*

(percent)



\*Includes DOE and part of AEC

NOTE: Data for the GNP refer to the earlier calendar year.

SOURCE: R&D 2010, National Science Foundation, GNP data, U.S. Department of Commerce.

Est.

TABLE 1.—Yearly percent growth rates in gross national product, research and development, and basic research

	Gross national product	Total research and development	Total basic research
1953-54.....	-0.6	9.7	10.4
1954-55.....	9.5	9.5	13.6
1955-56.....	5.5	35.0	19.7
1956-57.....	5.6	17.2	16.5
1957-58.....	.4	10.2	22.3
1958-59.....	8.6	15.0	12.5
1959-60.....	4.1	9.6	14.4
1960-61.....	3.1	5.6	16.7
1961-62.....	7.1	8.6	19.0
1962-63.....	5.4	11.1	15.2

Source: National Science Foundation.

TABLE 2.—Federal and National Science Foundation obligations for basic research  
[Amounts in millions of dollars]

	Federal		National Science Foundation		National Science Foundation as a percent of Federal total
	Obligations	Percent growth rate from previous year	Obligations	Percent growth rate from previous year	
1952.....	162		1		0.6
1953.....	154	-0.5	2	100.0	1.3
1954.....	148	-3	5	150.0	3.4
1955.....	162	9.5	10	100.0	6.2
1956.....	208	28.4	15	50.0	7.2
1957.....	264	26.9	30	100.0	11.4
1958.....	336	27.3	33	10.0	9.8
1959.....	519	54.5	54	63.6	10.4
1960.....	612	17.9	68	25.9	11.1
1961.....	827	35.1	77	13.2	9.3
1962.....	1,110	34.2	105	36.4	9.5
1963.....	1,395	25.7	144	37.1	10.3
1964.....	1,574	12.8	163	13.2	10.4
1965 (estimated).....	1,808	14.9	197	20.9	10.9
1966 (estimated).....	2,049	13.3	270	37.1	13.2

Source: National Science Foundation.

TABLE 3.—Yearly percent growth rates in Federal and National Science Foundation obligations for basic research in universities

	Federal support	National Science Foundation support		Federal support	National Science Foundation support
1953-54.....	8.2		1959-60.....	19.1	31.1
1954-55.....	8.4		1960-61.....	14.8	12.5
1955-56.....	11.6		1961-62.....	26.3	35.6
1956-57.....	20.1		1962-63.....	19.9	25.3
1957-58.....	38.7		1963-64.....		11.5
1958-59.....	6.7	106.3	1964-65.....		9.5

Source: National Science Foundation.



(f) Pertinent geographic differentials, such as variations in the regional, State, or metropolitan area scale of operations or economic impacts.

The following tables (I through V) show the geographic and academic (by institutions) breakdowns of NSF research, institutional, and educational obligations by State, nine Census divisions (New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific), and four Census regions (Northeast, North Central, South, and West). Data on the distribution of National Science Foundation support by standard metropolitan area are not available.

Because of the primary responsibilities of the Foundation and the nature of its programs, it is also instructive to view the economic impact of the Foundation's programs on an institutional as well as a geographic basis. Therefore, tables IV and V have been included. These show the geographic distribution of NSF funds institutionally.

#### LIST OF TABLES

I. State distribution of National Science Foundation grant and contract awards, by program, fiscal year 1965.

II. Distribution of National Science Foundation grant and contract awards, by nine Census divisions, fiscal year 1965.

III. Distribution of National Science Foundation grant and contract awards, by four Census regions, fiscal year 1965.

IV. Distribution of NSF support for academic science by institutions and by regions, fiscal year 1965.

V. Total earned degrees in the sciences and engineering, by type, in institutions receiving NSF funds in 1965 as a percent of totals, by geographic division, 1963-64.

#### TECHNICAL NOTES

In the tables, the terminology "universities" and "colleges" is intended to include all institutions of higher education in the United States offering at least a 2-year program of college-level studies and meeting criteria for inclusion in the U.S. Office of Education's Directory, 1964-65, part 3, Higher Education, OE-50000-65.

The classification of institutions, by highest degree granted in the sciences and engineering, in table V, is based on the highest level of earned degrees granted by a particular institution during the 4-year period, 1960-61 to 1963-64. Thus, an institution that granted one or more Ph. D. degrees during the period is classified in the "Ph. D.-granting" category for all years covered by this report, even though it may not have granted a Ph. D. degree in some of the years.

The Census classifications by region and geographic division are as follows:

#### NORTHEAST

New England:

Connecticut

Maine

Massachusetts

New Hampshire

Rhode Island

Vermont

Middle Atlantic:

New Jersey

New York

Pennsylvania

## NORTH CENTRAL

## East North Central:

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

## West North Central:

Iowa  
Kansas  
Minnesota  
Missouri  
Nebraska  
North Dakota  
South Dakota

## SOUTH

## South Atlantic:

Delaware  
District of Columbia  
Florida  
Georgia  
Maryland  
North Carolina  
South Carolina  
Virginia  
West Virginia

## East South Central:

Alabama  
Kentucky  
Mississippi  
Tennessee

## West South Central:

Arkansas  
Louisiana  
Oklahoma  
Texas

## WEST

## Mountain:

Arizona  
Colorado  
Idaho  
Montana  
Nevada  
New Mexico  
Utah  
Wyoming

## Pacific:

Alaska  
California  
Hawaii  
Oregon  
Washington

TABLE I.—State distribution of National Science Foundation grant and contract awards, by program, fiscal year 1965

(In millions of dollars)

State	Total <sup>1</sup>	Basic research program grants	Science education programs <sup>2</sup>	Fellowships	Development and improvement of institutional science programs <sup>3</sup>	National research programs and centers and specialized research facilities <sup>4</sup>
Alabama.....	1,310,303	171,200	867,668	50,026	205,609	15,800
Alaska.....	1,319,898	552,600	123,986	1,092	126,020	516,200
Arizona.....	12,687,763	1,363,400	1,057,956	190,928	1,503,579	8,571,900
Arkansas.....	995,315	175,700	436,998	46,585	187,932	148,100
California.....	40,689,064	17,893,262	7,764,695	4,485,781	4,505,319	6,040,007
Colorado.....	18,357,933	1,414,900	2,527,004	358,610	5,419,419	8,638,000
Connecticut.....	5,733,713	3,432,250	884,031	795,910	476,622	144,900
Delaware.....	547,841	191,000	214,167	48,361	57,113	37,200
District of Columbia.....	5,479,126	1,534,612	2,923,538	135,941	220,710	664,325
Florida.....	6,452,033	2,512,800	1,114,769	243,662	2,094,552	486,250
Georgia.....	4,266,939	883,625	1,793,114	244,617	1,250,108	95,475
Hawaii.....	3,183,906	1,368,900	471,587	28,962	155,157	1,159,300
Idaho.....	539,235	90,600	343,810	29,316	75,509	
Illinois.....	18,459,536	7,078,800	6,105,700	1,340,488	2,681,152	1,253,396
Indiana.....	10,440,049	4,485,550	2,681,331	624,686	1,815,161	8,371,321
Iowa.....	2,820,897	677,700	1,373,262	344,798	363,887	61,250
Kansas.....	3,608,676	1,305,500	1,515,313	140,549	382,880	61,434
Kentucky.....	1,724,093	737,500	573,832	69,607	343,154	
Louisiana.....	2,748,614	563,825	1,648,080	143,065	362,644	36,000
Maine.....	678,561	99,000	455,000	10,208	99,553	14,800
Maryland.....	4,389,203	2,271,500	899,661	392,621	412,184	413,237
Massachusetts.....	27,409,683	11,507,150	6,493,352	3,782,492	2,671,665	2,955,024
Michigan.....	11,777,113	4,952,370	4,729,996	965,421	831,336	297,990
Minnesota.....	5,702,543	1,684,450	2,507,705	252,696	533,629	724,063
Mississippi.....	1,197,346	100,600	560,314	38,563	270,869	27,000
Missouri.....	8,500,738	1,703,450	1,629,545	329,271	4,506,672	331,800
Montana.....	986,881	286,900	402,673	45,791	125,617	126,000
Nebraska.....	1,104,030	282,150	473,501	99,485	113,894	135,000
Nevada.....	518,482	212,200	174,097	13,565	29,731	88,889
New Hampshire.....	1,420,064	433,450	486,890	114,968	162,856	221,900
New Jersey.....	9,557,444	4,794,350	2,021,712	928,439	941,355	871,588
New Mexico.....	1,893,941	726,550	588,852	68,871	225,668	284,000
New York.....	45,202,489	15,790,300	8,033,858	1,940,140	5,561,096	13,877,095
North Carolina.....	7,744,434	1,722,170	2,434,852	266,453	1,762,559	1,558,400
North Dakota.....	864,092	34,000	664,622	31,312	108,558	25,600
Ohio.....	14,628,236	3,078,100	2,985,246	472,943	7,816,493	275,454
Oklahoma.....	3,360,140	701,150	1,917,063	364,123	291,754	86,050
Oregon.....	9,008,035	2,151,450	1,648,712	236,299	4,842,574	129,000
Pennsylvania.....	16,382,292	7,773,990	3,740,726	825,703	3,202,149	839,724
Rhode Island.....	2,964,135	1,677,400	817,125	167,066	291,222	31,322
South Carolina.....	1,803,385	228,900	614,475	29,371	900,439	30,200
South Dakota.....	1,058,703	62,500	855,900	10,820	129,483	
Tennessee.....	2,899,008	609,300	1,723,439	133,285	278,484	154,500
Texas.....	35,214,939	2,706,289	3,138,111	656,631	3,636,614	25,077,294
Utah.....	2,869,056	1,139,700	898,297	97,326	706,233	27,500
Vermont.....	452,375	43,700	245,496	18,709	101,070	43,400
Virginia.....	6,558,434	948,850	1,166,970	138,856	4,099,846	213,912
Washington.....	6,544,668	2,198,438	1,703,737	335,444	404,127	1,902,922
West Virginia.....	4,534,144	284,500	223,973	44,616	601,055	3,380,000
Wisconsin.....	7,705,611	3,753,800	1,362,938	812,119	488,924	1,287,830
Wyoming.....	1,004,565	149,900	384,080	25,077	445,508	
Total.....	387,319,704	120,542,281	90,588,759	22,971,668	68,819,644	84,397,352

<sup>1</sup> Includes the gross amount of grants and contracts awarded by the National Science Foundation except those to (1) other agencies of the Federal Government, (2) institutions and individuals in U.S. possessions and foreign countries, and (3) grants and awards for science information and science resource planning activities, which totaled \$22,615,610 in fiscal year 1965.

<sup>2</sup> Science education programs include traineeships, teacher institutes, research participation and scientific activities for teachers, science education for undergraduate students, science education for secondary school students, specialized advanced science education projects, course content improvement, and instructional equipment for undergraduate education.

<sup>3</sup> Development and improvement of institutional science programs includes institutional grants for science, graduate science facilities, and the science development program.

<sup>4</sup> National research programs include Antarctic and Arctic Ocean research programs, Indian Ocean expedition, weather modification, International Year of the Quiet Sun, ocean sediment coring program, deep crustal studies of the earth (Project Mohole), and United States-Japan cooperative science program. National research centers include National Radio Astronomy Observatory, Kitt Peak National Observatory, Cerro Tololo Inter-American Observatory, and National Center for Atmospheric Research. Specialized research facilities support includes facilities support for the biological sciences, physical sciences, specialized social sciences, engineering research, and university computing.

Source: National Science Foundation.

TABLE II.—*Distribution of National Science Foundation grant and contract awards, by 9 Census divisions, fiscal year 1965*

[In millions of dollars]

Division	Total <sup>1</sup>	Basic research program grants	Science education programs <sup>2</sup>	Fellowships	Development and improvement of institutional science programs <sup>3</sup>	National research programs and centers and specialized research facilities <sup>4</sup>
New England.....	38,678,531	17,192,950	9,381,894	4,889,353	3,802,988	3,411,346
Middle Atlantic.....	71,142,225	28,358,640	13,796,296	3,694,282	9,704,600	15,588,407
East north central.....	63,010,545	23,348,620	17,865,211	4,215,657	13,633,066	3,947,891
West north central.....	23,659,679	5,749,750	9,019,948	1,208,931	6,138,903	1,542,147
South Atlantic.....	41,775,539	10,577,957	11,375,819	1,544,498	11,398,566	6,878,999
East south central.....	7,130,750	1,618,600	3,925,253	291,481	1,098,116	197,300
West south central.....	42,319,008	4,146,964	7,135,252	1,210,404	4,478,944	25,347,444
Mountain.....	38,857,856	5,384,150	6,376,669	829,484	8,531,264	17,736,289
Pacific.....	60,745,571	24,164,650	11,712,717	5,087,578	10,033,197	9,747,429
<b>Total.....</b>	<b>387,319,704</b>	<b>120,542,281</b>	<b>90,588,759</b>	<b>22,971,668</b>	<b>68,819,644</b>	<b>84,397,352</b>

<sup>1</sup> Includes the gross amount of grants and contracts awarded by the National Science Foundation except those to (1) other agencies of the Federal Government, (2) institutions and individuals in U.S. possessions and foreign countries, and (3) grants and awards for science information and science resource planning activities, which totaled \$22,615,610 in fiscal year 1965.

<sup>2</sup> Science education programs include traineeships, teacher institutes, research participation and scientific activities for teachers, science education for undergraduate students, science education for secondary school students, specialized advanced science education projects, course content improvement, and instructional equipment for undergraduate education.

<sup>3</sup> Development and improvement of institutional science programs includes institutional grants for science, graduate science facilities, and the science development program.

<sup>4</sup> National research programs include Antarctic and Arctic Ocean research programs, Indian Ocean expedition, weather modification, International Year of the Quiet Sun, ocean sediment coring program, deep crustal studies of the earth (Project Mohole), and United States-Japan cooperative science program. National research centers include National Radio Astronomy Observatory, Kitt Peak National Observatory, Cerro Tololo Inter-American Observatory, and National Center for Atmospheric Research. Specialized research facilities support includes facilities support for the biological sciences, physical sciences, specialized social sciences, engineering research, and university computing.

Source: National Science Foundation.

TABLE III.—*Distribution of National Science Foundation grant and contract awards, by 4 Census regions, fiscal year 1965*

[Millions of dollars]

Region	Total <sup>1</sup>	Basic research program grants	Science education programs <sup>2</sup>	Fellowships	Development and improvement of institutional science programs <sup>3</sup>	National research programs and centers and specialized research facilities <sup>4</sup>
Northeast.....	109,820,756	45,551,590	23,178,190	8,583,635	13,507,588	18,999,753
North-central.....	86,670,224	29,098,370	26,885,159	5,424,588	19,771,969	5,490,138
South.....	91,225,297	16,343,521	22,436,024	3,046,383	16,975,626	32,423,743
West.....	99,603,427	29,548,800	18,089,386	5,917,062	18,564,461	27,483,718
<b>Total.....</b>	<b>387,319,704</b>	<b>120,542,281</b>	<b>90,588,759</b>	<b>22,971,668</b>	<b>68,819,644</b>	<b>84,397,352</b>

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<sup>3</sup> Development and improvement of institutional science programs includes institutional grants for science, graduate science facilities, and the science development program.

<sup>4</sup> National research programs include Antarctic and Arctic Ocean research programs, Indian Ocean expedition, weather modification, International Year of the Quiet Sun, ocean sediment coring program, deep crustal studies of the earth (Project Mohole), and United States-Japan cooperative science program. National research centers include National Radio Astronomy Observatory, Kitt Peak National Observatory, Cerro Tololo Inter-American Observatory, and National Center for Atmospheric Research. Specialized research facilities support includes facilities support for the biological sciences, physical sciences, specialized social sciences, engineering research, and university computing.

Source: National Science Foundation.

TABLE IV.—*Distribution of National Science Foundation support for academic science by institutions and by regions, fiscal year 1965*

[Dollar amounts in thousands]

Selected groups of institutions arrayed from highest to lowest in terms of National Science Foundation funds, fiscal year 1965	U.S. total			Northeast			North Central			South			West		
	Number of institutions	National Science Foundation funds		Number of institutions	National Science Foundation funds		Number of institutions	National Science Foundation funds		Number of institutions	National Science Foundation funds		Number of institutions	National Science Foundation funds	
		Amount	Percent distribution		Amount	Percent distribution		Amount	Percent distribution		Amount	Percent distribution		Amount	Percent distribution
1 to 10.....	10	\$78,555	24.6	4	\$36,944	38.0	3	\$19,521	23.1	-----	-----	-----	3	\$22,090	27.8
11 to 20.....	10	51,199	16.0	2	9,311	9.6	4	21,163	25.1	1	\$5,035	8.6	3	15,690	19.7
21 to 30.....	10	37,767	11.8	3	11,974	12.3	3	11,292	13.4	2	6,438	11.1	2	8,063	10.1
31 to 40.....	10	26,078	8.2	1	2,580	2.7	3	7,483	8.9	3	7,664	13.2	3	8,351	10.5
41 to 50.....	10	19,325	6.1	2	4,202	4.3	1	1,795	2.1	4	7,240	12.4	3	6,088	7.7
Subtotal, 1 to 50.....	50	212,924	66.7	12	65,011	66.9	14	61,254	72.5	10	26,377	45.3	14	60,282	75.9
51 to 100.....	50	53,802	16.8	17	17,865	18.4	10	10,491	12.4	12	14,600	25.1	11	10,846	13.6
Subtotal, 1 to 100.....	100	266,726	83.5	29	82,876	85.2	24	71,745	84.9	22	40,977	70.4	25	71,128	89.5
101 to 200.....	100	31,561	9.9	26	8,678	8.9	22	6,574	7.8	35	11,193	19.2	17	5,116	6.4
201 to 300.....	100	10,733	3.4	31	3,218	3.3	29	3,170	3.8	26	2,718	4.7	14	1,627	2.0
301 to 400.....	100	5,389	1.7	22	1,123	1.2	30	1,629	1.9	32	1,742	3.0	16	895	1.1
401 to 500.....	100	2,747	.9	32	879	.9	24	683	.8	30	793	1.4	14	392	.5
501 to 600.....	100	1,270	.4	19	233	.2	26	345	.4	40	495	.8	15	197	.2
601 to 700.....	100	667	.2	30	191	.2	26	174	.2	33	224	.4	11	78	.1
701 to 834.....	134	327	.1	23	54	.1	55	140	.2	42	101	.2	14	32	(1)
Total.....	834	319,420	100.0	212	97,252	100.0	236	84,460	100.0	260	58,243	100.0	126	79,465	100.0

1 Less than 0.05 percent.

NOTE.—Detail may not add to total because of rounding.

Source: National Science Foundation, October 1965.

TABLE V.—Total earned degrees in the sciences and engineering, by type, in institutions receiving National Science Foundation funds in 1965 as a percent of totals, by geographic division, 1963-64

Geographic division	Earned degrees in the sciences and engineering, 1963-64											
	U.S. total			Ph. D.'s			Master's			Bachelor's		
	Total degrees, all institutions	Institutions receiving National Science Foundation funds		Total Ph. D.'s, all institutions	Institutions receiving National Science Foundation funds		Total master's, all institutions	Institutions receiving National Science Foundation funds		Total bachelor's, all institutions	Institutions receiving National Science Foundation funds	
		Number of degrees	Percent of total		Number of Ph. D.'s	Percent of total		Number of master's	Percent of total		Number of bachelor's	Percent of total
U.S. total.....	190,347	174,642	91.7	8,923	8,905	99.8	29,533	29,356	99.4	151,891	136,381	89.8
New England.....	16,494	15,164	91.9	948	948	100.0	2,570	2,569	100.0	12,976	11,647	89.8
Middle Atlantic.....	39,156	35,731	91.3	1,677	1,660	99.0	6,103	6,017	98.6	31,376	28,054	89.4
East North Central.....	38,841	36,054	92.8	2,236	2,236	100.0	6,375	6,352	99.6	30,230	27,466	90.9
West North Central.....	18,289	16,933	92.6	859	859	100.0	2,571	2,567	99.8	14,859	13,507	90.9
South Atlantic.....	21,317	18,930	88.8	844	843	99.9	2,757	2,743	99.5	17,716	15,344	86.6
East South Central.....	9,181	8,153	88.8	210	210	100.0	1,073	1,072	99.9	7,898	6,871	87.0
West South Central.....	15,029	13,830	92.0	546	546	100.0	2,251	2,231	99.1	12,232	11,053	90.4
Mountain.....	9,263	9,077	98.0	306	306	100.0	1,730	1,730	100.0	7,227	7,041	97.4
Pacific.....	22,777	20,770	91.2	1,297	1,297	100.0	4,103	4,075	99.3	17,377	15,398	88.6

Source: National Science Foundation, October 1965.

# RAILROAD RETIREMENT BOARD

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## RAILROAD EMPLOYEES' RETIREMENT, SURVIVORS, AND DISABILITY INSURANCE

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The railroad employees' retirement, survivors, and disability insurance programs are intended to provide benefits based on the employee's railroad service and wages as follows: (1) monthly benefits for (a) railroad employees who retire on account of age or disability; and (b) their eligible wives (or dependent husbands of such employees); (2) monthly and lump-sum benefits to widows, children and parents; and (3) residual payments designed to insure that an employee and his family receives at least as much in benefits as the employee contributes in taxes.

Types of benefit and requirements for entitlement are set forth in a Board publication prepared by the Office of the Director of Research, "Provisions of the Railroad Retirement Act and Railroad Unemployment Insurance Act as amended through 1963" (Form RB-16, December 1963), and supplementary statements.

#### 2. Operation

The railroad retirement program is wholly a direct Federal operation conducted partly in regional and field offices with headquarters supervision. Overall direction of the benefit provisions of the program has been vested in the Bureau of Retirement Claims by the Board. Claims are taken in local field offices where necessary development action is taken. The claims are sent to the Chicago headquarters for processing. Payment record tapes are furnished to the Chicago disbursing officer for preparation of benefit checks.

#### 3. History

An act establishing a special retirement system for railroad workers was enacted in 1934, but was declared unconstitutional by the Supreme Court less than a year later. A revised act was passed in 1935, and its

constitutionality was also challenged. However, at the request of President Roosevelt, railroad management and labor established a joint committee to resolve their differences on the retirement problem. After many conferences, at which representatives of the Railroad Retirement Board also participated, agreement was reached on all basic issues. The Railroad Retirement Act of 1937 was drafted on the basis of this agreement and approved unanimously by both Houses of Congress. The general principles set forth in the agreement have since been observed by all parties concerned.

The system established by the 1937 act represented an important advance in the history of pension plans. There was an immediate reduction in both the number of employed and unemployed older railroad workers. At the end of 1938, the number of workers aged 65 and over in active railroad service was less than one-half the number 2 years earlier. Almost 100,000 employees had retired under the system by that date, 80 percent of them under the nondisability annuity provisions. The amounts of retirement annuities awarded were directly related to the employee's earnings and length of service, which is still largely the case today.

The system provided by the 1937 act was principally an age retirement plan. The disability provisions were restrictive as to service requirements, and the benefits available to survivors were very minor. Requests for extension of the system developed.

The amendments of 1946 greatly liberalized the provisions under which disability annuities are payable and established a system of monthly and lump-sum survivor benefits patterned after, but substantially higher than, those under the social security system. In 1951, provision was made for the payment of wives' annuities. These additions had the effect of changing to some extent the scope and character of the benefits provided. The program for survivors of railroad employees became a social insurance plan, with types and amounts of benefits based in part on presumed need. Nevertheless, the railroad retirement system still is basically a staff type of pension plan with retirement benefit amounts geared to compensation and length of service. Of the total retirement and survivor benefits in 1962-63, 75 percent represented payments to retired workers and their wives.

The article, "30 Years Under the Railroad Retirement Act," Railroad Retirement Board Monthly Review, September 1965, more fully summarizes the history.

#### *4. Level of operations.* (See table 1.)

Program: Railroad employees' retirement, survivors, and disability insurance.  
Department or agency, and office or bureau: Railroad Retirement Board.



TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude (beneficiaries) .....	970,000	980,000	1,000,000	1,010,000
(b) Participants (active railroad employees).....	953,000	911,000	865,000	850,000
(c) Federal finances (in millions):				
Railroad retirement account (trust fund): Un-				
obligated balance available, start of year.....	\$4,010.5	\$4,073.9	\$4,204.5	\$4,344.4
Income during year:				
Tax transfers.....	\$609.0	\$644.3	\$705.6	\$789.2
Interest and profit on investments and				
loans.....	\$139.6	\$155.2	\$160.0	\$165.0
Financial interchange with:				
Federal old-age and survivors insur-				
ance and Federal disability				
insurance trust funds.....	\$421.8	\$459.2	\$470.0	\$547.0
Total annual income.....	\$1,170.4	\$1,258.7	\$1,335.6	\$1,501.2
Obligations incurred:				
Retirement, disability, and survivor benefit				
payments.....	\$1,096.3	\$1,117.7	\$1,184.0	\$1,198.0
Payment to Federal hospital insurance trust				
fund.....				\$16.0
Administrative expenses.....	\$10.7	\$10.4	\$11.7	\$11.2
Total annual outgo.....	\$1,107.0	\$1,128.1	\$1,195.7	\$1,225.2
Unobligated balance available, end of year.....	\$4,073.9	\$4,204.5	\$4,344.4	\$4,620.4
(d) Matching or additional expenditures (none)				
(e) Number of Federal Government employees: Total				
for RRA.....	1,047	1,074	1,077	1,070
(f) Expenses for non-Federal personnel employed in				
program.....				
(g) Other significant work performance data (applica-				
tions for all types of benefits).....	120,000	119,000	120,000	110,000

### 5. Estimated magnitude of program in 1970

The estimates for fiscal year 1970 are as follows:

Number of beneficiaries (thousands).....	1.025
Benefit payments (millions).....	\$1.259

The estimates for fiscal year 1970 were developed by projecting trends in number of employees, retirement and mortality rates, and average amounts of annuity.

### 6. Prospective changes in program orientation

(a) *Pending legislative proposals.*—A number of bills are pending proposing to provide benefits for surviving school children age 18-21 inclusive and the Board has reported favorably on the proposal. More than a score of bills are pending which propose to change the benefit provisions in other respects, including bills to increase benefit amounts generally, but the Board has not recommended the enactment of these bills principally on the basis that financing of the system is not adequate to cover the costs that would be added.

(b) *Proposed administrative and organization changes.*—Expanded use of electronic data processing system.

(c) *Probable changes in conditions under which the program will function.*—Well developed retirement programs are not very sensitive to economic changes over a short period of time. Thus, changes in conditions between now and 1970 (other than major amendments to the program itself) will not greatly affect the operations of the program.

### 7. Coordination and cooperation

(a) and (b) *Within bureau, division, or office and with other units of RRB.*—The activities of the Board are concerned solely with administering the Railroad Retirement and Railroad Unemployment Insur-

ance Acts. The chief executive officer is responsible for the proper performance and coordination, in conformity with the policies and rules of the Board, of all the Board's operations. The Bureau of Retirement Claims administers the benefit provisions of the Railroad Retirement Act, and the Bureau of Unemployment and Sickness Insurance administers the benefit provisions of the Unemployment Insurance Act. Except for the Appeals Council which serves as the appellate body, next below the Board, in considering and rendering decisions on appeals of claimants under the Railroad Retirement Act, all other bureaus and offices perform functions related to the administration of both laws. In addition to the effective coordination provided by the chief executive officer, specific activities of the Bureau of Retirement Claims and the Bureau of Unemployment and Sickness Insurance are coordinated with each other and other Board units as follows:

(1) Both the Bureau of Retirement Claims and the Bureau of Unemployment and Sickness Insurance use the same wage record information. (The Bureau of Wage and Service Records maintains records of railroad earnings and furnishes the required information to the BRC and BUSI as needed.)

(2) Both bureaus use the same electronic data processing equipment for processing claims. This equipment is operated by the Bureau of Wage and Service Records pursuant to programs and procedures jointly developed.

(3) Benefit payments are coordinated. (The RUIA [Sec. 4 (a-1)ii] provides that an employee who is eligible for benefits under both the RRA and the RUIA for the same period will in effect be paid the larger benefit.) This coordination for the most part is carried out by matching magnetic tapes through the use of electronic data processing equipment. This arrangement is also effective in recovering overpayments made under one program from benefits due under the other program.

(4) Both bureaus use the same field officer staff. All district managers and contact representatives carry out the required field service work under both acts.

(5) Personnel needs are coordinated. One personnel officer serves the entire Board. Board employees move freely between bureaus and offices:

(i) Through detail—during periods of unusual claims work resulting from legislative changes, labor disputes or economic conditions.

(ii) By promotion and reassignments—under the Board's personnel and promotion policy, employees frequently move from one bureau or office to another.

(c) *With other Federal Government departments and agencies.*—

(1) Social Security Administration:

(i) Under the RRA there are three areas where coordination with SSA is required:

(a) Benefit payments: The RRA (sec. 3(e)) guarantees that the annuity paid to a career railroad employee and his family or his survivors will never be less than 110 percent of the amount or the additional amount that would be paid if his railroad service were included as employment under the Social Security Act. To carry out this provision the RRA specifies in section 5(k)3 that:

The Board and Secretary of Health, Education, and Welfare shall upon request, supply each other with certified reports of record \* \* \*.

(b) Transfer of wage credits: In the case of noncareer railroad employees, that is, employees having less than 120 months of railroad service, the railroad wage credits are counted as wages under the Social Security Act. Thus, in that type of case the Board transfers to SSA the wage information for use in computing SSA benefits. For eligible survivors of career railroad employees, the wage credits under the Social Security Act are transferred to the Board and used in the computation of survivor benefits. In that type of case, Social Security Administration transfers wage information to the RRB (RRA, sec. 5(k)3 applies here also).

(c) Financial interchange: The RRA (sec. 5(k)2) requires the RRB and the Secretary of HEW to make annual determinations of the amounts which would place the social security trust funds in the same position in which they would have been if railroad service after 1936 had been included under the social security coverage. The financial interchange determinations between the railroad retirement and social security systems was instituted in 1951. The financial interchange places the social security system in the same financial position in which it would have been had railroad employment been covered by the Social Security Act. The determinations are carried out by means of yearly adjustments involving transfers of funds from one system to the other. The arrangement is retroactive to January 1, 1937.

General procedure: The determinations required for purposes of the financial interchange are made jointly by the two agencies involved, but calculations are done primarily by the Board. The calculations are made essentially in three parts:

(1) The amount of additional taxes which the social security trust funds would have collected on railroad payrolls;

(2) The amount of benefits which the social security system would have paid to railroad retirement beneficiaries on the basis of the combined social security and railroad retirement earnings of the employees involved; and

(3) The amount of benefits based on nonrailroad earnings which the social security system is paying directly to the individuals included in the calculation for item (2) above.

(ii) In addition to working out the needed arrangements for giving effect to the above provisions, the Board and SSA have made a number of other cooperative arrangements which have been mutually beneficial. To illustrate:

(a) Applications for disability retirement: If a disabled railroad employee is eligible for benefits under both the RRA and SSA, the development of medical data is undertaken by the agency that gets the application first. The evidence is then made available to the other agency. Aside from reducing administrative costs, this arrangement benefits the applicant since he does not have to undergo the same medical examinations a second time. It also conserves the use of medical services which generally are in short supply.

(b) Exchange of information: RRB and SSA maintain a two-station teletype network providing for rapid exchange of information between the Chicago office of the Board and Baltimore office of SSA.

In addition, wage information is exchanged through an electronic data transmission system.

To illustrate, SSA inquiries are produced on magnetic tape and used as input to a wire transmission service in Baltimore which in turn produces a magnetic tape output in Chicago. This tape is used along with our own tape input in our computer run.

The needed information is produced on magnetic tape and is returned to Baltimore via the same data transmission system.

This exchange of earning data takes place three times each week. Quarterly, we send a record of our beneficiaries to SSA and SSA sends a record of their beneficiaries to us, showing current earnings and benefit status. This information is used in policing beneficiaries under the SSA and the RRA.

(c) Local office liaison: Our local offices work in close liaison with local SSA offices in exchanging information, proofs, and so forth. Our local representatives on occasion attend meetings of local SSA representatives and SSA representatives occasionally visit our local offices. These meetings and visits provide opportunities to discuss the technical aspects of our respective laws and further develop ways to expedite the development of applications in which both agencies have an interest.

(d) Training: SSA has developed an excellent program for the training of disability claims examiners in the evaluation of physical and mental impairments. SSA makes provision for including any of our examiners we may wish to send.

(e) Availability of files: The payment centers of SSA make their files available to our local representatives for review to determine whether residual payments may be due under the RRA. Similarly, we make our files available to SSA representatives as the need arises.

(2) Veterans' Administration: The RRB and the VA, upon request, supply each other with whatever information or evidence may be needed in any particular case. For the most part, this exchange has to do with medical evidence, decisions made, and benefits paid. The VA in many areas conducts specialized examinations for us on a fee basis.

(3) Public Health: In some areas the Public Health Service conducts examinations for us on a fee basis.

(4) Census Bureau: Supplies information from census records in cases where such evidence is needed to establish the age of an applicant. Also converts for us magnetic tape produced by EDP machines not compatible with our equipment, to a tape we can use.

(5) Treasury: Maintains the special railroad retirement account established pursuant to section 15(a) of the RRA; and through the Division of Disbursements issues checks to individuals certified by the Board as entitled to receive payment (RRA sec. 10(b)(3)).

(6) Department of Defense: Upon request, supplies information regarding military service performed, amount of pension, and other data needed by the Board in the adjudication of claims based, in part, on military service.

(d) *With State governments or their instrumentalities.*—

(1) Vocational rehabilitation: Applicants for railroad disability retirement annuities who appear to be good candidates for vocational

rehabilitation services are encouraged to apply at the local vocational rehabilitation agency. The local vocational rehabilitation agency may ask for our medical evidence when needed to work up a vocational rehabilitation program for a former railroad employee.

(2) Mental hospitals or State institutions: We do not have any formal agreement with these hospitals or institutions having care or custody of former railroad employees or their dependents but we have working arrangements in the following situations:

(i) Submission of medical evidence: These hospitals and institutions supply us with medical evidence needed to determine eligibility under the RRA.

(ii) Appointment of substitute payees: The appropriate officer of the hospital or institution is frequently designated as substitute payees for incompetent annuitants who have no one to take care of their needs. These appointments are made pursuant to Section 19(a) of the RRA.

(e) *Local governments or communities.*—(1) Welfare agencies: We do not have any formal agreement with local welfare agencies. However, we supply such agencies with information as to payments currently made. This information is used in working out a budget for annuitants and determining the amount of supplemental welfare benefits needed. In certain cases where a minor or incompetent child is entitled to benefits but has no responsible person to act for him, we will ask the assistance of the local welfare agency in locating some responsible individual to act as substitute payee.

(f) *Foreign governments or international organizations.*—No items of special significance.

(g) *Nonprofit organizations.*—

(1) Railway labor unions: The RRA provides in section 10(a) for the establishment as an independent agency in the executive branch of the Government of a Railroad Retirement Board consisting of three members to be appointed by the President. That section specifies that "One member shall be appointed from recommendations made by representatives of the employees . . . as the President shall direct so as to provide representation on the Board satisfactory to the largest number of employees concerned." Thus, the railroad employees who, through their special railroad retirement payroll taxes, provide one-half of the funds needed by the retirement system have, through their representative on the Board, a direct voice in the administration of the retirement acts. The railway labor unions individually and through the Railway Labor Executives Association have always worked very closely with the Board in the administration of the railroad retirement acts. These working arrangements extend to such matters as arranging meetings at which Board representatives may explain the provisions of the railroad retirement acts; distributing literature to their membership and through their various publications disseminating information about the operations of the RRB and provisions of the railroad retirement acts.

(2) University of Minnesota: The University of Minnesota has an agreement with the Board for using our information in connection with their study of heart disease. The Board is reimbursed for whatever expense is incurred.

(3) Professional societies: Our professional people are encouraged to maintain membership in their respective professional societies. Attendance at annual meetings or other meetings concerning our programs is, under certain limited conditions, at Board expense.

(h) *With business enterprises.*—(1) Railroad employers: The RRA provides in section 10(a) for the establishment of a three-member Railroad Retirement Board, one of whom is to be appointed from recommendations made by representatives of the employers so as to provide representation to the largest number of employers concerned. Thus, the employers, who through their special railroad retirement tax provide half of the funds required for the railroad retirement system, have, through their representative on the Board, a direct voice in the administration of the railroad retirement acts. In addition, the RRB has made a number of arrangements with railroad employers with a view to expediting the processing of applications, reducing costs, and keeping paperwork to a minimum. Examples follow:

(i) Wage reporting: The RRA (sec. 10(b)4) empowers the Board to require employers to furnish "such information and records as shall be necessary \* \* \*." The Board has worked out with the railroad employers a method for reporting wage information that will produce the needed data as a result of the railroads' payroll and timekeeping operations. Railroads may submit their wage reports on magnetic tape, punchcards, or paper forms. For many years prior to the advent of electronic data processing equipment, reports from most large railroads were submitted on punchcards. Even though the accounting equipment used by a railroad produces a tape or card that is not compatible with our systems, we readily accept it and through arrangements with the Census Bureau convert the tape to one that we can use. Previously, the Navy Department converted the tape to cards we could use.

(ii) Medical evidence: The railroad medical departments supply us without cost available medical evidence in cases of employees who apply for disability annuities. In some cases where current medical data are not available, the railroad employer conducts a physical examination and furnishes a report without cost to the Board.

(iii) Information about retirement: A number of railroad employers have from time to time published in their company magazines articles having to do with railroad retirement benefits.

(iv) Meetings with railroad officials: Staff members of the Board frequently attend meetings of various groups of railroad officials, such as accounting officers, medical officers, etc., to explain Board programs. In addition, the various railroad officials individually and through their associations work with us in developing procedures having to do with the submission of various reports.

(v) Space: In a number of localities where we provide itinerant service, one of the railroads in the area will provide space for our representative. In some cases telephone service is also made available. Notice regarding the dates our representatives will be in the area is posted on the company bulletin boards.

### 8. *Laws and regulations*

The laws governing the establishment, the jurisdiction and the functions of the Railroad Retirement Board are primarily social welfare legislation dealing with human resources, since the purposes of the Railroad Retirement Act and Railroad Unemployment Insurance Act, and amendments thereto, are to provide income and assistance

to railroad workers and their dependents and survivors. Therefore, reference is made to (45 U.S.C., 1964 ed., sec. 228a-228z), the Railroad Retirement Act of 1937, as amended, and (45 U.S.C. 1964 ed., sec. 351-367), the Railroad Unemployment Insurance Act, as amended.

Regulations issued by the Railroad Retirement Board are published in the Code of Federal Regulations (title 20, ch. II, sec. 200-266 and sec. 300-395). Annual appropriations to be used for the payment of benefits and for administrative expenses are passed by Congress.

Public Law 452-82d Congress provided:

Payment to railroad retirement account: For annual premiums after June 30, 1952, to provide for the payment of all annuities, pensions, and death benefits, in accordance with the provisions of the Railroad Retirement Acts of 1935 and 1937, as amended (45 U.S.C. 228-228s), and for expenses necessary for the Railroad Retirement Board in the administration of said Acts as may be specifically authorized annually in appropriation Acts, for crediting to the railroad retirement account, an amount equal to amounts covered into the Treasury (minus refunds) during each fiscal year under the Railroad Retirement Tax Act (28 U.S.C. 1500-1538).

Salaries and expenses, Railroad Retirement Board (trust fund): For expenses necessary for the Railroad Retirement Board, including not to exceed \$1,000 for expenses of attendance at meetings concerned with the work of the Board when specifically authorized by the Board; and stenographic reporting services as authorized by section 15 of the Act of August 2, 1946 (5 U.S.C. 55a); \$6,207,000, to be derived from the railroad retirement account.

This title may be cited as the "Railroad Retirement Board Appropriation Act, 1953".

The dates and citations for original laws, amendments, and supplementary legislation are as follows:

#### RAILROAD RETIREMENT ACTS

Public Law 399, 74th Congress, approved August 29, 1935.  
 Public Law 400, 74th Congress, approved August 29, 1935.  
 Public Law 162, 75th Congress, approved June 24, 1937.  
 Public Law 174, 75th Congress, approved June 29, 1937.  
 Public Resolution 81, 76th Congress, approved June 11, 1940.  
 Public Law 764, 76th Congress, approved August 13, 1940.  
 Public Law 801, 76th Congress, approved October 8, 1940.  
 Public Law 833, 76th Congress, approved October 10, 1940.  
 Public Resolution 102, 76th Congress, approved October 9, 1940.  
 Public Law 520, 77th Congress, approved April 8, 1942.  
 Public Law 376, 78th Congress, approved June 28, 1944.  
 Public Law 572, 79th Congress, approved July 31, 1946.  
 Public Law 744, 80th Congress, approved June 23, 1948.  
 Public Law 234, 82d Congress, approved October 30, 1951.  
 Public Law 590, 82d Congress, approved July 18, 1952.  
 Public Law 398, 83d Congress, approved June 16, 1954.  
 Public Law 746, 83d Congress, approved August 31, 1954.  
 Public Law 383, 84th Congress, approved August 12, 1955.  
 Public Law 881, 84th Congress, approved August 1, 1956.  
 Public Law 1013, 84th Congress, approved August 7, 1956.  
 Public Law 238, 85th Congress, approved August 30, 1957.  
 Public Law 840, 85th Congress, approved August 28, 1958.  
 Public Law 927, 85th Congress, approved September 6, 1958.  
 Public Law 28, 86th Congress, approved May 19, 1959.  
 Public Law 211, 86th Congress, approved August 29, 1959.  
 Public Law 346, 86th Congress, approved September 22, 1959.  
 Public Law 778, 86th Congress, approved September 13, 1960.  
 Public Law 64, 87th Congress, approved June 30, 1961.  
 Public Law 285, 87th Congress, approved September 22, 1961.  
 Public Law 299, 87th Congress, approved September 26, 1961.  
 Public Law 133, 88th Congress, approved October 5, 1963.  
 Public Law 97, 89th Congress, approved July 30, 1965.  
 Public Law 212, 89th Congress, approved September 29, 1965.

## RAILROAD UNEMPLOYMENT INSURANCE ACTS

- Public Law 722, 75th Congress, approved June 25, 1938.  
 Public Law 141, 76th Congress, approved June 20, 1939.  
 Public Law 725, 76th Congress, approved July 2, 1940.  
 Public Law 764, 76th Congress, approved August 13, 1940.  
 Public Law 833, 76th Congress, approved October 10, 1940.  
 Public Law 520, 77th Congress, approved April 8, 1942.  
 Public Law 640, 77th Congress, approved June 30, 1942.  
 Public Law 572, 79th Congress, approved July 31, 1946.  
 Public Law 599, 79th Congress, approved August 2, 1946.  
 Public Law 378, 80th Congress, approved August 6, 1947.  
 Public Law 234, 82d Congress, approved October 30, 1951.  
 Public Law 343, 82d Congress, approved May 15, 1952.  
 Public Law 746, 83d Congress, approved August 31, 1954.  
 Public Law 383, 84th Congress, approved August 12, 1955.  
 Public Law 880, 84th Congress, approved August 1, 1956.  
 Public Law 791, 85th Congress, approved August 28, 1958.  
 Public Law 927, 85th Congress, approved September 6, 1958.  
 Public Law 28, 86th Congress, approved May 19, 1959.  
 Public Law 507, 86th Congress, approved June 11, 1960.  
 Public Law 7, 87th Congress, approved March 24, 1961.  
 Public Law 729, 87th Congress, approved October 1, 1962.  
 Public Law 133, 88th Congress, approved October 5, 1963.

## CARRIERS TAXING ACT

- Public Law 400, 74th Congress, approved August 29, 1935.  
 Public Law 174, 75th Congress, approved June 29, 1937.  
 Public Resolution 81, 76th Congress, approved June 11, 1940.  
 Public Law 764, 76th Congress, approved August 13, 1940.  
 Public Law 520, 77th Congress, approved April 8, 1942.

## RAILROAD RETIREMENT TAX ACT

- Public Law 572, 79th Congress, approved July 31, 1946.  
 Public Law 746, 83d Congress, approved August 31, 1954.  
 Public Law 28, 86th Congress, approved May 19, 1959.  
 Public Law 133, 88th Congress, approved October 5, 1963.  
 Public Law 212, 89th Congress, approved September 29, 1965.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

(a) *Effects on personal income.*—In the fiscal year 1965, the program added \$1,118 million to the personal incomes of the individuals it served.

(b) *Effects on placement or productivity of workers.*—Since 1961, retirement annuities were awarded to about 40,000 retired railroad workers each year. Average railroad employment based on average of the 12 midmonthly employment figures, declined during the same period by about 23,000 per year. The difference between this figure and the number of retirements is an indication of the number of job opportunities resulting from this program.

(c) *Effects on business, stimulation of new business.*—In a number of areas, retirement homes and apartments have been constructed. The extent to which the railroad retirement program may have been a factor in this activity is not available.

(d) *Effects on the stability level etc., of employment.*—See comments under (b) above.

(e) *Any benefits not included above.*—No comment.

(f) *Pertinent geographic differentials.*—See table 2, which gives the amount of benefit payments for each of the benefit programs by State.



(g) *The measurable contribution to either the magnitude or rate of growth of the gross national product.*—Cannot be identified.

(h) *Other comments relevant to economic impacts or significance of this program.*—The relatively high level of benefits reduces the need for public assistance under State programs. No research was done in this area.

TABLE 2.—Benefit payments, by class of benefit and by State of residence of beneficiary, fiscal year 1964-65

[In thousands]

State	Total	Retirement benefits	Survivor benefits	Unemployment benefits	Sickness benefits
Total.....	\$1,232,934	\$834,002	\$283,688	\$71,260	\$43,984
Alabama.....	17,414	11,417	4,389	1,071	538
Alaska.....	105	59	28	18	1
Arizona.....	10,322	7,636	1,922	607	257
Arkansas.....	14,315	9,708	3,221	759	626
California.....	80,410	55,980	18,444	3,103	2,883
Colorado.....	15,414	10,689	3,390	955	480
Connecticut.....	7,355	4,946	1,952	221	236
Delaware.....	4,177	3,037	969	97	74
District of Columbia.....	3,376	2,065	828	295	189
Florida.....	47,657	35,638	8,226	2,837	955
Georgia.....	22,709	13,879	5,660	2,122	1,048
Hawaii.....	374	295	69	3	7
Idaho.....	5,310	3,746	1,004	332	228
Illinois.....	89,481	59,228	21,062	5,000	4,191
Indiana.....	38,140	26,249	9,339	1,349	1,202
Iowa.....	23,456	16,146	5,506	1,010	794
Kansas.....	25,182	17,743	5,551	997	891
Kentucky.....	29,870	19,895	6,580	2,279	1,116
Louisiana.....	15,063	9,738	3,658	1,023	644
Maine.....	6,876	4,401	1,572	681	223
Maryland.....	22,017	14,311	5,360	1,440	907
Massachusetts.....	19,262	12,803	4,996	827	637
Michigan.....	29,781	20,190	7,025	1,609	967
Minnesota.....	36,205	24,380	7,694	2,801	1,330
Mississippi.....	10,699	7,041	2,617	664	377
Missouri.....	42,435	29,220	9,401	2,186	1,628
Montana.....	8,895	6,049	1,890	485	473
Nebraska.....	15,305	10,390	3,483	926	505
Nevada.....	2,699	1,901	588	127	83
New Hampshire.....	3,361	2,376	793	134	58
New Jersey.....	33,811	23,035	8,582	950	1,244
New Mexico.....	6,376	4,031	1,309	893	144
New York.....	84,956	56,107	20,368	5,333	3,149
North Carolina.....	15,632	10,260	3,924	874	574
North Dakota.....	4,103	2,939	1,011	46	107
Ohio.....	76,530	51,775	17,435	4,848	2,472
Oklahoma.....	11,190	7,783	2,518	596	294
Oregon.....	13,333	9,596	2,837	465	435
Pennsylvania.....	120,839	82,801	27,366	6,521	4,151
Rhode Island.....	2,035	1,348	538	93	55
South Carolina.....	3,013	4,797	2,244	661	311
South Dakota.....	3,415	2,213	647	447	109
Tennessee.....	26,361	17,599	6,316	1,515	931
Texas.....	54,104	35,734	12,375	3,722	2,273
Utah.....	8,214	5,582	1,785	371	276
Vermont.....	3,372	2,344	755	243	30
Virginia.....	33,359	21,867	8,291	1,950	1,251
Washington.....	17,969	12,153	4,333	870	612
West Virginia.....	22,876	14,489	5,028	2,235	1,124
Wisconsin.....	24,980	16,762	5,774	1,795	649
Wyoming.....	4,553	3,243	927	253	129
Outside United States:					
Canada.....	5,244	3,538	1,285	329	91
Mexico.....	843	635	109	72	27
Others.....	3,161	2,419	717	19	6

NOTE.—Data partly estimated.

10. *Economic classification of program expenditures.* (See table 3.)

Program: Railroad employees' retirement, survivors, and disability insurance.  
Department or agency, and office or bureau: Railroad Retirement Board.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]

Federal Government:	
Purchases of goods and services <sup>1</sup> -----	10.4
Transfer payments (benefits to retired railroad employees and families)-----	1,117.7
<b>Total Federal expenditures</b> -----	<b>1,128.1</b>

<sup>1</sup> Represents expenditures incurred in connection with administration of program.

**RAILROAD UNEMPLOYMENT INSURANCE AND SICKNESS (TEMPORARY DISABILITY) INSURANCE**

PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

This program provides for qualified railroad employees cash benefits designed to restore part of their wage loss arising from unemployment or sickness (including maternity sickness). Contributions paid by employers directly to the Board are used to finance both benefit payments and administrative costs under the unemployment and sickness benefit programs. No contributions are paid by employees. The types of benefits and requirements for entitlement are set forth in "Provisions of the Railroad Retirement Act and Railroad Unemployment Insurance Act," published by the Board. The Railroad Unemployment Insurance Act also authorizes the Board to operate a free placement service and requires that this service be directed primarily toward securing reemployment of experienced railroad workers who have lost their jobs.

2. *Operation*

The railroad unemployment insurance program is wholly a direct Federal operation partly conducted in regional and field offices with headquarters supervision. However, unemployment registrations (claims) are taken by authorized claims agents, who are railroad employees designated by the railroad to do this work. The Board pays the railroad 50 cents for each claim taken, pursuant to a contract between the railroad and the Board. In some isolated areas claims are taken by special claims agents pursuant to an agreement with the Board. This agreement also provides for the payment of 50 cents for each claim taken. The claims go from the claims agent to the local office for checking and then to Chicago for processing and payment.

3. *History*

See "25 Years of Railroad Unemployment Insurance," Railroad Retirement Board Monthly Review, June 1964.

4. *Level of operations.* (See table 1.)

Program: Railroad unemployment insurance and sickness (temporary disability) insurance.

Department or agency, and office or bureau: Railroad Retirement Board.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude (beneficiaries).....	249,000	219,000	210,000	200,000
(b) Participants (active railroad employees).....	953,000	911,000	865,000	850,000
(c) Federal finances (in millions of dollars):				
Unemployment trust fund:				
Railroad unemployment insurance account (including administrative expense account):				
Balance or (deficit) start of year.....	(304.6)	(300.4)	(283.0)	(251.8)
Income during year:				
Contributions.....	156.0	152.4	152.0	152.0
Interest on investments.....	.4	.3	.3	.3
Total annual income.....	156.4	152.7	152.3	152.3
Obligations incurred:				
Unemployment, sickness, and maternity benefit payments.....	133.9	115.2	102.0	102.0
Administrative expenses.....	8.8	7.9	7.5	7.4
Payment of interest on borrowings from railroad retirement account.....	9.5	12.2	11.6	10.8
Total annual outgo.....	152.2	135.3	121.1	120.2
Balance or (deficit) end of period.....	(300.4)	(283.0)	(251.8)	(219.7)
(d) Matching or additional expenditures.....				
(e) Number of Federal Government employees: Total for RULA.....	800	693	653	630
(f) Expenses for non-Federal personnel employed in program <sup>1</sup> (thousands).....	\$589	\$485	\$400	\$400
(g) Other significant work performance data, amount of benefits (millions).....	\$133.9	\$115.2	\$102	\$102

<sup>1</sup> Payments to railroads for services of claims agents registering applicants for unemployment benefits.

### 5. *Estimated magnitude of the program in 1970*

Number of beneficiaries (thousands).....	220
Benefit payments (millions).....	\$125

### 6. *Prospective changes in program orientation*

(a) *Pending legislative proposals.*—None.

(b) *Proposed administrative and organizational changes.*—Expanded use of electronic data-processing system and continued reduction in number of district and regional offices.

(c) *Probable changes in conditions under which the program will function.*—Job security agreements which are in effect in the railroad industry, if continued, will tend to keep operations at a relatively low level. Also, the downward trend in number of covered employees will probably continue.

### 7. *Coordination and cooperation*

(a) and (b) *Within bureau and with other units of agency.*—Comments under railroad employees' retirement, survivors and disability insurance for these items (a and b) apply.

(c) *Federal agencies.*—

(1) Department of Labor—U.S. Employment Service: A long-standing agreement provides for cooperation and coordination in the two areas with which the Board's placement service is primarily concerned: (a) placement of unemployed railroad employees, and (b) recruitment and referral of needed employees to railroad employers. This agreement is implemented by separate agreements with the State employment services which are affiliated with the U.S. Employment Service.

(2) Department of Labor—Bureau of Employment Security: An agreement worked out after passage of the Manpower Development and Training Act of 1962, provides that Board offices will refer unemployed railroad employees, who appear to be good candidates for training under this act, to State employment security offices. Those who are accepted for training, have the option of being paid a training allowance equal to railroad unemployment benefits or of registering for such benefits. If the Board pays benefits to a trainee, the Board is entitled to reimbursement from MDTA funds for the amount of benefits paid the claimant while he was in training. Instructions on the necessary procedures and a supply of forms developed for the purpose have been provided to both RRB and SES offices.

(3) Social Security Administration: This agency, upon request, furnishes information from wage records of nonrailroad employers concerning employment of claimants for railroad unemployment insurance benefits. This information is obtained from State records in States where it is available. (See "d" below.)

(d) *State agencies.*—Agreements have been worked out in all States with the State employment services which implement the agreement with the U.S. Employment Service. (See "c" above.) There are also arrangements or agreements with State employment security agencies to supply, upon request, information from wage records from nonrailroad employers (in States where such records are maintained) or employment of claimants under the Railroad Unemployment Insurance Act, and information concerning State unemployment insurance benefits paid to claimants under the Railroad Unemployment Insurance Act. This information is used in connection with checking by the RRB for possible employment on days for which railroad unemployment insurance benefits have been claimed, and for checking on the possibility of claimants claiming unemployment benefits from both agencies for the same days of unemployment. In addition, the RRB has an agreement with Alaska whereby unemployed railroad employees register at State facilities for railroad unemployment insurance benefits.

(e) *Local governments.*—None.

(f) *Foreign governments.*—The RRB has an arrangement with Canada under which information is supplied, upon request, concerning possible receipt of Canadian unemployment insurance benefits by claimants for railroad unemployment insurance benefits.

(g) *Nonprofit organizations.*—See comments under railroad employees' retirement, survivors and disability insurance. In addition, railway labor unions assist in cooperative programs, in which the RRB participates, that are designed to stabilize employment in the railroad industry. The unions are particularly helpful in working out arrangements for reemployment of unemployed railroaders in the railroad industry at other than their last railroad jobs.

(h) *Business enterprises—Railroad employers.*—Comments under railroad employees' retirement, survivors and disability insurance for this item apply. Examples of specific cooperation in railroad unemployment and sickness insurance follow:

(1) Contracts with the individual railroad employers provide for registration of claimants for unemployment insurance benefits with designated railroad employees (unemployment claims agents) at railroad facilities. The Board pays railroad employers 50 cents

for each claim. In connection with the taking of claims, unemployment claims agents supply information having a bearing on claimants' entitlement to benefits and assist their claimants in finding employment with other employers as well as in the railroad industry.

(2) Railroad employers, upon request, furnish information from payroll or time records concerning days on which claimants were employed and their rate of pay. This is used in connection with checking on possible employment on days for which unemployment benefits were claimed and in determining the claimant's unemployment benefit rate.

(3) Railroad employers are cooperative in withholding, from personal injury settlements and from amounts paid to employees for time lost, the amount of benefits paid by the Board to the claimant for the period in question. This is in accordance with sections 12(o) and 2(f) of the Railroad Unemployment Insurance Act.

(4) Railroad employers have also cooperated, in response to requests by the Board, to assist in stabilizing railroad employment by transferring laid off employees to other railroad jobs in preference to hiring new employees. This reduces expenditures for railroad unemployment benefits.

(i) *Others.*—The RRB has an agreement with the Commonwealth of Puerto Rico whereby unemployed railroaders register for unemployment benefits at facilities of the Commonwealth. The agreement also provides for checking on and furnishing information concerning claimants' unemployment.

#### 8. Laws and regulations

See railroad employees' retirement, survivors, and disability insurance—Question 8.

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

#### 9. Economic effects

(a) *Personal incomes of persons served.*—Benefits of over \$100 million a year are paid to railroad employees who have suffered temporary loss of income because of unemployment or sickness. In the fiscal year 1965, beneficiaries and payments were as follows:

	Unemploy- ment	Sickness
Beneficiaries.....	127,000	106,000
Payments.....	\$71,260,000	\$43,984,000

(b) *Placements.*—Placement activities help bring together vacant railroad jobs and unemployed railroad workers. Placements run about 20,000 per year.

(c) *Effects on business.*—Data not available.

(d) *Effects on stability and other aspects of employment or other phases of economic activity.*—Stabilization of railroad employment is one of the objectives of the program. The tax structure is intended to provide a financial incentive for employers in attaining that goal. The ratio of

the total number of employees for whom compensation was reported to the average number of employees (based on an average of 12 mid-monthly employment figures) indicates a trend toward employment stabilization in the railroad industry. In the table below, figures are given for 1937 and 1938, the two years preceding the effective date of the benefit provisions of the RUI Act, and for 1961 to 1963 to show recent trends.

*Number of employees*

[Thousands]

Year	Total	Average	Ratio
1937.....	1,996	1,279	156 to 100
1938.....	1,617	1,053	147 to 100
1939.....	1,666	1,151	144 to 100
1961.....	1,032	836	129 to 100
1962.....	1,037	815	127 to 100
1963.....	1,003	790	127 to 100

(e) *Any benefits not included above.*—To the extent that benefits replace lost wages, the program tends to stabilize income.

(f) *Pertinent geographic differentials.*—See table 2 in the answer to question 9 for retirement, survivors, and disability insurance.

(g) *Measurable contribution to GNP.*—Not measurable.

(h) *Other data or comments.*—None.

10. *Economic classification of program expenditures.* (See table 2.)

Program: Railroad unemployment insurance and sickness (temporary disability) insurance.

Department or agency, and office or bureau: Railroad Retirement Board.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government:

Transfer payments—benefits to railroad employees:

Unemployment..... 71,260

Sickness..... 43,984

Purchases of goods and services<sup>1</sup>..... 7,874

Total Federal expenditures<sup>2</sup>..... 123,118

<sup>1</sup> Includes expenditures incurred in connection with the administration of the program.

<sup>2</sup> Excludes interest payments; see answer to Question 4, Federal finances.

## HOSPITAL AND HEALTH CARE INSURANCE FOR RAILROAD WORKERS AND THEIR FAMILIES

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The railroad hospital and health care programs are intended to provide hospital and medical insurance for railroad employees and their beneficiaries aged 65 and over. The hospital and medical insurance is identical to that provided under the Social Security Act for nonrailroad employees except that all services under the basic hospital program are provided in Canada for railroad employees who are receiving or who are qualified to receive Railroad Retirement Act benefits. These payments will be reduced by the amounts payable for such services under Canadian public health insurance laws. Supplemental medical insurance is made available to these employees but would be payable only for services obtained in the United States.

## *2. Operation*

The railroad hospital and health care programs are joint RRB-SSA operations conducted through our respective regional and field offices under headquarters supervision and with contracts between SSA and fiscal intermediaries for hospitals in the United States. Public Law 89-97 enacted on July 30, 1965, provides the same health insurance benefits for persons qualified for benefits under the Railroad Retirement Act as are provided for individuals entitled to benefits under the Social Security Act, with one exception. The only difference is that railroad retirement beneficiaries residing in Canada are covered for basic hospital benefits under part A of the law, whereas persons insured under the Social Security Act are not covered for any services provided outside the United States. Payment for services provided in Canada, however, is limited to the extent that the amount otherwise payable for such services under Public Law 89-97 exceeds the amount payable for such services under the law in effect in Canada where the services are provided.

## *3. History*

In 1965 the Social Security Act was amended to provide a broad new program of health care for nearly every American age 65 and over. The effective date is July 1, 1966, except for services in extended care facilities, which are first covered on January 1, 1967. Railroad employees and their dependents are included in this program. Special provision was made in social security amendments to transfer the administration of benefits for individuals under the railroad retirement system to the Railroad Retirement Board, if certain financing conditions were met. The Railroad Retirement Act and Railroad Retirement Tax Act were subsequently amended (Sept. 29, 1965, Public Law 89-212) to increase the base on which railroad retirement benefits and taxes are computed and change the rates of taxes. As a result of this act the medicare program for retired railroad employees and their beneficiaries will be administered by the Railroad Retirement Board. This arrangement continues the longstanding congressional policy of assigning to the Railroad Retirement Board jurisdiction for the administration by the Board of all types of benefit programs for railroad employees, their dependents, and survivors. This will also make for more efficient administration, since questions concerning eligibility of beneficiaries may be answered by the RRB on the basis of information which the Board has or may be expected to obtain in connection with the administration of other benefit programs.

## *4. Level of operations.* (See table 1.)

Program: Hospital and health care insurance for railroad workers and their families.

Department or agency, and office or bureau: Railroad Retirement Board.

TABLE 1.—Level of operations or performance, fiscal years 1964–67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of program (eligible employees and annuitants).....	(1)	(1)	838,000	838,000
(b) Applicants: Hospital admissions.....	(1)	(1)	(1)	(2)
(c) Federal finances: Payment to Federal hospital insurance trust fund.....	(1)	(1)	(1)	(1)
(d) Matching or additional expenditures.....	(1)	(1)	None	-----
(e) Number of Federal employees.....	(1)	(1)	\$ 43.5	30

<sup>1</sup> Prior to effective date (July 1, 1966).

<sup>2</sup> The number of admissions will be included in SSA estimates.

<sup>3</sup> In fiscal year 1966, the railroad retirement account will receive an estimated \$14,000,000 in health insurance taxes. This amount (with some adjustments) will later be transferred to the hospital insurance trust fund under the provisions of the financial interchange.

<sup>4</sup> In fiscal year 1967, the railroad retirement account will receive an estimated \$39,000,000 in health insurance taxes. This amount (with some adjustments) will later be transferred to the hospital insurance trust fund under the provisions of the financial interchange.

<sup>5</sup> Includes all initial work of medicare program both in field and headquarters, such as identifying eligible individuals on beneficiary rolls; establishing eligibility of railroad employees who have not ceased compensated service; mailing 700,000 enrollment forms; processing improperly completed enrollment forms and issuing identification cards.

### 5. Estimated magnitude of program in 1970

Except for payments from the railroad retirement account for hospital services in Canada, all payments for medical services for railroad employees will be made from Federal hospital insurance trust fund and the Federal supplemental medical insurance trust fund. As SSA will account for payments and beneficiaries under those funds, railroad employees will be included in SSA's estimate.

For Canadian employees, estimate for 1970 follows:

Payments.....	\$175,000
Eligible individuals.....	4,000

### 6. Prospective changes in program orientation

(a) Pending legislative proposals.—None at present.

(b) Proposed administrative changes.—None at present.

(c) Probable changes under which program will function in 1970.—See comment under this heading—"Railroad Employees' Retirement, Survivors, and Disability Insurance."

### 7. Coordination and cooperation

(a) and (b) Within bureau and with other units of agency.—Comments under "Railroad Employees' Retirement, Survivors and Disability Insurance" for these items (a and b) apply.

(c) With other Federal departments or agencies.—

(1) Social Security Administration: The Board and SSA have made a number of arrangements for efficient and effective administration of the medicare program. In addition to the coordination activities described under "Railroad Employees' Retirement, Survivors and Disability Insurance" (item c), which also apply generally to this program, coordination between the two agencies is exemplified by the following:

(i) Enrollment cards: The RRB furnished a tape record of eligible beneficiaries on railroad retirement benefit rolls to SSA. This record was used to eliminate duplicate beneficiaries. SSA mailed RRB enrollment cards and instructional leaflets in RRB envelopes to RR annuitants who were not eligible for SSA benefits. These cards were returned to RRB for processing. RRB



handles correspondence, takes followup action, makes determinations on requests for enrollment in the supplemental plan, and furnishes a tape record giving status of beneficiaries under voluntary supplemental health plan.

RRB will get in touch with railroad employees over 65 who are now working and who are not on SSA or RRB beneficiary rolls, and will make a determination of entitlement to basic hospital benefits. RRB will solicit information needed for a determination of eligibility, and enrollment for supplemental hospital benefits at the same time. (This same information will be useful in claims for other benefits, such as retirement annuities, etc.)

(ii) Utilization records: SSA will maintain utilization records and give RRB quick access to these records so we may handle correspondence and inquiries.

(iii) Agreements, contracts and payments to providers of services: Under the law, agreements and contracts with providers of services in the United States are the responsibility of the Social Security Administration. Agreements and contracts with providers of service in Canada for qualified RR employees are the responsibility of the Railroad Retirement Board. The Social Security Administration will furnish the Board with lists of participating providers of services. The Social Security Administration will make all health insurance payments and payments under the supplemental plan for services performed in the United States. The Railroad Retirement Board will make payments under the basic plan to providers of service in Canada.

(iv) Payments of monthly premiums: The Railroad Retirement Board will collect the monthly premiums from annuitants who elect to participate in the voluntary supplemental hospital insurance program. For annuitants on the rolls, these premiums will be collected by deducting the amounts thereof from their railroad retirement annuities. The amount so collected will be transferred to Federal Supplemental Medical Insurance Trust Fund.

(v) Training: SSA has developed a number of training aids, including a film for providers of services and, in addition, has established training programs for medicare. These aids are made available to us, and our technical personnel have attended SSA training programs.

(d) and (e) *With State and local governments.*—Our plans for administering the medicare program for railroad employees call for SSA to make the necessary arrangements with State and local governments. It is too soon to determine what separate arrangements, if any, we may need to make with State and local agencies.

(f) *With foreign governments.*—The law provides that payments made for basic health services (pt. A of title XVIII) in Canada shall be made only to the extent that the amount for such services provided by Social Security Act exceeds the amount payable for like services provided under applicable Canadian law. The Board is at present making arrangements to obtain the data needed to give effect to this provision.

(g) *With nonprofit organizations.*—

(1) Labor organizations: Comments under "Railroad Employees' Retirement, Survivors and Disability Insurance," about coordination with railway labor organizations apply. In addition, a number of

railway labor organizations through their local units participate in the management of railway hospital associations. It may be expected that as experience is obtained in the administration of "medicare" we will find a number of areas for mutual cooperation in the advancement of this program.

(2) Canadian hospitals: We are in the process of making arrangements for paying to the Canadian hospitals that provide service for railway employees, the proportion of costs authorized by the Social Security Act. Payments will be made either directly or through an agency or organization nominated and properly recognized to act in this matter.

(h) *With business enterprises.*—(1) Railroads: Comments under "Railroad Employees' Retirement, Survivors and Disability Insurance" about coordination with railroad employers apply. In addition, railroad employers have cooperated in "medicare" administration as follows:

(i) Notice to eligible employees: From Board records we identified railroad employees who would attain age 65 in 1965 and who were still employed. Punched cards were prepared showing for each such employee his name, payroll location and number of months of creditable railroad service. In addition to the identifying data, each card carried information about the benefits provided under the medicare program and instructions about applying for such benefits. These cards were sent to the employers. The employers forwarded the cards to their employees through their normal payroll check distribution channels. In cases where employees had left service, the address was entered by the employer and returned to the local Board office for mailing.

(ii) Application arrangements: Our local offices made arrangements with the railroads in a number of locations for giving explanations about medicare to eligible railroad employees in a group and taking their applications on the site at the same time. This arrangement reduced the amount of time required for our field employees to do this work, and was of benefit to the employer since it kept to minimum the length of time the employee might be away from his work.

#### 8. *Laws and regulations*

See report under "Railroad Employees' Retirement, Survivors and Disability Insurance."

#### 9. *Economic effects*

(a) *Effects on personal income of persons served.*—The basic plan of hospital insurance provides protection against the costs of inpatient hospital services, post hospital extended care services, post hospital home health services, and outpatient hospital diagnostic services for railroad employees and their dependents when they attain age 65. In addition, a package of benefits supplementary to those provided under the basic plan is offered to persons 65 and over on a voluntary basis. The premium for this protection is \$3.00 a month. The Government matches this amount with \$3.00 paid from general funds.

(b) *Effects on the placements or productivity of workers.*—Information not available.

(c) *Effects on business, stimulation of new business enterprises.*—The medicare program will probably encourage the expansion of existing hospital facilities and the construction of new nursing home facilities.

(d) *Effects on stability and other aspects of employment.*—The program will probably increase the number of persons employed in medical care facilities and supporting organizations.

(e) *Any benefits not included above.*—May encourage construction of medical centers and training facilities for medical personnel.

(f) *Geographic differentials.*—Not available.

(g) *Measurable contribution of the program to gross national product.*—Not identifiable.

(h) *Other comments relevant to economic impacts or significance of this program.*—The relatively high level of benefits should reduce the need for public assistance in meeting medical costs for the elderly under the State and local programs.

10. *Economic classification of program expenditures*

Program not operative in fiscal year 1965.

## SELECTIVE SERVICE SYSTEM

The following letter of October 14, 1965, from Director Lewis B. Hershey, of the Selective Service System, to Congressman Wright Patman, chairman of the Joint Economic Committee, gives information concerning the role of the Selective Service System in developing human resources. (Attachments mentioned in the letter are not reproduced here.)

NATIONAL HEADQUARTERS,  
SELECTIVE SERVICE SYSTEM,  
Washington, D.C., October 14, 1965.

HON. WRIGHT PATMAN,  
*Chairman, Joint Economic Committee,  
House of Representatives.*

DEAR MR. PATMAN: This is with further reference to your letter of September 22, 1965, and my reply of October 1, 1965, relating to human resources programs.

The Selective Service System does not itself carry on any programs designed to improve the manpower resource. In its normal functions of registration, classification, and delivery for Armed Forces examination and induction, the Selective Service System acquires information of value to agencies engaged in such programs. By virtue of its decentralized organization with local boards in virtually every community, the System is able to support with information and in other ways Federal, state, and local rehabilitative efforts. The System's role in these efforts can best be described in narrative form.

The physical, mental, and moral health of our youth is of deep concern to me. This concern arises not only from my position as Director of Selective Service where I see so many young men being found unqualified for service, but also it arises from my daily contacts and other activities. The Selective Service System has direct, vital interest in the youth of our Nation in that it is the procurement agency for the Armed Forces for manpower. The product that the Armed Forces receive is of vital concern, not only to the Armed Forces but to the general welfare of this Nation. In light of the above, I have endeavored in every way possible to cooperate and coordinate with other agencies in areas where the betterment of our human resources is the goal.

The Selective Service System has cooperated fully with the Office of Economic Opportunity. It has not only cooperated but it has used its resources and facilities in helping other Government agencies and individuals involved to find and make use of the facilities available in this great work. In January 1964, President Johnson approved the report of The President's Task Force on Manpower Conservation. This task force was composed of the Secretary of Labor as Chairman, and the Secretary of Defense, the Secretary of Health, Education and Welfare, and the Director of Selective Service as members. The attached report entitled "One-Third of a Nation" was a study of young men found unqualified for military service. I believe that it launched many of the present programs on manpower conservation, rehabilitation, and betterment.

As a member of the Economic Opportunity Council I have enlisted the help of the entire Selective Service System. In an editorial in the January 1965 issue of "Selective Service," copy attached, and through an administrative directive to all State directors, issued December 13, 1964, copy attached, I emphasized the desired support. I also requested in the attached memorandum that the 1,300 Reserve and National Guard officers who are earmarked for Selective Service expansion in an emergency, contribute their ideas and thoughts pertaining to new ideas and new adaptations of old ideas on improving our human resources. In addition, a special library has been established at National Headquarters to screen, evaluate, and record all suggestions and recommendations that come from the personnel of the System.

On January 5, 1964, the President requested that certain 18-year-old registrants be forwarded to the Armed Forces for physical examination so that those who were found unacceptable for military service could be referred to other government agencies who could assist these individuals. Therefore, 18-year-olds who were not

in high school or college or gainfully employed have been ordered for physical examination by the Selective Service System. More than 360,000 of these individuals have been examined. The U.S. Employment Service and other agencies have contacted and interviewed and assisted in the rehabilitation of many of these men.

Prior to the Economic Opportunity Council meeting of December 12, 1964, which launched the latest Selective Service effort in this area, the System had initiated many projects of a similar nature. It had (1) participated in and supported about 20 pilot projects conducted by the Departments of Labor and Health, Education, and Welfare to explore the efficacy of counseling rejected registrants at Armed Forces examining stations for medical rehabilitation; (2) referred by letter to the Department of Labor for counseling 250,000 rejected registrants other than 18-year-olds since the Department of Labor first requested this service in February 1964; (3) made the State directors of Selective Service in many States available to become members and even chairmen of advisory committees to the collaborating State agencies appointed as a result of the December 7, 1964, letter sent to all Governors by the Secretary of Health, Education, and Welfare; (4) distributed to all of the more than 4,000 local boards of the System fliers and other solicitation material, together with instructions for their display, as requested by the Job Corps of the Office of Economic Opportunity, on November 16, 1964; (5) supplied the community action program of the Office of Economic Opportunity with many estimates of the number of rejected registrants by cause and by geographical areas coterminous with the jurisdictions of the local governmental agencies; and (6) counseled representatives of VISTA in the Office of Economic Opportunity on their approach to the subject of deferment for registrants who apply as volunteers.

I trust this information will be of assistance to you.

Sincerely yours,

LEWIS B. HERSHEY, *Director.*

# SMALL BUSINESS ADMINISTRATION

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## BUSINESS LOAN PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The purpose of the business loan program is to carry out the objectives of section 7(a) of the Small Business Act: to make direct and participation loans up to \$350,000 (SBA share) to enable small business concerns to finance plant construction, conversion, or expansion, or the acquisition of equipment, facilities, machinery, supplies, or materials for war, defense, or civilian production or as may be necessary to insure a well-balanced national economy. The agency also provides financial counseling services to loan applicants and other small concerns.

#### 2. Operation

The program is carried out by 62 field offices, with supervision provided by 8 area offices and the Washington office. Loans are made in participation with banks or other lending institutions whenever possible. To date approximately 58 percent of all loans have been made on a participation basis, either immediate or guaranteed.

#### 3. History

Though certain business lending programs of the Federal Government were previously in effect from time to time, the present program started in 1953, with the passage of the Small Business Act. Begun

on a relatively modest basis, it has picked up momentum, and fiscal year 1965 was the most active in the agency's history, with approval of 13,420 loans in the amount of \$418 million. In addition, counseling assistance was provided to another 24,055 loan applicants or those seeking financial counseling and advice. In cases where loans are not granted, it is frequently possible to steer the small business firms to local banks or other sources of commercial credit, thus conserving the Government's funds and also enabling small firms to establish a continuing source of credit for business needs.

4. *Level of operations.* (See table 1.)

Program: Business loan program.

Department or agency, and office or bureau: Small Business Administration;  
Deputy Administrator for Financial Assistance.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude (approved business loans).....	6, 288	13, 420	12, 800	17, 800
(b) Applicants (applicants for business loans) ..	11, 608	21, 374	21, 000	28, 800
(c) Federal finances (amount of approved loans) <sup>1</sup> .....	\$248,108,000	\$339,523,000	\$354,645,000	\$428,000,000
(d) Additional private expenditures (bank par- ticipations in loans).....	\$64, 104, 000	\$78, 534, 000	\$75, 600, 000	\$91, 400, 000

<sup>1</sup> SBA operates from a revolving fund; appropriations and balances are not identified by program. Additional financial information may be found in the material listed in app. III.

<sup>2</sup> Includes \$15,000,000 guaranteed by SBA but disbursed by banks.

<sup>3</sup> Includes \$56,700,000 guaranteed by SBA but disbursed by banks.

<sup>4</sup> Includes \$120,000,000 guaranteed by SBA but disbursed by banks.

<sup>5</sup> Includes \$120,000,000 guaranteed by SBA but disbursed by banks.

(e) *Federal employees.*—We are unable to break down the man-years of financial assistance personnel spent on the three programs: business loan, disaster loan, and economic opportunity loan. Washington and field office personnel spend their time on the three programs, as needed, with the Washington and area offices providing planning and supervision, while the regional offices make and service loans. Overall figures are as follow: (man-years, including clerical personnel):

Number of Federal employees (man-years):

Fiscal year 1964.....	1, 320
Fiscal year 1965.....	1, 410
Fiscal year 1966 (estimated).....	1, 815
Fiscal year 1967 (estimated).....	2, 305

(f) *Non-Federal employees.*—The non-Federal employees are personnel employed by participating banks. We are unable to estimate the numbers, but it is noted that 58 percent of all business loans are made in participation with banks, and there are presently more than 5,000 banks participating. These banks use loan officers and credit analysts to process and service the loans. In addition, SCORE volunteers contribute hundreds of hours in assisting SBA borrowers with financial, management, and other business problems.

(g) *Work-performance data.*—The Agency has a work-measurement system for personnel engaged in making and servicing loans. This system is carefully reviewed in order to determine whether current standards (which change from time to time, as warranted) are being met. Our offices are, on the whole, consistently meeting, and sometimes exceeding, the standards set.

5. *Estimated magnitude of program in 1970.* (See general statement for all SBA programs.)

6. *Prospective changes in program orientation*

(a) No legislative proposals are presently pending to change the orientation or emphasis of the business loan program.

(b) The Agency completed in June, 1965, an extensive reorganization, including complete decentralization of lending operations to its field offices. (See material listed in app. II.)

(c) (See answer to question 5 in general statement for all SBA programs.)

7. *Coordination and cooperation*

(a), (b), and (c) Organization and coordination. (See material listed in app. II.)

SBA has agreements with the Departments of Agriculture and Interior under which loans for the purpose of building primary access roads may be made to purchasers of national forest timber or of timber cutting rights.

The Agency is presently seeking legislation to clarify and expand its authority to establish a program under which certain SBA loans would be pooled and certificates of beneficial interest, based on such pools, would be sold to the investing public by the Federal National Mortgage Association. We are hopeful that this program will be placed in operation in the near future, in order to supplement the financing of our revolving fund through this means of obtaining greater participation of private funds in SBA loans.

In addition, under Public Law 87-550 and the Automotive Products Trade Act of 1965 (Public Law 89-283), SBA will work out an agreement with the Department of Commerce to provide for loans and other assistance to firms economically injured under the Canadian-United States Automotive Products Agreement.

SBA has also provided loan processing and servicing functions for the Area Redevelopment Administration and the Economic Development Administration, under a delegation from the Secretary of Commerce.

(d), (e), (f), (g), and (i) not applicable.

(h) As mentioned above, this Agency's lending program is carried out in participation with a number of banks and other private lending institutions, on either an immediate participation or guaranteed basis. Our efforts to increase such participation are very active and on a continuing basis.

As a part of these efforts to increase bank participation, the Agency cooperates with and seeks the assistance of the American Bankers Association in informing its member banks of our lending programs. The association has been helpful in these informal negotiations, in which they have offered suggestions as to various participation plans, particularly the guarantee plan under which the banks provide the full loan to the borrower, with a portion guaranteed by SBA.

8. *Laws and regulations.* (See general statement for all SBA programs.)



## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See statement for all SBA programs and SBA annual report for 1964, sec. III.)

10. *Economic classification of program expenditures.* (See table 2.)

Program: Business loan program.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Financial Assistance.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government:	
Loans to business.....	284, 236
Economic opportunity loans.....	964
<b>Total, Federal loans<sup>1</sup>.....</b>	<b>285, 200</b>
Non-Federal expenditures financed by business enterprises (participating banks) <sup>2</sup> .....	104, 800
<b>Total expenditures for the program.....</b>	<b>390, 000</b>

<sup>1</sup> This represents gross loans disbursed. Net loan disbursements are approximately \$110,586,000. It is not feasible to accurately prorate other costs (administrative, interest, etc.) by program. Total expenditures for interest, administrative, and other costs for all SBA lending programs in fiscal 1965 were \$72.3 million.

<sup>2</sup> Includes loans guaranteed by SBA.

NOTE.—The Small Business Administration is classified as a Government enterprise in the National Income Accounts.

## ECONOMIC OPPORTUNITY LOAN PROGRAM

### DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The objective of this program is to provide business opportunity for low-income businessmen or potential businessmen through the development of entrepreneurs among disadvantaged groups. This is accomplished through the use of loans up to \$25,000 under liberal credit criteria, and through management assistance.

#### 2. Operation

Loans are made from the SBA revolving fund. Under title IV of the Economic Opportunity Act, authority to make these loans has been delegated to SBA by the Director, Office of Economic Opportunity. Prescreening and management assistance are provided by small business development centers (SBDC's). Typically, the SBDC is a component of a community action program and operates with funds from the OEO under title II-A of the Economic Opportunity Act. Some SBDC's have been funded by the Area Redevelopment Administration. Some small ones operate on a volunteer basis. The basic combination involves SBA loans to individual businessmen and OEO grants to community organizations.

#### 3. History

The forerunner of the program was a 1963-64 pilot operation by SBA in which loans up to \$6,000 were made to very small businessmen for a period not exceeding 6 years. The passage of the Economic Opportunity Act in 1964 provided statutory authority for the same type of program on an expanded basis. The program will be in operation in 50 communities by the end of fiscal year 1966, and is now available

in 35 communities. The fiscal year 1967 budget provides for an increase to 70 SBDC's.

4. *Level of operations.* (See table 1.)

Program: Economic opportunity loan program.  
Department or agency, and office or bureau: Small Business Administration;  
Deputy Administrator for Financial Assistance.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude (approved loans).....	( <sup>1</sup> )	159	3,300	6,600
(b) Applicants for E.O. loans.....		307	4,760	8,100
(c) Federal finances (amount of approved loans).....		\$1,731,000	\$28,000,000	\$50,000,000
(d) Additional expenditures (bank participation in loans).....		\$35,000	\$560,000	\$1,000,000

<sup>1</sup> Not in operation.

(e) *Number of Federal employees.*—See item 4(e) under business loans.

(f) *Non-Federal employees.*—

(1) Unknown number of employees of participating banks.

(2) Employees of small business development centers. (Number of employees per SBDC varies markedly.)

(g) *Work-performance data.*—SBA employees are meeting agency standards in the processing and servicing of E.O. loans.

5. *Estimated magnitude of program in 1970.* (See general statement for all SBA programs.)

6. *Prospective changes in program orientation*

(a) No legislative proposals are presently pending. Public Law 89-117 provides for a new program of lease guarantees for small business concerns eligible for E.O. loans.

(b) It is proposed that, for greater efficiency, OEO delegate the administration of grants to SBDC's to SBA, transferring to SBA the necessary funds for this purpose. Under this plan, SBA will be the sole Federal source of funds for the operating costs of SBDC's with regard to the implementation of title IV. The plan has been approved and is incorporated in the 1967 budget.

(c) (See answer to question 5 in general statement for all SBA programs.)

7. *Cooperation and coordination*

(a), (b), and (c) Organization and coordination.—(See material listed in app. II.) Specific areas of cooperation exist with:

(1) Bureau of Indian Affairs: SBDC's operate on some Indian reservations. Their operations are supported and assisted by BIA.

(2) Manpower Administration, Department of Labor: They are interested in using centers as a way to inform businessmen on the Manpower Development and Training Act and as a source of referrals for MDTA programs.

In addition, SBA has a close operating relationship with the Office of Economic Opportunity. Procedures and criteria for SBA approval and OEO funding of SBDC's are jointly agreed

upon by SBA and OEO. Procedures involve joint review and joint action on SBDC proposals. Regular weekly meetings at OEO of all delegated programs, and weekly reports to OEO on the progress of the programs are established mechanisms for general coordination.

(d) There are no formal or specific mechanisms for cooperating with State governments. Frequently, there is informal coordination with State poverty coordinators on the planning and developing of the program in a particular State.

(e) There is cooperation with local government in that we work with SBDC's, and local governments are involved with SBDC's in varying degrees. There are no specific direct arrangements with local governments.

(f) Not applicable.

(g) Nonprofit organizations: Of course, we work directly through SBDC's. We cooperate with any nonprofit institutions which are interested in helping the economic opportunity loan program.

(h) A few banks are participating. We hope to increase the number as the program develops.

8. *Laws and regulations.* (See statement for all SBA programs and title IV of the Economic Opportunity Act.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general statement for all SBA programs.)

10. *Economic classification of program expenditures.* (Included under business loans.)

## DISASTER LENDING PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The purpose of this program is to carry out the objectives of section 7(b) of the Small Business Act: to make loans up to any appropriate amount to assist the victims of natural and certain economic disaster situations.

#### 2. Operation

The program is carried out in SBA field offices located nearest the area of the particular disaster; in addition, special disaster offices are often established temporarily where the damage is extensive.

#### 3. History

A Federal disaster loan program began in 1936 under the Reconstruction Finance Corporation, at which time these loans were known as catastrophe relief loans. In 1937 RFC established the Disaster Loan Corporation and these loans have been known by this name since that date. RFC continued to make these loans until the function was transferred to SBA in 1953. These loans are presently covered under section 7(b)(1) of the Small Business Act. Since the beginning of SBA in 1953, three new sections have been added to the SBA disaster authority; namely, economic injury disaster loans

(sec. 7(b)(2)), displaced business disaster loans (sec. 7(b)(3)), and product disaster loans (sec. 7(b)(4)).

4. *Level of operations.* (See table 1.)

Program: Disaster lending program.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Financial Assistance.

TABLE 1.—*Level of operations or performance, fiscal years 1964–67*<sup>1</sup>

Measure and unit	Fiscal year 1964	Fiscal year 1965
(a) Magnitude (approved loans).....	2,604	4,207
(b) Applicants for disaster loans.....	3,069	5,071
(c) Federal finances (amount of approved loans).....	\$54,132,000	\$90,160,000
(d) Additional expenditures (bank participation in loans).....	\$1,616,000	\$3,379,000

<sup>1</sup> It is exceedingly difficult to estimate with any degree of accuracy the number of loan applications for this fiscal year (1966), primarily due to the recent Hurricane Betsy which has caused damage in Alabama, Florida, Mississippi, and Louisiana. The destruction in Louisiana is almost beyond description and involves wind damage which may be covered by insurance, as well as flood or other water damage which is generally not insurable, and in many cases a combination of both. It appears safe to state that the number and dollar amount of applications received and approved will exceed those of any fiscal year. Budget estimates for fiscal years 1966 and 1967 for the entire disaster loan program are \$220,800,000 and \$125,000,000, respectively.

(e) *Federal employees.*—See item 4(e) under business loans.

(f) *Non-Federal employees.*—Unknown number of personnel in participating banks.

(g) *Work-performance data.*—SBA personnel are meeting the required agency standards for the handling of disaster loans.

5. *Estimated magnitude of program in 1970.* (See general statement for all SBA programs.)

6. *Prospective changes in program orientation*

(a) The first session of the 89th Congress passed legislation providing for an immediate study of the feasibility of Federal participation in providing disaster insurance for disasters such as floods, where private insurance is not available. This legislation also included a partial loan forgiveness for uninsurable damage caused by Hurricane Betsy.

The new lease guarantee program under Public Law 89–117, section 316, also applies to small firms eligible for 7(b)(3) disaster loans, if they are injured through displacement by Federal or federally aided construction.

(b) No organizational changes presently pending.

(c) (See answer to question 5 in general statement for all SBA programs.)

7. *Coordination and cooperation*

(a) and (b) Experienced personnel from Washington and other SBA offices are frequently temporarily assigned to help local personnel in major disaster areas.

(c) On the physical disaster program (sec. 7(b)(1) of the Small Business Act and the economic injury program under sec. 7(b)(2) of the act) this agency works in close coordination with the Office of Emergency Planning, which takes actions on behalf of the President in relation to such disasters. SBA also cooperates closely with other Federal agencies helping to provide relief to disaster stricken areas. In connection with economic disasters, as covered by section

7(b)(2)(B) of the act, we coordinate with the Farmers Home Administration. On disasters of the type covered by section 7(b)(3) of the act, we work closely with the Urban Renewal Administration of HHFA, and with other Federal agencies financing construction which may displace small firms.

(d) This agency works with State governments in connection with disasters declared under the physical, economic injury, and displaced business disaster loan programs.

(e) The agency also works with local governments and communities in its disaster loan programs.

(f) Not applicable.

(g) The agency coordinates closely with the American Red Cross and other nonprofit organizations helping to provide disaster assistance in connection with our physical disaster loan operations. In addition, in this program, as in none of our other lending programs, the SBA makes loans to nonprofit organizations (which have suffered physical damage).

(h) A number of banks participate with the agency in making disaster loans. Also, the agency can make physical-type disaster loans to any business regardless of size, unlike its other disaster or business loan programs.

(i) Not applicable.

8. *Laws and regulations.* (See general statement for all SBA programs.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See general statement for all SBA programs and SBA Annual Report for 1964, sec. IV.)

10. *Economic classification of program expenditures.* (See table 2.)

Program: Disaster lending program.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Financial Assistance.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government: Loans <sup>1</sup> .....	82, 558
Non-Federal expenditures financed by business enterprises <sup>2</sup> (participating banks).....	2, 942
<b>Total expenditures for program.....</b>	<b>85, 500</b>

<sup>1</sup> This represents gross loans disbursed. Net loan disbursements are approximately \$67,038,000. It is not feasible to accurately prorate other costs by program. Total expenditures for interest, administrative, and other costs for all SBA lending programs in fiscal 1965 were \$72,300,000.

<sup>2</sup> Includes loans guaranteed by SBA.

NOTE.—The Small Business Administration is classified as a Government enterprise in the National Income Accounts.

## LOCAL DEVELOPMENT COMPANIES PROGRAM

### 1. Objectives

It is the intent of the program to provide a source of long-term financing for small business to accomplish expansion, conversion, or modernization of plant and equipment in cooperation with local community development corporations. This lending program is geared

to function in any community of the United States to increase employment and expand economic development through small business.

## 2. Operation

The program is operated through broad delegation to the area and regional offices of SBA, with general program supervision provided from the Washington office.

Through this program, SBA makes loans to eligible local development companies chartered under State law for the primary purpose of assisting in the industrial and economic development of their local communities and areas. Such loans can be for as much as \$350,000 for each identifiable small concern involved, and for a maturity of as long as 25 years. Loan funds go to the local development company, which may construct facilities for leasing to small concerns, or which may relend the proceeds to small concerns for new or improved facilities. Ordinarily, local development companies are expected to supply 20 percent of the cost of the project. Such funds are commonly raised by popular subscription among local residents. Most of the loans are made in participation with local banks.

## 3. History

The local development company loan program started in 1958, when the Small Business Investment Act of 1958 was passed. Only 14 loans totaling \$1,671,000 (SBA share \$1,540,000) were approved during fiscal year 1959. The benefited small business concerns reported a gain of 663 jobs in their local communities as a result of these loans. By way of comparison, and illustrating the growth of the program, fiscal year 1965 approvals totaled 256, for \$40,205,000 (SBA share \$37,843,000), and aided in the creation of 9,289 jobs.

During the last year and a half, more loans were made under this program than were made in the previous 6 years of the program's existence. On a cumulative basis, to December 31, 1965, the totals have reached 807 loans approved for \$161,500,000 (SBA share approximately \$110 million), and 37,500 jobs.

## 4. Level of operations. (See table 1.)

Program: Local development companies program.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Investment.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 esti- mate	Fiscal year 1967 esti- mate
(a) Magnitude (approved loans).....	154	256	280	375
(b) Applicants (applications received).....	176	305	350	470
(c) Federal finances (amount of approved loans).....	\$19,724,000	\$37,843,000	\$40,000,000	\$50,000,000
(d) Additional expenditures (bank participation in loans).....	\$2,246,000	\$2,456,000	\$2,600,000	\$5,000,000
(e) Number of Federal employees (Washington and field) <sup>1</sup> .....	49	63	87	97

<sup>1</sup> These figures reflect overall total of man-years, including clerical personnel, related to the program. This includes processing and reviewing of loan applications in the field as well as planning and supervisory time of the Washington and area offices staff.

(f) *Non-Federal employees.*—Number of employees of participating banks is unknown.

(g) *Work-performance data.*—SBA employees are meeting agency standards in the processing and servicing of local development company loans.

5. *Estimated magnitude of program in 1970.* (See general statement for all SBA programs.)

6. *Prospective changes in program orientation*

(a) No legislative proposals are presently pending.

(b) The local development loan program was placed in the Investment Division of SBA under the terms of the Small Business Investment Act of 1958. The act was amended in August 1965 (Public Law 89-117) to permit the Administrator to assign it elsewhere within the agency, in his discretion. As yet, no reassignment has been made.

7. *Coordination and cooperation*

(a) and (b) See material listed in appendix II.

(c) Specific areas of coordination and cooperation exist with the following Federal agencies:

(1) Department of Defense: In areas affected by military cutbacks, to alleviate local unemployment problems.

(2) Atomic Energy Commission: In areas affected by cutbacks in that agency's operations.

(3) Economic Development Administration: In conjunction with EDA (and its predecessor, the Area Redevelopment Administration), this program has been most effective in reducing unemployment in distressed areas through effective economic improvement at the local level.

(4) Securities and Exchange Commission: Close liaison is required with the SEC in order to insure regulatory compliance relative to investment procedures.

(5) Department of Agriculture (REA): The 502 program works in conjunction with Rural Electrification Administration programs in helping to create "off the farm" employment in rural areas.

(d) The program is coordinated with State government instrumentalities, such as departments of commerce, in order to help increase and expand their industries.

(e) Local governments are frequently involved in efforts to work through local development companies to help provide long-term financing for capital improvement to small businesses in the community.

(f) Not applicable.

(g) The program is also aided by the efforts of nonprofit organizations, such as the small business development centers and the small business advisory councils.

(h) Many business enterprises cooperate with this program and many banks and lending institutions participate in our development company lending program.

(i) Not applicable.

8. *Laws and regulations.* (See general statement on all SBA programs.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See statement on all SBA programs and SBA annual report for 1964, sec. VI.)

10. *Economic classification of program expenditures.* (See table 2.)

Program: Local development companies program.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Investment.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

	[In thousands of dollars]
Federal Government:	
Loans <sup>1</sup> -----	19, 999
Non-Federal expenditures financed by business enterprises (participating banks) <sup>2</sup> -----	1, 741
Total expenditures for program-----	21, 740

<sup>1</sup> This represents gross loans disbursed. Net loan disbursements are approximately \$16,254,000. It is not feasible to accurately prorate other costs by program. Total expenditures for interest, administrative and other costs for all SBA lending operations in fiscal 1965 were \$72,300,000.

<sup>2</sup> Includes loans guaranteed by SBA.

NOTE.—The Small Business Administration is classified as a Government enterprise in the National Income Accounts.

## INVESTMENT COMPANY ASSISTANCE PROGRAM

## PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

As stated by Congress in section 102 of the Small Business Investment Act, the purpose is to improve and stimulate the national economy in general and the small business segment thereof in particular by establishing a program to stimulate and supplement the flow of private equity capital and long-term loans which small concerns need for expansion, modernization, and the sound financing of their operations.

2. *Operation*

Under the act, SBA has established a new system of financial institutions known as small business investment companies (SBIC's). Such companies are chartered under State law, and their initial capitalization is supplied by private parties. Their sole purpose must be to supply equity capital and long-term loans, and managerial assistance to small business, under SBA regulations. If they meet standards established by SBA, they are licensed as SBIC's and are eligible for financial help from SBA, as well as certain tax benefits.

Private capital in an SBIC, up to \$700,000, may be matched by SBA through the purchase of a subordinated debenture issued by the SBIC. Additional loans from SBA, or from other financial institutions with a guarantee from SBA, are available to SBIC's in good standing, in amounts up to 50 percent of the company's statutory capital or \$4 million, whichever is less. All the funds of an SBIC, except for resources temporarily idle while awaiting investment opportunities, must be channeled to small concerns.

SBIC's are privately owned and privately operated, but are subject to the regulations prescribed by SBA. Within these regulations, they make their own credit decisions.



The investment program is primarily a centralized program in SBA. It operates with a limited field staff located in SBA's eight area offices. Field personnel provide advice and assistance to groups applying for licenses, and conduct examinations of the affairs of the licensed companies. Approval of licenses and of loan applications and general supervision of the program, including the issuance of regulations, are centered in the Washington office.

### 3. History

The small business investment company program has its roots in a series of congressional hearings and an extensive study by the Federal Reserve Board, concerning the availability of equity capital and long-term loan funds to small concerns. Congress found that a gap existed in the Nation's financial structure which made it difficult, if not impossible, for small concerns to obtain such funds, and it determined, by passage of the Small Business Investment Act of 1958, to create a new institution through which private investors would be encouraged to venture into this field of financing.

SBA was given authority to license, regulate, and provide limited financial assistance to the new small business investment companies.

The first SBIC licenses were issued in 1959. Licensing activity reached a peak in 1961-62. By the end of 1965, there were 704 licensed SBIC's in the country.

SBA estimates that the SBIC industry as a whole has passed the \$800 million mark in investments, and probably will reach a billion dollar total early in 1966. The SBIC's have concluded approximately 20,000 financing transactions with small business concerns, and are now investing at a rate of about \$200 million per year.

By the end of 1965, private capital invested in SBIC's had reached \$491.4 million. The Government's capital investment in the industry, in the form of subordinated debentures issued to SBA by the SBIC's, was \$152.2 million. In addition, SBA had approved direct or guaranteed operating loans to SBIC's in the amount of \$139.2 million, for use in making investments in small concerns.

### 4. Level of operations. (See table 1.)

Program: Investment company assistance program.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Investment.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimated	Fiscal year 1967 estimated
(a) Magnitude (licenses outstanding).....	723	709	679	599
(b) Applicants (number of debenture purchases and loans approved).....	340	221	245	245
(c) Federal finances (amount of approved loans to SBIC's).....	\$57,800,000	\$36,000,000	\$75,000,000	\$72,000,000
(d) Matching or additional expenditures (new private funds injected into SBIC's).....	\$20,400,000	\$10,200,000	\$23,200,000	\$22,500,000
(e) Number of Federal employees (Washington and field) <sup>2</sup> .....	134	121	128	132
(f) Non-Federal employees <sup>3</sup> .....	-----	-----	-----	-----
(g) Other measurements <sup>4</sup> .....	-----	-----	-----	-----

<sup>1</sup> This figure is net after cancellation of commitments outstanding totaling \$11,000,000.

<sup>2</sup> These figures reflect overall total of man-years, including clerical personnel, related to the program.

<sup>3</sup> Non-Federal employees would include personnel of the SBIC's and of other lending institutions which participate in loans to SBIC's. SBA has no information on their number.

<sup>4</sup> The magnitude and results of the SBIC program can be measured by the number and amount of financings made by SBIC's, and the profitability of the SBIC's themselves. However, a more pertinent measure would be the increases in productivity and income of small concerns aided by SBIC's. SBA is now instituting procedures by which this type of information will be obtained from SBIC's with respect to their portfolio companies.

5. *Estimated magnitude of program in 1970.* (See general statement for all SBA programs.)

6. *Prospective changes in program orientation*

(a) Legislation is presently pending before Congress to create an SBIC capital bank to provide a means of obtaining greater participation of private investment in the financing of SBIC's.

(b) The Investment Division completed an extensive reorganization in January, 1965 (see material listed in app. II).

(c) See answer to question 5.

7. *Coordination and cooperation*

(a) and (b) See material listed in appendix II.

(c) Federal agencies with which the Investment Division cooperates include the Internal Revenue Service and the Treasury Department. They work closely with SBA on SBIC tax problems and regulations. SBA also works with the Securities and Exchange Commission, since some of the SBIC's are registered with the SEC and both SBA and SEC have regulatory responsibilities in respect to these companies. Representatives of both Treasury and SEC serve with SBA on an SBIC Government and industry liaison committee.

(d), (e), and (f) not applicable.

(g) Nonprofit organizations, such as small business development centers and small business advisory councils, refer small businessmen to SBIC's for possible financial assistance.

(h) Business enterprises such as banks, lending institutions, insurance companies, and pension funds participate in the SBIC lending program.

(i) Trade associations, such as the National Association of Small Business Investment Companies, keep industry aware of new developments and legislation of the program.

8. *Laws and regulations.* (See general statement for all SBA programs.)

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* (See statement on all SBA programs and SBA Annual Report for 1964, sec. V.)

10. *Economic classification of program expenditures.* (See table 2.)

Program: Investment company assistance program.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Investment.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government: Loans <sup>1</sup> .....	45,364
Non-Federal expenditures financed by: Business enterprises (participating banks) <sup>2</sup> .....	1,265
Total expenditures for program.....	46,629

<sup>1</sup> This represents gross loans disbursed. Net loans disbursements are approximately \$27,278,000. (This includes repayment of \$12,321,000 or sale of loans with recourse.) It is not feasible to accurately prorate other costs by program. Total expenditures for interest, administrative, and other costs for all SBA lending programs in fiscal year 1965 were \$72,300,000.

<sup>2</sup> Includes loans guaranteed by SBA.

NOTE.—The Small Business Administration is classified as a Government enterprise in the National Income Accounts.

PROCUREMENT ASSISTANCE PROGRAM<sup>1</sup>

## PRIME CONTRACT OPERATIONS

## PART I. DESCRIPTION OF THE PROGRAM

## 1. Objectives

The program objective is to increase the share of Government contract awards to small business concerns so as to help them obtain a fair share of Government procurement and sales contracts. The set-aside program, which involves setting aside certain contracts or portions thereof for exclusive small business bidding, is a major means by which awards can be assured to small business concerns on the types of Government requirements for which they can compete.

## 2. Operation

SBA and the Government procuring agencies are striving to work out an active partnership in establishing total agency small business procurement and set-aside goals. Negotiations are now being conducted with the aim of establishing this partnership in the procurement policy area, and it is felt that once this is effected, small business goals will continue to reflect progress.

## 3. History

The authority for setting aside certain Federal Government purchases for exclusive bidding by small firms was first enacted in the Defense Production Act of 1950, which created the predecessor agency of SBA, the Small Defense Plants Administration. This authority was transferred to the Small Business Administration when it was created in August 1953. These set-asides were restricted to purchases by defense agencies but by 1958, when SBA became a permanent agency, these activities had been expanded to include purchases by civilian agencies and extended to class set-asides (section 15 of the Small Business Act). Under a class set-aside, broad groups of items or services are restricted to small business. SBA is now placing primary reliance upon set-asides by the procuring agencies under their own authority, rather than joint set-asides under the Small Business Act.

## 4. Level of operations. (See table 1.)

Program: Prime contract operations.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Procurement and Management Assistance.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

[Dollar amounts in billions]

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimated	Fiscal year 1967 estimated
(a) Magnitude (joint set-asides made).....	\$2.7	\$3.05	( <sup>1</sup> )	( <sup>1</sup> )
(b) Applicants <sup>2</sup> .....				
(c) Federal finances <sup>3</sup> .....				
(d) Additional private expenditures <sup>3</sup> .....				
(e) Federal employees (man-years).....	46	46	14	14
(f) Non-Federal employees.....				
(g) Other data <sup>3</sup> .....				

<sup>1</sup> Not available.

<sup>2</sup> Not applicable.

<sup>3</sup> This involves the awards of Government contracts and this item is, therefore, not applicable to SBA.

<sup>1</sup> Questions 1 through 4 are answered for individual SBA procurement assistance programs, while questions 5 through 9 are answered on a combined basis.

## SUBCONTRACTING PROGRAM

## PART I. DESCRIPTION OF THE PROGRAM

## 1. Objectives

The objective of the program is to increase the participation of small business concerns in subcontracting awards resulting from Government procurements. Personnel permitting, it is planned to expand this program eventually to the 100 largest defense contractors as a means of motivating the greatest feasible effort of industry to maximize small business participation, as subcontractors, in the Nation's huge expenditures for defense and space programs.

## 2. Operation

The agency's subcontracting program is a part of the overall Government program. Supplementing the actions of the procurement agencies, the SBA, in collaboration with the DOD, has asked major prime contractors to join in a voluntary procedure to provide increased opportunities for small firms. SBA works with the contractors, learning of their needs, passing the information along to small firms, and recommending qualified small suppliers.

## 3. History

Public Law 87-305 (Sept. 26, 1961) (sec. 8(d) of the Small Business Act) gave impetus to several previously independent programs on subcontracting. As a result of this law, the SBA, DOD, and GSA developed a Government-wide program in which Government contractors with contracts over \$500,000 must contractually undertake specified actions to expand small business opportunities.

## 4. Level of operations. (See table 1.)

Program: Subcontracting program.

Department or agency, and office or bureau: Small Business Administration;  
Deputy Administrator for Procurement and Management Assistance.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude:				
Number of companies.....	29	39	39	39
Number of plants.....	190	260	244	244
(b) Applicants <sup>1</sup> .....				
(c) Federal finances <sup>2</sup> .....				
(d) Additional private expenditures <sup>2</sup> .....				
(e) Federal employees (man-years).....	28	35	17	24
(f) Non-Federal employees.....				
(g) Other data <sup>2</sup> .....				

<sup>1</sup> Not applicable.

<sup>2</sup> This involves the awards of Government contracts and this item is, therefore, not applicable to SBA.

## RESEARCH AND DEVELOPMENT CONTRACTS ASSISTANCE

## PART I. DESCRIPTION OF THE PROGRAM

## 1. Objectives

The objective of the program is to increase the participation of small business concerns in Government-funded research and development work. The ultimate goal is to increase the amount of Government

R. & D. contracts awarded to small business concerns from \$364 million in fiscal year 1963 to \$440 million in fiscal year 1966. The SBA helps to increase small business participation in research and development contracts through various methods, including learning the future needs of purchasing agencies so it can inform interested and qualified small businesses; supplying data on capable small firms to purchasing offices that need specialized facilities; co-sponsoring conferences where small businessmen can learn of purchasing methods and needs; and publishing booklets which guide and assist the potential research and development contractor.

## 2. Operation

SBA, together with other Government agencies, cosponsors a continuing program of conferences throughout the United States on research and development. SBA assures that small research and development companies are adequately represented at these conferences, which are held to acquaint the scientific community and industry with current and long-range requirements of Government agencies.

## 3. History

The research and development program of SBA started as a major activity with the enactment of the July 18, 1958, amendment to the Small Business Act (sec. 9 of the act).

## 4. Level of operations. (See table 1.)

Program: Research and development contracts assistance.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Procurement and Management Assistance.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

(Dollar amounts in millions)

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude (value of contracts awarded).....	\$78.2	\$83.2	(1)	(1)
(b) Applicants <sup>2</sup> .....				
(c) Federal finances <sup>3</sup> .....				
(d) Additional private expenditures <sup>3</sup> .....				
(e) Federal employees (man-years).....	25	25	16	16
(f) Non-Federal employees.....				
(g) Other data <sup>3</sup> .....				

<sup>1</sup> Not available.

<sup>2</sup> Not applicable.

<sup>3</sup> This involves the awards of Government contracts and this item is, therefore, not applicable to SBA.

## CERTIFICATE OF COMPETENCY PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The objective of the program is to insure that a small firm receives the Government contract on which it has submitted the lowest responsive bid, when the firm has the financial and productive capacity adequate for the contract in question, even though the procuring activity has rejected the firm's bid on grounds of inadequate capacity or credit, or both. Small firms so rejected are referred to SBA to permit this agency to make independent determinations as to the

bidder's capacity and credit. SBA's finding of capacity and credit is binding upon the contracting officer (sec. 8(b)(7) of the Small Business Act).

## 2. Operation

The program serves all branches of the Department of Defense, the General Services Administration, and other civilian agencies.

## 3. History

This program dates back to SBA's predecessor agency, the Small Defense Plants Administration (1952). In fiscal year 1964 initial steps were taken to decentralize the COC program. The agency delegated to the then 15 regional offices the authority to issue COC's for contracts up to \$50,000. This authority in amounts up to \$350,000 is in process of being delegated to these offices, with authority to issue in lesser amounts being delegated to some other regional offices. As soon as staffing permits, similar delegation will be extended to all regional offices.

## 4. Level of operations. (See table 1.)

Program: Certificate of competency program.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Procurement and Management Assistance.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude (applications received from individual firms).....	434	570	570	600
(b) Applicants (COC issues to individual firms).....	171	225	225	265
(c) Federal finances <sup>1</sup> .....	-----	-----	-----	-----
(d) Additional private expenditures <sup>1</sup> .....	-----	-----	-----	-----
(e) Federal employees (man-years).....	19	19	19	22
(f) Non-Federal employees.....	-----	-----	-----	-----
(g) Work performance data <sup>1</sup> .....	-----	-----	-----	-----

<sup>1</sup> This involves the awards of Government contracts and this item is, therefore, not applicable to SBA.

## FACILITIES INVENTORY PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The agency maintains a centralized facilities register of small business productive facilities, which is used principally in assisting the registered companies in their efforts to obtain prime and sub-contracts, in locating new sources for Government purchasing offices, in locating scarce or specialized machine tools and equipment when calls are received for them, in locating concerns with research and development capabilities, and in locating small business firms in the forestry and forest products industry for use in connection with the timber sales set-aside program.

#### 2. Operation

All SBA regional offices contribute to the development of the facilities inventory. However, the facilities registers are maintained at 18 selected SBA regional operating offices for those small business

firms which have listed their production facilities for the geographic territory served by the office.

### 3. History

The statutory responsibility to make a complete inventory of all production facilities of small business concerns is contained in section 8(b)(2) of the Small Business Act, as amended.

### 4. Level of operations. (See table 1.)

Program: Facilities inventory program.

Department or agency, and office or bureau: Small Business Administration;  
Deputy Administrator for Procurement and Management Assistance.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude (firms registered).....	56,270	64,053	69,000	65,000
(b) Applicants (see (a) above).....				
(c) Federal finances.....				
(d) Additional private expenditures.....				
(e) Federal employees (man-years).....	15	15	15	15
(f) Non-Federal employees.....				
(g) Other data.....				

## COMBINED ANSWERS FOR ALL PROCUREMENT ASSISTANCE PROGRAMS, QUESTIONS 5 THROUGH 10

5. *Estimated magnitude of program in 1970.* (See general statement for all SBA programs.)

### 6. *Prospective changes in program orientation*

(a) No legislative proposals presently pending.

(b) The agency completed in November, 1965, an extensive re-organization in this area (see material listed in app. II.)

(c) See answer to question 5.

### 7. *Coordination and cooperation*

(a) and (b) See material listed in appendix II on internal SBA organization.

(c) In the procurement assistance field, SBA maintains close coordination with the Department of Defense and its constituents, the General Services Administration, and other civilian agencies which procure services and supplies, to insure that small business concerns have opportunities to obtain fair shares of such procurement. SBA also has arrangements with such departments and agencies to assist small concerns in buying surplus Government property, including federally owned timber.

(d), (e), (f), and (i) Not applicable.

(g) Nonprofit groups with which SBA works in the procurement assistance field include industry associations, technical and scientific associations, and small business organizations.

(h) Business enterprises which cooperate in the program include large prime contractors and firms which supply data for certificate of competency purposes, as well as small concerns that provide informa-

tion enabling SBA to maintain a more complete inventory of small business facilities.

8. *Laws and regulations.* (See general statement on all SBA programs.)

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPORTS OF THE PROGRAM

9. *Economic effects.* (See general statement for all SBA programs and SBA Annual Report for 1964, sec. VII.)

10. *Economic classification of program expenditures.* (See table 2.)

Program: Procurement assistance programs.

Department or agency, and office or bureau: Small Business Administration.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government:	
Purchases of goods and services.....	5, 000
Total Federal expenditures.....	5, 000

MANAGEMENT ASSISTANCE PROGRAMS <sup>1</sup>

PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

Current management assistance program activities carried on by SBA are provided for in section 8(b)(1) and section 9 of the Small Business Act. Section 8(b)(1) states that "It shall be the duty of the Administration \* \* \* to provide technical and managerial aids to small business concerns, by advising and counseling on \* \* \* policies, principles, and practices of good management. \* \* \*" Section 9 directs SBA to aid small firms to obtain the benefits of technological research and development. The objectives of the management assistance programs are to improve the management know-how of the owners of existing business concerns and to help counsel individuals who are interested in starting a business. To attain these objectives, SBA cosponsors or conducts management training programs (courses, conferences, workshops); issues publications on pertinent management subjects; assists individual owners, or prospective owners, in resolving specific problems; and encourages private groups, firms and individuals to provide management assistance to small businesses.

2. *Operation*

All management assistance programs, except for publications, are carried on by SBA field offices with headquarters supervision and support. Publications are edited and distributed to SBA field offices by Washington.

3. *History*

Management publications and counseling date back to one of SBA's predecessor agencies, the Small Defense Plants Administration (1952). The first SBA courses were held in 1954. The conference

Questions are answered on a combined basis, except for question 4:



program in its present form began in 1961. The intra-industry management program (IMP) and the workshops for prospective owners were started in 1963, while the service corps of retired executives (SCORE) program was started in 1964.

In fiscal years 1959 and 1960, the Congress appropriated funds for a research grant program to study management problems of small business. The last research report was published in 1965. In 1960 the agency instituted a foreign trade program which was also phased out in 1965.

The intra-industry management program is designed to encourage large manufacturers, wholesalers, and trade associations to install management assistance programs for their small suppliers, distributors, and members.

In 1967, SBA will assume a new program from the Office of Economic Opportunity, called small business development center liaison (SBDC liaison), that will involve responsibility for assisting the small business development centers to carry out a meaningful program of assistance for disadvantaged individuals and their communities. The success of the SBDC's and their clients will be due to a positive management assistance program that involves the centers' internal operations as well as assistance to the public.

#### 4. Level of operations. (See table 1.)

Program: Management assistance programs.

Department or agency, and office or bureau: Small Business Administration; Deputy Administrator for Procurement and Management Assistance.

TABLE 1.—Level of operations or performance, fiscal years 1964–67

(a) PROGRAM: SERVICE CORPS OF RETIRED EXECUTIVES (SCORE)

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966, esti- mated	Fiscal year 1967, esti- mated
(a) Magnitude (number of SCORE counselors).....		1,834	4,000	6,000
(b) Applicants (number of cases handled).....		4,981	13,000	60,000
(c) Federal finances <sup>1</sup> .....				
(d) Additional private expenditures.....				
(e) Federal employees (man-years).....		19.1	20	60
(f) Non-Federal employees (same as (a)).....				
(g) Other data.....				

(b) PROGRAM: INTRA-INDUSTRY MANAGEMENT PROGRAM

(a) Magnitude (number of services instituted by or- ganizations or large concerns).....	78	171	100	300
(b) Applicants (number of small businesses covered).....	137,893	258,680	300,000	500,000
(c) Federal finances <sup>1</sup> .....				
(d) Additional private expenditures.....				
(e) Federal employees (man-years).....	4.6	3	3	9
(f) Non-Federal employees <sup>2</sup> .....				
(g) Other data.....				

(c) PROGRAM: WORKSHOPS FOR PROSPECTIVE BUSINESS OWNERS

(a) Magnitude (workshops).....	125	185	300	800
(b) Applicants (attendees).....	3,908	7,063	9,000	24,000
(c) Federal finances <sup>1</sup> .....				
(d) Additional private expenditures.....				
(e) Federal employees (man-years).....	5.8	6.2	9	9
(f) Non-Federal employees <sup>2</sup> .....				
(g) Other data.....				

See footnotes at end of table, p. 1237.

TABLE 1.—Level of operations or performance, fiscal years 1964-67—Continued

## (d) PROGRAM: MANAGEMENT CONFERENCES

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966, esti- mated	Fiscal year 1967, esti- mated
(a) Magnitude (conferences) .....	241	313	400	500
(b) Applicants (attendees) .....	24,297	38,662	40,000	50,000
(c) Federal finances <sup>1</sup> .....				
(d) Additional private expenditures .....				
(e) Federal employees (man-years) .....	5.3	5.3	6	6
(f) Non-Federal employees (estimated) .....	2,900	3,200	3,600	4,000
(g) Other data .....				

## (e) PROGRAM: MANAGEMENT AND TECHNICAL ADVISORY SERVICES

(a) Magnitude (cases) .....	24,447	29,860	16,000	16,000
(b) Applicants (see (a)) .....				
(c) Federal finances <sup>1</sup> .....				
(d) Additional private expenditures .....				
(e) Federal employees (man-years) .....	17.6	20.6	16	16
(f) Non-Federal employees (same as (a)) .....				
(g) Other data .....				

## (f) PROGRAM: RESEARCH GRANTS

(a) Magnitude (number of research reports published) .....	201	29		
(b) Applicants .....				
(c) Federal finances <sup>1</sup> .....				
(d) Additional private expenditures <sup>4</sup> .....				
(e) Federal employees (man-years) .....	4			
(f) Non-Federal employees <sup>2</sup> .....				
(g) Other data .....				

## (g) PROGRAM: MANAGEMENT COURSES

(a) Magnitude (courses) .....	704	1,049	1,100	1,500
(b) Applicants (enrollees) .....	22,007	30,315	33,000	45,000
(c) Federal finances <sup>1</sup> .....				
(d) Additional private expenditures .....				
(e) Federal employees (man-years) .....	13.4	14.8	15	15
(f) Non-Federal employees (estimated) .....	3,000	6,000	6,400	9,400
(g) Other data <sup>4</sup> .....				

## (h) PROGRAM: MANAGEMENT PUBLICATIONS (INCLUDING PRODUCTS LIST CIRCULARS)

(a) Magnitude (number of new titles) .....	131	72	63	81
(b) Applicants (distribution in millions) <sup>4</sup> .....	6.2	4.8	4.5	4.5
(c) Federal finances <sup>1</sup> .....				
(d) Additional private expenditures .....				
(e) Federal employees (man-years) .....	6	5.5	5	5
(f) Non-Federal employees .....	200	78	65	75
(g) Other data .....				

## (i) PROGRAM: SMALL BUSINESS DEVELOPMENT CENTER (SBDC) LIAISON

(a) Magnitude (number of development centers) .....				70
(b) Applicants <sup>1</sup> .....				
(c) Federal finances <sup>1</sup> .....				
(d) Additional private expenditures .....				
(e) Federal employees (man-years) .....				35
(f) Non-Federal employees <sup>2</sup> .....				
(g) Other data .....				

<sup>1</sup> It is not feasible to prorate Federal obligations and expenditures by program. As shown in response to question 10, Federal expenditures in all management assistance programs in fiscal 1965 were \$2,143,000

<sup>2</sup> Unknown.

<sup>3</sup> Cosponsors donate time; value cannot be estimated.

<sup>4</sup> As a result of 1959 and 1960 appropriations, extended funds amounted to \$4,493,748 Federal, with \$1,372,814 matching and \$155,876 recovered.

<sup>5</sup> Increase each year in number of courses, with some 52 percent of the total of the advanced type given at the request of businessmen who have already taken the basic management course.

<sup>6</sup> Plus paid distribution of products list circulars: Fiscal year 1964, 74,390; fiscal year 1965, 77,695; fiscal year 1966 estimate, 80,000; fiscal year 1967 estimate, 84,000.

<sup>7</sup> Unknown; new programs.

5. *Estimated magnitude of program in 1970.* (See general statement for all SBA programs.)

Projections, 1970: Such small business growth will undoubtedly generate additional demands upon SBA management assistance programs.

6. *Prospective changes in program orientation*

(a) No legislation is presently pending in this area.

(b) The SBA completed an extensive reorganization in this area in November, 1965. (See material listed in app. II.)

(c) See 5 above.

7. *Coordination and cooperation*

The management assistance programs are carried out in cooperation with many other agencies and private groups. Except for the SCORE program, this is all handled informally by letter or personal contact. SCORE does utilize what might be considered a formal agreement. The research grant program did utilize a contract form. Specifically, the management assistance program coordinates and cooperates with other programs and agencies as follows:

(a) and (b) Cooperates and coordinates with other SBA programs. For example, publications and completed research are used by all other programs; SCORE assists with counseling, courses, conferences, and workshop activities; IMP helps to develop courses and conferences.

(c) In the management and technical assistance area SBA maintains close cooperation with other Government agencies to help them be of greater assistance to small concerns. For example, SBA works closely with the Urban Renewal Administration to aid small firms displaced by urban renewal projects. And SBA maintains close contacts with the Commerce Department and other agencies in the areas of foreign trade assistance, SBA business publications, and technical information for small concerns, such as under the recent State Technical Services Act.

(d) Issued grants under the research grant program to an instrumentality of every State in the United States. Courses and conferences are sometimes cosponsored by State instrumentalities.

(e) Cooperates with local urban renewal groups and community action groups.

(f) Provides publications and counsel on the establishment of small business programs by foreign governments.

(g) Activities are conducted in cooperation with universities and colleges, trade and professional associations, chambers of commerce, rotary groups, etc.

(h) Aids all types of small business. Particularly in the intra-industry management program, works with large firms to help them provide management assistance to small firms.

(i) Not applicable.

8. *Laws and regulations.* (See general statement for all SBA programs.)

#### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects.* ((See statement for all SBA programs and SBA Annual Report for 1964, secs. VIII, IX, and X.)

10. *Economic classification of program expenditures.* (See table 2.)

Program: Management assistance programs.

Department or agency, and office or bureau: Small Business Administration;  
Deputy Administrator for Procurement and Management Assistance.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government: Purchases of goods and services.....	2, 143
Total Federal expenditures.....	<u>2, 143</u>

## GENERAL STATEMENT FOR ALL SBA PROGRAMS

5. *Estimated magnitude of program in 1970*

The agency has recently set records in each of its major activities. For example, in fiscal year 1965, the agency received 21,374 business loan applications and approved a record 13,420 loans for \$418 million. Since fiscal year 1960 the number of loans approved has almost quadrupled, the number of loan applications received has almost tripled, and the total dollar volume of loans approved has risen from \$168 million to over \$418 million. By 1970, we visualize a total business population of 5,250,000 firms—an increase of over 50,000 new firms yearly—and over 95 percent or almost 5 million of these firms will be small business. In order to help gear our resources toward handling the increased loan demand which may eventuate, the agency expects to intensify its present efforts in trying to shift funding from the public to the private sector. We will attempt to increase the share of bank participation in loans, bank purchase of seasoned loans, and to sell on the investment market participations in pools of our loans, in order to make SBA funds go as far as possible in assisting small business. In the next 5 years, the share of private funding of SBA loans should be substantially larger than it has been in the past. It is also expected that the small business investment company program will aid such companies to provide increased equity and long-term debt financing for the small business community. With respect to the fields of Government procurement and of the management and technical requirements of small business, it appears that total Government procurement (Federal, State, and local) may reach about \$84 billion in 1969 and \$100 billion in 1974, and that the rapid change and growth of the economy will increase both the challenge to, and the opportunities for, small business. We expect that SBA programs in these procurement and management assistance areas will continue to provide increased aid to small concerns.

On the basis of our experience, we are confident that small business will hold its own in its share of GNP, profits, and employment. We do not expect the 35 to 40 percent of overall business activity performed by small business to decrease. While we do not have the detailed data required for meaningful forecasts of those areas of small business activity where changes may occur of consequence to small business, the continued healthy growth of our economy implies a fertile environment for small business. Higher levels of GNP, disposable personal income, industrial production and other measures of economic activity create an increased capacity for viable small firms in all kinds of industries, and especially in the services sector

where economies of scale can be achieved by small firms. With the expected growth of present economic parameters, we look for the prospects for competition to remain bright.

#### 8. *Laws and regulations*

Small Business Act (Public Law 85-536), as amended by Public Law 85-699, Public Law 86-367, Public Law 87-70, Public Law 87-198, Public Law 87-305, Public Law 87-341, Public Law 87-367, Public Law 87-550, Public Law 88-264, Public Law 88-560, Public Law 89-59, Public Law 89-78, Public Law 89-117, Public Law 89-334, and Public Law 89-339. Small Business Investment Act of 1958 (Public Law 85-699), as amended by Public Law 86-502, Public Law 87-341, Public Law 88-273, and Public Law 89-117. Economic Opportunity Act, Title IV (Public Law 88-452). Public Law 87-846, relating to priorities under the War Claims Act of 1948.

Rules and regulations are found in title 13, chapter 1, Code of Federal Regulations.

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

#### 9. *Economic effects*

Of course, as described in other parts of this submittal (and elaborated in SBA annual reports), SBA believes its programs are having a beneficial effect on the national economy, and especially the small business segment thereof. However, while we have certain statistical information on our programs, we do not now have sufficient basic data on an accessible basis to supply quantitative support to specific conclusions on the precise economic effects of our programs.

However, we are happy to be able to inform the committee that we are taking steps to remedy this situation. In June of last year, SBA put out a substantial contract for development of a computerized rapid access data bank to develop ready access to key information on its regular business loan and disaster loan programs. At present, and in cooperation with the Bureau of the Budget, SBA is nearly ready to put out a second contract which will amplify the data base for such loan programs and their loan components, as well as title IV of the Economic Opportunity Act, loans to local development companies, and loans to small business investment companies.

This data base will form the structure of a sophisticated economic information system which will generate a flow of data reports on major phases of our programs. It will contain statistical routines as raw material for analysts who will carry on continuous and systematic program analysis. We are confident that this information system will soon greatly improve our available data on the specific economic effects of our programs, if we progress as expected.

The second-phase major long-range contract, will represent one of the first attempts to apply the program-planning-budgeting concept to a civilian agency. The new contract will get underway shortly and will benefit from a systematic analysis of the data generated as a result of the basic information system set up under the first contract. We expect to have new information and reports available in the next few months on SBA loans in the past year. These data and the analysis that we will be doing under the new contract will enable us to refine the basic system. For example, we will be able to decide what ex-

ternal information from other Government agencies and private business organizations would be relevant to enhance the analysis of SBA's program impact on the economy. We will also be in a position to decide upon and then collect the necessary followup data for measuring the growth of the different kinds of SBA borrowers. The additional data which the second contract will enable us to develop and analyze will make it possible to understand better not only the impact of our loans upon our borrowers but the impact of our loans upon various segments of the economy.

(See also material listed in appendix III.)

#### LIST OF APPENDED MATERIAL

NOTE.—Several Appendixes were attached to the reply of the Small Business Administration. These documents are in the Committee files. Frequent reference is made to this material in the response of the SBA. It is listed below for the convenience of the reader.

#### APPENDIX I

Small Business Administration, Annual Report, 1964.

#### APPENDIX II

Additional Material on Organization and Coordination:

- (a) Small Business Administration Organization Charts.
- (b) Delegations of Authority, ND 110-1.
- (c) SBA Participation in Interagency Committees, ND 120-1.
- (d) Federal Executive Board Participation, ND 120-2.
- (e) Administrative Communications, ND 150-1 and 2.
- (f) Establishment and Functions of SBA Advisory Councils, ND 1300-1.

#### APPENDIX III

Additional Financial and Statistical Information:

- (a) Financial and Statistical Report on Loan and Investment Programs, June 1965 (issued by Office of Fiscal Operations, October 29, 1965).
- (b) Condensed SBIC Statements of Financial Condition and of Income and Expense as of March 31, 1965 (Memorandum No. 65-7 October 7, 1965).
- (c) SBIC Activities Data Report for year ended March 31, 1965 (Memorandum No. 66-10, December 7, 1965).
- (d) Selected Reports on Local Development Company Program as of June 30, 1965.
- (e) Report on SBA Programs of Procurement and Management Assistance (December 31, 1964).
- (f) Addendum to Report on SBA Programs of Procurement and Management Assistance (June 30, 1965).

## SMITHSONIAN INSTITUTION

### Introduction

The questionnaire sent to the Smithsonian by the Subcommittee on Economic Progress of the Joint Economic Committee has been discussed with Messrs. Labovitz and Stark in preparation for compiling the appropriate information requested. It is at their suggestion that we provide the following explanatory text, so that our program may be correctly evaluated for the study's purposes.

These discussions of the purpose of the study suggested that however oversimplified our reply might appear, the fundamental nature of the Smithsonian Institution, with its traditional research programs and public museums, indicated that it would be correct to state that our entire Federal budget did in some manner involve investment in people.

It is granted that the Smithsonian Federal budget comprises only approximately one-fiftieth of 1 percent of the total annual Federal budget and, therefore, would not likely have major impact on the functioning of the American economy. Nevertheless, this budget does support an activity that annually provides an immediate source of recreation and education to more than 13 million visitors to the Smithsonian museums in the Capital. This budget also supports research programs conducted in Washington, Cambridge, Mass., the Panama Canal Zone, and, in fact, around the world wherever Smithsonian field trips may be conducted. The research facilities are in turn the source of assistance to scores of visitors ranging from leading postdoctoral scholars to amateur, but serious, hobbyists who may make use of our federally supported staff and facilities for periods ranging from a single day to several months.

In brief, all of the Smithsonian's activities are dedicated to fulfilling its founder's mandate "\* \* \* to increase and diffuse knowledge among men." Whether this be through publication of some aspects of American history or through a staff member's written or in-person counseling of a high school student interested in a career in science, our ultimate concern is invariably educational and therefore of relevance to your study.

Because the activities referred to above occur continually and without specific programing in the welter of daily work, any attempt to gage each one either in terms of man-hours or dollars would be guesswork at best, and of little value to your study. We, therefore, have limited our specific information to those [education and training] programs which may be extracted from the total Smithsonian activity, and for which estimates of persons involved and Federal dollars spent may be provided.

## EDUCATION AND TRAINING

## PART I. DESCRIPTION OF THE PROGRAM

*1. Objectives*

This activity comprises several programs, each intended to make the staff facilities of the Smithsonian more readily available to accomplished scholars and students in the academic community. It includes a postdoctoral visiting associateship program, a predoctoral internship program, and a short-term research assistantship program for undergraduate and graduate students. Indirectly, the program also entails approximately one dozen cooperative educational arrangements with universities throughout the United States.

*2. Operation*

The programs are conducted at most of the Smithsonian's facilities. Depending on their educational level, visitors are assigned to a professional member of the staff who serves as adviser during the visitor's stay at the Institution. (As noted in the introductory remarks above, since the nature of the Smithsonian is that of a private institution substantially supported through Federal funds, it would be most correct to say that the greater part of the programs are supported federally. However, this applies only to those visitors who are themselves supported while at the Smithsonian, and not to the scores who visit with similar relations to staff members but are supported through private grants or personal funds.) For program participants below the level of the doctoral degree, all aspects of the program, ranging from publicizing the existence of openings to making selections and conducting training, are handled by the Smithsonian staff. This would also be true for postdoctoral appointments in the arts and history. In science, however, the postdoctoral program is administered for the Smithsonian through a contract with the National Academy of Sciences-National Research Council.

*3. History*

From the point of view of assisting scholars in their research and studies, the Smithsonian program may be said to be as old as the Smithsonian itself. In fact, for many decades scholars in the fields of study emphasized at the Smithsonian have come to our facilities to study, confer, and observe. Also, like many Federal agencies in the Washington area, the Institution has employed a limited number of students during the summer. Most have been in programs that emphasized the educational value inherent in the work students performed. In addition to summer appointments, we have begun, on a small scale, in this fiscal year, a comparable program for students in colleges having work-study programs, who will spend approximately 10 weeks in the Institution during the academic year. The formal education and training program described in Nos. 1 and 2 above, however, has existed only in the current fiscal year, building upon the experience of informal activities of prior years and the experience of other private and Federal agencies having basic research as a primary mission. Reactions from the academic community to date have been enthusiastic and have encouraged the Institution's staff to continue and expand the program in the next fiscal year.



4. *Level of operations.* (See table 1.)

Program: Education and training.

Department or agency, and office or bureau: Smithsonian Institution.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966	Fiscal year 1967
(a) Magnitude of the program (participants): <sup>1</sup>				
Postdoctoral.....			10	12
Predoctoral.....			9	10
Research assistant.....	25	25	35	35
(b) Federal finances.....	\$25,000	\$25,000	\$195,000	\$225,000
(d) Matching or additional expenditures for the program.....			11,200	40,000
(e) Number of Federal Government employees administering the activity.....			3	3

<sup>1</sup> The number of participants does not include those funded by university or foundation grants. See answers to questions 1 and 2.

<sup>2</sup> A grant from the National Science Foundation permitted the Institution to appoint 16 undergraduate research participants. Several proposals are being considered by the Foundation which will announce its decision on Feb. 15, 1966.

<sup>3</sup> The number of Federal employees administering the education and training program directly include an assistant to the Secretary's director for educational and related programs, a research and administrative assistant, and a secretary. In addition, as noted in the introductory comments, approximately 50 members of the research staff assist as supervisors and advisers of the program participants.

5. *Estimated magnitude of program in 1970*

We estimate that the capacity of the Institution to absorb visiting scholars within existing facilities, and the probable level of interest in supervising participants in programs on the part of the Smithsonian staff, would permit us in 1970 to conduct a program involving elements described above, which would have approximately 20 postdoctoral visiting scholars, 25 predoctoral visiting scholars, and 50 undergraduate and graduate research assistants. These figures, too, pertain only to federally funded programs.

6. *Prospective changes in program orientation*

Passage of the National Museum Act (H.R. 7315; S. 1310) would require that special attention be given to a training program for museum specialists and trainees.

7. *Coordination and cooperation*

(a) and (b) The Office of Education and Training is located in the Office of the Secretary of the Smithsonian, and is responsible for coordinating all aspects of the education and training program, and for keeping the Secretary advised of the overall activities in its area of responsibility.

(c) The Office represents the Secretary on interagency committees, and maintains close liaison with the U.S. Office of Education, the National Science Foundation and similar Federal agencies, in order to keep apprised of changes of developments in Government policy related to its own activities and to assist where appropriate in the development of such policy.

(e) The Institution, through the Office of Education and Training, also maintains contact with local education officials, and plans ways in which the Smithsonian's facilities may be of use as educational tools.

(g) The Office of Education and Training administers cooperative education programs arranged by the research staff and private and State universities throughout the country.

8. *Laws and regulations*

Act of March 3, 1901. Fifty-Sixth Congress, second session. (Ch. 831, 31 Stat. 1039. 20 U.S.C. 91.)

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE  
PROGRAM

9. *Economic effects*

Except as stated in the program's intent for enhancing research productivity, the total number of dollars and the number of people involved in the program would suggest that no significant economic impact would result from Smithsonian programs.

10. *Economic classification of program expenditures*

Not answered.

# TENNESSEE VALLEY AUTHORITY

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## Letter of Transmittal

The following section of the letter dated January 24, 1966, from Mr. Aubrey J. Wagner, Chairman of the Tennessee Valley Authority, to Congressman Wright Patman, chairman of the Joint Economic Committee, explains the scope of the TVA response.

\* \* \* This response is limited to activities readily identifiable with the maintenance or development of individuals or as having a substantial impact on the development of the region's human resources.

In its widest implications, the whole of TVA's integrated program of regional resource development could be considered as a human resource development program. It is clear from a reading of the communication from President Roosevelt to the Congress of April 10, 1933, requesting establishment of the Tennessee Valley Authority, that he had in mind the development of the human resources of the Tennessee Valley as well as its natural resources. The Congress recognized this and the TVA Act uses such phrases as "for the benefit of the people," "social and economic development," "general welfare of the citizens," and "economic and social well-being of the people." However, after consultation with a representative of your staff, the TVA reply is limited to some carefully selected activities demonstrating our concern for the enhancement of human resources.

## REGIONAL SUPPLY OF ELECTRIC POWER

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

To provide an abundant supply of electric power at low cost to the Tennessee Valley region as a vital tool of social and economic development. In addition to providing basic generation and transmission facilities and to supplying power to municipal and cooperative

operated systems, industries, other Federal agencies, and privately owned power systems, TVA develops programs and activities dealing with uses of electricity. These activities are designed to promote greater and more effective use of electricity to raise living standards in the home, to promote rural development and improve agricultural production, and to improve production in commercial and industrial enterprises.

### *2. Operation*

TVA generates electric power and transmits it at high voltage to primary customers. Distribution of power to domestic consumers and to smaller industries and commercial establishments is primarily the function of municipal and cooperative systems.

### *3. History*

TVA was created by Congress in 1933, and in 1934 it began to serve its first customers under wholesale preferential customer contracts, the city of Tupelo, Miss., and the Alcorn County Electric Power Association (Mississippi). As discussed below under "Economic Aspects and Impacts," the region was served by privately owned systems and power use by residential consumers was low. TVA undertook a major construction program for multipurpose river development, adding greatly to the region's power capacity. Municipal and cooperative distribution systems were organized by local people and TVA became their source of power supply. In time TVA and these retail distributors purchased the privately owned companies in the region and an integrated power system was created.

In cooperation with its distributors, TVA promoted the wide use of electric power; and as regional demands have grown, generating and transmission capacity has been increased. Besides supplying power for normal residential, commercial, and industrial uses, TVA also supplies defense requirements of other Federal agencies. In recent years the defense requirements of the Atomic Energy Commission have declined. The capacity released thereby has been rapidly devoted to the growing residential, commercial, and industrial loads of the area, for which TVA is now the sole supplier of electricity.

TVA cooperates with its distributors in promoting the use of electricity to improve living and working conditions and to promote the regional economy. The following examples illustrate the nature of these activities.

One of the programs for improvement of rural development, initiated at the request of the State departments of education, has been work with vocational agriculture teachers. This work has included courses of study covering use of electricity in farming operations to meet the sweeping changes in agriculture, workshops covering practical use of electricity on the farm, and pilot farm workshops for teaching on-farm maintenance of equipment. Recently a new course of study in electricity was prepared with the objective of making the vocational agriculture student aware of the present trend in mechanizing agriculture and to present instruction in mechanized farm operations. Also, the course presents the student information about job opportunities in farm-related industries and provides some training to help him develop basic skills required in these industries. Each of these programs was presented to vocational agriculture teachers for

use in classroom instruction and has reached approximately 600 teachers.

A similar program for presenting the latest information on home uses of electricity has been presented to high school home economics teachers through the cooperation of State departments of education, distributors of TVA power, and TVA. Presented by TVA home economists, the courses covered wiring, lighting, new developments in electric home equipment, and information on the many uses of electricity in the home. The home economics teachers use the material and information obtained in these courses for classroom instruction in home furnishings, home planning, electric equipment, and family economics.

There is a related program which provides specialized training for power-use personnel employed by TVA distributors. This program is oriented to provide these distributor employees a professional background knowledge to permit them to better inform and educate the people in the use of electricity as a resource development tool. Approximately 200 have received this training during the past 2 years.

Another program is directed at 4-H Club members. With the distributors of TVA power, TVA helped the Tennessee Extension Service in revising the 4-H project for study and demonstration of electricity on the farm. There has been a continuing growth throughout the TVA area in the number of 4-H club members who enroll in the electrical projects. Tennessee now leads all other States in the number of 4-H Club members in electric projects. Distributors of TVA power, Extension Service employees, and TVA specialists are now working with club members to strengthen their demonstrations.

In a similar program TVA works extensively with the Future Farmers of America in uses of electricity for better farming practices.

To strengthen the agricultural economy in the area, the distributors of TVA power, the State extension services, and TVA jointly sponsor the Electro-farm program. The main objective of this long-range program is to establish demonstration farms throughout the TVA area to show local farmers how electricity can be used in farming operations to reduce labor requirements, increase income, and improve efficiency on the farm. Also, the farm home is brought into the program to show how electricity can improve rural living standards. Other objectives are to promote overall farm safety and to encourage more careful planning and better farm management. At present, 263 farm families are taking part in this program in which human energy is largely being replaced by machinery and electrical devices.

#### *4. Level of operations*

The TVA power system at June 30, 1965, had an installed capacity of 14.7 million kilowatts and during fiscal year 1965, a total of 69.9 billion kilowatt-hours was sold, of which 16.5 million kilowatt-hours was for residential use. Power was sold at wholesale to 158 retail distributors with 1,630,547 residential customers.

#### *5. Estimated magnitude of program in 1970*

It is estimated that the demand on the TVA power system in the winter of 1969-70 will be 17,100,000 kilowatts, reflecting increases in residential, commercial, and industrial uses.

#### *6. Prospective changes in program orientation*

None.

### 7. *Coordination and cooperation*

The TVA power program is conducted through contractual arrangements with municipal power agencies, cooperatives, directly served industries, privately owned utilities, and other Federal agencies.

### 8. *Laws and regulations*

Tennessee Valley Authority Act of 1933 as amended.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

When TVA was created in 1933 electric service was being provided to about 190,000 residential customers in the region, of whom some 15,000 were farm customers. Rural electrification in 1933 reached 3 percent of the region's farms. Residential use in calendar year 1933 averaged 600 kilowatt-hours a year. The average residential rate was 5.7 cents a kilowatt-hour. Regional generating capacity was 800,000 kilowatts.

A measure of the value of electric power in the development of human resources is the use to which power is put to improve conditions of living and to promote economic advance. The contrast between figures for calendar year 1965 and those previously cited for 1933 is sharp. In June 1965 there were 1,631,000 residential customers. Rural electrification for the region is virtually 100 percent complete. In 1965 the average residential use in the Tennessee Valley region was 10,831 kilowatt-hours and the average rate, 0.92 cents. The region's average use figure is more than double that of the Nation. The rate is less than half the national rate. Regional generating capacity totaled 14,676,000 kilowatts.

These figures of use are evidence of increased standards of living. Along with other economic aspects of regional resource development, they help to explain increases in regional per capita income from 45 percent of the United States average in 1929 to 69 percent in 1964, an increase of 459 percent for the region as compared with 265 percent for the Nation.

The quantitative figures do not show how electricity has improved the conditions of living in the Tennessee Valley in terms of comfort, convenience, recreation, diet, health, and the like. The availability of electricity has lightened the human workload, has lessened human drudgery, has made it possible to preserve foods, to add variety to diet, to improve methods of cooking and serving foods, to put running water in homes, and to add immeasurably to human well-being.

Due in part to the TVA power program, industry is expanding rapidly in the region. Between 1959 and 1963 manufacturing employment increased 15 percent and manufacturing payrolls 29 percent. Comparable increases for the Nation were 3 percent and 16 percent.

### 10. *Economic classification of program expenditures*

Total expense of TVA power operations in fiscal year 1965 was \$240,102,118, including interest charges, depreciation, and allocable administrative, general, and common costs. Income for the period totaled \$295,079,342.

(NOTE.—The TVA is classified as a Government enterprise in the national income accounts.)

## TRIBUTARY AREA DEVELOPMENT

## PART I. DESCRIPTION OF THE PROGRAM

*1. Objectives*

To promote the accelerated economic development of subareas of the Tennessee Valley where special problems inhibit economic growth, where specific opportunities exist for substantial development of the resource base, and where local area organizations are established to deal with problems of economic and social advancement and area improvement.

*2. Operation*

A Federal activity in cooperation with State agencies, local government agencies, and areawide citizen organizations. The general pattern of work is the same for each tributary area. The first major task of each new tributary area organization is the completion of a resource inventory and an analysis of problems and opportunities to serve as a basis for planning and decisionmaking. Concurrently work gets underway to attack the most obvious problems of the area.

The basic procedure is for TVA to furnish the tools needed for area development in those fields where it has specific responsibilities (agriculture, forestry, water control) and to provide technical assistance and motivation in other fields important to development (business and industry, education and training, health, governmental services). The local citizen organizations establish a series of resource work groups each of which concentrates on the development of a specific resource with technical advice from the TVA technical adviser and his State agency counterpart. These normally include the following:

Agriculture Work Group	Human Resources Work Group
Business and Industry Work Group	Minerals Work Group
Forestry Work Group	Recreation Work Group
Governmental Services Work Group	Water Resources Work Group

The area association boards of directors use the recommendations of the various work groups to develop a comprehensive and unified area development program, which gives direction and guidance to activities of the entire organization.

*3. History*

Tributary area development grew out of and is an intensification of TVA's longstanding experience in comprehensive resource development in the Tennessee Valley. Beginning in the early days of TVA with long-range research projects in hydrology and watershed protection and management, TVA expanded this phase of its work in 1951 with a comprehensive demonstration project in the 134-square-mile Chestuee Creek watershed in Tennessee. Based partly on this experience, TVA entered into agreements with the States of Tennessee and Mississippi to plan and assist in resource development efforts in the Beech River and Yellow Creek watersheds in the two States.

Meanwhile, people within the larger tributaries of the Tennessee Valley came to recognize the need for an economic development program based upon the full utilization of all the resources of their area. The Elk River Development Association was organized as a local citizen participation organization in 1959. TVA in 1961 established

its Office of Tributary Area Development to work with these and other such organizations which were being set up within the watersheds of the major tributary streams of the valley. Today 16 area development organizations, some functioning as official State agencies and others as nonprofit citizen development associations, are active in 14 separate tributary areas of the Tennessee Valley. Total citizen members of these associations number approximately 7,000.

4. *Level of operations.* (See table 1.)

5. *Estimated magnitude of program in 1970.* (See table 1.)

Program: Tributary area development.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67 and estimated 1970*

Measure	Unit	Fiscal year				
		1964	1965	1966 estimate	1967 estimate	1970 estimate
(a) Magnitude of the program:						
Area.....	Square mile.....	18,500	18,500	21,800	21,800	26,100
Population.....	Number.....	1,627,800	1,635,500	1,808,800	1,820,000	2,200,000
(b) Applicants or participants:						
State government agencies.....	.....do.....	80	80	80	80	80
Counties and cities.....	.....do.....	99	99	113	113	134
Area organizations.....	.....do.....	13	13	15	15	18
Area work groups.....	.....do.....	80	88	106	106	133
(c) Federal finances: Expenditures.....	Dollar.....	1,583,000	1,846,000	2,263,000	2,475,000	4,000,000
(d) Matching or additional expenditures for the program.....	.....do.....	592,000	733,000	800,000	825,000	850,000
(e) Number of Federal Government employees administering, operating, or supervising the activity.....	Person.....	81	97	112	121	130
(f) Non-Federal personnel employed in the program.....	.....do.....	6	7	8	9	14.5
(g) Other measures of level or magnitude of performance.....	.....do.....					

6. *Prospective changes in program orientation*

None.

7. *Coordination and cooperation*

(a) The TVA Office of Tributary Area Development coordinates the program within TVA and outside. Coordination and cooperation are achieved by meetings to which representatives of interested groups are invited, appearances before civic organizations, films, illustrated lectures, brochures, newsletters, etc.

(b) All Federal agencies having programs of resource and economic development within the Tennessee Valley have been or are being involved directly or indirectly in the TAD program. The local citizen groups are encouraged to take full advantage of all Federal programs available to achieve the objective of economic betterment of the area. OTAD participates directly in a variety of these contacts, while encouraging the local citizen organization to initiate contact in others. Where coordination procedures are explicit and detailed, memorandums of agreement are used.

(c) TVA considers it essential that State governments be directly involved in the TAD program. In fact, one of the basic aims of the program is the strengthening of the functions of State governments.



The existing departments and agencies of State government have been quite active in furnishing counterparts to the TVA resource technical advisers. The area citizen groups are chartered under State law. In four instances State legislatures have authorized new State agencies to manage certain facets of the area development program. In some States memorandums of agreement have been executed with State Governors to assure coordination. In other instances coordination and cooperation is by contract or by letter of agreement. In all cases it involves in the final analysis good day-to-day working relations at the informal staff level.

(d) The involvement of county and municipal governments in the developmental process has been found to be essential to a successful TAD program. Local governmental involvement has been heavy with county executives and mayors of communities assuming important leadership positions in all tributary area organizations. The development of a well-informed electorate through involvement in the membership association and work group process is one of the long-term and more significant side effects of the TAD program. It, in effect, provides a training ground for leaders of the tributary areas.

(e) Local citizen groups organized as nonprofit welfare membership corporations represent nine of the tributary areas. Other organizations and institutions available in the tributary areas serve in various facets of the comprehensive program. Almost daily contacts are maintained between OTAD field representatives and these associations to assure coordination.

(f) All business enterprises that exist in each tributary area or for which a satisfactory economic base can be identified are important to the overall economic development of the tributary areas. Business leaders are important components of the leadership in all tributary area organizations.

(g) Educational institutions of all levels and types play an important role in tributary area development. Universities provide research facilities and professional training, vocational and trade schools fulfill the need for skilled workers, while elementary and secondary schools fulfill the basic need for a literate and informed electorate. Civic and service clubs and chambers of commerce play significant roles in tributary area development activities.

#### 8. *Laws and regulations*

Tennessee Valley Authority Act of 1933 as amended.

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

#### 9. *Economic effects*

A detailed appraisal of the impact of the program as a whole on the economics of the tributary area cannot be made until data are available covering a longer period than the few years it has been in existence. To a large extent the pattern of growth of the tributary areas is determined by private decisions and by other State and Federal activities outside the realm of the TAD program. Because of the cooperative nature of the program, responsibility for progress in tributary areas must be shared with many organizations, governments, and individuals.

(a) A comparison of the growth of total personal income, 1960-62 (latest available figures) in the tributary areas located in Tennessee with growth in that State shows:

	<i>Percent increase</i>
State of Tennessee.....	10. 8
Tributary areas organized prior to 1960:	
Elk River.....	14. 0
Beech River.....	17. 5
Tributary areas organized after 1960:	
Lower Hiwassee.....	12. 0
Clinch-Powell.....	12. 0
Sequatchie Valley.....	11. 9
Little Tennessee.....	10. 1

It is plausible to assume that the generally superior performance of the tributary areas where organized development efforts have been underway longest is due in part to those efforts.

As to effects of specific programs, it is estimated that in one seven-county area (Elk River) TAD's program of working with 2,000 farmers, through demonstrations and other program activities in cooperation with the University of Tennessee, for the improved management of subsistence as well as commercial farms has resulted in successive annual increases of about \$1 million in farm income for the last 2 years. Similarly, TVA demonstrations of better timber management and studies of the feasibility of establishing forest products industries in the tributary areas are expected to help increase wages paid to workers in the woods and wood products industries from \$105.3 million in fiscal year 1965 to \$119.6 million by 1970.

(b) The TAD program extends technical and organizational assistance to any local group in the valley requesting it but, from the beginning of the program, special consideration has been given to areas of special need. Such areas have experienced large shifts in employment in recent years out of agriculture and into manufacturing, construction, trades, and services. This shifting has had the effect of greatly increasing the productivity and average earnings of the labor forces, at the same time reducing the underemployment on the farms.

Programs of vocational training in one area, sponsored by the tributary area organization, have resulted in new jobs for all graduates, with increases in earnings averaging \$125 per month. All but one of the graduates obtained employment within the same area.

(c) The "stimulation of new business enterprises or expansion of existing ones" is a primary aim of the TAD program. TVA specialists work continually to identify the industries for which the valley has a comparative locational advantage, to bring results of their research to the attention of valley citizens interested in industrial development, and to work with these people to preserve for that purpose land suitable for industrial sites.

Although the precise impact of the business and industry program in tributary areas is incapable of exact measurement, a number of instances have been noted in which, were it not for the calling of the entrepreneur's attention to the area's resources or markets or to the existence of a prepared site or available building, a particular plant would, in all probability, have been located elsewhere. In one tributary area of less than 20,000 population, over 2,000 new industrial jobs have been created by efforts of the area leadership, stimulated by this cooperative development program.

A project now underway in another tributary area, undertaken in cooperation with the University of Tennessee, is seeking to identify specific products for which local markets exist, and then to organize local capital and entrepreneurial skills to manufacture these products.

(d) Being a comprehensive developmental program, TAD is designed to have positive effects on all of these economic parameters. Of the observed results, perhaps most dramatic is the drastic reduction of unemployment in the Beech River and Lower Hiwassee areas. This achievement in the face of a rapidly declining farm population is a first objective in any tributary area. Increased wages for the industrial worker in due time will be the natural consequence of increased skills and increased demand for a diminishing surplus of workers.

(e) The benefits of the program generally accrue to the populations of the small- and medium-sized towns and small cities that make up the average composition of the typical tributary area. Within any particular area the TAD program affects the entire socioeconomic structure—landowners, labor, and the business community.

10. *Economic classification of program expenditures.* (See table 2.)

Program: Tributary area development.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]	
Federal Government:	
Purchase of goods and services:	
Wages and salaries.....	\$1, 280
Other.....	566
Total Federal expenditures <sup>1</sup> .....	1, 846
Non-Federal expenditures financed by:	
State and local governments.....	472
Individuals or nonprofit organizations.....	261
Total expenditures for program.....	2, 579

<sup>1</sup> Refers to net expenditures. In the national income accounts the TVA is classified as a Government enterprise.

## AGRICULTURAL RESOURCE DEVELOPMENT—FARM TEST- DEMONSTRATIONS OF TVA FERTILIZERS

### PART I. DESCRIPTION OF PROGRAM

#### 1. Objectives

(a) To introduce TVA experimental fertilizers to professional agricultural workers and to farmers and to demonstrate their value, effect, and best method of use under a wide variety of soil, climatic, and farming conditions. (b) To develop and demonstrate improved fertilization practices on demonstration plots and on a whole farm basis as a means of conserving and improving soil resources, lowering the cost of plant nutrients to farmers, and increasing net farm income. (c) To promote watershed protection, agricultural development, and needed resource adjustments in the Tennessee Valley region through proper use of fertilizers in combination with other recommended farm management practices.

This program is an excellent example of the basic proposition of the TVA Act: that human resource development flows from natural

resource development. The program is basically a series of learning-teaching situations where cooperating farmers learn by doing and teach by demonstrating. It is a program in which three parties (farmers, college, and TVA) share in deciding upon the problems of resource improvement, conservation, and use and how to go about solving them to increase the income and welfare of farm families and strengthen the Nation's agriculture.

### *2. Operation*

Through project agreements and work plans negotiated with the cooperating land-grant colleges, TVA provides administrative direction, shares the supervisory costs with the colleges, and provides some fertilizer at reduced prices. The land-grant colleges administer the program at the State and local levels, work with local groups in selecting farms for program participation, provide the farmers with the educational and technical guidance needed in carrying out the program, and plan for and supervise the use of the demonstrations for educational purposes. Cooperating farmers carry out the program planned for their farms and permit their use for educational purposes. Test demonstration farmers bear all farm costs other than those represented by fertilizer price reductions and assume the risk involved in carrying out the program.

### *3. History*

The test demonstration program was begun in 1935. Within a year it was organized in States outside of the Tennessee Valley. From the start the program was conducted through the extension services in the various States. In the early years emphasis was placed on rebuilding depleted soils, erosion control, and land use adjustment. TVA fertilizers, limited to phosphate materials in the early years, were used on pasture and hay crops. Later, as TVA developed other materials and program emphasis was concerned with whole farm development, TVA fertilizers were used on row crops as well. From 1937 to 1948 community development was a significant part of the program. As this function was assumed by the various other community development programs the test demonstration program again shifted its emphasis. In this period there was a growing interest in the farm management aspects of the program. Beginning in 1947, this aspect began to receive organized attention. In 1951 special emphasis on test demonstration activities in tributary watersheds of the valley was begun. Following an evaluation of the test demonstration program in 1959, it was reorganized to provide for three major activities. The unit test demonstration farm activity was continued in its previous form. In each State and county several farms would be involved to permit maximum impact on the farming of the area. A new activity, rapid adjustment farms, was designed to explore income and adjustment problems. This was to be an intensified activity on a limited number of farms located in the valley States. A third activity, fertilizer trials and field demonstrations, was initiated to evaluate and introduce new TVA materials and investigate major fertilizer problems.

### *4. Level of operations.* (See table 1.)

Program: Agricultural resource development—farm test-demonstrations of TVA fertilizers.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 esti- mate	Fiscal year 1967 esti- mate
(a) Magnitude of the program (farms).....	2, 531	2, 322	2, 601	2, 563
(b) Applicants or participants:				
State government agencies.....	31	32	36	38
Local communities or governments (county)...	323	315	320	322
Individuals or families (farms).....	2, 531	2, 322	2, 601	2, 563
Other.....				
(c) Federal finances: Expenditures.....	\$1, 522, 079	\$1, 755, 325	\$1, 738, 000	\$1, 699, 000
(d) Matching or additional expenditures for the program:				
State land-grant colleges.....	\$1, 655, 000	\$1, 695, 000	\$1, 687, 000	\$1, 700, 000
Farmer purchases of fertilizer.....	\$923, 750	\$843, 145	\$814, 000	\$783, 000
(e) Number of Federal Government employees administering, operating, or supervising the activity (man-years).....	22. 9	23. 7	25. 6	26
(f) Non-Federal personnel employed in the program (man-years).....	205. 6	218	216	221
(g) Other measures of level or magnitude of performance: Fertilizer field trials and demonstrations (number).....	1, 849	2, 105	2, 175	2, 346

### 5. *Estimated magnitude of program in 1970*

Three thousand one hundred and forty-six test demonstration farms and 4,381 fertilizer trials and field demonstrations.

### 6. *Prospective changes in program orientation*

In terms of changes in technological, economic, and social conditions that will occur by 1970, it is expected that test demonstration farms will continue to increase in size in keeping with the changes occurring throughout agriculture. With larger farms there will be an increasing emphasis on the management aspects of farming. Through the rapid adjustment activity, adjustment and income possibilities of farms are investigated in detail by extension and research workers. Knowledge gained from these investigations is useful in solving problems on other farms. Through the use of new research techniques, such as linear programming, it is possible to investigate many alternatives as one makes the major farm management decisions. Farm recordkeeping as emphasized in the test demonstration program is useful in measuring progress to the adjustment goals that have been chosen. Through the fertilizer trials and field demonstration aspects of the program, new practices are evaluated and demonstrated.

### 7. *Coordination and cooperation*

(a) *With other Federal Government departments or agencies.*—(1) Opportunities for cooperation: Since the test demonstration program is conducted through the cooperative extension services in the various States, there are cooperative relationships with the Federal Extension Service as well. At the State and local level, there is cooperation between the Farmers Home Administration, Soil Conservation Service, and the Agricultural Stabilization and Conservation Service. To encourage fertilizer demonstrations and cooperative programs on reclamation project farms, there is a cooperative program with the Bureau of Reclamation. Currently, cooperative activities are being developed under the Economic Opportunity Act and the Appalachia program. (2) Organizational arrangements: A memorandum of understanding has been signed by the Bureau of Reclamation and TVA concerning cooperative programs on reclamation projects. The

cooperative relationships with the other Federal agencies are based on informal arrangements.

(b) *With State governments or their instrumentalities.*—(1) Opportunities for cooperation: The existing program is a cooperative program with the various State extension services. (2) Administrative arrangements: The test demonstration program is conducted under a project agreement describing the nature of the program and designating the relative contributions of the cooperating parties. The State program is operated by the State extension service. A TVA field representative consults with the State representatives in the operation of the program.

(c) *With local governments or communities.*—(1) Opportunities for cooperation: Within the Tennessee Valley area there are organized groups associated with the various tributaries of the Tennessee River. These groups are organized to encourage the economic development of their respective areas. The test demonstration program cooperates with these groups in the implementation of the aspects of their program relating to agriculture. (2) Administrative arrangements: Relationships with these agencies are on an informal basis, with TVA field representatives providing assistance in the implementation of the program.

(d) *With business enterprises.*—(1) Opportunities for cooperation: In the implementation of the program at the local level, there are cooperative relationships with fertilizer dealers. This involves an exchange of information on fertilizer use and management practices. When the test demonstration program was being developed, local associations were formed to handle TVA fertilizer materials. (2) Organizational arrangements: Simple dealer agreements describe the responsibilities of the dealer under the program.

## 8. Laws and regulations

Tennessee Valley Authority Act of 1933 as amended.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

In the States and counties in which the test demonstration program operates, it is an integral part of the extension program. Since these farmers are also influenced by other educational programs, as well as news media, it is difficult to isolate the economic impact of the test demonstration program on the cooperating farmers. A comprehensive study is currently underway in Pennsylvania to measure economic impact on cooperating farmers as well as spread of practice to neighboring farmers.

(a) *Effects on personal income.*—Several studies have been made of economic progress of cooperating farmers. In Pennsylvania, net farm income on cooperating farms increased from \$3,555 to \$5,339 in the 5-year program period. In the Arch Hurley Conservancy District in Quay County, N. Mex., gross crop sales per acre in 1964 on test demonstration farms were \$83.12 compared to \$49.32 on project farms. On 30 farms in northeast Mississippi net farm income increased from \$3,411 to \$5,506 during the program period. On 37 rapid adjustment farms net farm income in 1964 was \$7,545 compared with \$5,472 in the base year.

(b) *Effects on placement or productivity of workers.*—To the extent that levels of production for crops and livestock increased on test demonstration farms during the program period, the productivity of the farmer would also increase. Some examples from the Pennsylvania study are: milk production per cow increased from 8,774 pounds to 10,267 pounds; corn yields, from 57 bushels to 94 bushels per acre; and hay yields, from 2.1 tons to 3.3 tons per acre. In 1964 cotton yields in Quay County, N. Mex., were 802 pounds of lint on treated plots and 537 pounds on untreated plots. Grain sorghum yields were 3,030 pounds for treated plots and 2,060 pounds for untreated plots. In northeast Mississippi cotton yields increased from 494 pounds of lint to 617 pounds of lint during the program period.

(c) *Effects on business or industrial organization and management.*—The test demonstration program is directed primarily to farmers. In the early years of the program, local associations were encouraged to assist in the distribution of these fertilizers. Some of these later developed into local cooperatives.

(d) *Effect on other phases of economic activity.*—To the extent that the program influences the levels of income on farms in the areas in which it is operating, this will influence the economic activity of these areas. As improved practices are adopted by neighboring farms this will influence their incomes and in turn influence the economic activity of the area.

(e) *Any other benefits resulting from the particular Government program.*—The test demonstration program is not only concerned with the economic aspects of farming but is also concerned with the level of living in the farm household and the development of community leadership. During the participation period cooperating farmers make significant improvements to their dwellings and add many household conveniences.

In the valley States cooperators within a county are organized into an association which in turn sends representatives to a state association. A valleywide test demonstration farm families association represents the various State associations. Leadership experiences gained through these associations have influenced many cooperators to pursue other significant leadership responsibilities in their state and county.

The valleywide association sponsors an annual 4-H Resource Conference at Fontana, N.C. About 260 boys and girls from 4-H Clubs in the valley counties participate in a study of human resources, soils, minerals, water, wildlife, forestry, and atmosphere. This association also sponsors service awards to outstanding farm leaders in the organization.

Another area of influence of the test demonstration program is the spread of information through tours and demonstrations. In each county, farmers are invited to visit the test demonstration farms individually or as members of tour groups to learn about the new practices being followed by these farmers. Tours involving professional people aid in the exchange of ideas concerning new production practices.

#### 10. *Economic classification of program expenditures.* (See table 2.)

Program: Agriculture resource development—farm test-demonstrations of TVA fertilizers.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1966*

[In thousands of dollars]

Federal Government:	
Purchases of goods and services:	
Wages and salaries.....	772
Other.....	983
Total Federal expenditure <sup>1</sup> .....	1, 755
Non-Federal expenditures financed by:	
State or local governments.....	1, 695
Individuals or nonprofit organizations.....	843
Total expenditures for program.....	4, 293

<sup>1</sup> Refers to net expenditures. In the national income accounts the TVA is classified as a Government enterprise.

## ALLEVIATION OF RURAL POVERTY—INVESTIGATION

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

To develop and perfect methods and techniques for working with rural people in defining and delineating the important factors contributing to their economic ills and to plan educational programs designed to solve their problems.

#### 2. Operation

A Federal project to be conducted cooperatively with the agricultural extension services in North Carolina. Field activities are to be conducted mainly by the extension services.

#### 3. History

This project developed out of joint discussions with extension leaders in North Carolina from a suggestion that the serious problem of pockets of rural poverty should be dealt with in TVA and extension programs.

#### 4. Level of operations. (See table 1.)

Program: Alleviation of rural poverty—investigation.

Department or agency, and office or bureau: Tennessee Valley Authority

TABLE 1.—*Level of operations or performance, fiscal years 1966-67* <sup>1</sup>

Measure and unit	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (families).....	75	150
(b) Applicants or participants:		
State government agencies (number).....	1	1
Local communities or governments.....		
Individuals or families (families).....	75	150
Other.....		
(c) Federal finances: Expenditures.....	\$40, 000	\$65, 000
(d) Matching or additional expenditures for the program.....	\$15, 000	\$25, 000
(e) Number of Federal Government employees administering, operating, or supervising the activity (man-years).....	1	1.3
(f) Non-Federal personnel employed in the program (man-years).....	1	1

<sup>1</sup> Program started in fiscal 1966.

#### 5. Estimated magnitude of program in 1970

By 1970 it is expected that a satisfactory number of programs will be developed to effectively reach rural low-income people.



6. *Prospective changes in program orientation*

Project orientation is experimental and will be changed as the need arises.

7. *Coordination and cooperation*

The project will involve coordination with Federal, State, and non-Government agencies as needed.

8. *Laws and regulations*

Tennessee Valley Authority Act of 1933 as amended.

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

The project should have a direct effect on the personal income of those people who are involved in the pilot program. This will be done by improving the productivity of workers in agriculture and in providing counseling on alternative training and means of making a livelihood for those who have nonfarm employment possibilities. The objective is to develop better techniques for dealing with rural poverty. The future wider benefits of this project will be derived from the application of these techniques in action programs.

10. *Economic classification of program expenditures*

Project began in fiscal year 1966.

RECREATION RESOURCE DEVELOPMENT—LAND BETWEEN THE LAKES DEMONSTRATION

PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

To demonstrate how all resources of a large area (170,000 acres) can be developed to serve a wide range of public outdoor recreation and conservation opportunities; to demonstrate participation by user groups and various levels of government in planning such a development; and to test proposed methods and principles for operating outdoor recreation areas.

2. *Operation*

Direct Federal operation.

3. *History*

Construction of a Corps of Engineers multipurpose dam and reservoir project on the Cumberland River roughly parallel to TVA's Kentucky Reservoir on the Tennessee River will create a peninsula with 300 miles of shoreline between the two lakes. This area is within a day's automobile drive of one-third of the population of the United States. In January 1959 TVA began a study of the opportunity offered for a large-scale national recreation center in this area, and in June 1961 proposed that the Federal Government undertake such a project. The President in June 1963 assigned the project to TVA as a demonstration. Initial funds were provided by the Public Works Appropriation Act for fiscal year 1964. In January 1964 a field office was opened in the area and shortly thereafter development

of the area was initiated. On June 1, 1964, the first camping facility was opened to the public.

#### 4. Level of operations. (See table 1.)

Program: Recreation resource development—land between the lakes demonstration.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (individual users).....	5, 000	41, 000	100, 000	600, 000
(b) Applicants or participants:				
State government agencies.....				
Local communities or governments.....				
Individuals or families.....				
Other (individual users).....	5, 000	41, 000	100, 000	600, 000
(c) Federal finances: Expenditures.....	\$16, 000	\$284, 000	\$541, 000	\$653, 000
(d) Matching or additional expenditures for the program.....				
(e) Number of Federal Government employees administering, operating, or supervising the activity.....	18	32	81	125
(f) Non-Federal personnel employed in the program.....				
(g) Other measures of level or magnitude of performance: Person-day visits (number).....	( <sup>1</sup> )	100, 000	150, 000	200, 000

<sup>1</sup> Not available.

#### 5. Estimated magnitude of program in 1970

On the basis of present plans, it is expected that the Land Between the Lakes area will receive over 1 million person-days use in 1970.

#### 6. Prospective changes in program orientation

The Land Between the Lakes program anticipates an expansion of the present trends in use of recreation facilities in America. More specifically, it anticipates an increasing demand for outdoor recreation and conservation education facilities. The program of Land Between the Lakes is oriented to take into account this upsurge in outdoor interest. Some program activities may be expected to undergo change since the demonstration is partly experimental in nature. Other changes may well be undertaken to accommodate arising needs for additional knowledge in the fields of outdoor recreation and conservation education.

#### 7. Coordination and cooperation

Cooperation with other programs and agencies has a major role in development of Land Between the Lakes. Numerous Federal, State, and local groups have an interest in one or more phases of the project. Those groups and agencies outside TVA with which programs of mutual interest have been discussed and coordinated are listed below:

##### Federal agencies:

- U.S. Department of the Interior:
  - U.S. Fish and Wildlife Service.
  - Bureau of Outdoor Recreation.
  - National Park Service.
- U.S. Corps of Engineers.

## State agencies:

## Kentucky:

Office of the Governor.  
 Department of Commerce.  
 Murray State College.  
 Department of Health.  
 Department of Fish and Wildlife Resources.  
 Department of Highways.  
 Department of Natural Resources.  
 Division of Forestry.

## Tennessee:

Department of Conservation.  
 Division of Forestry.  
 Department of Health.  
 Game and Fish Commission.  
 State Planning Commission.  
 Department of Highways.  
 Austin Peay State College.

Local agencies: The county courts, health departments, highway departments, and school systems of Lyon and Trigg Counties, Ky., and Stewart County, Tenn.; and a local planning group in Cadiz, Ky.

8. *Laws and regulations*

Tennessee Valley Authority Act of 1933, as amended.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

As an incident to providing outdoor recreation opportunities, public parks and recreation areas help build the economy of the area surrounding them. This economic development is a built-in purpose of the Land Between the Lakes demonstration. This purpose will be reflected in (a) basic plans for its development, (b) its policies of administration and operation, and (c) its permanent staffing and organization. Because development will be limited to those kinds of facilities which private enterprise does not customarily supply, businessmen in the surrounding area will find a new market for private investment in motels, resorts, restaurants, attractions, and other services for visitors to Land Between the Lakes.

It was estimated these private investment opportunities would be on the order of \$25 million within a period of, perhaps, a decade. Although it is now clear that this estimate is too conservative, it is still too early to predict with any degree of accuracy how much private investment will be realized in the area surrounding Land Between the Lakes. The announced figures of intended investment already approximate the original estimate.

The acquisition of private lands for development of the Land Between the Lakes project necessitates the relocation of resident families. The problems that confront these families are being given individual consideration. Through TVA's assistance program, needed community services are sought and directed to assist those affected by the project to relocate with the minimum of disruption.

Direct technical assistance is provided through the services of a TVA staff member living in the area and known to property owners and residents who desire assistance. A survey disclosed that 903 families resided in the project area. Of this number, 113 families had moved outside the area by the end of September 1965. The TVA relocation representative has helped 73 of these families with their relocation problems.

10. *Economic classification of program expenditures.* (See table 2.)

Program: Recreation resource development—land between the lakes demonstration.  
Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]	
Federal government:	
Purchase of goods and services:	
Wages and salaries.....	137
Other.....	147
<hr/>	
Total Federal expenditures <sup>1</sup> .....	284

<sup>1</sup> Refers to net expenditures. In the national income accounts, the TVA is classified as a Government enterprise.

## RECREATION RESOURCE DEVELOPMENT—RESERVOIR SHORELINES

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

To promote the development and utilization of the recreation resources of the region by assuring that recreational opportunities inherent in TVA reservoirs and their shorelines are offered for widest public use, consistent with the requirement of other authorized TVA programs.

#### 2. *Operation*

Direct Federal operation involving studies and demonstrations in cooperation with others involved in the development of outdoor recreation resources.

#### 3. *History*

In acquiring land for multipurpose dam and reservoir projects, TVA avoided leaving owners with unproductive fragments of holdings by purchasing entire tracts in many instances. It also often found it more economical to purchase land isolated by reservoir impoundment than to build access roads to it. Changing program needs sometimes resulted in land becoming surplus to current requirements. Thus, TVA has had residual lands for which there was no immediate program need. TVA has conveyed interests in such reservoir lands to State and local agencies upon evidence of willingness and ability to develop and manage them in such a manner as to preserve and enhance recreation values in them. In this way the rights of the public to free access to TVA reservoirs have been protected. Similarly, TVA has made land available to quasi-public groups. TVA has also promoted commercial recreational development along reservoirs by licensing or leasing sites for boat docks or by making former construction villages available as recreation centers.

In the beginning of this program, when assistance was not otherwise available, TVA provided active planning and program assistance to State and local agencies while encouraging the States to accept this responsibility. Later, as State planning and conservation agencies accepted and became staffed to assume leadership in recreation, TVA's assistance has been channeled through the appropriate State agencies. At this time, little property remains available for disposition as surplus to the program needs of TVA.

#### *4. Level of operations*

The magnitude of the program during the years 1964-65 and the estimates for the year 1966 do not adequately measure the total program which has been accomplished over a period of years. The following information better explains the scope of this program.

TVA has conveyed interest in properties through fee, transfer, or other arrangement to States and their political subdivisions for the development of 87 public parks around its reservoirs. These parks involve a total of 27,615 acres of land. The breakdown of these parks is as follows: 12 State parks, 38 county, 36 municipal, and 1 county-municipal. In addition, some 393 public access areas and roadside parks have been conveyed to the valley States and 41 to their political subdivisions, counties or cities. These developments involve approximately 5,300 acres of land. Twenty-one wildlife management areas, totaling 54,436 acres of land, have been placed in the hands of valley States.

There are 38 group campsites which have been conveyed to quasi-public organizations around TVA reservoirs, which involve some 5,000 acres of land. Information regarding private development reveals that there are approximately 69 private club sites, involving approximately 1,860 acres, and approximately 345 privately owned boat docks located around the TVA reservoirs.

In cooperative programs with other Federal agencies a total of approximately 124,000 acres of land has been conveyed to three Federal agencies having management units within the Tennessee Valley as a part of two national wildlife refuges, two national parks, and four national forests.

#### *5. Estimated magnitude of program in 1970*

The probable employment and expenditures for this program in 1970 involving staff directly responsible for carrying out recreation matters is estimated as follows: Number of employees, 5; number of man-years, 2; salaries and wages, \$18,000 plus other costs of \$7,000, making a total cost of \$25,000.

#### *6. Prospective changes in program orientation*

The newly enacted Land and Water Conservation Fund Act (Public Law 88-578) will bring about some changes in land-use policies and will also offer new opportunities for furthering recreation resource development.

#### *7. Coordination and cooperation*

Cooperative agreements for program operations and transfers in fee of lands for program needs have been effected during this program between TVA and the Corps of Engineers, the National Park Service, the Fish and Wildlife Service, and the U.S. Forest Service. There are a large number of agreements under which TVA lands have been leased, licensed, or transferred in fee to the valley States and to numerous county and city governments lying in close proximity to TVA reservoirs for public recreation and fish and wildlife purposes. Program activities are coordinated closely with appropriate agencies of the various States. Contracts and agreements are developed periodically with colleges and universities throughout the valley States for cooperative action on specific projects relating to or involving recreation resources. Contractual agreements are entered into

from time to time with private individuals or organizations to assist in specific projects generally involving recreation demonstrations or recreation-related activities.

### 8. Laws and regulations

Tennessee Valley Authority Act of 1933 as amended.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

Indications of the economic effects of the program are not available in the form requested. The total value of recreation improvements around TVA lakeshores, basically all developed by agencies and individuals previously mentioned in this material, is \$182,522,461. The estimated number of man-years of employment by these developments and improvements in 1964 was 2,215.2. Estimated visits to the reservoirs for recreation purposes in 1964 were 47,637,959.

### 10. Economic classification of program expenditures. (See table 1.)

Program: Recreation resource development—reservoir shorelines.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 1.—Economic classification of program expenditures for fiscal year 1965

[In thousands of dollars]	
Federal Government:	
Purchases of goods and services:	
Wages and salaries.....	23
Other.....	12
Total Federal expenditures <sup>1</sup> .....	35

<sup>1</sup> Refers to net expenditures. In the national income accounts, the TVA is classified as a Government enterprise.

## PUBLIC HEALTH—VECTOR CONTROL

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

To control reservoir-associated organisms, principally mosquitoes, which might transmit disease or cause other adverse health effects in the human population residing or employed in areas contiguous to TVA reservoirs or using reservoir waters for recreation.

#### 2. Operation

Direct Federal operation.

#### 3. History

When the TVA was created by act of Congress in 1933 the mosquito-borne disease, malaria, was endemic in a large portion of the Tennessee River Valley. A blood survey in 1934 of the population along a 75-mile stretch of the river showed an average malaria infection rate of 35 percent with certain areas ranging up to 76 percent. The control of malaria therefore became an integral part of the TVA resource development program. To combat the malaria already present in the valley and to assure that the chain of lakes to be constructed by TVA would not increase the malaria incidence, TVA brought together a staff of medical malariologists, biologists, and engineers

to study the problem and develop and carry out plans for malaria control. The program which evolved proved highly successful in eliminating malaria and is the basis for the current vector control program. Emphasis is placed upon providing an ecological environment in TVA reservoirs that is unsuitable for the propagation of mosquitoes of public health significance. The mosquito control program is integrated with other program needs and is virtually built into the design and operation of the dams and reservoirs. Principal reliance is placed upon water level management to control mosquito production.

Other naturalistic measures employed to supplement water level management include shoreline alteration, plant growth control, drainage of reservoir margins, and summertime dewatering of certain areas by pumping. Where the desired degree of mosquito control cannot be obtained through these measures due to physical or economic limitations, chemical treatment is applied to limited areas as an antilarval measure. Program effectiveness is measured by adult mosquito collections from some 258 stations strategically located and routinely inspected from April through September.

Research and investigations to evaluate or improve control techniques are carried out as a part of the program. Close cooperation and collaboration with Federal research laboratories and other organizations engaged in similar work are maintained.

#### 4. Level of operations. (See table 1.)

Program: Public health—vector control.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 1.—Level of operations or performance, fiscal years 1964–67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program:				
Reservoirs (each).....	27	27	27	27
Shoreline (miles).....	10,000	10,000	10,000	10,000
Surface area (acres).....	600,000	600,000	600,000	600,000
(b) Applicants or participants:				
State government agencies.....				
Local communities or governments.....				
Individuals or families.....				
Other.....				
(c) Federal finances: Expenditures.....	\$587,000	\$541,000	\$599,000	\$657,000
(d) Matching or additional expenditures for the program.....				
(e) Number of Federal Government employees administering, operating, or supervising the activity (man-years).....	36.2	38.9	41.2	46.2
(f) Non-Federal personnel employed in the program.....				
(g) Other measures of level or magnitude of performance:				
Plant growth control (acres).....	2,601	2,403	3,093	3,153
Drainage maintenance (linear feet).....	63,901	111,117	113,150	102,540
Larviciding (cumulative acres).....	52,029	37,807	41,070	40,570

#### 5. Estimated magnitude of program in 1970

The construction of additional reservoirs on the system and expanded industrial and recreational development of the reservoir shorelines will tend to increase the magnitude of the total program. On the other hand, better shoreline conditions resulting from past, current, and planned operations together with improved techniques should offset such increases.

#### 6. *Prospective changes in program orientation*

None.

#### 7. *Coordination and cooperation*

Research and developmental work are closely coordinated with vector control studies performed by the U.S. Public Health Service and the U.S. Department of Agriculture through an annual meeting of the three staffs held for this purpose. Coordination is accomplished with other Federal groups through representation on the Subcommittee on Vector Control, Interagency Committee on Water Resources, and the Subcommittee on Research, Federal Committee on Pest Control.

In addition, three dewatering projects are operated to serve both vector control and wildfowl refuge interests of the U.S. Fish and Wildlife Service.

The TVA vector control program is closely coordinated with State health departments of the several valley States with respect to planning, program operations, and results. Weekly and seasonal reports are supplied both State and local health agencies. Upon request, technical advice and information are given counties and municipalities having specific vector control problems.

In cooperation with the State Department, Department of Health, Education, and Welfare, Agency for International Development, World Health Organization, etc., representatives of foreign governments and international organizations are received and instructed in methods and techniques employed by TVA for vector control on impounded waters.

Liaison is maintained with colleges and universities with respect to vector control research. Graduate students are given temporary employment during the summer months to assist in special studies of mutual benefit. During the past year a cooperative study on *Aedes vexans* mosquitoes was conducted with the Metropolitan Mosquito Control District, St. Paul, Minn. Currently a cooperative study is being carried out with the Center for Zoonoses Research, University of Illinois.

#### 8. *Laws and regulations*

Tennessee Valley Authority Act of 1933 as amended.

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

#### 9. *Economic effects*

Freedom from malaria and other mosquito-borne diseases and from mosquitoes per se, as provided by the vector control program, has not only contributed to agricultural and industrial development of the Tennessee Valley but has been largely instrumental in making TVA lakes a water playground. States, counties, cities, and private interests are providing parks, hotels, marinas, fishing camps, and other recreational facilities at an intensifying rate. Recreation has already become a big business exerting a definite impact on the overall economy of the region that would be greatly diminished without adequate mosquito control.

#### 10. *Economic classification of program expenditures.* (See table 2.)

Program: Public health—vector control.

Department or agency, and office or bureau: Tennessee Valley Authority.



TABLE 2.—*Economic classification of program expenditures for fiscal year 1966*

[In thousands of dollars]	
Federal Government:	
Purchases of goods and services:	
Wages and salaries.....	343
Other.....	198
Total Federal expenditures <sup>1</sup> .....	541

<sup>1</sup> Refers to net expenditures. In the national income accounts the TVA is classified as a Government enterprise.

## EMPLOYEE HEALTH SERVICES

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

To provide an employee health program for all employees in the interest of the efficiency of its operation and the well-being of its employees. All appointees to TVA positions are given medical examinations to assure that from the standpoint of physical and mental health they are capable of performing the duties to be assigned to them without hazard to themselves or endangering the health and safety of others. In addition, employees are given periodic health examinations to review and appraise the status of health in relation to the requirements of work, and to provide or direct them to such treatment or other health guidance as may be necessary or desirable. Other medical services provided for employees include health counseling, immunizations, medical care for occupational disease or injury, and treatment of minor on-the-job illnesses.

#### 2. Operation

Direct Federal operation. TVA is affiliated with the University of Pittsburgh and is approved for residency training in occupational medicine by the American Board of Preventive Medicine. TVA cooperates with local, State, and other Federal agencies.

#### 3. History

TVA health services were established in the fall of 1933 with the organization of construction medical services. The immediate objective was to care for employees injured during the construction of Norris Dam. This program was expanded to provide services for similar major construction projects. The need for physical appraisal of applicants for employment and immunization of employees against certain infectious diseases was apparent from the beginning. As soon as possible after the development of facilities for the care and treatment of service-connected injuries, arrangements were made and facilities provided for immunizations and physical examinations of employees. At construction projects so remotely situated as to render medical care through normal facilities impractical, it became necessary to provide facilities for medical services for workers and dependents living in construction villages. Employees and their families participated on a fee basis designed to provide for cost of services without accumulation of surplus funds. By January 1938 medical care services covered, in addition to the treatment of occupational-related injuries and diseases, treatment of illnesses; periodic health examinations; prenatal, obstetrical, postnatal, preschool, and

well baby clinics. When private facilities became available and construction villages were not remotely situated, medical services for dependents and the treatment of nonoccupational conditions were discontinued.

#### 4. Level of operations. (See table 1.)

Program: Employee health services.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 1.—Level of operations or performance, fiscal years 1964–67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program:				
Visits (each) .....	130,066	116,422	125,000	130,000
Services rendered (each) .....	212,424	191,231	209,000	216,000
(b) Applicants or participants: Employees.....	17,353	16,469	17,000	17,000
(c) Federal finances: Expenditures <sup>1</sup> .....	\$1,318,000	\$1,197,000	\$1,347,000	\$1,388,000
(e) Number of Federal Government employees administering, operating, or supervising the activity (man-years).....	123	110	115	122

<sup>1</sup> These costs are also included in the program items previously discussed.

#### 5. Estimated magnitude of program in 1970

No major change in the level or magnitude of performance is expected by 1970. New medical facilities are expected for the Chattanooga and Wilson Dam health offices. Medical activities are expected to show a moderate increase which will require approximately 10 percent increase in medical personnel.

#### 6. Prospective changes in program orientation

There are no proposed changes in the orientation of the health service program. The periodic physical examination is expected to receive more emphasis. New technology is continually added to the program. During fiscal year 1966 computer electrocardiography, and proctosigmoidoscopic examinations are planned as additions to the program. The addition of consultants in the various specialties of medicine will receive more emphasis. Automation is expected to improve research and operational capabilities.

#### 7. Coordination and cooperation

Two cooperative programs with the U.S. Public Health Service will be initiated during fiscal year 1966. The Instrumentation Field Station of the Bureau of State Services will assist TVA in a feasibility study of reading electrocardiograms by computer. The Chronic Disease Section of the Public Health Service in Atlanta will provide surveillance for quality control of various medical laboratory examinations.

#### 8. Laws and regulations

Tennessee Valley Authority Act of 1933 as amended.

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

#### 9. Economic effects

Not evaluated.

### 10. Economic classification of program expenditures. (See table 2.)

Program: Employee health services.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 2.—Economic classification of program expenditures for fiscal year 1965

[In thousands of dollars]

Federal Government:	
Purchases of goods and services:	
Wages and salaries.....	910
Other.....	287
<b>Total Federal expenditures</b> <sup>1</sup> .....	<b>1,197</b>

<sup>1</sup> These costs are also included in the program items previously discussed.

NOTE.—In the national income accounts the TVA is classified as a Government enterprise.

## EMPLOYEE HEALTH—INDUSTRIAL HYGIENE SERVICES

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

To assure a healthful working environment for all TVA employees, including office, construction, and operational personnel. This includes the health aspects of heating, cooling, and lighting of offices and the protection of construction and operations employees from potentially hazardous exposures to dust, fumes, noxious gases, heat, cold, and noise—along with employee education aimed at good industrial practices.

#### 2. Operation

Direct Federal operation.

#### 3. History

The industrial hygiene services program was initiated in 1936 at the chemical plant at Muscle Shoals, Ala. By 1940 industrial hygiene surveillance was extended to all major construction activities and since that time has encompassed all principal TVA operations.

#### 4. Level of operations. (See table 1.)

Program: Employee health—Industrial hygiene services.

Department or agency and office or bureau: Tennessee Valley Authority.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program: Construction of operating work locations (each).....	119	122	124	122
(b) Applicants or participants: Employees.....	17,353	16,469	17,000	17,000
(c) Federal finances: Expenditures <sup>1</sup> .....	\$154,000	\$155,000	\$157,000	\$151,000
(e) Number of Federal Government employees administering, operating, or supervising the activity (man-years).....	9	9	9	8

<sup>1</sup> These costs are also included in the program items previously discussed.

#### 5. Estimated magnitude of program in 1970

A 25-percent increase in level or magnitude of performance is estimated by 1970.

### 6. *Prospective changes in program orientation*

Legislation relating to employee health and welfare (such as broadened compensation bases) is expected to emphasize the need for industrial hygiene services and the provision of improved work conditions and environments.

Technological changes in TVA programs are expected to require an increase in radiological health services.

### 7. *Coordination and cooperation*

Analytical procedures are standardized with laboratories of the Division of Occupational Health, Public Health Service. Exchange of information and experiences and mutual visitation or inspection are encouraged with State agencies.

### 8. *Laws and regulations*

Tennessee Valley Authority Act of 1933 as amended.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

The provision of a healthful environment should enhance productivity. For individuals with certain hypersensitivities or physical limitations, selective placement and some limitations are necessary. However, no data are available on the general effect on personal incomes.

### 10. *Economic classification of program expenditures.* (See table 2.)

Program: Employee health—Industrial hygiene services.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

#### Federal Government:

##### Purchases of goods and services:

Wages and salaries.....	116
Other.....	39

Total Federal expenditures <sup>1</sup> .....	155
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<sup>1</sup> These costs are also included in the program items previously discussed.

NOTE.—In the National Income Accounts the TVA is classified as a Government enterprise.

## EMPLOYEES HOSPITAL AND MEDICAL INSURANCE PLANS

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

To provide a plan whereby employees may protect themselves and members of their families at reasonable cost against hospital, medical, and surgical expenses.

#### 2. *Operation*

A federally sponsored program carried out through private insurance companies for annual employees, and in the case of certain hourly employees in cooperation with union health and welfare and pension plans. The material which follows relates only to the plan for annual employees.

### 3. History

This insurance plan was established in 1956.

### 4. Level of operations. (See table 1.)

Program: Employees hospital and medical insurance plans.

Department or agency and office or bureau: Tennessee Valley Authority.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (eligible employees).....	12, 119	12, 116	12, 200	11, 500
(b) Applicants or participants: Participating employees.....	11, 751	11, 714	11, 800	11, 100
(c) Federal finances: Contributions to plan <sup>1</sup> .....	\$1, 347, 655	\$1, 531, 303	\$1, 700, 000	\$1, 900, 000
(d) Matching or additional expenditures for the program: Employee contributions.....	\$1, 103, 011	\$1, 032, 559	\$1, 000, 000	\$980, 000
(e) Number of Federal Government employees administering, operating, or supervising the activity.....	-----	-----	-----	-----
(f) Non-Federal personnel employed in the program <sup>2</sup> .....	-----	-----	-----	-----
(g) Other measures of level or magnitude of performance: Claims paid.....	\$2, 104, 479	\$2, 269, 896	\$2, 400, 000	\$2, 500, 000

<sup>1</sup> These costs are also included in the program items previously discussed.

<sup>2</sup> Unknown number of employees of insurance carriers.

### 5. Estimated magnitude of program in 1970

It is expected that there will be 12,000 eligible employees, of whom 11,600 will participate.

### 6. Prospective changes in program orientation

The program will be changed as needed to reflect the impact of medicare on it. TVA is studying the feasibility of contributing toward hospital and medical insurance for retired employees under 65.

### 7. Coordination and cooperation

No formal coordination with other agencies is called for, in view of the limited coverage of the program.

### 8. Laws and regulations

Tennessee Valley Authority Act of 1933 as amended.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

No quantitative information available.

### 10. Economic classification of program expenditures

The TVA contributions to the hospital and medical insurance plans were \$1,531,303<sup>1</sup> in fiscal 1965. Employee contributions were \$1,032,559. Benefit payments made were \$2,269,896.

NOTE.—The TVA contribution represents an expenditure for goods and services. See also answer to question 2. In the National Income Accounts the TVA is classified as a Government enterprise.

## EMPLOYEE SAFETY

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

To protect employees from injury.

<sup>1</sup> These costs are also included in the program items previously discussed.

## 2. Operation

The program is applied by the organizational units within TVA conducting various types of work, including design, purchasing, construction, maintenance and operation of structures, facilities, equipment, and works. Efforts are directed to the control of environmental hazards by eliminating the hazard or providing protective devices and equipment; the control of unsafe practices through motivation, education, and training. The offices and divisions conducting high-hazard operations have staff specialists in safety guiding the application of the program in these organizations. In addition, there is a small central staff providing overall guidance and appraisal and supplying staff services to those units engaged in relatively low-hazard operations.

## 3. History

The employee safety program was first undertaken in fiscal year 1935 during the construction of Norris Dam. During that year the frequency of disabling injuries was 62.26 injuries per million man-hours. The frequency rates during fiscal years 1964 and 1965 were 7.17 and 5.80, respectively.

## 4. Level of operations. (See table 1.)

Program: Employee safety.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 1.—Level of operations or performance, fiscal years 1964–67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (man-hours exposure) . . .	31,928,624	31,549,205	32,000,000	32,000,000
(b) Applicants or participants: Employees . . . . .	17,353	16,469	17,000	17,000
(c) Federal finances: Expenditures <sup>1</sup> . . . . .	\$528,000	\$579,000	\$654,000	\$686,000
(d) Matching or additional expenditures for the program . . . . .				
(e) Number of Federal Government employees administering, operating, or supervising the activity (man-years) . . . . .	45	47	51	52
(f) Non-Federal personnel employed in the program . . . . .				
(g) Other measures of level or magnitude of performance: Frequency of disabling injuries (injuries per million man-hours) . . . . .	7.17	5.80	(?)	(?)

<sup>1</sup> These costs are also included in the program items previously discussed.

<sup>2</sup> Unknown.

## 5. Estimated magnitude of program in 1970

The anticipated growth of TVA's power system will result in an increase in the number of safety specialists required to provide essential staff service.

## 6. Prospective changes in program orientation

During the first 20 years of TVA's history there was a steady decline in the frequency of employee injuries. In recent years a plateau has been reached. In order to obtain improvement in safety performance, ways must be found to provide more effective motivation, particularly if the President's goal of a 30-percent reduction in injury frequency is to be attained. Depending upon the means developed to accomplish this, there may be a need for an increased level of activity.

### 7. *Coordination and cooperation*

No formal coordination with other agencies is involved.

### 8. *Laws and regulations*

Tennessee Valley Authority Act of 1933 as amended.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

Hourly trades and labor employees who suffer disabling injuries on the job receive compensation at the rate of two-thirds or three-fourths of their normal earnings. Successful efforts in the prevention of injuries will avoid these losses in earnings. Some measure of these potential savings may be obtained from the fact that during fiscal year 1965 the Bureau of Employees' Compensation made nonfatal compensation payments of \$993,691 on account of injuries to TVA employees.

### 10. *Economic classification of program expenditures.* (See table 2.)

Program: Employee safety.

Department or agency, and office or bureau: Tennessee Valley Authority.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

#### Federal Government:

##### Purchases of goods and services:

Wages and salaries.....	427
Other.....	152
<b>Total Federal expenditures<sup>1</sup>.....</b>	<b>579</b>

<sup>1</sup> These costs are also included in the program items previously discussed.

NOTE.—In the national income accounts the TVA is classified as a Government enterprise.

## GROUP ACCIDENT INSURANCE PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. *Objectives*

To offer at reasonable cost a voluntary group plan whereby TVA annual employees, their wives, and dependent children may obtain indemnity for loss resulting from accidental death, dismemberment, or permanent disability (employees only), thus relieving financial hardship, promoting morale, and improving efficiency.

#### 2. *Operation*

A federally sponsored program carried out through a private insurance company. Premiums are paid in full by TVA employee contributions.

#### 3. *History*

This accident insurance program was established in 1960. In 1965 insured employees' wives and dependent children of employees were made eligible.

#### 4. *Level of operations.* (See table 1.)

Program: Group accident insurance program.

Department, and office or bureau: Tennessee Valley Authority.

TABLE 1.—Level of operations or performance, fiscal years 1964–67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (eligible employees).....	11, 800	11, 650	11, 950	12, 400
(b) Applicants or participants:				
State government agencies.....				
Local communities or governments.....				
Individuals or families: Participating employees.....	10, 300	10, 400	10, 600	11, 000
Other.....				
(c) Federal finances.....				
(d) Matching or additional expenditures for the program: Premiums paid by employees.....	\$212, 528	\$214, 198	\$340, 000	\$350, 000
(e) Number of Federal Government employees administering, operating, or supervising the activity.....				
(f) Non-Federal personnel employed in the program (insurance carrier).....	1	1	1	1
(g) Other measures of level or magnitude of performance: Benefits paid.....	\$272, 500	\$170, 000	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Not available.

### 5. Estimated magnitude of program in 1970

Eligible employees are expected to number 13,400.

### 6. Prospective changes in program orientation

None.

### 7. Coordination and cooperation

No formal coordination with other agencies is called for, in view of the limited coverage of the program.

### 8. Laws and regulations

Tennessee Valley Authority Act of 1933 as amended.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

No quantitative information available.

### 10. Economic classification of program expenditures

Total cost of program is borne by premiums paid by employees, except for limited unidentifiable expenses involved in making payroll deductions for premiums.

## RETIREMENT SYSTEM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

To offer reasonable financial security for employees in old age or upon early retirement, disability, or death and to aid in attracting to TVA employment qualified persons who will make their careers with the agency.

#### 2. Operation

A federally sponsored program administered by a seven-member Board of Directors, of whom three are appointed by TVA, three are elected by members of the system, and one is elected by the other six. Financial support is contributed by TVA and the members of the system.



### 3. History

The TVA employees retirement system was established by the TVA Board of Directors in 1939. Major changes since that time have been adjustments related to coverage of TVA employees under social security in 1956 and establishment of a variable annuity plan in 1959 as an optional feature.

### 4. Level of operations. (See table 1.)

Program: Retirement system.

Department or agency, and offices or bureau: Tennessee Valley Authority.

TABLE 1.—Level of operations or performance, fiscal years 1964–67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (members).....	11, 410	11, 252	11, 500	12, 000
(b) Applicants or participants:				
State government agencies.....				
Local communities or governments.....				
Individuals or families: Beneficiaries (persons).....	1, 232	1, 407	1, 600	1, 800
Other.....				
(c) Federal finances: Contributions to system <sup>1</sup> .....	\$7, 251, 029	\$7, 476, 630	\$7, 700, 000	\$8, 175, 000
(d) Matching or additional expenditures for the program: Employee contributions.....	\$5, 014, 823	\$5, 425, 956	\$5, 850, 000	\$6, 750, 000
(e) Number of Federal Government employees administering, operating, or supervising the activity (man-years).....	12	12	13	13
(f) Non-Federal personnel employed in the program.....	(?)	(?)	(?)	(?)
(g) Other measures of level or magnitude of performance:				
System assets.....	\$164, 265, 228	\$184, 528, 105	\$206, 000, 000	\$235, 000, 000
Monthly benefit payments.....	\$1, 732, 536	\$2, 208, 694	\$2, 750, 000	\$3, 200, 000

<sup>1</sup> These costs are also included in the program items previously discussed.

<sup>2</sup> Unknown number of employees of consulting actuary, trustee, and auditor.

### 5. Estimated magnitude of program in 1970

System membership will total 13,000, with 2,500 on the pension payroll.

### 6. Prospective changes in program orientation

None.

### 7. Coordination and cooperation

No formal coordination with other agencies is called for, in view of the limited coverage of the program.

### 8. Laws and regulations

Tennessee Valley Authority Act of 1933 as amended.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

No quantitative information available.

### 10. Economic classification of program expenditures

The TVA contribution to the retirement system was \$7,476,630 in fiscal 1965.<sup>1</sup> Employee contributions were \$5,425,956. Benefit payments were \$2,208,694. The administrative costs of the system were \$259,000, of which \$129,000 was for wages and salaries.

NOTE.—In the national income accounts the TVA is classified as a Government enterprise.

<sup>1</sup> These costs are also included in the program items previously discussed.

# VETERANS' ADMINISTRATION

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## HOSPITAL, DOMICILIARY, AND NURSING HOME CARE AND FACILITIES PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The mission of the Veterans' Administration medical program is to provide hospital, outpatient, domiciliary, and nursing home care to eligible veterans; to conduct a research program to improve methods of diagnosis and treatment; and to carry on an education and training program to improve the professional competence of its staff.

#### 2. Operation

This is wholly a direct Federal operation conducted in VA medical facilities with headquarters supervision from central office, Washington, D.C., including care of VA beneficiaries in contract facilities.

#### 3. History

The history of the program of providing medical and domiciliary care for veterans goes back many years. The first provision for giving veterans medical care of any kind dates back to 1811 when the U.S. Naval Home in Philadelphia was established.

Shortly after the entrance of the United States in World War I, Congress enacted legislation providing that men with service-connected disabilities could in addition to compensation benefits be furnished reasonable medical and dental hospital care. The Bureau of War Risk Insurance determined the service origin of disabilities and the Public Health Service was responsible for the actual treatment of the veterans. In 1921 the newly established U.S. Veterans' Bureau superseded the Public Health Service in the control over all hospitals for the care of veterans.

The present Veterans' Administration was established as an independent agency under the President by Executive Order 5398, of July 21, 1930, in accordance with the act of July 3, 1930 (46 Stat.

1016; 38 U.S.C. 11). It inherited the responsibility for providing medical and hospital care to veterans. Beds in Veterans' Administration hospitals have increased from 40,000 in 1930 to more than 108,000 in 1951. The total number of operating beds as of October 31, 1965, amounted to 116,825 and the average daily patient load in fiscal year 1965 was about 107,600.

#### 4. Level of operations. (See table 1.)

Program: Hospital, domiciliary, and nursing home care, and facilities program. Department or agency, and office or bureau: Veterans' Administration; Department of Medicine and Surgery.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year			
	1964	1965	1966 estimate	1967 estimate
(a) Magnitude of the program: Number of VA installations.....	188	218	217	237
(b) Applicants or participants:				
Individuals or families:				
Average daily patient load.....	112,881	111,782	110,795	110,935
Average daily nursing load.....		168	3,010	4,877
Average daily member load.....	15,330	14,575	13,500	13,500
(c) Federal finances:				
Obligations incurred.....	\$1,088,459,188	\$1,149,165,959	\$1,206,982,000	\$1,263,864,000
Allotments or commitments made.....	\$1,088,459,188	\$1,149,165,959	\$1,206,982,000	\$1,263,864,000
(d) Matching or additional expenditures for the program.....				
(e) Number of Federal Government employees administering, operating, or supervising the activity:				
Full-time equivalent direct care.....	84,829	84,471	84,706	87,491
Administrative.....	23,333	23,339	23,357	23,492
Operations.....	21,647	21,417	21,287	21,488
(f) Non-Federal personnel employed in the program.....				
(g) Other measures of level or magnitude of performance:				
Patients treated in VA hospitals.....	738,583	729,911	738,000	745,000
Outpatient medical visits.....	4,945,717	5,987,225	6,055,100	6,167,000

NOTE.—Statistical data supplied by Controller, D.M. & S.

#### 5. Estimated magnitude of program in 1970

In the light of the recent debate in the Congress as to the need for making the authorized 125,000 VA beds a minimum number, no attempt is made to project the probable level or magnitude of performance of the program in 1970. Any such projection could prove to be entirely unrealistic in the light of advances in medical science and the advent of new supplemental medical care programs about to be undertaken by the Federal Government.

#### 6. Prospective changes in program orientation

For data on prospective and probable changes in program orientation or emphasis, please see the estimated projections for fiscal years 1966 and 1967 submitted in connection with the answer to question 4.

#### 7. Coordination and cooperation

All of the programs referred to above are administered exclusively by the Veterans' Administration.

#### 8. Laws and regulations

The laws pertaining to the Department of Medicine and Surgery and to hospital, domiciliary, and medical care are contained in title

38, United States Code. The regulations pertaining to hospital, domiciliary, and medical care are contained, in the main, in VA Regulations 6030-6176.

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

We can merely state here that an expenditure in the magnitude of more than \$1 billion on an annual basis, such as that appropriated to operate the farflung activities of the Department of Medicine and Surgery, has a very considerable impact in every segment of the country in which these funds are used. The precise impact, however, cannot be identified without a thorough knowledge of the community and its economic level in each area in which one of our many hospitals, domiciliaries, or clinics is located.

10. *Economic classification of program expenditures.* (See table 2.)

Program: Hospital, domiciliary, and nursing home care and facilities program.  
Department or agency, and office or bureau: Veterans' Administration; Department of Medicine and Surgery.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]	
Federal Government:	
Purchases of goods and services:	
Wages and salaries.....	907
Other.....	251
Total Federal expenditures.....	1,158

NOTE.—Statistical data supplied by the Controller, D.M. & S.

STATE VETERANS' HOMES AND STATE NURSING HOMES PROGRAM

PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

To fulfill the mission of the Veterans' Administration to provide domiciliary and nursing care to eligible veterans.

2. *Operation*

The Veterans' Administration is authorized to reimburse each State for part of the cost of care furnished to eligible beneficiaries

3. *History*

At the end of the Civil War, the number of disabled veterans, as well as those unable to cope with the economic struggle of civil life, became so great as to prompt the Congress to establish in 1866, the National Home for Disabled Volunteer Soldiers—in actuality, a number of homes in various parts of the country. The purpose of this legislation was to provide domiciliary care with hospital facilities. At the time the Veterans' Administration became an independent agency it took over the functions of the National Home for Disabled Volunteer Soldiers.

4. *Level of operations.* (See table 1.)

Program: State veterans' homes and State nursing homes.  
Department or agency, and office or bureau: Veterans' Administration; Department of Medicine and Surgery.

TABLE 1.—*Level of operations or performance, fiscal years 1964-67*

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (number of installations).	33	33	33	33
(b) Applicants or participants:				
Individuals or families:				
Average daily member load.....	9,346	9,146	8,380	7,950
Average daily nursing load.....		156	1,100	1,400
Other.....				
(c) Federal finances:				
Obligations incurred.....	\$7,581,703	\$7,877,767	\$8,700,000	\$8,694,000
Allotments or commitments made.....	\$7,581,703	\$7,877,767	\$8,700,000	\$8,694,000

### 5. *Estimated magnitude of program in 1970*

No attempt is being made here to project the probable level or magnitude of performance of the program in 1970 since any such projection could prove to be entirely unrealistic in the light of advances in medical science and the advent of new supplemental medical care programs about to be undertaken by the Federal Government.

### 6. *Prospective changes in program orientation*

For data on prospective and probable changes in program orientation or emphasis, please see the estimated projections for fiscal years 1966 and 1967 submitted in connection with the answer to question 4.

### 7. *Coordination and cooperation*

The Veterans' Administration participates with the various States in the handling of the moneys in the grants-in-aid program provided to the State-operated soldiers homes.

No data is being furnished at this time with respect to that portion of our State soldiers homes programs concerned with granting of funds for the construction of State soldiers nursing homes. This portion of our program has only recently been implemented and as of this date we have no data or experience on which to predicate a reply.

### 8. *Laws and regulations*

The laws pertaining to State veterans' homes and the nursing home program are contained, in the main, in title 38, United States Code. The regulations pertaining to this program are contained, in the main, in VA Regulations 6166-6176.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

The precise impact of this program on those segments of the country where these facilities are located cannot be identified without a thorough knowledge of the community and its economic level in each area in which such a facility is located. Therefore, no attempt is made to answer this question.

### 10. *Economic classification of program expenditures.* (See table 2.)

Program: State veterans' homes and State nursing homes.

Department or agency, and office or bureau: Veterans' Administration; Department of Medicine and Surgery.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]	
Federal Government:	
Purchases of goods and services <sup>1</sup> .....	8
Total Federal expenditures.....	8

<sup>1</sup> In the national income accounts this is classified as a grant-in-aid to State and local governments.

## COMPENSATION AND PENSION PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The purpose of the compensation and pension program is to serve veterans and their dependents by administering uniformly, equitably and without bias or prejudice the laws governing disability compensation, disability pension, service pension, death compensation and dependency and indemnity compensation, death pension, insurance matured by death, and burial allowance.

Disability compensation is to compensate veterans for loss or reduction in earning power resulting from service-connected disabilities. The loss is based on average impairment of earning capacity resulting from comparable injuries and disease in civil life.

The disability pension program furnishes financial assistance to needy war veterans who are permanently and totally disabled from disease or injury without regard to service origin.

The service pension program gives financial aid to persons who served in wartime periods prior to World War I, and to their widows and children, without regard to need.

The death compensation and dependency and indemnity compensation programs provide financial help to widows, children, and dependent parents of veterans whose deaths were related to service, to make up for the resultant loss of family income.

The death pension program gives aid to needy widows and children of veterans of wartime service whose deaths were not related to military service.

#### 2. Operation

The compensation and pension program is administered by the Department of Veterans' Benefits of the Veterans' Administration from 57 regional offices and centers throughout the Nation. There is at least one regional office in every State. Technical assistance is furnished the Adjudication Divisions of the regional offices by the Director, Compensation, Pension, and Education Service and his staff located in the central office at Washington, D.C. Operational supervision is furnished by 4 area field directors and their staffs, also located in Washington, D.C.

#### 3. History

From earliest times our country recognized its indebtedness to veterans who died or were disabled as a result of service. The first Federal law was enacted September 29, 1789. It provided that the military pensions granted and paid by the States respectively for servicemen wounded or disabled during the Revolutionary War should be continued and paid by the United States.

The act of March 16, 1802, provided for payment to persons injured or disabled in service and also provided a pension for widows and children of persons who died as a result of wounds received in service.

In the ensuing years various acts of Congress have provided pensions for persons disabled in service during the Revolutionary War, the War of 1812, the war with Mexico, the Indian wars, the Civil War, the Spanish-American War, World War I, World War II, and the Korean conflict. Widows, children, and dependent parents of veterans of the various wars have also been granted pensions.

The provisions for payment of service-connected and non-service-connected disability and death compensation are currently contained in title 38, United States Code.

#### 4. Level of operations. (See table 1.)

Program: Compensation and pension program.

Department or agency, and office or bureau: Veterans' Administration; Department of Veterans Benefits.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (cases).....	4, 400, 417	4, 472, 908	4, 537, 967	4, 484, 292
(b) Applicants or participants: Individuals or families (cases) <sup>1</sup> .....	4, 400, 417	4, 472, 908	4, 537, 967	4, 484, 292
(c) Federal finances: allotments or commitments made <sup>2</sup> .....	\$3, 951, 000, 000	\$4, 109, 300, 000	\$4, 430, 000, 000	\$4, 374, 000, 000
(d) Matching or additional expenditures for the program (none).....				
(e) Number of Federal Government employees administering, operating or supervising the activity <sup>3</sup> .....	4, 048	3, 808	3, 624	3, 656
(f) Non-Federal personnel employed in the program <sup>4</sup> .....				
(g) Other measures of level or magnitude of performance (claims <sup>5</sup> adjudicated).....	1, 639, 200	1, 953, 722	1, 884, 500	1, 960, 500

<sup>1</sup> Composite of the entitled members of the veteran's family.

<sup>2</sup> No-year appropriation; appropriations are shown in the year they were made.

<sup>3</sup> New obligational authority adjusted for \$3,700,000 transferred to readjustment benefits.

<sup>4</sup> Includes proposed supplemental of \$283,000,000.

<sup>5</sup> Includes readjustment benefits, disabled veterans vocational rehabilitation, war orphans education assistance, and excludes supporting programs such as administrative, finance, etc.

<sup>6</sup> None in direct assistance to VA.

<sup>7</sup> Original death and disability claims, reopened death and disability claims, dependency and income claims, burial and accrued claims, and notices of disagreement.

#### 5. Estimated magnitude of programs in 1970

By 1970, we estimate that there will be 4,721,000 cases receiving compensation and pension payments and that these payments will total \$4,431 million annually. The 4,721,000 cases on the rolls will comprise the following categories:

Disability compensation.....	1, 997, 000
Death compensation (dependency and indemnity compensation).....	358, 000
Disability pension.....	1, 236, 000
Death pension.....	1, 130, 000

#### 6. Prospective changes in program orientation

The number of veterans receiving service-connected disability compensation will remain relatively stable through 1970. From 1971 onward, there will be a gradual decrease in the numbers receiving disability compensation. This is due to the fact that as the veterans on the disability compensation rolls grow older, the increasing mor-

tality rate will cause a decrease in the number receiving disability compensation. There will also be a continuing decrease in the number of cases receiving service-connected death compensation and dependency and indemnity compensation. This is caused by the rate of remarriage of widows and coming of age 18 by children, which more than offsets any additions to the service-connected death compensation rolls.

In contrast to the decrease in service-connected benefits, will be the steady rise in non-service-connected benefits. The disability pension rolls and the death pension rolls will both increase each year, and the peak will not be reached until 1995. The increase in the non-service-connected cases more than offsets the decrease in service-connected cases. The increase in non-service-connected benefits is due to the advancing age of veterans and widows. With advancing age, there is more disability, more unemployment, and less income. These factors tend to increase the pension rolls.

#### *7. Coordination and cooperation*

Within the Veterans' Administration the operation of the compensation and pension program is dependent upon the cooperation and coordinated actions of all three Departments—the Department of Veterans Benefits, the Department of Data Management, and the Department of Medicine and Surgery.

Outside the Veterans' Administration, there is close cooperation and exchange of information between the Veterans' Administration, the Department of Defense, the Social Security Administration, and the Railroad Retirement Board. The administration of the compensation and pension program is dependent upon receipt of information from the various service departments, particularly medical records of examinations and treatment in service, verification of dates and type of service, and for inservice death cases, casualty reports.

For VA pension purposes, railroad retirement benefits and social security benefits generally count as income, therefore in many instances an exchange of information between these agencies and the Veterans' Administration is essential.

#### *8. Laws and regulations*

The laws pertaining to the compensation and pension program are contained in title 38, United States Code. The regulations pertaining to the program are contained in the Code of Federal Regulations, title 38, secs. 3.1 through 3.1900.

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

#### *9. Economic effects*

(a) Over \$4 billion is paid out annually in compensation and pension benefits to over 3.2 million veterans and to dependents of 1.3 million deceased veterans. These payments are not subject to wide fluctuation. They are made monthly at a rate of over \$325 million. Since the payments are made directly to individuals to compensate for loss of earning capacity or to assist needy veterans and their dependents, almost the entire amount is returned to the national economy in expenditures for goods and services which have a stabilizing effect on our national economy.

(b), (c), (d), (e), (g), and (h) are covered in (a) above.



(f) The payments are nationwide and there are no significant geographic variations.

10. *Economic classification of program expenditures.* (See table 2.)

Program: Compensation and pension program.

Department or agency, and office or bureau: Veterans' Administration; Department of Veterans Benefits.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]	
Federal Government:	
Purchases of goods and services: <sup>1</sup>	
Wages and salaries.....	\$37
Other.....	2
Transfer payments to individuals.....	4,109
Total Federal expenditures.....	4,148

<sup>1</sup> Includes compensation and pension program, war orphans educational assistance program, disabled veterans vocational rehabilitation program, and readjustment benefits program.

## READJUSTMENT BENEFITS FOR VETERANS OF WORLD WAR II AND KOREAN CONFLICT

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The purpose of the vocational readjustment program was to restore to veterans of World War II and the Korean conflict educational opportunities lost as a result of military service.

#### 2. Operation

Readjustment training for most World War II veterans terminated July 25, 1956, and for Korean conflict veterans the termination date was January 31, 1965. At the time of the termination of this benefit, the average monthly training load had been reduced to approximately 7,500. The program was administered from 26 VA regional offices throughout the Nation. Technical assistance was provided by the staff of the Director, Compensation, Pension and Education Service located in Central Office in Washington, D.C. Operational supervision was provided by four area field directors and their staffs also located at Central Office, Washington, D.C. A Korean conflict veteran in school training received direct monthly payments of \$110 for full-time training, \$80 for three-fourths time training, and \$50 for one-half time training. Additional amounts were payable if the veteran had dependents.

#### 3. History

Readjustment training for veterans of World War II was inaugurated with the enactment of Public Law 346, 78th Congress (Service-men's Readjustment Act) approved June 22, 1944. The peak enrollment under this law occurred in November 1947 with an enrollment of 2,546,000 veterans. The total number trained during the life of the World War II program was 7,800,000 veterans.

The readjustment educational program for veterans of the Korean conflict was enacted as Public Law 550, 82d Congress, approved July 16, 1952. The peak enrollment under this program was in March

1957 with an enrollment of 764,000 veterans. During the life of the program 2,390,000 were trained.

#### 4. Level of operations. (See table 1.)

Program: Readjustment benefits for veterans of World War II and Korean conflict. Department or agency, and office or bureau: Veterans' Administration; Department of Veterans Benefits.

TABLE 1.—Level of operations, or performance, fiscal years 1964–65<sup>1</sup>

Measure and unit	Fiscal year 1964	Fiscal year 1965
(a) Magnitude of the program (average monthly enrollment).....	25,526	7,575
(b) Applicants or participants: Individuals or families (individuals—monthly average number).....	25,526	7,575
(c) Federal finances: Allotments or commitments made <sup>2</sup> .....	\$33,926,306	\$11,807,100
(d) Matching or additional expenditures for the program.....		
(e) Number of Federal Government employees administering, operating, or supervising the activity <sup>3</sup> .....		
(f) Non-Federal personnel employed in the program <sup>4</sup> .....		

<sup>1</sup> Program expired Jan. 31, 1965.

<sup>2</sup> Expenditures.

<sup>3</sup> Included in compensation and pension.

<sup>4</sup> None in direct assistance to VA.

#### 5. Estimated magnitude of program in 1970

Programs have been inoperative since July 25, 1956, for veterans of World War II and January 31, 1965, for veterans of Korean conflict.

#### 6. Prospective changes in program orientation

Not applicable.

#### 7. Coordination and cooperation

During the time the program was operating there was close cooperation and coordination of activities with the Departments of Labor; Health, Education, and Welfare; Defense; and State. Furthermore, there was close liaison with State departments of education.

#### 8. Laws and regulations

Laws were under chapter 33, title 38, United States Code. The regulations were contained in the Code of Federal Regulations, title 38, secs. 21.2000 through 21.2310.

### PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

#### 9. Economic effects

(a) Readjustment training ended January 31, 1965. During the 7 months of fiscal year 1965 that the program was operating 7,575 veterans received readjustment training benefits, and payments of \$11.8 million were made.

(b), (c), (d), (e), (g), and (h) We have no way of measuring the effects of the program for fiscal year 1965 in respect to these items.

(f) Payments were nationwide and there were no significant geographic variations.

#### 10. Economic classification of program expenditures. (See table 2.)

Program: Readjustment benefits for veterans of World War II and Korean conflict. Department or agency, and office or bureau: Veterans' Administration; Department of Veterans Benefits.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]	
Federal Government:	
Purchases of goods and services.....	(1)
Transfer payments to individuals.....	12
<b>Total Federal expenditures.....</b>	<b>12</b>

<sup>1</sup> Included in compensation and pension program.

## DISABLED VETERANS VOCATIONAL REHABILITATION

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

To provide vocational rehabilitation to each veteran to restore employability lost by virtue of a handicap due to service-connected disabilities.

#### 2. Operation

The program is administered by 26 VA regional offices throughout the Nation. Technical assistance is furnished by the staff of the Director, Compensation, Pension, and Education Service located at Central Office, Washington, D.C. Operational supervision is provided by four area field directors and their staffs also located at Central Office, Washington, D.C.

Ordinarily, a period of 4 years of training is available. Rates payable extend from \$95 monthly to \$175 depending upon the type of training and number of dependents. In addition, the cost of tuition, books, supplies, and equipment is paid to the school.

#### 3. History

Vocational rehabilitation benefits became available for disabled veterans of World War II through Public Law 16, 78th Congress, approved March 24, 1943. For Korean conflict veterans these benefits were authorized by Public Law 894, 81st Congress, approved December 28, 1950. For veterans of peacetime periods of service since September 16, 1940, these benefits were authorized by public Law 87-815, approved October 15, 1962.

July 25, 1956, was the termination date for these benefits for most World War II veterans. However, exceptions are made for certain seriously disabled veterans, for whom the termination date is June 30, 1975.

For veterans of the Korean conflict termination dates are on an individual basis occurring for most veterans 9 years after separation from service in the Armed Forces. The same principle applies to veterans disabled during peacetime periods of service.

The peak enrollment for World War II disabled veterans occurred in December 1947 when 255,800 were enrolled. The peak for Korean conflict veterans was in April 1956 with 18,300 enrolled. For peacetime veterans the greatest number enrolled during any month since the beginning of the program in October 1962 was 3,674 in April 1964.

#### 4. Level of operations. (See table 1.)

Program: Disabled veterans vocational rehabilitation.

Department or agency, and office or bureau: Veterans' Administration; Department of Veterans Benefits.

TABLE 1.—*Level of operations or performance, fiscal years 1964–67*

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (persons—average monthly enrollment).....	5, 441	6, 730	6, 100	8, 000
(b) Applicants or participants: Individuals or families (persons—monthly average number).....	5, 441	6, 730	6, 100	8, 000
(c) Federal finances: Allotments or commitments made <sup>1</sup> .....	\$4, 249, 633	\$5, 596, 588	\$5, 210, 000	\$7, 040, 000
(d) Matching or additional expenditures for the program.....				
(e) Number of Federal Government employees administering, operating or supervising the activity <sup>2</sup> .....				
(f) Non-Federal personnel employed in the program <sup>3</sup> .....				

<sup>1</sup> Includes cost of tuition, books, supplies, and equipment. (Subsistence allowance paid from the compensation and pension appropriation.)

<sup>2</sup> Includes \$1,100,000 proposed supplemental to cover cost of new legislation (Public Law 89-138).

<sup>3</sup> Included in compensation and pension.

<sup>4</sup> None in direct assistance to VA.

### 5. *Estimated magnitude of program in 1970*

We estimate that in 1970 there will be an average monthly enrollment of 300 Korean conflict disabled veterans, 2,700 disabled veterans of peacetime service, and 1,200 seriously disabled veterans of World War II and the Korean conflict.

### 6. *Prospective changes in program orientation*

None anticipated. Rates were recently increased under Public Law 89-137, and termination dates for certain seriously disabled veterans were extended under Public Law 89-138.

### 7. *Coordination and cooperation*

There is close cooperation of activities with the Department of Labor; Department of Health, Education, and Welfare; and the American Psychological Association.

### 8. *Laws and regulations*

The laws pertaining to vocational rehabilitation of disabled veterans are contained in chapter 31, title 38, United States Code, and the regulations are in the Code of Federal Regulations, title 38, secs. 21.1 through 21.735.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

(a) In fiscal year 1965 payments of \$5.6 million were made on behalf of an average monthly enrollment of 6,730 disabled veterans receiving vocational rehabilitation training.

(b) The purpose of the program is to train or retrain disabled veterans whose service-connected disabilities require their receiving vocational rehabilitation training. The magnitude of the program is stated in (a) above.

(c), (d), (e), (g), and (h) We have no way of measuring the effects of the program in respect to these items.

(f) The program is nationwide and there is no significant geographic variation.

10. *Economic classification of program expenditures.* (See table 2.)

Program: Disabled veterans vocational rehabilitation.  
Department or agency, and office or bureau: Veterans' Administration; Department of Veterans Benefits.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]	
Federal Government:	
Purchases of goods and services.....	(1) 6
Transfer payments to individuals.....	6
<b>Total Federal expenditures.....</b>	<b>6</b>

<sup>1</sup> Included in compensation and pension program.

## WAR ORPHANS EDUCATIONAL ASSISTANCE PROGRAM

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

To provide financial assistance to the sons and daughters of deceased or totally disabled veterans whose death or disability resulted from service in the Armed Forces, to help them attain the educational status which they might normally have aspired to and obtained but for the death or disability of the veteran parent.

#### 2. Operation

The program is administered by 26 VA regional offices located throughout the Nation. Technical assistance is provided by the staff of the Director, Compensation, Pension, and Education Service located at central office in Washington, D.C. Operational supervision is provided by four area field directors and their staffs also located at central office, Washington, D.C.

The benefits are available generally between ages 18 and 23. Financial aid is afforded during a period of 36 months. The amounts payable are \$130 monthly for full-time training, \$95 monthly for three-fourths-time training, and \$60 monthly for one-half-time training.

Vocational counseling is provided each beneficiary to assist in the selection of his training objective.

#### 3. History

War orphans educational assistance program was inaugurated with the enactment of Public Law 634, 84th Congress, approved June 29, 1956. This program continues without any established termination date.

The peak enrollment was reached in December 1962 with an enrollment of 24,500. It is not anticipated that this figure will be exceeded. The average monthly enrollment during fiscal year 1965 was 15,700. It is believed that this level will be maintained for the next 5 years after which a slight decline may be expected.

The number trained from the beginning of the program through fiscal year 1965 was 78,000.

#### 4. Level of operations. (See table 1.)

Program: War orphans educational assistance program.  
Department or agency, and office or bureau: Veterans' Administration; Department of Veterans Benefits.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966 estimate	Fiscal year 1967 estimate
(a) Magnitude of the program (persons—average monthly enrollment).....	15,543	15,722	16,500	14,700
(b) Applicants or participants: Individuals or families (persons—monthly average number).....	15,543	15,722	16,500	14,700
(c) Federal finances: Allotments or commitments made <sup>1</sup> .....	\$24,805,193	\$25,570,006	\$31,695,804	\$29,422,000
(d) Matching or additional expenditures for the program.....				
(e) Number of Federal Government employees administering, operating, or supervising the activity <sup>2</sup> .....				
(f) Non-Federal personnel employed in the program <sup>3</sup> .....				

<sup>1</sup> Expenditures.

<sup>2</sup> Includes proposed supplemental of \$3,900,000 for cost of new legislation (Public Law 89-222).

<sup>3</sup> Included in compensation and pension.

<sup>4</sup> None in direct assistance to VA.

### 5. Estimated magnitude of program in 1970

We estimate that in 1970 the average monthly enrollment will be 15,000.

### 6. Prospective changes in program orientation

No changes in the program are anticipated. Rates were recently increased by Public Law 89-222.

### 7. Coordination and cooperation

Under this program there is close cooperation and coordination of activities with the Departments of Labor and Health, Education, and Welfare. There is also close liaison with State departments of education. In addition, vocational counseling services of colleges and universities are utilized on a fee basis.

### 8. Laws and regulations

The laws are contained in chapter 35, title 38, United States Code, and the regulations in the Code of Federal Regulations, title 38, sections 21.3000 through 21.3312.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. Economic effects

(a) A monthly average of almost 16,000 sons and daughters of deceased veterans or permanently and totally disabled veterans received training in fiscal year 1965 under this program. Payments of over \$25.5 million were made during the year.

(b), (c), (d), (e), (g), and (h). We have no way of measuring the effects of the program for fiscal year 1965 in respect to these items.

(f) Payments were nationwide and there were no significant geographic variations.

### 10. Economic classification of program expenditures. (See table 2.)

Program: War orphans educational assistance program.

Department or agency, and office or bureau: Veterans' Administration; Department of Veterans Benefits.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1966*

[In millions of dollars]	
Federal Government:	
Purchases of goods and services.....	(1) 26
Transfer payments to individuals.....	26
<b>Total Federal expenditures.....</b>	<b>26</b>

<sup>1</sup>Included in compensation and pension program.

## INSURANCE AND INDEMNITY PROGRAMS

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

The Veterans' Administration administers a contributory program of Government life insurance for servicemen, veterans and their beneficiaries. The main objective of each of the various insurance programs was the restoration of insurability lost on entrance into military service during wartime.

The Servicemen's Indemnity Act of 1951 established a program for the purpose of providing noncontributory, automatic indemnity coverage to servicemen during their active duty status in the Korean conflict, and for an additional period of 120 days after discharge from such active duty.

#### 2. Operation

In most respects VA insurance operations are similar to those of private life insurance companies. Operations are carried out principally by mail. Personal contacts are made through VA contact offices where veterans may visit and obtain assistance in filing applications and information on matters relating to VA insurance. The Government bears the administrative costs for all programs except the veterans reopened insurance and reimburses the National Service Life Insurance (NSLI) and U.S. Government Life Insurance (USGLI) funds for claims losses which the VA determines are traceable to the extra hazard of military service.

The Department of Veterans Benefits operates insurance field activities through two VA centers at Philadelphia and St. Paul. They provide policy, underwriting, and disability insurance claims service to veterans with Government life insurance within assigned geographical areas. Death claims are adjudicated by the VA regional offices.

The Office of the Director, Insurance Service, central office, formulates plans, regulations, procedures, and standards. Other central office functions include the conduct of studies of mortality and disability in order to calculate and establish policy rates and values and to determine surplus and apportionment of dividends; the review of proposed legislation and Executive orders to determine the special effects on the program and comment and recommend with respect thereto; recommendation of changes in existing laws affecting the insurance program; and appraisal of the effectiveness, efficiency, and economy of policies, regulations, procedures, and standards.

#### 3. History

The Government life insurance program had its inception in 1917 when war risk insurance—yearly renewable term—was established to

provide life insurance protection for servicemen. The U.S. Government life insurance (USGLI) program, initiated in 1919, permitted policyholders of yearly renewable term insurance to convert their policies to permanent plans of insurance, and in June 1926, term insurance was added to the USGLI program. National service life insurance (NSLI), authorized on October 8, 1940, provided both term and permanent plan insurance for men and women who served in World War II. Both the USGLI and NSLI insurance programs provided for participation in dividends resulting from gains and savings derived from favorable mortality experience and excess interest earnings over and above the reserve requirements.

In April 1951 two new insurance programs were authorized, and further issue of insurance under the prior USGLI and NSLI programs was terminated. Veterans special life insurance (VSLI) initially provided only 5-year term, indefinitely renewable. In 1958 legislation was enacted providing for an exchange to a lower-priced term, non-renewable after age 50, and for conversion to permanent plans. Service-disabled veterans insurance (SDVI), providing both term and permanent plans, became available only to those with service-connected disabilities. Both of these programs are nonparticipating. Effective January 1, 1957, further issue of insurance in the veterans special life insurance program was terminated. Insurance in the service-disabled veterans insurance program continues to be available to veterans separated from service after April 25, 1951, who apply within 1 year of granting of service connection for a disability.

The Servicemen's Indemnity Act of 1951 provided automatic insurance, without cost, to servicemen in the Korean conflict. Coverage was for \$10,000, less the aggregate of NSLI and/or USGLI, during their period of active duty and for 120 days after discharge. Benefits were payable to eligible beneficiaries for 120 months after the date of death of the servicemen. This act was repealed effective January 1, 1957.

Public Law 88-664, enacted October 13, 1964, provided for a limited reopening of the NSLI program for a period of 1 year after May 1, 1965, to certain veterans with military service between October 7, 1940, and January 1, 1957, who have service-connected disabilities or non-service-connected disabilities which are so severe that they cannot obtain insurance from private companies. Insurance under this reopening provision is issued under three nonparticipating programs:

Veterans service-disabled standard insurance: Issued to veterans with a service-connected disability who, notwithstanding their disability, qualify for insurance at standard premium rates.

Veterans service-disabled rated insurance: Issued to veterans who do not qualify for insurance at standard premium rates solely because of their service disability. The premium rates for this group are increased, based on the severity of their disability and the effect which their disability will have on their longevity.

Veterans non-service-disabled insurance: Issued to veterans who cannot buy commercial life insurance at the highest rates because of a non-service-connected disability.



## 4. Level of operations. (See table 1.)

Program: Insurance and indemnity programs.

Department or agency and office or bureau: Veterans' Administration; Department of Veterans' Benefits.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966	Fiscal year 1967
Magnitude of program: Policies in force (average).....	5,912,000	5,857,600	5,726,000	5,623,000
Applicants or participants:				
Individuals:				
Policyholders.....	5,321,000	5,272,000	5,153,400	5,060,700
Policyholders and beneficiaries receiving monthly benefits.....	557,000	497,000	475,000	460,000
Federal finances:				
Unobligated appropriations available:				
Veterans' insurance and indemnities.....	\$7,626,282	\$688,295	\$453,295	-----
USGLI fund.....	962,355,437	939,514,785	923,644,535	\$900,233,035
NSLI fund.....	5,472,061,283	5,582,446,654	5,789,891,211	5,858,195,811
VSTI fund.....	115,120,254	140,546,422	162,167,859	183,072,459
SDVI fund.....	163,619	820,331	1,150,889	1,114,143
Veterans' reopened insurance fund.....	-----	570,445	6,297,225	23,768,107
Total.....	6,557,326,875	6,664,586,932	6,883,605,014	6,966,383,555
Obligations incurred:				
Veterans' insurance and indemnities.....	27,091,788	22,248,474	17,785,000	12,623,295
USGLI fund.....	107,933,133	104,761,490	94,531,600	98,031,100
NSLI fund.....	729,448,321	699,255,889	617,946,672	764,478,000
VSTI fund.....	21,637,200	11,681,502	11,578,207	12,422,100
SDVI fund.....	8,055,382	9,269,265	10,604,628	11,897,401
Veterans' reopened insurance fund.....	-----	2,977,247	6,030,163	4,897,163
Total.....	893,565,824	850,193,867	758,476,270	904,349,059
Allotments or commitments made.....	-----	-----	-----	-----
Matching or additional expenditures for the program.....	-----	-----	-----	-----
Number of Federal Government employees administering, operating, or supervising the activity (man-years).....	1,503	1,290	1,467	1,120
Non-Federal personnel employed in the program.....	-----	-----	-----	-----
Other measures of level or magnitude of performance:				
Significant workload items: <sup>1</sup>				
Reinstatements.....	140,232	139,100	141,000	140,000
Maintenance, active accounts.....	5,912,726	5,857,600	5,726,000	5,623,000
Disability insurance claims actions.....	114,741	131,400	141,800	144,500
Underwriting actions.....	487,363	597,400	801,800	494,500
Loans and surrenders.....	125,638	118,200	122,200	123,600
Adjustments.....	885,668	876,300	835,000	813,000
Correspondence.....	1,274,661	1,346,700	1,278,600	1,193,600
Premium information requests.....	131,183	129,200	148,000	159,300
Returned mail.....	161,102	216,700	191,600	184,300
Refunds.....	74,753	81,300	73,000	72,900

<sup>1</sup> Man-years required in support of insurance function (finance, personnel, administrative, data management, etc.) not included.

<sup>2</sup> The above workload items represent recurring workload and exclude the work generated by the 1-year reopening period of the national service life insurance provided by Public Law 88-664.

## ABBREVIATIONS:

USGLI: U.S. Government life insurance.

NSLI: National service life insurance.

VSTI: Veterans special term insurance.

SDVI: Service-disabled veterans insurance.

### 5. *Estimated magnitude of program in 1970*

Estimates of significant work-performance data for the program in 1970 include:

Reinstatements.....	140, 800
Maintenance—active accounts.....	5, 509, 000
Disability insurance claims actions.....	144, 500
Underwriting actions.....	409, 000
Loans and surrenders.....	121, 050
Adjustments.....	789, 800
Correspondence.....	1, 135, 100
Premium information requests.....	192, 750
Returned mail.....	152, 200
Refunds.....	62, 800

### 6. *Prospective changes in program orientation*

(a) *Pending legislative proposals.*—There are presently no major legislative proposals pending which would significantly affect this program. There may be some minor proposals in the near future to provide our insureds with better service within the present contractual relationship. An example of this might be a change permitting term policyholders to reinstate lapsed insurance at any time within 5 years after date of lapse instead of the present requirement that this be done prior to the expiration date of the policy.

(b) *Proposed administrative and organizational changes.*—There are no administrative or organizational changes pending at this time.

(c) *Probable changes in the conditions under which the program will function in 1970.*—The servicemen's indemnity program will be terminated before 1970. The program provided a 10-year annuity to beneficiaries of certain servicemen dying before January 1, 1957. The last payments will be made in December 1966, and except for a scattering of retroactive claims thereafter, the program will terminate at that time.

On the other hand, Public Law 89-214, recently enacted, provides for payment of a death gratuity to beneficiaries of certain servicemen who died between January 1, 1957, and September 29, 1965. Approximately 40,000 servicemen died during that period. This legislation also provided a maximum of \$10,000 servicemen's group life insurance for members of the uniformed services while on active duty and 120 days thereafter. The Veterans' Administration will administer this insurance purchased from one or more commercial life insurance companies.

USGLI and NSLI policies in force will decline from 5,857,600 in fiscal year 1965 to about 5,590,000 in fiscal year 1970. On the other hand, payments to insureds and beneficiaries will increase from approximately \$779 million in fiscal year 1965 to about \$833 million in fiscal year 1970. The number of policyholders and beneficiaries receiving monthly payments will, however, decrease from 497,000 to 419,000 during the same 5-year period.

### 7. *Coordination and cooperation*

Most of the basic functions of servicing insurance policyholders are performed by the Insurance Service. Certain support and related functions, however, are performed by other elements within the Department of Veterans Benefits, other departments within the agency, and by other Federal Government agencies.

(a) Within the Department of Veterans Benefits, the Compensation, Pension, and Education Service is responsible for the adjudication of insurance death claims. The Contact and Administrative Service provides information, advice and assistance to veterans and their beneficiaries in insurance matters. The Controller and Personnel Service provide financial and personnel assistance respectively. The Chief Benefits Director is responsible for coordination among the Services. This is achieved by means of staff meetings, and briefings, issuance of directives such as operating manuals, memoranda, et cetera.

(b) Within the Veterans' Administration, the Department of Medicine and Surgery provides veterans with physical examinations for insurance purposes and the Department of Data Management conducts insurance ADP operations. Formal and informal coordination and cooperation takes place at all operating levels among the departments involved.

(c) Other Federal Government agencies, such as the Bureau of the Budget, Civil Service Commission, and General Services Administration provide finance, personnel, and space services. The Treasury Department prepares checks for insurance payments from magnetic tape furnished by the Veterans' Administration.

(d) The insurance and indemnity programs have no significant coordination with State governments or their instrumentalities, except perhaps with the various State departments of veterans affairs, where such exist. In the State of California, several departments deduct insurance premiums from their employees' pay and transmit such premium payments by voucher to the VA.

(e) The city of Los Angeles, like the State of California, has entered into agreement with VA to deduct insurance premiums from employees of several of their departments. This is the only significant contact Insurance Service has with local governments.

(f) The Government of the Philippines has also entered into an agreement with VA to deduct insurance premiums from active duty veterans who were under U.S. jurisdiction during World War II. These premiums are sent to the United States through the Manila regional office.

(g) VA maintains liaison with the various service organizations, such as the American Legion, Veterans of Foreign Wars, and so forth. These organizations invite insurance personnel to address their conventions, and seminars are conducted on a regular basis to keep such organizations abreast of legislative and procedural changes.

(h) Public Law 89-214 established a group insurance program for servicemen on active duty. By law, VA is responsible for liaison with the insurance companies selected to insure these servicemen, to establish premium rates, control premium funds, and so forth. VA also has a number of agreements with various business enterprises throughout the country whereby these establishments deduct premiums from their employees' pay and pay such premiums to the VA.

### 8. *Laws and regulations*

Title 38, United States Code, effective January 1, 1959, is a codification of all laws in the field of veterans affairs. The sections dealing with Government life insurance are shown below:

National service life insurance: Sections 701 through 725.

U.S. Government life insurance: Sections 740 through 760.

General: Sections 781 through 788.

More recent laws affecting the Government life insurance program are: Public Laws 88-355 and 88-364 effective January 1, 1965. Public Law 88-664 effective May 1, 1965, and Public Law 89-214 effective September 29, 1965.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

### 9. *Economic effects*

(a) *Effects on personal incomes of persons served or involved and on the distribution of personal income.*—Substantial payments are made to Government life insurance policyholders and their beneficiaries. Living policyholders receive payments in the form of policy dividends, matured endowments, cash surrenders, and disability benefits. Beneficiaries of deceased policyholders receive the proceeds of the policy either in a lump-sum payment or in installments. These payments, spread throughout each of the States, have a significant impact on the economy.

During fiscal year 1965, living policyholders received \$222.7 million in dividend payments, \$36.1 million in disability benefits, \$30.8 million in surrender value, and \$13.8 million in matured endowments. About \$354 million was paid to beneficiaries of deceased policyholders. From the inception of the insurance programs through fiscal year 1965, payments to living policyholders and to beneficiaries from the insurance funds have totaled about \$19.4 billion.

Another source of personal income to holders of permanent plan Government life insurance derives from the policy loan provisions. The maximum loan value, amounting to 94 percent of the policy reserve, is available to the policyholder at any time after the end of the first policy year. The loan values increase with the age of the policies. Thus, there has been a steady increase in the value of outstanding loans from \$244.9 million in 1955 to \$646.8 million at the end of fiscal year 1965.

The number of policyholders and beneficiaries receiving monthly payments was about 497,000 in fiscal year 1965. The total amount of insurance and indemnity payments in fiscal year 1965 was approximately \$779 million. As policyholders advance in age, the increase in their death rate will cause the number of beneficiaries to increase starting in 1975 and to increase yearly thereafter until after the year 2000. Policyholders receiving disability benefits will also increase during this period. Thus the number receiving monthly payments will go to about 653,000 and the amount of payments will go to approximately \$1,609 million by the year 2000.

The economic effects of the program with respect to subparagraphs (b), (c), (d), (e), (g), and (h) cannot be identified.

(f) *Pertinent geographic differentials.*—(See table 2.)TABLE 2.—*Insurance programs by State of residence (calendar year 1964)*

(In thousands throughout)

Place of residence	Number of insureds	Insurance payments made	
		Dividends	All other
Alabama.....	55	\$2,362	\$5,820
Alaska.....	6	231	568
Arizona.....	45	1,890	4,657
Arkansas.....	31	1,303	3,212
California.....	606	25,375	62,531
Colorado.....	67	2,853	7,030
Connecticut.....	105	4,482	11,046
Delaware.....	16	670	1,651
District of Columbia.....	29	1,236	3,047
Florida.....	149	6,355	15,661
Georgia.....	82	3,479	8,573
Hawaii.....	22	941	2,318
Idaho.....	17	706	1,739
Illinois.....	334	13,910	34,279
Indiana.....	103	4,383	10,800
Iowa.....	77	3,238	7,980
Kansas.....	59	2,517	6,203
Kentucky.....	49	2,093	5,157
Louisiana.....	57	2,417	5,957
Maine.....	23	977	2,408
Maryland.....	102	4,365	10,756
Massachusetts.....	198	8,341	20,555
Michigan.....	198	8,310	20,478
Minnesota.....	128	5,421	13,358
Mississippi.....	32	1,384	3,411
Missouri.....	109	4,660	11,483
Montana.....	23	985	2,426
Nebraska.....	43	1,843	4,543
Nevada.....	11	480	1,183
New Hampshire.....	18	757	1,866
New Jersey.....	242	10,197	25,130
New Mexico.....	25	1,043	2,570
New York.....	622	26,326	64,874
North Carolina.....	71	3,055	7,528
North Dakota.....	19	832	2,050
Ohio.....	270	11,573	28,520
Oklahoma.....	51	2,204	5,431
Oregon.....	57	2,434	5,999
Pennsylvania.....	346	14,687	36,194
Rhode Island.....	27	1,131	2,787
South Carolina.....	34	1,451	3,576
South Dakota.....	19	813	2,002
Tennessee.....	69	2,878	7,091
Texas.....	219	9,323	22,975
Utah.....	28	1,194	2,943
Vermont.....	9	390	962
Virginia.....	107	4,536	11,179
Washington.....	95	4,011	9,884
West Virginia.....	34	1,467	3,614
Wisconsin.....	129	5,444	13,417
Wyoming.....	10	429	1,058
Outside United States.....	21	885	2,180
Total.....	5,298	224,267	552,660

10. *Economic classification of program expenditures.* (See table 3.)

Program: Insurance and indemnity program.

Department or agency and office or bureau: Veterans' Administration; Department of Veterans Benefits.

TABLE 3.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government:	
Purchases of goods and services:	
Wages and salaries.....	\$16, 930
Other.....	2, 383
Transfer payments to individuals:	
Veterans insurances and indemnities <sup>1</sup> .....	12, 940
USGLI.....	96, 344
NSLI.....	600, 821
VSTI.....	11, 682
SDVI.....	9, 269
Veterans reopened insurance fund.....	2, 977
Total, transfer payments.....	<u>734, 033</u>
Loans:	
USGLI.....	8, 418
NSLI.....	98, 434
VSTI.....	2, 162
SDVI.....	1, 245
Total, loans.....	<u>110, 259</u>
Total Federal expenditures <sup>2</sup> .....	<u>863, 605</u>

<sup>1</sup> Excludes intragovernmental transactions.<sup>2</sup> Refers to obligations; net expenditures are lower because of offsetting receipts.

Abbreviations: See note to table 1, above.

## LOAN AND LOAN GUARANTEE PROGRAMS

## PART I. DESCRIPTION OF THE PROGRAM

1. *Objectives*

The objective of the programs is to facilitate the extension of credit at reasonable terms to veterans of World War II and the Korean conflict for the purchase or construction of homes, and for farming and business ventures.

2. *Operation*

The loan guarantee program operates by substituting a guarantee of the Federal Government for the investment protection afforded, under conventional mortgage terms, by substantial downpayment requirements and relatively shorter terms of loan. Thus, eligible veterans are enabled to finance home purchases and farming or business ventures with capital provided by private lenders even though they may not have the resources to qualify for conventional loans.

In the event of a default, the Veterans' Administration, through its contract of guarantee, stands ready to make good any losses sustained by the holder of the loan up to the amount of guarantee, and in most cases, to accept title to the security for ultimate disposition.

In rural areas, small cities and towns, where private credit for VA-guaranteed loans is found to be not generally available, the Veterans' Administration makes loans directly to veterans from funds advanced by the Secretary of the Treasury.

The Administrator of Veterans' Affairs has broad power to pay or compromise any claim and to take title, manage, and dispose of any properties as acquired.

### 3. History

(a) Legislative highpoints: The VA loan guarantee program was instituted with the enactment of title III of the Servicemens' Readjustment Act of 1944, approved on June 22, 1944.

(1) Salient features of the legislation as originally enacted were as follows:

(a) Any person who served in the active military or naval service of the United States on or after September 16, 1940, and before the termination of the then existing war, was eligible for loan benefits upon discharge or release therefrom under conditions other than dishonorable, after service of 90 days or more, or because of disability incurred in service in line of duty.

(b) Application for guarantee or insurance of a loan might be made within 2 years after separation from the service or 2 years after termination of the then existing war, but in no event, more than 5 years after termination of the war.

(c) Loans were limited to a maximum maturity of 20 years.

(d) The amount of guarantee was limited to 50 percent of the loan amount but not to exceed \$2,000.

(e) The purpose of the loan might be for the purchase, construction, improvement, or repair of residential property which the veteran intended to occupy as his home; for the purchase for use in a farming operation, of land, buildings, livestock equipment, machinery, or implements; or for the purchase of any business, land, building, supplies, equipment, machinery, or tools to be used in pursuing a gainful occupation other than farming.

(f) A gratuity payment of 4 percent of the amount of the guaranteed portion of the loan, up to \$160, was authorized to be paid veteran borrowers from appropriated funds.

(g) It was required that terms of repayment must bear a proper relation to the veteran's present and anticipated income.

(2) Major legislative changes:

(a) Public Law 268, approved in December 1945, extended the time afforded veterans for obtaining loan benefits, increased the maximum amount of guarantee on real estate loans to \$4,000, raised maximum maturities on nonfarm real estate loans to 25 years and on farm real estate loans to 40 years, provided for automatic guarantee of loans made by lenders subject to examination and supervision by an agency of the Federal or State government, and introduced a loan insurance plan which might be employed as an alternative to the guarantee plan by State or federally supervised lenders.

(b) The Housing Act of 1950 authorized the making of loans from appropriated funds directly to veterans residing in rural areas, small cities, and towns where private credit is found to be generally unavailable for the making of guaranteed or insured loans. This act also increased the maximum amount of guarantee for home loans to 60 percent

of the loan amount, but not to exceed \$7,500, and extended the maximum permissible maturity for home loans to 30 years.

(c) Public Law 550, 82d Congress, approved July 16, 1952, extended VA loan benefits to veterans who served in the Korean conflict.

(d) Public Law 149, 83d Congress, approved July 21, 1953, eliminated the 4-percent gratuity payment to veteran borrowers.

(e) The period following termination of the war, during which eligible veterans of World War II may use loan benefits, was increased from 10 to 11 years by Public Law 898, 82d Congress, 2d session, approved August 1, 1956; and increased further from 11 to 13 years by Public Law 85-364, 85th Congress, 2d session, approved April 1, 1958.

(f) A phase-out formula for loan benefits was added by Public Law 87-84, 87th Congress, approved July 6, 1961. Under the formula, a veteran's entitlement to loan benefits expires 10 years from discharge or release from the last period of active duty of the veteran, any part of which occurred during a wartime period, plus an additional 1 year for each 3 months of active duty performed during wartime service. No loan entitlement benefit is available to veterans of World War II after July 25, 1967, and no loan entitlement benefit is available to veterans of the Korean conflict after January 31, 1975.

(b) Volume of activity through fiscal year 1965 is indicated below:

*Loans to veterans*

Fiscal years	Loans guaranteed or insured		Direct loans made	
	Number	Amount (thousands)	Number	Amount (thousands)
1945 to 1949.....	1,622,873	\$8,773,513	0	0
1950 to 1954.....	2,007,013	15,155,955	49,311	\$345,908
1955 to 1959.....	1,994,300	22,832,612	88,058	714,974
1960 to 1964.....	840,799	11,846,733	107,396	1,125,714
1965.....	170,803	2,704,263	11,602	127,714
Total.....	6,635,788	61,313,076	256,367	2,314,310

(c) Other pertinent data: The vast majority of loans made have been for homes. More than 6.3 million of the loans guaranteed or insured and all of the direct loans have been for purchase or construction of homes.

Through fiscal year 1965, 238,752 business loans in a principal amount of \$647,937,560 and 71,654 farm loans in a principal amount of \$285,038,540 had been guaranteed or insured. More than 2.9 million of the loans guaranteed or insured and 38,000 of the direct loans made had been paid in full. Claims had been paid on 182,606 guaranteed or insured loans and 5,544 direct loans had been foreclosed or conveyed because of default by borrowers.

*4. Level of operations.* (See table 1.)

Program: Loan and loan guarantee programs.

Department or agency, and office or bureau: Veterans' Administration, Department of Veterans Benefits.



TABLE 1.—Level of operations or performance, fiscal years 1964-67

Loans to veterans and unit	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966	Fiscal year 1967
(a) Total loans made:				
Guaranteed or insured (thousands).....	\$2,815,548	\$2,704,263	\$2,672,000	\$2,496,000
Direct loans (thousands).....	\$196,869	\$127,714	\$96,300	\$49,725
(b) Number of veterans:				
Guaranteed or insured (each).....	186,403	170,803	167,000	156,000
Direct loans (each).....	17,996	11,602	6,000	4,500
(c) Federal finances: <sup>1</sup>				
Appropriated funds available (thousands).....	\$1,222,827	\$1,238,475	\$2,010,618	\$2,204,110
Obligations incurred (thousands).....	\$581,441	\$515,937	\$475,510	\$432,051
Commitments issued (thousands).....	\$581,441	\$515,937	\$475,510	\$432,051
(d) Matching additional expenditures for programs loans made by private lenders (guaranteed or insured loans) (thousands).....	\$2,815,548	\$2,704,263	\$2,672,000	\$2,496,000
(e) Number of Federal Government employees administering, operating, or supervising programs:				
Total (each).....	2,826	2,754	2,672	2,574
In field stations (each).....	2,752	2,678	2,598	2,502
(f) Non-Federal personnel employed in program (each).....	None	None	None	None
(g) Other measures of magnitude of program: <sup>2</sup>				
Guaranteed loans outstanding (end of year):				
Estimated number (thousands).....	3,685	3,630	3,516	3,390
Estimated amount (millions).....	\$30,967	\$30,951	\$30,097	\$28,924
Estimated contingent liability (millions).....	\$16,720	\$16,594	\$16,151	\$15,636
Direct loans outstanding:				
Number (thousands).....	219	224	223	216
Amount (millions).....	\$1,694	\$1,741	\$1,725	\$1,655
Guarantee or insurance claims settled:				
Number (each).....	25,840	25,801	26,485	25,390
Amount paid:				
For net claim (thousands).....	\$24,502	\$26,751	\$27,500	\$25,760
For properties and loans (thousands).....	\$278,157	\$280,870	\$298,400	\$286,950
Property management:				
Number of properties acquired (each).....	27,087	30,021	29,970	29,070
Number of properties sold (each).....	30,502	32,712	32,400	32,375
Amount of property sales (thousands).....	\$344,848	\$387,481	\$382,340	\$384,797
Amount of credit extended (thousands).....	\$330,473	\$372,670	\$366,980	\$369,452
Total Federal financing <sup>1</sup> for guaranteed or insured loans and direct loans:				
Authorization to spend from public debt receipts, start of year (thousands).....	\$280,512	\$249,372	\$265,848	\$205,303
Unobligated fund balances, start of year (thousands).....	395,934	360,874	473,166	1,269,260
Fund receipts for the year (thousands).....	546,381	628,229	1,271,604	729,547
Total available (thousands).....	1,222,827	1,238,475	2,010,618	2,204,110
Obligations incurred (thousands).....	581,441	515,937	475,510	432,051
For direct loans only:				
Authorization to spend from public debt receipts (thousands).....	280,512	249,372	265,848	205,303
Unobligated fund balances, start of year (thousands).....	314,983	343,386	283,587	937,271
Fund receipts for the year (thousands).....	281,531	292,212	750,609	283,822
Less transfer to loan guarantee revolving fund (thousands).....	-27,000	-200,000		
Total available (thousands).....	850,026	684,970	1,300,044	1,426,396
Obligations incurred (thousands).....	228,128	152,011	96,925	72,101
For guaranteed or insured loans only:				
Unobligated fund balance, start of year (thousands).....	80,951	17,488	189,579	331,989
Fund receipts for the year (thousands).....	264,850	336,017	520,995	445,725
Transfer from direct loan revolving fund (thousands).....	27,000	200,000		
Total available (thousands).....	372,801	553,505	710,574	777,714
Obligations incurred (thousands).....	355,313	363,926	378,585	359,950

<sup>1</sup> Federal financing: Data shown represent fund availability in the loan guarantee revolving fund and the direct loans to veterans and Reserves revolving fund, plus undrawn Treasury advances for direct loans to veterans authorized by Public Law 87-84, 87th Cong., approved July 6, 1961.

<sup>2</sup> Measures shown under this item (g) represent activity which follows from the guarantee or insurance of loans or the making of direct loans in prior years.

Guaranteed or insured loans outstanding include loans originated by VA and sold with a repurchase agreement under provisions of VA Regulation 4600.

Direct loans outstanding include loans arising through extension of credit to purchasers of VA owned properties sold on terms, as well as loans disbursed from the direct loans to veterans and reserves revolving fund. Balances shown include amounts set aside in support of mortgage participation certificates sold to private investors through the Government mortgage liquidation trust.

Claims settled include claims arising under the repurchase agreement of VA Regulation 4600 as well as claims under the regular guarantee or insurance provisions.

5. *Estimated magnitude of program in 1970*

Guaranteed or insured loans in the amount of \$1,782 million to 108,000 veterans.

Direct loans in the amount of \$23,800,000 to 2,000 veterans.

6. *Prospective changes in program orientation*

(a) *Pending legislative proposals.*—S. 9 passed by the Senate and referred to the Committee on Veterans' Affairs in the House of Representatives would extend veterans' home and farm loan benefits to persons who served in the Armed Forces after the end of the Korean conflict and before July 1, 1967. The effects of S. 9 have not been reflected in fiscal year 1966 or in fiscal year 1970 estimates previously given. If the legislation is enacted, the volume of loans will be higher than shown.

(b) *Proposed administrative and organizational changes.*—As program activity declines, organizational changes, including changes in the number of field offices, will be made to keep the administrative structure consistent with the workload.

(c) *Probable changes in the conditions under which the program will function in 1970.*—By 1970, the number of eligible veterans will have shrunk to only those Korean veterans with the longest periods of active wartime service. Housing credit needs of most eligible veterans probably will have been supplied through the VA program or the FHA and conventional credit terms. Population growth and attendant demand for housing should create a basic environment conducive to the successful liquidation of outstanding VA loans.

7. *Coordination and cooperation*

(a) *Within your bureau, division, or office.*—See (b), immediately below.

(b) *With other units of your department or agency.*—The collection and liquidation of loans, particularly in respect to the extension of forbearance and the granting of indulgence to delinquent or defaulting obligors, and the management and sale of properties acquired in consequence of defaulted loans, necessitate agencywide coordination of policies and operations.

(c) *With other Federal Government departments or agencies.*—

(1) A high degree of coordination exists between VA and FHA: VA will accept FHA compliance inspections made during the course of construction. FHA also accepts VA compliance inspections.

The minimum property standards, material standards, and product approval standards of the two agencies are essentially the same.

Local FHA and VA offices exchange construction cost information.

Pursuant to the authority contained in section 1804(b), chapter 37, title 38, United States Code, VA will refuse to appraise—

any dwelling or housing project owned, sponsored, or to be constructed by any person refused the benefits of participation under the National Housing Act pursuant to a determination of the Federal Housing Commissioner under section 512 of that act.

Likewise, FHA will refuse participation in its program to any person suspended by VA under the provision of the above cited subsection because he was—

identified with housing previously sold to veterans \* \* \* as to which there has been a failure or indicated inability to discharge contractual liabilities to veterans

or as to which it is ascertained that the type of contract of sale or the methods or practices pursued in relation to the marketing of such properties were unfair or unduly prejudicial to veterans.

Both agencies coordinate policies for the sale of acquired properties.

(2) The VA coordinates its prices of loans sold to private investors with the Federal National Mortgage Association and has joined with FNMA in the marketing of mortgage participation certificates under a mortgage pooling arrangement which was authorized by the Housing Act of 1964, Public Law 88-560, approved September 2, 1964.

(3) VA and FHA work closely with the Public Health Service in establishing standards on sanitary facilities, and with the Bureau of Standards on standards and material testing.

(d) *With State governments and their instrumentalities.*—State governments and their instrumentalities provide reviews and certifications of technical development facts in the cases of housing developments in outlying areas not covered by public sewer and water systems.

(e) *With local governments or communities.*—VA requires conformance with all local ordinances and building codes.

(f) *With foreign governments or international organizations.*—None. The security for guaranteed or direct loans must be situated in the United States or its territories.

(g) *With nonprofit organizations or institutions.*—Policies and operations are coordinated with trade associations such as the National Association of Homebuilders, the Mortgage Bankers Association, the United States Savings & Loan League, and the National Association of Real Estate Boards, with a view toward providing more effective service to veterans.

(h) *With business enterprises.*—

(1) The program utilizes the services of qualified appraisers, construction inspectors, real estate management and sales brokers as independent contractors in carrying out the functions of the program. The program also engages the services of private attorneys on a fee basis, principally to close loans.

(2) At the local level, VA field stations work with builders and lenders to assist them in planning projects and developments which will meet VA standards, in developing coordinated loan processing procedures and in working out forbearance arrangement for veterans who are in temporary danger of losing their homes because of economic misfortune or from the effects of a natural disaster.

(3) At the staff level, VA works out arrangements with builders, materials manufacturers, and lenders with respect to adoption of novel or new construction techniques, financing plans and the like.

(i) *With others.*—Policies and operations are coordinated with the President's Committee on Equal Opportunity in Housing and the Committee on Equal Opportunity in Employment.

### 8. Laws and regulations

(1) VA Pamphlet 26-7, "Lenders Handbook": Part II of this pamphlet contains VA regulations governing the guarantee or insurance of loans and interim amendments thereto from March 1, 1946, to the present. Part III contains chapter 37, title 38, United States Code and title III of the Servicemen's Readjustment Act of 1944, with interim amendments to each.

(2) Regulations governing direct loans to veterans are numbered in the 4500 series.

## PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

(a) *Effects on personal incomes of persons served.*—None.

(b) *Effects on the placement or productivity of workers, or both, and on their earnings.*—None.

(c) *Effects on business or industrial organization and management; the stimulation of new business enterprises or expansion of existing ones; business location; and effect on competition, if any.*—Mortgage oriented financial institutions have grown at a faster rate than otherwise would have been possible. The virtually riskless investment opportunity has attracted capital funds to the mortgage market, and this in turn has stimulated the rate of growth of the economy.

(d) *Effects on the stability, level, volume, or other aspects of employment, wages, costs, productions, sales, prices, or other phases of economic activity.*—

(1) The programs stimulate construction of homes and the exchange of real estate, by making financing available to a greater number of purchasers than would otherwise qualify;

(2) The programs cushion the shock of economic dislocations by: first, affording direct protection to financial institutions through the guaranty; second, stabilizing the real estate market through the orderly marketing of foreclosed properties. VA property management and repair programs minimize vandalism, deterioration, and blight in communities where the VA has acquired properties;

(3) Afford financial institutions low risk investment opportunities, and facilitate secondary mortgage market operations through creation of a security instrument which has a uniform marketable quality, thus promoting flow of mortgage capital into capital deficient areas.

(e) *Any benefits (not included above) resulting from the particular governmental program. Specify the groups or economic segments primarily affected.*—All homes constructed for sale with VA financing and all properties sold by VA from its inventory of acquired properties are subject to the provisions of Executive Order 11063 which requires that sales be made to all races without discrimination. Since the promulgation of Executive Order 11063 in November 1962, the Veterans' Administration has issued certificates of reasonable value for more than 305,000 units of new residential construction and has placed more than 95,000 of its acquired properties on the market, all of which are offered for sale without discrimination with respect to race.

(f) *Pertinent geographic differentials, such as variations in the regional, state, or metropolitan area scale of operations or economic impacts.*—With respect to the guaranty or insurance of loans, the effects of the program have varied geographically according to the availability of private capital and the needs of the area. Generally speaking, the program has been most active in metropolitan areas which have experienced the most rapid rate of growth since the end of World War II. The level of activity has been affected temporarily, from time to time, by imbalances in availability of capital, particularly in areas dependent upon absentee capital to finance development, e.g., the Southwest and the west coast.

(g) *The measurable contribution of the program to either the magnitude or the rate of growth of the gross national product, if such a contribution can be identified.*—The table below shows the relationship between

new home sales financed with VA guaranteed or direct primary home loans and the nonfarm residential construction component of gross national product for calendar years 1955 through 1964 in billions of dollars.

TABLE 2.—*New homes financed by VA loans and nonfarm residential construction*

Year	Residential nonfarm new construction component of GNP <sup>1</sup>	Purchase price of new homes financed by VA loans <sup>2</sup>	VA volume as percent of component
1955.....	18.7	4.8	25.6
1956.....	17.7	4.2	23.7
1957.....	17.0	3.1	18.2
1958.....	18.0	1.5	8.3
1959.....	22.3	2.2	9.9
1960.....	21.1	1.7	8.1
1961.....	21.1	1.3	6.2
1962.....	23.6	1.5	6.4
1963.....	25.2	1.3	5.2
1964.....	26.0	1.1	4.2

<sup>1</sup> Department of Commerce estimates as reported in the Federal Reserve Bulletin.

<sup>2</sup> Represents purchase price of all new or proposed homes financed with a VA guaranteed or insured loan, plus new or proposed homes classified as nonfarm by VA, which were financed with a direct loan. Data for guaranteed or insured loans, which constitute the bulk of the transactions, contain a small but unknown proportion of loans for farm homes.

No attempt has been made to relate value of loans made for other purposes, i.e., purchase of existing homes, business, and farm loans, to gross national product.

In recent years such loans have been in the majority in the VA loan program as may be seen from the table below which compares the purchase price of home loans guaranteed for new and existing homes.

TABLE 3.—*Purchase price of homes financed with VA guaranteed primary home loans*  
[In billions of dollars]

Year	New homes	Existing homes
1955.....	4.8	2.9
1956.....	4.2	2.3
1957.....	3.2	1.0
1958.....	1.5	.6
1959.....	2.2	.8
1960.....	1.7	.5
1961.....	1.3	.7
1962.....	1.5	1.4
1963.....	1.3	1.7
1964.....	1.1	1.8

#### 10. *Economic classification of program expenditures.* (See table 4.)

Program: Loan and loan guarantee programs.

Department or agency, and office or bureau: Veterans' Administration; Department of Veterans Benefits.

TABLE 4.—*Economic classification of program expenditures for fiscal year 1965*

[In millions of dollars]	
Federal Government:	
Purchases of goods and services:	
Employee salaries and benefits.....	22
Other (acquisitions of properties and loans, operating, and property expenses and improvements).....	340
Other categories:	
Loans to veterans.....	128
Claims paid holders of defaulted loans (net) <sup>1</sup> .....	27
Interest payments to Treasury.....	41
Total Federal expenditures <sup>2</sup> .....	558
Non-Federal expenditures financed by: Financial institutions.....	2,704
Total expenditures for program.....	3,262

<sup>1</sup> Claims paid holders of defaulted loans (net) represents the amount paid out to satisfy the VA contract of guarantee or insurance which is over and above the value of properties conveyed to the VA as part of the transactions. Value of properties conveyed (\$256,000,000) has been classified as a purchase of goods and services.

<sup>2</sup> Federal Government expenditures include general operating (administrative) expenditures (\$23,000,000 of which \$22,000,000 was for employee salaries and benefits), as well as expenditures made from VA's loan guarantee and direct loans to veterans' revolving funds. See also footnote to table, above.

NOTE.—These programs are operated as revolving funds. Federal expenditures shown here refer to gross expenditures. The national income accounts reflect the net expenditures and certain noncash transactions.

## SOLDIERS' AND SAILORS' CIVIL RELIEF ACT OF 1940, AS AMENDED

### PART I. DESCRIPTION OF THE PROGRAM

#### 1. Objectives

Generally this act "is to provide for, strengthen, and expedite the national defense under the emergent conditions which are threatening the peace and security of the United States and to enable the United States the more successfully to fulfill the requirements of the national defense" by making provision "to suspend enforcement of civil liabilities, in certain cases, of persons in the military service of the United States in order to enable such persons to devote their entire energy to the defense needs of the Nation."

Specifically, the Veterans' Administration administers only "Article IV—Insurance" of the act. This article authorizes the Veterans' Administration to protect the life insurance on qualified service people by guaranteeing the insurer the payment of any unpaid premiums while the insured is in service and for 2 years thereafter.

#### 2. Operation

A person in service files an application with the Veterans' Administration and the insurance company to have his commercial life insurance protected under the act. The insurance company in turn files with the Veterans' Administration a report which describes the policy and gives the current status. The Veterans' Administration determines from the application and the report from the company whether the insurance is eligible for protection. If eligible, the application is approved and the insured and the insurer are so notified; if ineligible, the application is disapproved and the insured and the insurer are notified and the reason for disapproval is given. Once the application is approved the insurer cannot terminate the policy for nonpayment of premiums or place it on extended insurance. Any premiums guaranteed under the act that are not paid become a loan against the policy.

Upon discharge from service, the insured has 2 more years of protection, during which time he should arrange with the insurer to pay off any premium indebtedness.

At the end of the 2-year period the protection of the act ceases and the insurer either releases the Veterans' Administration from all liability or files claim for payment of all unpaid guaranteed premiums with interest. Should a claim be presented the policy must be terminated and any values inherent in the policy used to reduce the claim against the Veterans' Administration. Any moneys paid by the Veterans' Administration to the insurers for policies approved for protection after October 6, 1942, become a debt owed by the insureds to the United States and action is taken to collect. The cost of any claim paid on policies approved for protection prior to October 6, 1942, is borne by the United States and is therefore not a debt owed by the insureds.

### 3. History

The Soldiers' and Sailors' Civil Relief Act of 1940 was approved October 17, 1940. It has since been amended several times. The principal amendments pertaining to article IV were approved on October 6, 1942, June 24, 1948, and July 11, 1956.

The peak of this program was, of course, reached during the period of World War II when at one time over 71,000 policies for \$181 million of insurance involving 514 insurance companies were protected.

After World War II there was a sharp decline of activity in this program and it has remained quite static since then with the exception of periods of the Korean conflict and the emergency during 1961 and 1962 when there was a slight increase.

As of June 30, 1965, a total of 90,931 policies had been protected in this program. Of this number only 230 remained under protection.

### 4. Level of operations. (See table 1.)

Program: Soldiers' and Sailors' Civil Relief Act of 1940, as amended.  
Department or agency, and office or bureau: Veterans' Administration; Office of the Chief Actuary.

TABLE 1.—Level of operations or performance, fiscal years 1964-67

Measure and units	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966	Fiscal year 1967
(a) Magnitude of the program (number of policies under protection).....	474	230	190	185
(b) Applicants or participants:				
Individuals (number of persons insured under the protected policies).....	325	170	120	118
Companies (insurance).....	124	71	65	65
(c) Federal finances:				
Unobligated appropriations available.....	\$68,371	\$52,991	\$52,074	\$37,074
Obligations incurred.....	\$27,352	\$35,917	\$25,000	\$8,600
Allotments or commitments made.....	None	None	None	None
(d) Matching or additional expenditures for the program.....	None	None	None	None
(e) Number of Federal Government employees administering, operating, or supervising the activity:				
Supervising.....	1	1	1	1
Operating.....	1	1	1	1

5. *Estimated magnitude of program in 1970*

This program is apt to remain static in 1970 unless the international situation causes the reserve elements of the defense forces to be activated.

6. *Prospective changes in program orientation*

There are no prospective or probable changes in the program orientation or emphasis.

7. *Coordination and cooperation*

(a) None within this office.

(b) After this office prepares a voucher authorizing payment of a claim to an insurer it is forwarded to the Finance Office in the Veterans Benefits Office, Veterans' Administration. They in turn forward it to the Treasury Department for payment. On the cases where the claim is a debt owed by the insured to the United States, the Finance Office in the Veterans Benefits Office endeavors to recover the amount of claim from the insured.

(c) The General Accounting Office endeavors to recover the amount of claim when the Finance Office in the Veterans Benefits Office fails to do so.

(d) No activity with State governments or their instrumentalities.

(e) No activity with local governments or communities.

(f) No activity with foreign governments or international organizations.

(g) No activity with nonprofit organizations or institutions.

(h) Correspondence with the various insurance companies is needed.

(i) Application blanks are sent to organizations in the various services upon request.

8. *Laws and regulations*

The Soldiers' and Sailors' Civil Relief Act of 1940 was enacted under Public Law No. 861, 76th Congress and approved on October 17, 1940. Article IV of the act was amended on October 6, 1942, by Public Law No. 732, 77th Congress; on June 24, 1948, by Public Law No. 759, 80th Congress and on July 11, 1956, by Public Law No. 697, 84th Congress.

PART II. DATA BEARING ON ECONOMIC ASPECTS AND IMPACTS OF THE PROGRAM

9. *Economic effects*

(a) Most people suffer a reduction of income upon entering military service. This program permits the insured to stop premium payments on his commercial life insurance while in service and still have the insurance protection.

(e) If this program was not available some of the service people would drop their commercial insurance. In consequence, this would have an effect on the commercial insurers involved.

(b), (c), (d), (f), and (g) no effect.

(h) No additional comments.



10. *Economic classification of program expenditures.* (See table 2.)

Program: Soldiers' and Sailors' Civil Relief Act of 1940, as amended.

Department or agency, and office or bureau: Veterans' Administration; Office of the Chief Actuary.

TABLE 2.—*Economic classification of program expenditures for fiscal year 1965*

[In thousands of dollars]

Federal Government:

Purchases of goods and services: Wages and salaries.....	10
Payments to commercial insurers <sup>1</sup> .....	36
Total Federal expenditures.....	46

<sup>1</sup>This represents gross expenditures. Net expenditures are \$24,000.

