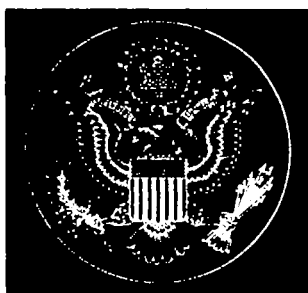




SPECIAL ANALYSES

BUDGET OF THE UNITED STATES

FISCAL YEAR 1969



SPECIAL ANALYSES

BUDGET OF THE UNITED STATES

FISCAL YEAR 1969

FOREWORD

This volume of *Special Analyses, Budget of the United States, 1969*, contains facts and figures on special aspects of the President's budgetary recommendations transmitted in *The Budget of the United States Government, 1969*. Thirteen special analyses are included, of which six (A through F) are reprints of analyses already printed in the budget document.

GENERAL NOTES

1. All years referred to are fiscal years, unless otherwise noted.
2. Detail in the tables, text, and charts of this volume may not add to the totals because of rounding.

TABLE OF CONTENTS

	Page
A. Comparison of new and old budget concepts.....	5
B. Federal transactions in the national income and product accounts.....	14
C. Public enterprises, trust funds, agency borrowing, and investment.....	24
D. Investment, operating, and other budget outlays.....	34
E. Federal credit programs.....	55
F. Civilian employment in the executive branch.....	70
G. Federal activities in public works.....	77
H. Federal education, training, and related programs.....	94
I. Federal health programs.....	115
J. Federal research, development, and related programs.....	135
K. Federal aid to State and local governments.....	155
L. Principal Federal statistical programs.....	175
M. Foreign currency availabilities and uses.....	183

SPECIAL ANALYSIS A

COMPARISON OF NEW AND OLD BUDGET CONCEPTS

This analysis provides a comparison of the budget totals under the new concept used in this budget with two older concepts used heretofore.¹ It also presents, as a transitional matter, a full table based upon the old concept of the "administrative budget." It continues the presentation of a gross table on the flow of funds, as a supplementary measure of Federal financial data.

THE NEW CONCEPT OF THE BUDGET

In this budget, a unified comprehensive summary budget statement is utilized to present the total financial plan for the Government, along the lines recommended by the President's Commission on Budget Concepts in its report of October 10, 1967. The basic principles are that the budget encompasses all programs of the Federal Government and its agencies, with the outlay and deficit divided between the expenditure account and loan account, and with proprietary receipts offset against outlays, regardless of the funding structure at any particular time. Payments between funds are eliminated from the totals, as is conventional in statements that consolidate data for a number of funds. These principles are explained on pages 48 to 50 of this document.

The financial plan also includes appropriate attention to congressional action on the budget, a comprehensive statement of the Federal debt with a distinction between that which is internal and that which is held by the public, and a redefinition of participation certificates in loans to be a part of the debt rather than a sale of assets.

Two of the fundamental recommendations of the Commission could not be adopted in this budget because, as the Commission report indicates, more time is required to provide an appropriate accounting basis for the data. These relate to the use of the accrual basis, instead of the cash basis, for the presentation of receipts and expenditures, and the identification of subsidies on loans (including the capitalization of the interest subsidies at the time the loan is disbursed).

OLD MEASURES OF THE BUDGET

The administrative budget.—While the budget documents have for many years covered all of the types of funds administered by the Government, certain funds were totaled separately from others to form the "administrative budget." This administrative budget covered receipts and expenditures of the Federal funds—that is, funds owned by the Government. It excluded funds held in trust by the Federal Government. In the case of public enterprise funds, intra-

¹Transactions in the Federal sector of the national income and product accounts, another measure of Government finances, are set forth and explained in Special Analysis B.

governmental funds, and reimbursements which by law are mingled with appropriations, the administrative budget offset receipts against expenditures; otherwise, it presented receipts and expenditures gross, except for refunds.

While the administrative budget was not coextensive with either the finances requiring annual action or the expenditures subject to legislative and administrative control, it was often the focus of attention as the principal financial plan for the Government. Actually, it always included a number of appropriations and funds in which money becomes available each year without new action by the executive or legislative branches, the most important being interest on the public debt. Similarly, it excluded a few items on which annual action is required, but which are in the nature of trust funds.

Consolidated cash statement.—The consolidated cash statement sought to reflect the transactions between the Government and the public. It was “consolidated” in the sense that it included both Federal funds and the trust funds. It was “cash” in the sense that its totals were basically on a checks-paid basis, as distinguished from the checks-issued basis used in the administrative budget.

Since the trust funds, particularly those derived from taxes and social insurance premiums, have become of greater importance, the consolidated cash statement took on a greater significance in the presentation of Federal finances, and in permitting analysis of the relationship between Federal finances and the remainder of the economy. This statement followed the same rules as the administrative budget with respect to grossing and netting; most trust funds were reported gross, but a few, designated as trust revolving funds, were included on the basis of the net excess of expenditures over receipts. The consolidated cash statement also included among Government-sponsored enterprises two privately owned groups—the Federal home loan banks and the Federal land banks—which at one time were mixed ownership in nature.

ELEMENTS OF DIFFERENCE

Table A-1 presents “bridges” between the measures of receipts and expenditures used in this budget and the older measures of the administrative budget and the consolidated cash statement. Table A-2 makes a similar presentation for the measures of borrowing and other financing presented in this budget, as compared with the changes in the net borrowing by Federal funds, related to the administrative budget, and the net borrowing from the public, related to the consolidated cash statement.

Table A-1. RELATION OF BUDGET TOTALS TO OLDER MEASURES
(In billions of dollars)

Description	Reconciliation to administrative budget			Reconciliation to consolidated cash		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
RECEIPTS						
Unified, comprehensive budget totals.....	149.6	155.8	178.1	149.6	155.8	178.1
Additions or deductions (-), differences in:						
Coverage (adjusted for intragovernmentals ¹):						
Trust funds.....	-37.0	-38.9	-43.9			
D.C. municipal funds.....				.3	.4	.4
Grossing of proprietary receipts:						
To be continued in fund structure.....	2.8	2.1	2.0	4.5	4.1	4.2
Proposed for netting in new funds.....	.4			.4		
Interfund and intragovernmental transactions:						
Employee payments for retirement.....	-1.2	-1.3	-1.4	-1.2	-1.3	-1.4
Employer payments of Government for social security.....	.5	.5	.6	.5	.5	.6
Social security annuitants' payments for supplementary medical insurance.....				-.5	-.6	-.8
Definition of receipts: Seigniorage.....	.8	.4	.2	*	*	*
Total, receipts under older concepts.....	115.9	118.6	135.6	153.6	158.9	181.1
OUTLAYS (FORMERLY EXPENDITURES)						
Unified, comprehensive budget totals.....	158.4	175.6	186.1	158.4	175.6	186.1
Additions or deductions (-), differences in:						
Coverage (adjusted for intragovernmentals ¹):						
Trust funds.....	-30.9	-35.1	-36.6	*	*	*
D.C. municipal funds.....				.3	.3	.4
Privately owned institutions.....	-.1		.1	-3.9	1.6	2.8
Grossing of proprietary receipts:						
To be continued in fund structure.....	2.8	2.1	2.0	4.5	4.1	4.2
Proposed for netting in new funds.....	.4			.4		
Interfund and intragovernmental transactions.....	-.7	-.8	-.8	-1.2	-1.4	-1.6
Timing:						
Debt issued in lieu of checks:						
International lending agencies.....	-.2					
Other program payments.....				*	*	*
Interest.....				-.7	-.6	-.6
Other interest accruals, checks outstanding, and clearing accounts.....				.7		
Deposit fund liabilities.....				-1.1	-.4	-.4
Definition of cash, monetary assets.....	-.6	-.4	-.7	.1		
Definition of borrowing:						
Sales of participation certificates, net.....	-3.5	-4.7	-3.1	-2.6	-3.4	-2.3
Increase in balances held for buyers of participation certificates.....	.1	.3	.3			
Sales of Defense family housing mortgages, net.....	.1	.1	.1	.1	.1	.1
Totals, outlays under older concepts.....	125.7	137.2	147.4	155.1	176.0	188.7

*Less than \$50 million.

¹ The adjustments for coverage take account of the change in the intragovernmental transactions caused by inclusion or exclusion of funds which have transactions with the Federal funds.

Significant differences are as follows:

Coverage.—Trust funds must be subtracted from the new budget totals in moving toward the administrative budget concept. The District of Columbia municipal funds, and certain transactions of Government sponsored, but privately owned corporations (Federal land banks and Federal home loan banks), for which the U.S. Treasurer acts as fiscal agent, must be added to the new budget to move toward the consolidated cash statement.

Grossing of proprietary receipts from the public.—The new budget offsets against expenditures the proprietary receipts from the public, both in the Federal funds and the trust funds, regardless of fund structure. The older budget concepts permitted such offsets only in accordance with the fund structure—that is, when the receipts are deposited in public enterprise funds, trust revolving funds, etc. The proposals to create new public enterprise funds such as for the Rural Electrification Administration and the power marketing agencies of the Department of the Interior, have no effect on the totals under the new concept; under both of the older concepts, however, the adoption of such proposed legislation would reduce the receipts and expenditures from the levels which would otherwise prevail.

Interfund and intragovernmental transactions.—Under each concept, payments between funds covered by that concept are netted out to avoid duplication. However, there are differences in the application of this principle. The Government's payments into the social security trust funds, representing its contributions as employer of military personnel and covered civilian personnel, are treated as an intragovernmental transaction in the new budget, just as the Government's payments into the civil service and foreign service retirement and disability funds are treated there and in the consolidated cash statement. On the other hand, the new budget does not treat as an intragovernmental payment the employee's share of retirement or social security, which is collected by payroll deductions. Nor does the new budget treat as an intragovernmental transaction the monthly payments for supplementary medical insurance which are collected from social security or other annuitants through deductions from their annuity checks. The older consolidated cash statement had given intragovernmental treatment to such deductions. The new concept does not diminish the recorded expenditures in payment of earnings or annuities because of the payroll deduction method of making collection from the payees.

Timing.—The new budget follows closely the checks-issued principle of the conventional accounts, and therefore differs from the old administrative budget only in one minor regard with respect to timing. In accordance with the recommendations of the President's Commission on Budget Concepts, payments to international lending organizations are recognized in the new budget only when the cash is actually paid out, whereas the administrative budget recognized the expenditure at the time that the public debt figures were increased through the issuance of notes to these organizations.

Table A-2. RELATION OF FINANCING TOTALS TO OLDER MEASURES
(In billions of dollars)

Description	Reconciliation to administrative budget			Reconciliation to consolidated cash		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
FINANCING						
Unified comprehensive budget deficit.....	8.8	19.8	8.0	8.8	19.8	8.0
Additions of deductions (—) to borrowing, differences in:						
Coverage:						
Trust funds.....	6.5	4.3	7.1	— .6	*	*
Borrowings from D.C. government.....				*	*	*
Privately owned institutions.....	— .1		.1	—3.9	1.6	2.8
Timing.....	— .2			— .6	— .6	— .6
Definition of cash, monetary assets.....	— .3	— .4	— .7	.5		
Definition of borrowing.....	—3.4	—4.6	—3.0	—2.5	—3.3	—2.2
Net change in borrowing.....	2.5	— .7	3.5	—7.4	—2.3	.1
Additions or deductions (—) to other financing, differences in:						
Coverage:						
Trust funds.....	— .4	— .4	.2	.7	*	*
Other.....				.1	*	*
Timing.....				— .4	— .4	— .4
Definition of cash, monetary assets.....	— .3			— .3		
Definition of borrowing.....	.1	.3	.3	*	*	*
Definition of receipts.....	— .8	— .4	— .2			
Net change in other financing.....	—1.4	— .5	.3	.1	— .4	— .4
Deficit under older concepts.....	9.9	18.6	11.8	1.5	17.2	7.6

*Less than \$50 million.

Several adjustments are necessary, however, to move from the new budget toward the old consolidated cash statement, since the latter was on a checks-paid basis. The exclusion of deposit funds from the coverage of the new budget is a reconciling item; the exclusion is made because deposit funds generally represent a timing adjustment with respect to transactions of other funds; the most common uses of deposit funds are to account temporarily for receipts before they are earned, and to account temporarily for certain expenditures after the check in payment of the liability has been drawn but pending final settlement. Such funds are also used to account for moneys deposited with the Government as banker.

Definition of cash and monetary assets.—The United States drawing rights in the International Monetary Fund (which represent a part of the Government's equity in the fund) are now treated like cash. Hence, the exercise of those drawing rights, under which cash is moved from the IMF to the U.S. Treasury, no longer affects receipts, expenditures, borrowing, or redemption of borrowing. Also, the exchange of notes for cash in connection with subscriptions to the IMF do not affect the new budget totals. In the older concepts, certain transactions with the IMF affected the totals.

Definition of receipts.—Seigniorage, representing the difference between the face value and the intrinsic value of coins manufactured, increases the Government's cash without an increase in liabilities and has therefore been a receipt in the administrative budget. It has been excluded from the consolidated cash statement of receipts because it did not come from the public. The new budget similarly excludes seigniorage.

Definition of borrowing.—Both of the older concepts treated the sale of certificates of participation in loans as the sale of an asset, and therefore as a receipt offsetting expenditures in the public enterprise funds concerned. However, the portion of the loan repayments received by the Government and retained for the certificate holders until maturing of the certificates was accounted for in a trust fund. On recommendations of the President's Commission, such sales are now treated as borrowing. Under these circumstances, the repayments on loans collected by the Government are appropriately deposited into Federal funds. The new budget also treats Defense family housing mortgages as a form of borrowing.

Borrowing.—Several of the factors named above also affect the figures on borrowing. The reconciliation of debt outstanding under the three concepts is as follows (in billions of dollars):

	1967 actual	1968 estimate	1969 estimate
Public debt issued by the Treasury	326, 221	347, 031	358, 908
Agency debt issued by authorized agencies (TVA, FHA, etc.), other than participation certificates and trust fund issuances	910	1, 099	1, 333
Portion of above debt held by Federal funds (—) ¹	-2, 736	-3, 637	-4, 270
Total net debt outstanding, administrative budget concept	324, 394	344, 493	355, 971
Participation certificates issued to public	6, 119	9, 504	11, 737
Defense family housing mortgages outstanding	2, 034	1, 954	1, 871
Agency debt issued by trust funds to public	7, 821	10, 617	12, 033
Public and agency debt held by trust funds (—) ¹	-67, 881	-73, 630	-81, 376
Public debt held by the IMF and international lending organizations (—)	-3, 328	-2, 937	-2, 237
Total net debt outstanding, unified comprehensive budget concept	269, 160	290, 000	298, 000
Participation certificates and defense family housing above	-8, 153	-11, 458	-13, 608
Debt issued in lieu of checks other than to IMF and international lending organizations (—)	-13, 321	-13, 916	-14, 466
Debt issued to public by Federal land banks and Federal home loan banks	8, 239	8, 119	10, 979
Public and agency debt held by Federal land banks and Federal home loan banks (—)	-3, 851	-2, 100	-2, 100
Debt issued for IMF drawings, net of Exchange Stabilization Fund holdings	828	828	828
Debt issued by trust revolving funds, not included in consolidated cash computations (—)	-93	-91	-104
Public debt held by trust revolving funds not included in consolidated cash computations	11	12	13
Debt issued by the District of Columbia Armory Board	20	20	20
Public and agency debt held by District of Columbia agencies	-65	-70	-73
Total net debt outstanding, consolidated cash concept	252, 773	271, 344	279, 489

¹ After adjusting for reclassification of participation sales trust fund.

Financing other than borrowing.—The remaining adjustments in table A-1 that do not affect borrowing (except for those which are self-balancing within table A-1) generally affect either the cash accounts

or the liabilities related to the cash accounts. One item in this group is the accumulation of trust fund balances, which, in conventional administrative budget terms, represent a change in liabilities. In both the consolidated and comprehensive budget concepts, trust fund balances, like the Federal fund balances, are merely a reservation within the total balances on the books of the Treasury that result from the cumulative surplus or deficit.

THE "ADMINISTRATIVE BUDGET"

Table A-3 presents, according to customary classifications, the administrative budget as derived from the adjustments set forth in the preceding tables.

Table A-3. THE "ADMINISTRATIVE BUDGET" (in millions of dollars)

Description	1967 actual	1968 estimate	1969 estimate
RECEIPTS BY SOURCE			
Individual income taxes.....	61,526	67,700	80,900
Corporation income taxes.....	33,971	31,300	34,300
Excise taxes.....	9,278	9,509	9,908
Estate and gift taxes.....	2,978	3,100	3,400
Customs.....	1,901	2,000	2,070
Miscellaneous receipts.....	6,871	5,644	5,669
Interfund transactions.....	-682	-678	-660
Total, administrative budget receipts.....	115,849	118,575	135,587
EXPENDITURES BY AGENCY			
Legislative Branch.....	250	285	296
The Judiciary.....	87	95	101
Executive Office of the President.....	28	32	33
Funds appropriated to the President.....	4,141	4,808	4,900
Department of Agriculture.....	5,741	6,520	7,220
Department of Commerce.....	757	856	910
Department of Defense—Military.....	67,664	73,930	76,881
Department of Defense—Civil.....	1,343	1,401	1,371
Department of Health, Education, and Welfare.....	10,794	13,156	14,515
Department of Housing and Urban Development.....	493	495	1,249
Department of the Interior.....	1,516	1,542	1,717
Department of Justice.....	409	443	504
Department of Labor.....	512	713	712
Post Office Department.....	1,141	1,087	767
Department of State.....	414	421	431
Department of Transportation.....	1,467	1,570	2,093
Treasury Department.....	14,538	15,493	16,440
Atomic Energy Commission.....	2,264	2,333	2,546
General Services Administration.....	675	648	673
National Aeronautics and Space Administration.....	5,426	4,805	4,575
Veterans Administration.....	6,197	6,325	6,818
Other independent agencies.....	543	804	1,322
Allowances for:			
Civilian and military pay increase.....			1,600
Contingencies.....		100	350
Interfund transactions.....	-682	-678	-660
Total, administrative budget expenditures.....	125,718	137,182	147,363
Excess over receipts (+) or expenditures (-).....	-9,869	-18,607	-11,776

As in the case of the basic tables of the budget, the amounts shown include transactions under both existing and proposed legislation. The receipts, therefore, include the expected income from the proposed income tax surcharge, as well as lesser amounts from other tax proposals. The expenditures include those to be financed from Federal funds under the President's legislative program, as well as those recommended under existing legislation, and its renewal or extension.

FLOW OF GOVERNMENT-ADMINISTERED FUNDS

In recent years there has been presented in the special analyses of the budget, a consolidated statement of Government-administered funds on a gross basis. This statement presents the flow of moneys between the Federal Government and the public. It has been on a checks-issued basis and its coverage has been substantially the same as the new concept. It excludes borrowing and repayment thereof.

The Commission recommended that the compilation of such gross figures be continued as supplementary information. Table A-4 presents such a statement.

Table A-4. GROSS FLOW OF GOVERNMENT-ADMINISTERED FUNDS

(In millions of dollars)

Description	1967 actual	1968 estimate	1969 estimate
RECEIPTS BY SOURCE			
Individual income taxes.....	61,526	67,700	80,900
Corporation income taxes.....	33,971	31,300	34,300
Employment taxes.....	27,823	29,730	34,154
Unemployment insurance.....	3,652	3,660	3,594
Premiums for insurance and retirement.....	1,853	2,049	2,275
Excise taxes.....	13,719	13,848	14,671
Estate and gift taxes.....	2,978	3,100	3,400
Customs.....	1,901	2,000	2,070
Other receipts from the public:			
General and special funds.....	5,280	4,838	5,070
Public enterprise funds.....	14,812	14,755	16,542
Trust funds (excluding trust revolving funds).....	1,836	2,035	2,291
Trust revolving funds.....	9,549	11,481	13,238
Reimbursements to appropriations and other funds.....	2,450	2,475	2,630
Total receipts from the public.....	181,350	188,971	215,135
PAYMENTS BY FUNCTION			
National defense.....	74,245	80,389	83,979
International affairs and finance.....	6,032	6,334	6,635
Space research and technology.....	5,439	4,812	4,589
Agriculture and agricultural resources.....	18,859	20,184	22,075
Natural resources.....	3,920	4,196	4,308
Commerce and transportation.....	12,953	14,234	15,285
Housing and community development.....	4,313	6,370	5,897
Health, labor, and welfare.....	39,017	45,311	50,419
Education.....	4,186	4,702	4,879
Veterans benefits and services.....	7,937	8,195	8,405
Interest.....	10,561	11,147	11,655
General government.....	2,709	2,803	3,015
Allowances for:			
Civilian and military pay increase.....			1,600
Contingencies.....		100	350
Total payments to the public.....	190,173	208,775	223,090
Excess of payments (-).....	-8,823	-19,805	-7,954

It differs from the unified comprehensive budget, only with respect to grossing and netting and the distribution here of the nonfunctional adjustments shown elsewhere. Its deficits are the same. The items which are here grossed may be summarized as follows (in millions of dollars):

	1967 actual	1968 estimate	1969 estimate
Receipts conventionally offset against expenditures:			
Receipts of public enterprise funds (table C-1).....	14,812	14,755	16,542
Receipts of trust revolving funds (table C-5).....	9,549	11,481	13,238
Reimbursements to appropriations and other funds:			
Department of Defense.....	2,249	2,278	2,432
Other agencies.....	200	197	198
Other receipts offset against expenditures in the new budget (table 12).....	4,948	4,430	4,617
Total	31,758	33,141	37,027

Table A-4 is not fully comparable to similar information presented in recent budgets (table B-9 in the 1968 budget), because of the following conceptual changes that were set forth earlier in this analysis:

- Definition of borrowing (sale of participation certificates);
- Definition of cash and monetary assets (IMF);
- Timing of payments to international lending organizations;
- Government payments as employer for social security.

COMPARISON OF RESULTS

Table A-5 summarizes receipts, expenditures, and deficits under the new concept, the old administrative budget, the consolidated cash statement, and the flow of funds statement included above.

Table A-5. COMPARISON OF RESULTS UNDER FOUR CONCEPTS

(In millions of dollars)

Description	1967 actual	1968 estimate	1969 estimate
Unified, comprehensive budget:			
Receipts.....	149,591	155,830	178,108
Expenditures and net lending.....	158,414	175,635	186,062
Budget deficit.....	8,823	19,805	7,954
The "administrative budget":			
Receipts.....	115,849	118,575	135,587
Expenditures (including lending).....	125,718	137,182	147,363
Excess of expenditures.....	9,869	18,607	11,776
"Consolidated cash" statement:			
Receipts.....	153,596	158,823	181,146
Expenditures (including lending).....	155,142	175,981	188,725
Excess of expenditures.....	1,546	17,157	7,579
Flow of Government-administered funds:			
Receipts from the public.....	181,350	188,971	215,135
Payments to the public.....	190,173	208,775	223,090
Excess of payments.....	8,823	19,805	7,954

SPECIAL ANALYSIS B

FEDERAL TRANSACTIONS IN THE NATIONAL INCOME AND PRODUCT ACCOUNTS

The budget is designed to serve many purposes:

- It represents a proposed *allocation of resources* to serve national objectives, between the private and public sectors, and within the public sector;
- It is an *economic document* which embodies the taxing and spending policies of the Government for promoting high employment, price stability, growth of the national economy, and maintainance of the Nation's balance of payments;
- It sets forth the *President's requests to Congress* for appropriation action on existing or new programs, and changes in tax legislation;
- It is a *report to the Congress and the people* on how the Government has spent the funds entrusted to it in past years.

No single budget concept can completely satisfy all purposes. The budget is designed to provide a unified picture of the Federal Government's finances, while other series—such as the Federal sector of the national income accounts (NIA)—focus on specific areas of concern for various other purposes.

In past years, the budget document included a special analysis which concentrated on explaining the relationship among the three most widely used measures of Federal financial transactions: (1) the administrative budget, (2) consolidated cash statement (receipts from and payments to the public), and (3) the Federal sector of the national income accounts. In accordance with the recommendations of the President's Commission on Budget Concepts, neither the administrative budget nor the consolidated cash will be utilized as major measures of Federal finances. The relationship between the new budget and these two older concepts is discussed in detail in Special Analysis A.

The budget document and related Treasury reports provide detailed information on the finances of the Federal Government. The national income accounts of the United States are the most widely used measures of aggregate economic activity in the country. This analysis is designed to explain the relationships of the budget to the Federal sector of the national income accounts, and to present the budget estimates in national income terms.

This analysis is divided into three major sections: (1) the size and trends of major components in the Federal sector; (2) the relationship between the Federal sector and the budget; and (3) definitions of the major categories of the Federal sector.

TRENDS IN FEDERAL SECTOR RECEIPTS AND EXPENDITURES

Total expenditures in the Federal sector accounts budget are estimated to rise by \$13.9 billion between fiscal 1968 and 1969, receipts by \$21.4 billion. As a consequence, the Federal sector deficit will decline by \$7.5 billion, from \$10 billion in 1968 to \$2.5 billion in 1969.

Trends in Federal sector receipts.—Rising levels of economic activity expand the Nation's tax base and provide increased sources of Federal revenues. Between 1952 and 1967, Federal sector receipts more than doubled despite major decreases in tax rates and liberalization of tax provisions. Receipts in the national income accounts increased from \$65.1 billion in fiscal 1952 to \$147.6 billion in 1967. Part of this growth, however, has resulted from increases in social security tax rates and wage ceilings. Consequently, Federal receipts have kept pace with the growth in the economy.

Two major factors account for most of the changes in Federal sector receipts in 1969:

(1) *The level of economic activity.*—Personal tax and nontax receipts consist mainly of income taxes and tend to increase as personal income rises. Since income tax rates are progressive, there is a larger than proportional increase in these receipts as more people enter the higher income brackets. Corporate profits taxes, which are closely related to corporate profits, are also influenced by the level of economic activity and the profitability of business corporations. Since business taxes consist mainly of excise taxes on certain goods and services, such as tobacco, alcohol, automobiles, and telephones, they depend largely on the level of purchases of these items. Social insurance contributions expand with the growth in employment and earnings.

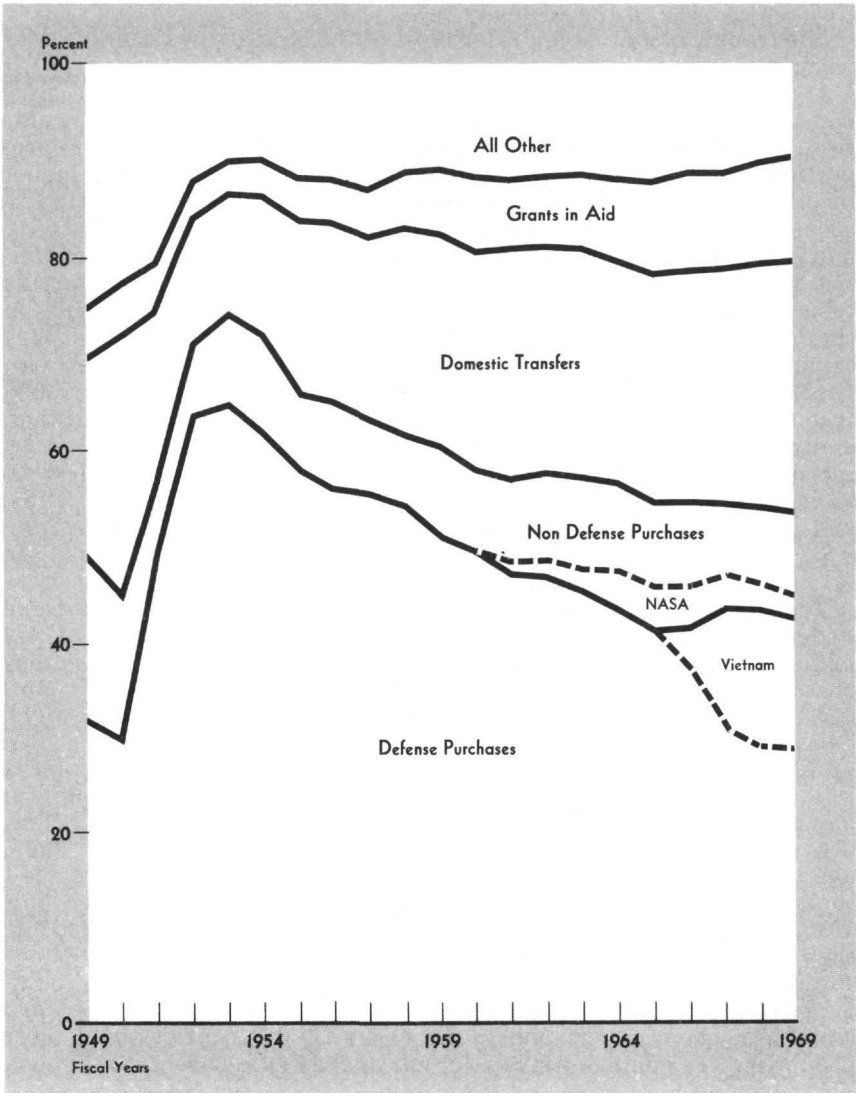
(2) *Changes in tax rates.*—The 1969 budget recommends a 10% income tax surcharge on individuals and corporations. In addition, contributions for social insurance in fiscal 1969 will be affected by recent legislation which increased the ceiling on wages subject to social security taxes from \$6,600 to \$7,800 beginning January 1, 1968, and which raised the combined employer and employee tax rate from 8.8% to 9.6% effective January 1, 1969.

Trends in Federal sector expenditures.—The \$13.9 billion rise in Federal sector expenditures in 1969 compares with increases of \$16 billion in 1968 and \$23.2 billion in 1967. The upsurge in defense purchases, starting with the large-scale commitments of American troops in Vietnam, is expected to continue in the year ahead, but at a much reduced rate. Federal sector expenditures, like receipts, have grown significantly over the past 15 years. The demands of a growing population, an expanding economy, and an unsettled world have resulted in new and expanded Federal programs to meet these needs. Nevertheless, despite a doubling of Federal sector expenditures from 1952 to 1967, about the same proportion of the gross national product was devoted to Federal programs in 1967 as prevailed 15 years previously. This year, Federal sector expenditures will account for 20.9% of the GNP, slightly lower than the 21.1% accounted for 15 years ago.

Significant shifts, however, have occurred among the several categories of expenditures, reflecting world conditions, domestic problems, and basic Government policy. As chart B-1 indicates, the largest proportion of Federal outlays is for national defense purchases of goods

and services, which increased rapidly early in the 1950's due primarily to the requirements of the Korean war. Since that time defense spending as a percent of the total declined to a low point of 7.5% in 1965, and has risen somewhat since as a result of the conflict in Vietnam; they are expected to reach 9.1% of GNP this year, compared with 13.6% in 1953.

Federal Sector Expenditures *Major Categories as a Percent of Total*



Aside from space, nondefense spending for goods and services has been a very stable proportion of total expenditures. Nondefense purchases have been subject to especially heavy economy efforts recently in order to mitigate inflationary pressures. Expenditures for space exploration have grown rapidly in recent years, rising from \$401 million in 1960 to a high of \$5.9 billion in 1966; they have declined somewhat since then, and are expected to total \$4.6 billion in 1969.

Grants-in-aid reflect Federal efforts to assist State and local governments in meeting pressing domestic needs. Most of the items included in the grants-in-aid category in the Federal sector accounts are also included in the discussion of Federal aids in Special Analysis K of this budget. Table B-1 shows both grants and domestic transfer payments—broken into several major groupings—for the past 10 years.

Table B-1. GRANTS-IN-AID AND DOMESTIC TRANSFER PAYMENTS
(In billions of dollars)

Fiscal year	Grants-in-aid			Domestic transfer payments			
	Public assistance	Highways	All other	Retirement and disability	Unemployment insurance	Hospital and supplemental medical insurance	All other
1960.....	2.1	2.9	1.9	16.5	2.6	-----	1.5
1961.....	2.2	2.6	2.1	18.1	4.0	-----	1.5
1962.....	2.4	2.8	2.4	20.1	3.5	-----	1.5
1963.....	2.7	3.0	2.6	21.9	2.9	-----	1.6
1964.....	2.9	3.6	3.3	23.1	2.8	-----	1.4
1965.....	3.3	4.0	3.6	24.3	2.4	-----	1.6
1966.....	3.5	3.9	5.3	28.1	2.0	-----	1.7
1967.....	4.2	4.0	7.2	29.7	2.0	3.2	2.8
1968.....	5.2	4.3	8.5	32.5	2.4	4.8	3.3
1969.....	5.8	4.3	9.9	36.4	2.4	5.5	3.6

Domestic transfer payments (which are mainly pensions, unemployment benefits, and veterans benefits) account for the second largest share of total Federal expenditures—an estimated 25.9% in 1969. During the late 1950's there was a rapid decline in expenditures for the GI bill but recent legislation is providing benefits for veterans who were ineligible under the earlier programs, while social security benefits under both retirement and health programs have expanded rapidly in recent years. A significant part of the war on poverty is in the form of transfer payments. In general, the growth of these programs has been the result of efforts to meet the needs of the poor, sick, and elderly—an obligation that our Nation cannot afford to shirk.

Table B-2 shows Federal expenditures as a percent of total GNP, for alternate years, since 1952. These expenditures have been remarkably stable as a portion of our Nation's economy.

Table B-2. FEDERAL SECTOR NIA EXPENDITURES AS A PERCENT OF GNP

Fiscal year	Total expenditures	Purchases			Domestic transfer payments	Grants-in-aid	All other
		Defense	Nondefense				
			NASA	Other			
1952-----	19.6	12.4	(1)	1.4	2.5	0.7	2.5
1954-----	20.5	12.6	(1)	2.1	2.9	.8	2.1
1956-----	17.0	9.6	(1)	1.5	3.1	.8	2.1
1958-----	18.9	10.2	(1)	1.3	4.0	1.1	2.2
1960-----	18.4	9.1	0.1	1.5	4.2	1.4	2.2
1962-----	19.6	9.3	.2	1.7	4.6	1.4	2.4
1964-----	19.1	8.3	.7	1.7	4.5	1.6	2.3
1966-----	18.4	7.6	.8	1.6	4.4	1.8	2.2
1968-----	20.9	9.1	.6	1.7	5.3	2.2	2.1
Excluding Vietnam:							
1966-----	17.5	6.8	.8	1.6	4.4	1.8	2.2
1968-----	17.9	6.4	.6	1.7	5.3	2.2	2.1

¹ Less than 0.05%.

RELATIONSHIP OF THE BUDGET TO THE FEDERAL SECTOR OF THE NATIONAL INCOME ACCOUNTS

The national income accounts depict the Nation's current production, income, and spending in separate major categories which are designed to aid understanding of the operations of the economy and to facilitate useful economic analysis. These accounts attempt to include all current income and production activities and do not measure transactions—such as loans—which represent an exchange of assets rather than income or production. Loan transactions have a significant economic impact, affecting both income and output, but they are best analyzed as part of monetary rather than fiscal policy. Special Analysis E (Federal credit programs) and the means of financing statement (p. 61 of the budget) are both designed to facilitate a study of the monetary policy implications of the budget.

Budget outlays are divided into two major segments—the expenditure account and the loan account. All transactions included in the loan account are excluded from the Federal sector, so this discussion will focus exclusively on how the Federal budget expenditure account relates to the Federal sector account.

Table B-3 shows the major differences between the receipt-expenditure account in the budget and the Federal sector estimates. These differences are explained in the following paragraphs.

Employee retirement.—The Civil Service and Foreign Service retirement programs are financed by employer and employee contributions. Retirement benefits under these programs are recorded as expenditures in the budget and as transfer payments in the Federal sector

Table B-3. RELATIONSHIP OF THE RECEIPT-EXPENDITURE ACCOUNT TO THE FEDERAL SECTOR NIA (in billions of dollars)

	1967 actual	1968 estimate	1969 estimate
RECEIPTS			
Total budget receipts.....	149.6	155.8	178.1
Employer share, employee retirement (grossing).....	1.7	1.9	2.0
Other netting and grossing.....	1.1	1.2	1.2
Adjustment to accruals.....	-4.8	2.2	1.1
Other.....	(¹)	(¹)	(¹)
Federal sector, NIA receipts.....	147.6	161.1	182.5
EXPENDITURES			
Total budget expenditures (excludes net lending).....	153.2	169.9	182.8
Employer share, employee retirement (grossing).....	1.7	1.9	2.0
Other netting and grossing.....	1.1	1.2	1.2
Defense timing adjustment.....	-.4	.3	.4
Lending in the expenditure account.....	-1.4	-1.7	-2.1
Dollar expenditures to finance agricultural exports.....	-.8	-.7	-.5
Other.....	1.6	.2	1.1
Federal sector, NIA expenditures.....	155.1	171.1	185.0

¹ Less than \$50 million.

accounts. The contributions of Government agencies, as employers, to these retirement trust funds are deducted from total budget expenditures since these contributions represent intragovernmental transactions. However, the NIA accounts consider Government payments for employee retirement to be part of the compensation paid to Government employees who, in turn, make their trust fund contributions. Therefore, the Federal sector accounts include the Government's contributions to employee retirement funds in both receipts and expenditures. Likewise, Federal payments on behalf of its employees to the old-age and survivors disability insurance programs are included in Federal sector receipts and expenditures. These adjustments affect total receipts and expenditures equally and thus do not alter the budget surplus or deficit.

Other netting and grossing.—The budget normally counts as receipts only income from taxation or revenues due to the exercise of governmental power to compel. Money received in the course of business type transactions, therefore, are normally shown as offsets against expenditures. For instance, receipts from two major insurance programs operated by the Veterans Administration (National Service Life Insurance and United States Government Life Insurance) are

netted against expenditures in the budget since these programs are voluntary, business-type activities. However, in the NIA the receipts are treated in the same way as receipts from compulsory Government insurance programs. This adjustment also has no impact on the budget surplus or deficit.

Timing adjustments.—At the present time the budget counts receipts when the cash is collected, and most expenditures when the checks are issued to pay the bills. In the NIA receipts are counted when the income is earned or when the transaction giving rise to the receipt occurs, even though the cash may be received at a later point. Accrued expenditures record outlays when the production or work takes place rather than when the payment is made. This permits changes in receipts and expenditures to more accurately reflect the impact of the Government on the economy. Since the accrual concept is followed in the national income accounts receipts, they differ from budget receipts by the amount of estimated accruals which are not collected in the time period covered.

Defense purchases are recorded in the Federal sector at the time of delivery of goods instead of when they are paid for; work in process on fixed-price contracts is counted as change in business inventories. Both the budget and the Federal sector record public debt interest when it accrues.

Lending.—The loan account in the budget includes only those domestic credit transactions where there are definite requirements for full repayment of the loans, plus all foreign loans made on commercial terms. Those credit programs which do not meet these requirements are included in the expenditure account. The Federal sector, however, excludes not only all lending transactions included in the loan account, but also some credit programs included as expenditures in the budget—such as foreign loans in AID and tobacco and foreign loans in the Commodity Credit Corporation (CCC). Certain credit transactions in the expenditure account—like most CCC nonrecourse commodity loans—are treated as purchases of goods under the national income accounts concept.

Dollar expenditures to finance agricultural exports.—The Commodity Credit Corporation facilitates the export of agricultural products by acquiring the foreign currencies used to pay for such commodities. This expenditure of dollars is included in the budget but excluded from the Federal sector on the ground that it is an exchange of financial assets: dollars for foreign currencies. When the foreign currencies thus acquired are spent, they are then counted as Federal sector expenditures.

Other.—This category includes some of miscellaneous adjustments largely for certain specialized aspects of the national income accounts

such as purchases and sale of land, which are included in the budget but not in the national income accounts. Certain nondefense timing adjustments are included here because of the difficulty in separating them from other adjustment categories included herein. It also includes adjustments for the expenditure of foreign currency acquired as described in the paragraph above.

MAJOR CATEGORIES OF THE FEDERAL SECTOR OF THE NATIONAL INCOME ACCOUNTS

Federal sector receipts.—Federal receipts on a national income basis largely reflect the tax payments or liabilities of individuals and of corporations and other businesses arising out of incomes earned. They also include other tax and nontax receipts. These receipts are classified into the following four categories: (1) personal tax and nontax receipts, (2) corporate profits tax accruals, (3) indirect business tax and nontax accruals, and (4) receipts from contributions for social insurance.

1. *Personal tax and nontax receipts* consist mostly of individual income taxes, estate and gift taxes, fines, fees, and donations.

2. *Corporate profits tax accruals* comprise the Federal tax liability incurred and accrued on corporate earnings during the specified year or period. While the budget treats Federal Reserve payments of earnings to the Treasury as miscellaneous receipts, these are included in the corporate profit tax category in the Federal sector.

3. *Indirect business tax and nontax accruals* consist primarily of excise taxes, customs duties, and Federal receipts from rents and royalties.

4. *Contributions for social insurance* are composed chiefly of payroll taxes for retirement, disability, hospital, and unemployment insurance, plus employer and employee contributions to retirement funds of Federal Government employees and premiums for federally operated veterans and medical insurance programs.

Table B-4 shows the adjusted receipts and expenditures after reclassification into the national income accounts categories.

Table B-4. FEDERAL RECEIPTS AND EXPENDITURES IN THE NATIONAL INCOME ACCOUNTS (in billions of dollars)

Description	1967 actual	1968 estimate	1969 estimate
RECEIPTS, NATIONAL INCOME BASIS			
Personal tax and nontax receipts.....	64.6	71.0	83.8
Corporate profits tax accruals.....	31.4	34.3	37.2
Indirect business tax and nontax accruals.....	15.9	17.1	18.1
Contributions for social insurance.....	35.7	38.7	43.4
Total receipts, national income basis.....	147.6	161.1	182.5
EXPENDITURES, NATIONAL INCOME BASIS			
Purchases of goods and services.....	84.5	92.8	99.4
Defense.....	(67.6)	(74.4)	(78.8)
Nondefense.....	(16.9)	(18.4)	(20.6)
Transfer payments.....	39.8	44.9	49.9
Domestic ("to persons").....	(37.7)	(43.0)	(47.9)
Foreign.....	(2.1)	(1.9)	(2.0)
Grants-in-aid to State and local governments.....	15.4	18.0	20.0
Net interest paid.....	10.1	10.7	11.2
Subsidies less current surplus of Government enterprises.....	5.3	4.6	4.5
Total expenditures, national income basis.....	155.1	171.1	185.0
Surplus (+) or deficit (-), national income basis.....	-7.5	-10.0	-2.5

Federal sector expenditures.—Federal expenditures on a national income basis represent either purchases of goods and services or outlays which directly affect current levels of income. These expenditures are classified in the following five categories: (1) purchases of goods and services, (2) transfer payments, (3) grants-in-aid to State and local governments, (4) net interest paid, and (5) subsidies less current surplus of Government enterprises. The definitions of the categories have been developed by the Department of Commerce so that they are consistent with the framework of accounts used to cover all sectors of the Nation's economic activity.

1. *Purchases of goods and services* measure the value of the Nation's output (i.e., gross national product) bought directly by the Federal Government. Thus, Federal expenditures for goods and services represent the value of output taken by the Federal Government itself.

These purchases include the pay of active military and civilian employees of the Federal Government, employer contributions for retirement, insurance, and other benefits for Federal employees; deliveries of equipment and supplies for defense and other programs; construction put in place for the Government; payments on research and development contracts with corporations and on similar agree-

ments with private nonprofit institutions; expenditures for the purchase of commodities to be donated to schools or similar institutions; and, generally, the administrative expenses of Government programs.

Federal purchases, in turn, are classified in two major subcategories—defense and nondefense. The defense category includes purchases for those activities classified under the defense function of the budget. Purchases for all other types of activities are classified as nondefense.

2. *Transfer payments* consist of expenditures by the Federal Government for which no *current* services have been rendered. Examples of transfer payments are: veterans compensation, pensions, and benefits; retired pay to Federal civilian or military personnel; unemployment benefits; old-age, survivors, disability, health, and supplemental medical insurance; and nonrepayable outlays for scholarships and fellowships.

Although transfer payments do not directly enter gross national product as a Federal Government component, they are a part of personal income and are counted as part of national output when respent by the recipients.

3. *Grants-in-aid to State and local governments*, for purposes of the national income accounts, are Federal payments (other than for interest on the public debt) to State and local governments, including State and local educational institutions. Like transfer payments and net interest paid, Federal grants-in-aid are counted in the GNP when spent by recipients—in this case, as purchases by State and local governments or as consumption expenditures of individuals receiving State or local transfer payments.

4. *Net interest paid* consists of the interest outlays to residents (including State and local governments) minus the interest received from them.

5. *Subsidies less current surplus of Government enterprises* consists of two elements which are consolidated for statistical reasons: (a) subsidy payments to resident businesses and (b) the “current surplus” or “deficit” of Government enterprises.

(a) A subsidy is a monetary grant to a private business. By definition, therefore, subsidies are made only to businesses organized for profitmaking purposes (including farms). Examples of subsidies are Government payments to farmers for land retirement, payments to air carriers, and the operating differential subsidy of the Maritime Administration.

(b) Government enterprise is the term applied to those functions of the Government (usually appearing in the budget as public enterprise revolving funds) for which operating costs are to a great extent covered by the sale of goods and services to the public, as distinguished from those being financed by tax receipts. Government enterprises conduct operations which are of a business-type nature. The difference between their sales and current operating expenses constitutes the surplus or deficit of Government enterprises. The Post Office and the Tennessee Valley Authority are two of the largest enterprises.

SPECIAL ANALYSIS C

PUBLIC ENTERPRISES, TRUST FUNDS, AGENCY BORROWING, AND INVESTMENT

This analysis presents selected information on the financing and operations of the public enterprise funds and the trust funds. Additional tables in this special analysis relating to agency borrowing and to agency investments in U.S. securities are an integral part of the computation of the changes in debt in table 9 (in part 2 of the budget).

PUBLIC ENTERPRISE FUNDS

The public enterprise funds are federally owned funds which carry on a cycle of operations, primarily with the public, organized usually on a business-type basis. Some of them are incorporated enterprises; others are unincorporated. Their outlays have been included, on a net basis, in the budgets and financial reports on Federal funds for many years. The general fund usually supplies them with capital; the provision of such capital, its return, and any dividends given to the general fund are not counted in the budget totals as expenditures, net lending or receipts.

Outlays and receipts.—Gross outlays of public enterprise funds are estimated to be \$30.5 billion in 1969, and their receipts will be \$22.8 billion (table C-1), resulting in net outlays of \$7.7 billion. The Commodity Credit Corporation and the postal fund together account for slightly more than half of the outlays. The figures exclude the effects of proposed legislation to create new funds for certain activities now funded directly by general fund appropriations. The receipts do not include the proceeds of borrowing (either through participation certificates or otherwise), nor do the expenditures include the repayment of borrowing.

The outlays in table C-1 include certain interfund payments to the general fund, principally for interest (see table 12). The receipts shown in table C-1 are generally from the public; but they include some transactions from within the Government—notably, the sales of Commodity Credit Corporation inventories and services to appropriations for special activities, and the short-term loans and repayments resulting from the line of credit extended to the Federal National Mortgage Association secondary market operations fund. The sales of Tennessee Valley Authority power to Government agencies, payments by all agencies to the Post Office for postal services, and interest paid to certain funds on their investments are other examples of such intragovernmental receipts included in table C-1.

Table C-1. GROSS OUTLAYS AND APPLICABLE RECEIPTS OF PUBLIC ENTERPRISE FUNDS (in millions of dollars)

Description	Gross outlays			Applicable receipts		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
Funds appropriated to the President:						
Economic assistance.....	1,137	1,074	1,186	76	85	108
Other.....	210	400	231	320	362	84
Department of Agriculture:						
Commodity Credit Corporation ¹	8,682	7,758	8,090	6,764	4,876	5,233
Farmers Home Administration.....	1,367	1,672	1,757	1,385	1,771	1,759
Federal Crop Insurance Corporation.....	28	56	47	35	41	46
Department of Commerce.....	243	213	213	255	229	238
Department of Defense:						
Military.....	29	20	27	30	18	13
Civil (Panama Canal Company).....	131	148	154	144	153	156
Department of Health, Education, and Welfare.....	18	64	83	15	10	14
Department of Housing and Urban Development:						
College housing loan fund.....	460	454	461	101	121	134
Urban renewal fund.....	991	973	1,176	546	473	465
Low-rent public housing fund.....	416	505	560	148	205	240
Federal National Mortgage Association.....	3,015	4,350	2,965	2,385	3,368	2,658
Federal Housing Administration.....	944	930	1,047	957	972	1,029
Other.....	262	280	354	18	28	33
Department of the Interior.....	116	123	113	51	56	61
Department of Labor.....	279	306	356	282	310	360
Post Office Department.....	6,468	6,919	7,342	5,326	5,832	6,575
Department of Transportation.....	23	27	32	20	23	23
Treasury Department.....	1	2	177	1	2	179
General Services Administration.....	*	*	*	*	*	*
Veterans Administration.....	821	890	1,035	606	674	733
Other independent offices:						
Export-Import Bank of Washington.....	1,707	1,760	1,928	1,271	1,188	1,362
Farm Credit Administration.....	3	7	4	16	12	13
Federal Home Loan Bank Board:						
Federal Savings and Loan Insurance Corporation.....	105 ¹	19	7	262	416	406
Other.....	17	24	22	17	19	21
Small Business Administration.....	430	557	556	283	383	413
Tennessee Valley Authority.....	479	529	586	377	420	436
United States Information Agency.....	3	1	*	3	1	*
Total.....	28,385	30,061	30,509	21,694	22,049	22,792
Receipts from the public.....				(14,812)	(14,755)	(16,542)
Receipts from other accounts.....				(6,882)	(7,294)	(6,250)

*Less than \$500 thousand.

¹ Includes advances from foreign assistance and special export programs of \$1,509 million in 1967, \$1,198 million in 1968, and \$1,448 million in 1969.

Capital and borrowing.—Capital requirements of the public enterprise funds are usually supplied through budget authority (either appropriations or some other form of such authority) from the general fund. While most public enterprise funds are operated to be self-sustaining over a period of years, the largest—the Commodity Credit

Corporation—has incurred substantial losses in most years. Appropriations have been made regularly to make up for the loss in this fund, the postal deficit, and other losses in a few smaller funds. Contract authorizations have also been provided for the Commodity Credit Corporation and for the urban renewal fund of the Department of Housing and Urban Development. Authorizations to spend debt receipts are used, especially for credit programs. Table C-2 reflects all such new obligational authority.

The return of capital shown here includes the writeoff of unused authority, the return of capital and transfer of dividends to the general fund of the Treasury, net transfers to other accounts, and the repayment of borrowing that is not renewable.

The effect of these capital transactions, together with outlays and receipts, upon the public enterprise fund group may be summarized as follows (in millions of dollars):

	1967	1968	1969
Balances, start of year:			
Cash and balances in Treasury.....	8,926	10,823	11,768
U.S. securities.....	2,394	2,836	4,016
Undrawn authorizations:			
Contract authorizations.....	3,815	3,006	3,994
Authority to borrow from Treasury.....	22,508	25,844	25,509
Authority to borrow from the public.....	779	1,264	1,601
Additional amounts becoming available:			
Budget authority.....	12,289	11,998	11,817
Applicable receipts.....	21,694	22,049	22,792
Total available.....	<u>72,405</u>	<u>77,821</u>	<u>81,496</u>
Application of funds:			
Expenditures and loan disbursements.....	28,385	30,061	30,509
Return of capital and authority, net of transfers in.....	248	875	1,209
Balances, end of year:			
Cash and balances in Treasury.....	10,823	11,768	12,702
U.S. securities.....	2,836	4,016	4,939
Undrawn authorizations:			
Contract authorizations.....	3,006	3,994	3,644
Authority to borrow from Treasury.....	25,844	25,509	27,394
Authority to borrow from the public.....	1,264	1,601	1,100
Total application and balances.....	<u>72,405</u>	<u>77,821</u>	<u>81,496</u>

Where the new obligational authority consists of authorizations to expend public debt receipts or appropriations to provide capital, rather than to make up deficits or finance losses, it is customary for the amounts thereof to become interest bearing when used or when credited to the fund.

Upon the creation of new revolving funds, to finance programs previously financed otherwise, capital may also be provided by the transfer of assets, including appropriation balances, into the new fund. Liabilities and obligations are taken over, also.

Minor adjustments in capital occasionally include other transfers to or from appropriations when authorized by law, and the transfer of real or personal property into or out of a fund.

Table C-2. BUDGET AUTHORITY AND OF CAPITAL OF PUBLIC ENTERPRISE FUNDS (in millions of dollars)

Description	Budget authority			Return of capital (net of transfers) ¹		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
Funds appropriated to the President:						
Economic assistance.....	920	824	1,280	34	226	28
Other.....	75	34	4	-133	(¹)	-----
Department of Agriculture:						
Commodity Credit Corporation.....	2,785	2,423	3,362	-13	18	29
Farmers Home Administration.....	671	750	425	-----	-----	-----
Department of Commerce.....	-----	-----	-----	5	2	-----
Department of Defense—Military.....	-----	20	12	1	-----	1
Department of Defense—Civil (Panama Canal Company).....	-----	-----	-----	-----	10	-----
Department of Health, Education, and Welfare.....	316	124	105	-1	*	-----
Department of Housing and Urban Development:						
College housing loan fund.....	602	1,924	648	-----	-----	-----
Urban renewal fund.....	740	850	1,250	-----	-----	-----
Federal National Mortgage Association.....	1,366	1,237	1,730	177	185	994
Low-rent housing fund.....	269	² 305	358	*	*	*
Other.....	292	333	303	6	4	10
Department of the Interior.....	73	55	41	3	3	2
Department of Labor.....	-----	-----	43	-----	-----	-----
Post Office Department.....	1,215	1,174	920	40	-----	-----
Department of Transportation.....	-----	13	-----	-----	-----	-----
Treasury Department.....	-----	1	-----	*	1*	32
General Services Administration.....	-----	-----	-----	*	*	*
Veterans Administration.....	260	851	527	17	199	3
Other independent offices:						
Export-Import Bank.....	779	865	608	50	50	50
Federal Home Loan Bank Board.....	13	-----	-----	-----	-----	-----
Small Business Administration.....	851	153	152	-----	115	-----
Tennessee Valley Authority.....	1,064	61	50	62	62	62
Total.....	12,289	11,998	11,817	248	875	1,209

*Less than \$500 thousand.

¹ In addition, the \$400 million balance of the foreign military sales fund was transferred from Funds appropriated to the President to the Treasury Department in 1968, for liquidation.² Includes \$6 million appropriation made in 1968 for 1967.

Balances available.—The balances of public enterprise funds are shown in table C-3. They are there divided between the balances which are accounted for as assets of the funds, and the undrawn authorizations to obtain capital from the Treasury, to borrow, or (in two cases) to contract in excess of their cash availability.

In most cases, a large part of the balances are obligated or reserved—to pay loan commitments, purchase and construction contracts, or other obligations entered into but on which the other party has not yet required or earned the money. The balances include inactive “standby” authority for loans to the Federal Deposit Insurance Corporation, the home loan banks, and the Federal Savings and Loan Insurance Corporation.

Table C-3. **BALANCES OF PUBLIC ENTERPRISE FUNDS** (in millions of dollars)

Description	Cash balances in Treasury and U.S. securities as of June 30			Undrawn authorizations as of June 30		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
Funds appropriated to the President:						
Economic assistance.....	2,978	2,786	2,960	199		
Other.....	440	40	8	250	246	135
Department of Agriculture:						
Commodity Credit Corporation.....	64	50	50	4,403	3,940	4,417
Farmers Home Administration.....	891	1,434	1,723	131	261	171
Federal Crop Insurance Corporation.....	37	22	22			
Department of Commerce.....	32	47	72			
Department of Defense—Military.....	19	37	35			
Department of Defense—Civil (Panama Canal Company).....	23	19	21	10	10	10
Department of Health, Education, and Welfare.....	316	385	420			
Department of Housing and Urban Development:						
College housing loan fund.....	87	88	87	1,109	2,685	2,978
Urban renewal fund.....	1,270	1,620	2,159	3,606	3,606	3,606
Low-rent public housing fund.....	112	120	154	1,500	1,496	1,500
Federal National Mortgage Association.....	163	666	1,019	5,719	5,796	6,477
Other.....	1,241	1,331	1,442	1,295	1,322	1,165
Department of the Interior.....	22	18	8	14	3	
Department of Labor.....	309	313	360			
Post Office Department.....	581	667	820			
Department of Transportation.....	5	18	18	15	11	3
Treasury Department.....	*	401	372			
General Services Administration.....	*	*	*			
Veterans Administration.....	1,342	1,800	2,003	196	85	
Other independent offices:						
Export-Import Bank.....	116	358	366	6,000	6,000	5,985
Farm Credit Administration.....	161	165	173			
Loans to Federal Deposit Insurance Corporation.....				3,000	3,000	3,000
Federal Home Loan Bank Board:						
Loans to Federal home loan banks.....				1,000	1,000	1,000
Federal Savings and Loan Insurance Corporation.....	1,733	2,130	2,529	750	750	750
Other.....	1	2	3	13	8	6
Small Business Administration.....	975	891	709	330	50	
Tennessee Valley Authority.....	77	95	104	1,233	1,105	935
United States Information Agency.....	5	6	6	1	*	*
Total.....	12,999	15,508	17,641	30,774	31,374	32,138

*Less than \$500 thousand.

TRUST FUNDS

The trust funds are administered in a fiduciary capacity by the Government. They are not included in the administrative budget totals, and transactions between the general fund and the trust funds are conducted "at arm's length"—that is, payments between them are reported as expenditures and receipts of the funds involved.

Outlays and receipts.—Trust fund outlays are estimated to be \$47.2 billion in 1969, with receipts of \$54.6 billion, as shown in table C-4. The transactions of the Federal old-age and survivors insurance fund are far larger than any other one fund.

Table C-4. OUTLAYS AND RECEIPTS OF TRUST FUNDS
(In millions of dollars)

Description	Outlays			Receipts		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
Funds to which receipts are appropriated:						
Federal old-age and survivors insurance trust fund.....	19,842	21,650	24,567	23,371	24,005	27,188
Federal disability insurance trust fund.....	2,071	2,268	2,617	2,332	2,838	3,655
Health insurance trust funds.....	3,411	5,064	5,770	4,373	5,751	6,827
Unemployment trust fund.....	2,868	3,163	3,088	4,072	4,119	4,095
Railroad retirement accounts.....	1,429	1,415	1,376	1,611	1,629	1,791
Federal employees retirement funds.....	2,091	2,133	2,262	3,105	3,452	3,638
Highway trust fund.....	3,973	4,219	4,203	4,455	4,379	4,805
Advances, foreign military sales.....	1,070	1,125	1,330	1,078	1,150	1,400
Veterans life insurance funds.....	970	638	559	736	752	744
Other trust funds (nonrevolving).....	407	602	426	277	380	416
Trust revolving funds (table C-5).....	1,143	2,310	990	-----	-----	-----
Subtotal.....	39,275	44,587	47,189	45,411	48,455	54,559
Interfund transactions.....	-686	-641	-720	-686	-641	-720
Total.....	38,589	43,946	46,469	44,725	47,814	53,839

When trust funds are consolidated with Federal funds, as in the unified comprehensive budget, appropriate deductions must be made for expenditures and receipts between the two groups of funds. The unified comprehensive budget also offsets some of the above receipts against expenditures.

The trust funds include a small group of trust revolving funds (see table C-5) which, like the public enterprise funds, are stated on a net basis in figures used elsewhere in the budget. The group includes the Federal Deposit Insurance Corporation, the three mixed-ownership enterprises, and several other business-type activities.

Table C-5. TRANSACTIONS OF TRUST REVOLVING FUNDS
(In millions of dollars)

Description	Gross outlays			Applicable receipts		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
Federal intermediate credit banks.....	7,161	8,531	9,693	6,692	8,067	9,214
Banks for cooperatives.....	1,898	2,186	2,474	1,703	1,944	2,238
Federal National Mortgage Association.....	1,288	2,616	1,351	481	667	761
Civil Service Commission (employees' life insurance and health benefits).....	604	960	1,209	692	1,045	1,300
Federal Deposit Insurance Corporation.....	19	14	18	258	275	292
All other trust revolving funds.....	62	65	115	62	64	65
Total trust revolving funds.....	11,031	14,370	14,860	9,887	12,061	13,870
Receipts from the public.....	-----	-----	-----	(9,549)	(11,481)	(13,238)
Receipts from other accounts.....	-----	-----	-----	(338)	(580)	(632)

Balances available.—Trust fund balances, both open book balances with the Treasury and investments in U.S. securities are shown in table C-6. These balances are reserved to carry out the purposes of the trusts.

Table C-6. TRUST FUND BALANCES (in millions of dollars)

Description	As of June 30			
	1966 actual	1967 actual	1968 estimate	1969 estimate
Federal old-age and survivors insurance trust fund.....	19,872	23,401	25,756	28,377
Federal disability insurance trust fund.....	1,686	1,948	2,518	3,556
Health insurance trust funds.....	851	1,813	2,500	3,557
Unemployment trust fund.....	9,300	10,504	11,460	12,467
Railroad retirement accounts.....	4,181	4,363	4,577	4,991
Federal employees retirement funds.....	16,795	17,811	19,130	20,507
Highway trust fund.....	244	725	885	1,487
Advances, foreign military sales.....	754	762	787	857
Veterans life insurance funds.....	7,061	6,827	6,942	7,126
Other trust funds:				
Nonrevolving.....	815	684	461	450
Revolving.....	4,102	4,428	4,773	5,099
Subtotal.....	65,661	73,267	79,789	88,475
Agency debt issuances of trust funds held by other trust funds (—).....		—646	—550	—450
Total.....	65,661	72,621	79,239	88,025

Note.—The balances shown here cover the amounts on deposit with Treasury, and the U.S. securities held. In addition, certain funds have authority to obligate in advance of receiving money, and to borrow from the public. The reconciliation is as follows:

	1966	1967	1968	1969
Balance available on an authorization basis.....	78,801	89,444	95,146	102,990
Unfinanced contract authorizations:				
Highway trust fund.....	—8,801	—9,267	—10,049	—10,548
Advances, foreign military sales.....	—1,974	—2,376	—2,576	—2,496
Other.....	—8	—12	—12	—2
Undrawn authorizations to borrow:				
Federal National Mortgage Association.....	—813	—3,934	—2,508	—2,049
Banks for Cooperatives.....	—1,267	—1,073	—878	—648
Federal Intermediate Credit Banks.....	—661	—380	—349	—393
Unappropriated receipts:				
Available as needed, on an indefinite basis.....	41	37	25	26
Available for appropriation by Congress:				
Soldiers' Home.....	108	107	108	108
Highway trust fund.....	235	721	882	1,487
Agency debt issuances of trust funds held by other trust funds.....		—646	—550	—450
Balance available on a cash basis.....	65,661	72,621	79,239	88,025

The trust fund balances are affected by the transactions as follows (in millions of dollars):

	1967	1968	1969
Balances, start of year.....	65,661	72,621	79,239
Receipts.....	44,725	47,814	53,839
Agency debt issuances (other than to other trust funds).....	824	2,750	1,416
Total available.....	111,210	123,185	134,494
Outlays.....	38,589	43,946	46,469
Balances, end of year.....	72,621	79,239	88,025
Total application and balances.....	111,210	123,185	134,494

BORROWING

Agency debt.—The Tennessee Valley Authority has authority to borrow \$1,750 million from the public. The Federal Housing Administration has an indefinite authorization to issue short-term debentures in connection with its settlements. The three mixed-ownership trust revolving funds all have authority to issue their own debt instruments. A few funds in liquidation are retiring earlier debt issuances.

Agency borrowing also takes the form of the sale of participation certificates in which buyers are purchasing a share in a pool of Government-owned loans (see Special Analysis E).

Some Government enterprise debt is guaranteed by the Treasury; some is not formally guaranteed.

Some agency debt is issued to other enterprises or trust funds, rather than to the public, and in some cases another fund may purchase or sell agency debt on the market. Table C-7 separates the agency debt on the basis of net issuances and holdings, as between the public and the Government-administered funds.

Relation to Treasury borrowing.—The Treasury borrowing, often called the “public debt,” includes both borrowing from the public and the issuance of debt instruments to trust funds and other Government-administered funds with balances available to invest.

In a number of cases, Government enterprises obtain capital by borrowing from the Treasury, which is usually directed by the law to use the proceeds of public debt receipts (that is, its borrowing) to supply the funds to the enterprise. The enterprise borrowing that takes this form is included in the capital section of the balance sheets in the budget appendix, and is not included in the phrase “agency debt” as used herein.

Table C-7. AGENCY DEBT ISSUANCES, NET (in millions of dollars)

Description	Transactions			End 1969, estimate outstanding
	1967 actual	1968 estimate	1969 estimate	
Borrowing from the public:				
By public enterprise funds:				
Agriculture: Farmers Home Administration ¹	419	456	190	1,065
Health, Education, and Welfare:				
Office of Education ¹	70	68	-----	138
Public Health Service ¹	-----	10	-----	10
Housing and Urban Development:				
Federal Housing Administration ²	67	57	68	538
Public facility loans ¹	56	54	54	164
College housing loans ¹	419	935	338	1,692
Housing for the elderly ¹	-----	40	46	86
Federal National Mortgage Association ¹	467	359	713	2,324
Treasury: Federal Farm Mortgage Corporation ²	*	*	*	*
Veterans Administration ¹	121	456	341	1,893
Export-Import Bank ¹	779	865	608	3,637
Federal Home Loan Bank Board:				
Home Owners Loan Corporation ²	*	*	*	*
Board revolving fund.....	-----	5	2	7
Small Business Administration ¹	293	143	-57	729
Tennessee Valley Authority.....	130	130	170	715
By trust funds:				
Federal National Mortgage Association.....	360	1,843	690	6,162
Banks for cooperatives.....	219	240	236	1,547
Federal intermediate credit banks.....	273	714	490	4,324
By general fund appropriation: Defense family housing.....	-77	-80	-83	1,872
Total, borrowing from the public.....	3,596	6,293	3,805	26,902
Borrowing from other funds:				
By public enterprise funds:				
Agriculture: Farmers Home Administration ¹	181	219	130	530
Health, Education, and Welfare:				
Office of Education ¹	30	32	-----	62
Public Health Service ¹	-----	5	-----	5
Housing and Urban Development:				
Federal Housing Administration ²	-16	-1	-3	73
Public facility loans ¹	24	26	24	74
College housing loans ¹	181	450	149	780
Housing for the elderly ¹	-----	20	20	39
Federal National Mortgage Association ¹	224	197	351	772
Veterans Administration ¹	78	249	178	504
Small Business Administration ¹	157	102	44	303
Tennessee Valley Authority.....	2	-2	-----	-----
By trust funds:				
Federal National Mortgage Association.....	450	100	-100	450
Banks for cooperatives.....	-28	-----	-----	-----
Federal intermediate credit banks.....	196	-242	-----	-----
Total, borrowing from other funds.....	1,479	1,155	792	3,594
Total, agency debt issuances ³	5,075	7,448	4,597	30,495

Note.—Excludes borrowing from the general fund. Negative figures represent net retirement of debt.

* Less than \$500 thousand.

¹ Certificates of participation in loans.

² Guaranteed by the Treasury (except for a small part of the HOLC obligations).

³ In addition, debt of the D.C. Armory Board is guaranteed by Treasury: 1967 actual, \$0; 1968 estimate, \$0; 1969 estimate, \$0; outstanding, end of 1969, estimate, \$20.

INVESTMENTS IN U.S. SECURITIES

The investment transactions of federally administered funds in the securities issued by the Government and its agencies are shown in table C-8.

Table C-8. AGENCY INVESTMENTS IN U.S. SECURITIES (in millions of dollars)

Description	Transactions			End 1969, estimate outstand- ing
	1967 actual	1968 estimate	1969 estimate	
Investment in public debt (issued by Treasury):				
By public enterprise funds:				
Agriculture: Farmers Home Administration.....		250		250
Commerce: Maritime Administration.....	1	1	7	13
Housing and Urban Development:				
Federal Housing Administration.....	57	91	106	749
Public Housing Administration.....	-8	-13	7	7
Federal National Mortgage Association.....	84	528	349	964
Export-Import Bank.....	82	-82		
Federal Savings and Loan Insurance Corpora- tion.....	212	396	397	2,521
Veterans Administration.....	54	60	60	362
By trust funds:				
Federal old-age and survivors insurance trust fund.....	3,438	1,934	2,372	25,652
Federal disability insurance trust fund.....	226	323	858	2,870
Federal supplementary medical insurance trust fund.....	479	-143	-19	317
Federal hospital insurance trust fund.....	406	862	1,070	3,124
Unemployment trust fund.....	778	770	917	11,718
Railroad retirement accounts.....	62	-21	254	4,364
Federal employees' funds.....	775	1,134	1,279	20,285
Highway trust fund.....	484	186	285	1,193
Veterans life insurance funds.....	-492	57	110	6,726
Federal Deposit Insurance Corporation.....	238	265	273	4,120
Bank for cooperatives.....	-1	-1	*	45
Federal intermediate credit banks.....		8	11	128
All other.....	-32	49	45	166
Total, investments in public debt.....	6,840	6,654	8,382	85,573
Investment in agency debt:				
By public enterprise funds:				
Public Housing Administration.....	-3			
Federal Housing Administration.....	-12	-1	-3	73
Federal National Mortgage Association.....	-24	-51		
By trust funds:				
Federal National Mortgage Association.....	*			
Veterans Administration.....	260	58	75	392
Federal hospital insurance trust fund.....	92			92
Federal old-age and survivors insurance trust fund.....	304	248	159	711
Federal disability insurance trust fund.....	70	240	159	469
Unemployment trust fund.....	379	173	84	636
Civil service retirement and disability fund.....	304	248	159	710
Railroad retirement accounts.....	111	240	159	510
Total, investments in agency debt ¹.....	1,479	1,155	792	3,594
Total, agency investments in U.S. securities..	8,319	7,810	9,173	89,167

Note.—Negative figures represent net reduction of investments.

*Less than \$500 thousand.

¹ Excludes purchases of securities of the privately-owned Federal land banks and Federal home loan banks. Such purchases are treated as a part of net lending to private enterprises.

SPECIAL ANALYSIS D

INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS

The United States, unlike some other governments, includes in its budget those outlays which are for "capital" or investment-type activities on the same basis as other or "current" activities and costs. Nevertheless, for a complete understanding of budget programs and levels, it is useful to recognize a distinction between those outlays which yield benefits over a period of years and those providing benefits largely in the year in which they are made. Special Analysis D presents the budget data in a manner that makes this distinction, covering both Federal funds and trust funds.

In dividing budget outlays (i.e., including the expenditure account and the loan account) according to their character, two basic breakdowns are used:

First.—Investment-type outlays are considered to be (1) those which add to the financial or physical assets of the Federal Government or add to State, local, and private assets and (2) those which are for "intangible" investments or developmental purposes, such as education, training, health, and research and development. All other outlays are considered as mainly for current operations; they are divided among current expenses for aids and special services, retirement and social insurance benefits, and other services and current operating expenses. (In addition, some outlays which cannot be properly categorized are left "unclassified.")

Second.—In each category, outlays for national defense purposes are reported separately from those for all other, i.e., civil programs; this separation highlights both (1) the difficulty of definition—e.g., whether to treat military outlays such as procurement of "hardware" as additions to assets—and (2) the basic difference in nature between most military and civil programs.

The combination of Federal funds and trust funds in tables D-1 and D-2, in accordance with the new budget concepts used throughout the 1969 budget, inflates certain of the figures because payments between Government funds and accounts have the effect—over the long run—of causing certain outlays to be counted twice; therefore, a deduction is made at the end of the table to remove the double counting for interfund and intragovernmental transactions. A second deduction is required under the new concept for receipts from the public which are business-type or market-oriented in character, and which are therefore applied against expenditures.

Summary.—Excluding outlays for national defense, \$31.4 billion of estimated outlays in 1969 are for activities which will directly or indirectly promote future gains in productivity and economic growth.

CIVIL INVESTMENT AND DEVELOPMENTAL OUTLAYS (in billions of dollars)

Description	1964 actual	1967 actual	1968 estimate	1969 estimate
Additions to Federal assets:				
Loans and other financial investments	1.5	6.2	8.1	5.4
Physical assets:				
Major commodity inventories	-.4	-1.2	-.9	.1
Other	3.0	3.2	3.1	3.1
Additions to State, local, and private assets	5.1	5.7	6.6	6.9
Developmental outlays:				
Education, training, and health	1.6	6.2	7.9	8.8
Research and development:				
National Aeronautics and Space Administration	3.7	5.1	4.6	4.5
Other	1.4	1.9	2.2	2.4
Other developmental outlays1	.2	.3	.3
Total	16.2	27.3	31.9	31.4

Additions to Federal civil assets are estimated at \$8.6 billion in 1969. This includes \$5.4 billion in loans and financial investments for housing, farming, small business, and other purposes. It also includes \$3.2 billion for physical assets of various types—such as civil public works, major equipment, and commodity inventories.

Another \$6.9 billion of budget outlays in 1969 will help finance additions to State, local, and private assets such as highways, hospitals, schools, conservation projects, and a variety of public facilities.

Developmental outlays for civil purposes are estimated at \$16 billion in 1969, compared with \$13.5 billion in 1967 and \$6.8 billion in 1964. Thus, the 1969 budget continues a trend begun several years ago toward emphasizing investment in human resources and scientific research and development. No less important than investment in physical assets, this type of investment helps promote the long-run growth of the Nation by expanding knowledge, enhancing occupational skills, increasing productivity, and encouraging technological development. Outlays for civil education, training, and health programs will be \$8.8 billion in 1969. Another \$6.9 billion will be for scientific research and development (including \$4.5 billion for space programs), representing a major source of funds for all such activities undertaken in the United States.

OUTLAYS OF AN INVESTMENT NATURE

Outlays of an investment nature are divided into three categories: (1) additions to Federal assets; (2) additions to State, local, and private assets; and (3) developmental outlays.

Additions to Federal assets.—This category comprises additions to both financial and physical assets of the Federal Government.

The financial assets consist mainly of direct loans—for example, loans to finance private housing construction and encourage homeownership, to help small businesses, to finance college dormitory construction, to aid farm ownership and operation, to finance rural electric and telephone systems, and to promote economic development abroad. All Federal financial assets are covered, both loans and other financial

investments which have been classified under the new budget concept in the expenditure account as well as loans in the loan account. (The specific distinction between the two types of loans is presented and discussed in Special Analysis E.) Other financial investments include the capital provided for certain international organizations and for supersonic aircraft development.

Additions to physical assets include expenditures for public works, such as dam construction, flood control projects, and Federal power systems. They also include changes in major commodity inventories and outlays for major equipment (including military equipment) and for the acquisition and improvement of real property and other physical assets.

Table D-1. SUMMARY OF INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS (in millions of dollars)

	1967 actual	1968 estimate	1969 estimate
INVESTMENT-TYPE OUTLAYS			
Additions to Federal assets:			
Civil:			
Loans and other financial investments.....	6,207	8,062	5,398
Physical assets:			
Major commodity inventories.....	-1,230	-859	52
Other.....	3,173	3,094	3,102
National defense.....	21,993	23,743	24,242
Additions to State, local, and private assets:			
Civil.....	5,721	6,649	6,905
National defense.....	11	11	12
Developmental outlays:			
Civil.....	13,456	14,950	15,951
National defense.....	8,923	9,063	9,702
Subtotal, investment-type outlays:			
Civil.....	27,325	31,896	31,408
National defense.....	30,927	32,817	33,956
CURRENT OUTLAYS			
Current expenses for aid and special services:			
Civil.....	23,156	24,148	25,301
National defense.....	1,841	1,737	2,006
Retirement and social insurance benefits—civil.....	29,048	33,430	37,783
Other services and current operating expenses:			
Civil:			
Interest.....	13,524	14,497	15,349
Other.....	4,208	4,606	4,779
National defense.....	39,030	43,427	45,478
UNCLASSIFIED ITEMS			
Payments to other funds.....	657	573	663
Allowances:			
Civilian and military pay increase.....			1,600
Contingencies.....		100	350
Undistributed intragovernmental payments:			
Government contribution for employee retirement (—).....	-1,735	-1,913	-2,007
Interest received by trust funds (—).....	-2,268	-2,639	-3,017
Interfund and intragovernmental transactions (—).....	-2,585	-2,863	-3,217
Applicable receipts from the public (—).....	-4,713	-4,181	-4,375
Total budget outlays.....	158,414	175,635	186,062

Additions to State, local, and private assets.—Federal outlays under this heading add to State, local, and private assets. Grants-in-aid which augment the physical assets of State and local governments are primarily for the construction of highways (mainly through the highway trust fund), hospitals, airports, waste-treatment works, watershed protection projects, schools in federally affected areas, and public facilities under regional economic development programs for depressed regions.

Outlays which increase the value of privately owned assets are largely for the conservation and improvement of private farmland and water, for grants for construction of private nonprofit hospitals and other health facilities, and for construction subsidies to the merchant fleet.

Developmental outlays.—Federal outlays of this type are principally for research and development, education and health, and other programs which increase the Nation's fund of knowledge and technical skills and improve the physical vigor of the population. The total of Federal outlays shown in this category does not fully reflect the Government's contribution to the productivity of the economy, since it excludes loans and additions to physical assets, as well as certain other programs which further this end. The latter are classified in accordance with their principal purpose; thus, veterans educational benefits are listed as veterans aids rather than as developmental outlays. Similarly, the training of military personnel or other Government personnel is treated as an operating expense and not as part of the Government's education and training programs.

OUTLAYS OF A CURRENT NATURE

Outlays of a current nature are divided into the following categories: (1) current expenses for aids and special services, (2) retirement and social insurance benefits, and (3) other services and current operating expenses.

Current outlays for aids and special services.—Outlays classified under this heading provide aids or special services to certain groups—mainly in the year in which the outlays are made. In addition to such items as realized losses of the Commodity Credit Corporation on its farm programs, maritime operating subsidies, veterans pensions, and grants to foreign nations for economic and military assistance, this category includes (1) administrative and other operating expenses attributable to investment-type programs which benefit specific groups, and (2) the costs of maintaining the physical assets related to those programs.

Only part of the Federal Government's aid to special groups is reflected in this classification, which is limited by definition to current expenses. For example, subsidies for the construction of private merchant ships are classified as additions to private assets. Similarly, outlays for which the Federal Government receives assets or collateral (as the acquisition of farm commodities by the Commodity Credit Corporation) are treated as additions to Federal assets. Many indirect Government aids are excluded from this classification either because

they are not reflected in outlays or cannot be readily measured. Examples of such indirect benefits include low interest rates on some loans and certain preferential tax treatments.

Although outlays in this category essentially provide a direct aid or special service yielding immediate benefits, some of the items included contribute indirectly to the Nation's future development. Among these are grants for slum clearance and urban renewal.

Retirement and social insurance benefits.—This category applies only to trust funds. It covers benefit programs which (1) are financed from special taxes or contributions and (2) provide insurance against the loss of income due to unemployment, retirement, disability, or death. It does not include outlays for Government employees' health and life insurance expenditures which are in the form of premium payments to approved companies.

Other services and current operating outlays.—The outlays reported under this heading support a wide range of activities. They consist mainly of: pay and subsistence of military personnel; repair, maintenance, and operation of physical assets of the national military establishment and general purpose public buildings; conduct of foreign affairs; tax collection; payment of interest on the national debt; and operation and administration of other direct Federal programs not elsewhere classified.

UNCLASSIFIED

Certain transactions cannot be properly classified into any of the categories described above. The major examples of such transactions include special allowances for (1) the second stage of the pay increase enacted in 1967 for Government personnel and (2) unforeseen contingencies. They also include transactions which occur entirely within Government accounts and which therefore do not result in any flow of funds between the public and the Government. In addition, under the new budget concept, receipts from the public arising from market-oriented or business-type activities of the Government are applied against outlays to highlight the *net* impact of the budget.

RELATIONSHIP TO CAPITAL BUDGET

The U.S. Government does not produce a capital budget in the sense of a long-range program for the acquisition of assets, with separate financing of capital outlays. Some foreign governments and some State and local governments fund a portion of their capital expenditures by separate borrowing and exclude most or all such expenditures from their computation of budget totals, except for annual charges to amortize these capital outlays over a number of years.

While not a precise measure of the difference between capital and current items, this analysis does provide useful general magnitudes. However, it does not make any allowance for depreciation and obsolescence on existing physical assets, anticipated losses on loan programs, or profit or loss on sales of assets at figures different from their book value, although agencies record such allowances for transactions only

where the data will serve program and management needs, as in the case of the public enterprise funds. As a result, it is not possible to determine directly from this analysis the net addition to the value of federally owned assets.

Recoverability of outlays.—In general, Government outlays for assets are not expected to be recovered by specific revenues. However, most loans, investment in commodity inventories, the construction of powerplants, and outlays for range and forest improvements on public domain and national forest lands are offset in whole or in part by receipts to the Treasury through repayments and sales, specific charges, or recoveries. Where activities are carried on through revolving funds, such as in the case of most loan programs, receipts are credited directly against disbursements and only the difference is included in the total of outlays in the budget and in this analysis. All other receipts from the public arising from market-oriented or business-type activities of the Government are offset against total outlays.

Whether recovered by specific revenues or not, investment and developmental outlays for both physical and human capital add to the wealth and income of the Nation and, by helping to expand the tax base, augment the Government's potential future revenues. However, this analysis does not attempt to measure the degree of recoverability of developmental outlays, the potential gain in public revenues which will be forthcoming from them, nor the duration of future benefits and their discounted present value.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)

Description	1967 actual	1968 estimate	1969 estimate
Investment-Type Outlays			
ADDITIONS TO FEDERAL ASSETS			
Loans:			
Civil:			
To domestic private borrowers:			
Department of Agriculture:			
Commodity Credit Corporation: Price support and related programs	-600	157	-546
Rural Electrification Administration	232	278	360
Farmers Home Administration:			
Emergency credit revolving fund	4	-29	-9
Agricultural credit insurance	-18	-79	-14
Rural housing insurance	42	-24	-3
Direct loans	14	36	21
Trust funds	*	-4	-2
Department of Commerce:			
Industrial development loans and guarantees	23	29	36
Other	-9	-8	-7
Department of Health, Education, and Welfare:			
Office of Education:			
Higher educational activities	41	75	73
Higher education facilities loans fund	7	20	27
Other	124	5	5
Public Health Service	33	43	45

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Investment-Type Outlays—Continued			
ADDITIONS TO FEDERAL ASSETS—Continued			
Loans—Continued			
Civil—Continued			
To domestic private borrowers—Continued			
Department of Health, Education, and Welfare—Con.			
Social Security Administration:			
Federal old-age and survivors insurance trust fund.....	114	-----	-114
Federal disability insurance trust fund.....	74	-----	-74
Other trust funds.....	15	-----	-15
Other.....	3	4	4
Department of Housing and Urban Development:			
Renewal and housing assistance:			
College housing loans.....	163	142	116
Housing for the elderly or handicapped.....	77	89	98
Other.....	5	17	19
Mortgage credit:			
Federal Housing Administration fund.....	17	62	113
Federal National Mortgage Association:			
Management and liquidating functions.....	421	367	52
Special assistance functions.....	109	639	410
Participation sales fund.....	147	-----	-179
Secondary market operations trust fund.....	831	2,012	643
Other.....	4	2	-1
Department of Labor: Unemployment trust fund.....	114	-----	-114
Veterans Administration:			
Veterans direct loans.....	53	66	82
Loan guarantee revolving fund.....	217	246	281
National service life insurance trust fund.....	133	55	-15
United States Government life insurance trust fund.....	82	-2	-85
Other.....	4	5	5
Civil Service Commission (trust fund).....	114	-----	-114
Farm Credit Administration:			
Banks for cooperatives trust fund.....	193	249	238
Federal intermediate credit banks trust fund.....	478	500	533
Federal Home Loan Bank Board.....	44	-8	-20
Railroad Retirement Board (trust fund).....	114	-----	-114
Small Business Administration:			
Disaster loan fund.....	-6	36	-13
Business loan and investment fund.....	74	78	114
Other agencies.....	45	20	5
Total, to domestic private borrowers, civil.....	3,534	5,077	1,845
To State and local governments:			
Department of Commerce: Economic development.....	7	24	30
Department of Health, Education, and Welfare:			
Higher educational activities.....	38	148	150
Other.....	59	15	18
Department of Housing and Urban Development:			
Renewal and housing assistance:			
Urban renewal fund.....	58	1	12
College housing loans.....	199	174	141
Other.....	11	20	-15
Metropolitan development:			
Public facility loans.....	56	41	50
Other.....	7	-3	-6

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Investment-Type Outlays—Continued			
ADDITIONS TO FEDERAL ASSETS—Continued			
Loans—Continued			
Civil—Continued			
To State and local governments—Continued			
General Services Administration:			
General Services Administration credit sales.....	2	-44	-40
Other.....	-4	-2	-1
Loans to District of Columbia.....	20	17	64
Other agencies.....	21	19	12
Total, to State and local governments, civil.....	473	411	416
To foreign borrowers:			
Funds appropriated to the President: Economic assistance.....	1,147	1,041	1,163
Department of Agriculture: Commodity Credit Corporation: Credit sales, Public Law 480.....	153	428	680
Export-Import Bank of Washington.....	540	716	675
Total, to foreign borrowers, civil.....	1,840	2,184	2,518
Total, loans, civil.....	5,847	7,673	4,778
National defense:			
To domestic private borrowers: other agencies.....	-3	-2	-4
To foreign borrowers:			
Funds appropriated to the President: Military assistance.....		-20	6
Other agencies.....			11
Total, to foreign borrowers, national defense.....		-20	17
Total, loans, national defense.....	-3	-22	14
Total, loans.....	5,844	7,651	4,792
Other financial investments—civil:			
Investments in quasi-public institutions, trust funds, and international institutions:			
Funds appropriated to the President:			
Economic assistance.....	61	54	44
Inter-American Development Bank.....	54	88	120
International Development Association.....	106	125	80
Other.....	10	10	10
Department of Housing and Urban Development: Federal National Mortgage Association.....		20	28
Department of Transportation: Civil supersonic aircraft.....	145	100	351
Other agencies.....	-17	-8	-12
Total, investments in quasi-public institutions, trust funds and international institutions.....	360	389	620
Public works—sites and direct construction:			
Civil:			
Department of Agriculture:			
Forest protection and utilization.....	30	27	27
Forest roads and trails.....	70	94	80
Other ¹	26	43	46

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Investment-Type Outlays—Continued			
ADDITIONS TO FEDERAL ASSETS—Continued			
Public works—sites and direct construction—Continued			
Civil—Continued			
Department of Defense—Civil:			
Corps of Engineers:			
Construction, general.....	974	942	854
Flood control, Mississippi River and tributaries.....	60	55	46
Trust funds.....	23	26	23
Other ¹	10	23	21
Department of Health, Education, and Welfare: Public			
Health Service and other ¹	46	68	91
Department of the Interior:			
Bureau of Indian Affairs:			
Construction.....	41	38	35
Other.....	16	20	20
National Park Service:			
Parkway and road construction.....	32	32	34
Other ¹	20	22	17
Bureau of Reclamation:			
Construction and rehabilitation.....	182	165	179
Upper Colorado River storage project.....	44	40	30
Other ¹	5	6	6
Bonneville Power Administration:			
Construction.....	104	113	115
Other ¹	2	2	1
Other.....	40	37	35
Post Office Department.....	43	42	88
Department of Transportation:			
Coast Guard: Acquisition, construction, and improvements.....	29	34	70
Federal Aviation Administration.....	62	79	102
Other.....	*	3	9
General Services Administration: Public buildings.....	239	214	172
National Aeronautics and Space Administration.....	289	160	76
Veterans Administration: Hospitals and other.....	60	59	66
Tennessee Valley Authority.....	183	249	263
Other agencies.....	122	114	103
Total, public works, civil.....	2,752	2,706	2,607
National defense:			
Department of Defense—Military.....	1,601	1,623	1,538
Atomic Energy Commission.....	130	161	245
Total, public works, national defense.....	1,731	1,784	1,783
Total, public works, sites and direct construction.....	4,483	4,489	4,391
Major commodity inventories:			
Civil:			
Department of Agriculture: Commodity Credit Corporation.....	-1,253	-884	31
Department of the Interior: Helium fund.....	23	26	21
Total, major commodity inventories, civil.....	-1,230	-859	52
National defense: Other agencies.....	9	12	8
Total, major commodity inventories.....	-1,221	-847	60

*Less than \$500 thousand.

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Investment-Type Outlays—Continued			
ADDITIONS TO FEDERAL ASSETS—Continued			
Major equipment:			
Civil:			
Post Office Department.....	55	127	118
Department of Transportation:			
Coast Guard.....	72	66	65
Other.....	1	*	4
Other agencies.....	36	38	31
Total, major equipment, civil.....	163	231	218
National defense:			
Department of Defense—Military ¹	19,498	21,295	21,785
Atomic Energy Commission.....	152	150	165
Total, major equipment, national defense.....	19,650	21,445	21,950
Total, major equipment.....	19,813	21,675	22,168
Other physical assets—acquisition and improvement:			
Civil:			
Department of Agriculture ¹	54	57	60
Department of Housing and Urban Development.....	149	48	120
Department of the Interior:			
Land and water conservation.....	40	41	79
Other.....	42	34	34
Veterans Administration.....	—8	—29	—21
Other agencies ¹	—19	5	6
Total, other physical assets, civil.....	258	157	277
National defense: Atomic Energy Commission.....	606	524	488
Total, other physical assets—Acquisition and improvement.....	864	680	765
Total, additions to Federal assets.....	30,144	34,038	32,796
ADDITIONS TO STATE, LOCAL, AND PRIVATE ASSETS			
State and local assets:			
Civil:			
Funds appropriated to the President:			
Appalachian regional redevelopment programs.....		127	219
Public works acceleration.....	19	12	
Department of Agriculture:			
Watershed protection.....	54	60	50
Rural water and waste disposal grants.....	11	27	34
Other.....	29	24	28
Department of Commerce: Economic development:			
Development facilities and other.....	20	99	138
Appalachian development highway system.....	40		
Department of Defense—Civil: Corps of Engineers.....	12	26	69
Department of Health, Education, and Welfare:			
Office of Education:			
Higher educational activities.....	136	207	142
School assistance in federally affected areas.....	39	22	19
Vocational education.....	61	60	57

* Less than \$500 thousand.

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Investment-Type Outlays—Continued			
ADDITIONS TO STATE, LOCAL, AND PRIVATE ASSETS—Continued			
State and local assets—Continued			
Civil—Continued			
Department of Health, Education, and Welfare—Continued			
Public Health Service:			
Hospital construction activities.....	91	104	95
Construction of health educational facilities.....	21	63	65
Community mental health resources support.....	4	25	25
Other education and health.....	26	48	26
Department of Housing and Urban Development:			
Renewal and housing assistance: Grants for neighborhood facilities.....	1	15	32
Metropolitan development:			
Open space land programs.....	19	60	60
Grants for basic water and sewer facilities.....	6	90	130
Urban mass transportation.....	41	96	144
Other metropolitan development.....			3
Department of the Interior:			
Land and water conservation.....	22	56	74
Construction grants for waste treatment works and other.....	85	112	154
Other.....	9	16	28
Department of Transportation:			
Federal Aviation Administration.....	64	58	73
Federal Highway Administration:			
Highway trust fund.....	3,951	4,191	4,171
Forest highways.....	28		
State and community highway safety programs.....	1	26	70
Other ¹	11	2	6
Other agencies ¹	*	4	27
Total, State and local assets, civil.....	4,797	5,630	5,939
National defense: Other agencies ¹	10	10	12
Total, State and local assets.....	4,807	5,640	5,952
Private assets—civil:			
Department of Agriculture:			
Soil conservation.....	141	144	143
Agricultural stabilization and conservation.....	420	440	416
Other ¹	-7	-4	-4
Department of Commerce: Merchant ships.....			
	82	86	71
Department of Health, Education, and Welfare:			
Office of Education: Higher educational activities.....	58	89	61
Public Health Service:			
Construction of health educational facilities.....	8	25	25
Hospital construction activities.....	112	104	117
Grants for construction of health research facilities.....	37	37	37
Other education and health.....	13	17	22
National Science Foundation.....	58	60	52
Other agencies.....	2	21	25
Total, private assets, civil.....	924	1,019	966

* Less than \$500 thousand.

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Investment-Type Outlays—Continued			
ADDITIONS TO STATE, LOCAL, AND PRIVATE ASSETS—Continued			
Private assets—Continued			
National defense: Atomic Energy Commission trust fund	1	1	*
Total, private assets	925	1,020	967
Total, additions to State, local, and private assets	5,732	6,660	6,918
DEVELOPMENTAL OUTLAYS			
Education, training, and health:			
Civil:			
Funds appropriated to the President:			
Economic opportunity program	838	1,066	1,236
Appalachian regional development		1	1
Department of Agriculture: Extension service ¹	93	90	97
Department of Health, Education, and Welfare:			
Office of Education:			
Elementary and secondary educational activities	1,266	1,423	1,408
School assistance in federally affected areas	400	341	385
Higher educational activities	250	422	550
Vocational education	166	188	187
Libraries and community services	33	78	120
Defense educational activities	202	182	8
Educational improvement for the handicapped	24	34	55
Education professions development activities			57
Salaries and expenses	36	38	45
Other	33	53	77
Public Health Service:			
Comprehensive health planning and services	*	72	110
National Institutes of Health	61	73	90
Mental health research and services	93	122	95
Indian health activities	73	79	90
Health manpower education and utilization	1	47	90
Chronic diseases	60	57	17
Community health services	65	43	52
Air pollution	14	29	27
Communicable diseases	22	35	27
Community mental health resources support	*	15	25
Other ¹	211	192	157
Social and Rehabilitation Service:			
Grants to States for public assistance and medical assistance	1,173	1,761	2,121
Grants for rehabilitation services and facilities	207	298	364
Grants for maternal and child health and welfare	179	214	249
Rehabilitation research and training	31	40	42
Social services demonstrations training and projects			30
Other	24	34	43
Other ¹	23	40	69
Department of the Interior:			
Bureau of Indian Affairs: Education and welfare	96	95	121
Other	8	13	13
Department of Labor: Manpower Administration:			
Manpower development and training	275	444	430
Other	27	31	32

*Less than \$500 thousand.

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Investment-Type Outlays—Continued			
DEVELOPMENTAL OUTLAYS—Continued			
Education, training, and health—Continued			
Civil—Continued			
National Science Foundation.....	136	145	159
Other agencies ¹	42	56	71
Total, education, training, and health, civil.....	6,163	7,849	8,751
National defense: Atomic Energy Commission.....	18	17	18
Total, education, training, and health.....	6,181	7,866	8,769
Research and development:			
Civil:			
Funds appropriated to the President:			
Economic opportunity program.....	35	53	58
Other.....	9	10	10
Department of Agriculture:			
Agricultural Research Service.....	137	141	146
Cooperative State Research Service.....	56	58	62
Forest Service.....	38	39	42
Other ¹	22	22	21
Department of Commerce:			
National Bureau of Standards.....	26	25	27
Other.....	38	44	41
Department of Health, Education, and Welfare:			
Office of Education: Research, training, and other.....	66	84	91
Public Health Service:			
National Institutes of Health.....	795	841	908
Air pollution.....	16	24	53
Other.....	94	120	116
Social and Rehabilitation Service:			
Rehabilitation research and training.....	21	21	25
Other.....	15	22	34
Other.....	10	11	11
Department of the Interior:			
Geological Survey.....	32	34	36
Bureau of Mines ¹	30	34	35
Federal Water Pollution Control Administration.....	15	30	40
Other ¹	72	95	106
Department of Transportation:			
Federal Aviation Administration.....	46	44	40
Federal Highway Administration: Highway trust fund.....	23	27	31
Other transportation ¹	17	44	60
National Aeronautics and Space Administration ¹	5,131	4,641	4,496
Veterans Administration.....	44	45	48
National Science Foundation.....	209	240	257
Other agencies ¹	61	73	91
Total, research and development, civil.....	7,057	6,819	6,885
National defense:			
Department of Defense—Military:			
Military personnel.....	325	328	325
Operation and maintenance.....	44	50	2
Procurement.....	110	95	45
Research, development, test, and evaluation.....	7,160	7,200	7,800
Other.....	10	11	12

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Investment-Type Outlays—Continued			
DEVELOPMENTAL OUTLAYS—Continued			
Research and development—Continued			
National defense—Continued			
Atomic Energy Commission.....	1,256	1,362	1,500
Total, research and development, national defense.....	8,905	9,046	9,684
Total, research and development.....	15,962	15,865	16,569
Engineering and natural resource surveys—civil:			
Department of Commerce.....	26	28	31
Department of Defense—Civil.....	22	29	31
Department of Housing and Urban Development.....	22	31	46
Department of the Interior:			
Geological Survey ¹	50	54	60
National Park Service.....	36	43	45
Other ¹	41	54	61
Other agencies ¹	40	44	41
Total, engineering and natural resource surveys.....	236	282	315
Total, developmental outlays.....	22,379	24,014	25,653
Current Outlays			
CURRENT EXPENSES FOR AIDS AND SPECIAL SERVICES			
Agriculture—civil:			
Department of Agriculture:			
Consumer and Marketing Service:			
Removal of surplus agricultural commodities.....	145	175	178
Other ¹	7	8	8
Foreign Agricultural Service.....	21	25	26
Agricultural Stabilization and Conservation Service:			
Expenses.....	132	140	144
Sugar Act.....	82	86	87
Other ¹	*	1	*
Commodity Credit Corporation and special export programs:			
Transfer to supplemental stockpile.....	33	25	1
Price support, and related programs.....	3,760	3,398	3,313
National Wool Act.....	35	64	63
Other.....	-9	-1	-2
Rural Electrification Administration ¹	12	13	13
Farmers Home Administration:			
Salaries and expenses.....	52	59	58
Direct loans and other ¹	-60		3
Other.....	62	88	77
Farm Credit Administration:			
Federal Intermediate Credit Banks trust fund.....	-11	-36	-54
Other ¹	1	-8	-2
Other agencies.....	7	5	4
Total, agriculture.....	4,269	4,040	3,918

* Less than \$500 thousand.

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Current Outlays—Continued			
CURRENT EXPENSES FOR AIDS AND SPECIAL SERVICES—Continued			
Business:			
Civil:			
Department of Commerce:			
Patent office.....	36	38	41
Maritime Administration:			
Ship operating subsidies and other.....	182	207	211
Federal ship mortgage insurance escrow trust fund.....	18	47	75
Other ¹	62	88	86
Department of Defense—Civil:			
Corps of Engineers—Operation and maintenance.....	115	140	150
Other.....	-21	-21	-20
Post Office Department.....	474	298	-94
Department of Transportation:			
Coast Guard: Navigation aids and other ¹	308	298	358
Federal Aviation Administration: Operations.....	513	554	597
Other ¹	2	20	7
Civil Aeronautics Board: Payments to air carriers.....	62	58	54
Small Business Administration:			
Business loan and investment fund.....	66	47	36
Other.....	16	22	16
Other agencies ¹	27	24	20
Total, business, civil.....	1,860	1,819	1,538
National defense: Funds appropriated to the President:			
Expansion of defense production.....	-102	22	146
Total, business.....	1,758	1,841	1,684
Labor—civil:			
Department of Health, Education, and Welfare: Work incentive activities.....		11	86
Department of Labor:			
Unemployment trust fund.....	584	620	664
Other.....	20	31	41
Other agencies.....	12	15	34
Total, labor.....	616	677	824
Homeowners and tenants—civil:			
Department of Housing and Urban Development:			
Renewal and housing assistance:			
Urban renewal.....	370	500	700
College housing loans.....	-4	17	69
Low-rent public housing program.....	257	280	335
Other.....	-3	14	16
Mortgage credit:			
Federal Housing Administration.....	-126	-149	-214
Secondary market operations trust fund.....	-24	-43	-25
Other.....	-16	5	39
Other.....	2	1	19
Federal Home Loan Bank Board.....	-201	-389	-380
Other agencies.....	3		
Total, homeowners and tenants.....	259	236	557

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Current Outlays—Continued			
CURRENT EXPENSES FOR AIDS AND SPECIAL SERVICES—Continued			
Veterans—civil:			
Department of Health, Education, and Welfare: Payments for military service credits	105	105	105
Veterans Administration:			
Compensation and pensions	4,302	4,606	4,654
Readjustment benefits	292	518	618
Medical care	1,272	1,336	1,413
General operating expenses	176	190	199
National Service Life Insurance trust fund	671	509	576
United States Government Life Insurance trust fund	84	75	83
Veterans reopened insurance fund	—34	—35	—35
Veterans special term insurance fund	—30	—30	—32
Other ¹	34	21	33
Other agencies ¹	38	40	41
Total, veterans	6,910	7,336	7,654
International aids:			
Civil:			
Funds appropriated to the President:			
Foreign economic assistance ¹	1,102	1,104	1,118
Peace Corps ¹	112	108	110
Department of Agriculture: Commodity Credit Corporation and special export programs:			
Credit sales, Public Law 480	917	462	322
Commodities disposed of and other costs incurred in connection with donations abroad and other	381	425	442
Export-Import Bank of Washington	—104	—144	—110
Other agencies	36	42	42
Total, international aids, civil	2,445	1,999	1,924
National defense:			
Funds appropriated to the President:			
Military assistance	873	570	519
Advances, military assistance trust fund	1,070	1,125	1,330
Department of Defense—Military: Construction		20	25
Other agencies			—14
Total, international aids, national defense	1,943	1,715	1,860
Total, international aids	4,388	3,714	3,784
Other aids and special services—civil:			
Funds appropriated to the President:			
Disaster relief	53	45	36
Economic opportunity program ¹	598	722	696
Appalachian regional development		3	3
Department of Agriculture:			
Special milk program	96	102	102
Food stamp program	114	178	238
School lunch program	208	220	246
Department of Health, Education, and Welfare:			
Public Health Service:			
Hospitals and medical care	61	61	66
Other	42	43	35

* Less than \$500 thousand.

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Current Outlays—Continued			
CURRENT EXPENSES FOR AIDS AND SPECIAL SERVICES—Continued			
Other aids and special services—civil—Continued			
Department of Health, Education, and Welfare—Continued			
Social and Rehabilitation Service:			
Grants to States for public assistance and maintenance payments	3,002	3,436	2,963
Coordination and development of programs for the aging	7	13	26
Assistance to refugees in the United States	27	29	34
Demonstration projects and training			558
Work incentive activities		4	33
Other	8	9	31
Social Security Administration:			
Payment to trust funds for health insurance for the aged	950	1,280	1,360
Payment for special benefits for the aged			226
Federal supplementary medical insurance trust fund	135	139	164
Federal hospital insurance trust fund	89	83	94
Federal old-age and survivors insurance trust fund	333	452	443
Federal disability insurance trust fund	98	112	129
Other ¹	19	29	35
Department of Housing and Urban Development: Model cities programs and other	35	66	303
Department of the Interior:			
Bureau of Indian Affairs and other ¹	74	88	99
Indian tribal funds (trust)	174	140	119
Post Office Department	557	605	634
Department of Transportation:			
Federal Highway Administration:			
Landscaping, scenic enhancement, and beautification	22	73	78
Other ¹	4	14	20
Other ¹	3	8	11
Other agencies ¹	88	86	104
Total, other aids and special services, civil	6,797	8,041	8,886
Total, current expenses for aids and special services	24,999	25,885	27,309
RETIREMENT AND SOCIAL INSURANCE BENEFITS			
Insurance benefits—civil:			
Department of Health, Education, and Welfare:			
Federal supplementary medical insurance trust fund	664	1,473	1,656
Federal hospital insurance trust fund	2,508	3,369	3,865
Federal old-age and survivors insurance trust fund	18,886	20,742	23,711
Federal disability insurance trust fund	1,861	2,118	2,521
Railroad Retirement Board (trust fund)	1,257	1,328	1,392
Total, insurance benefits	25,176	29,030	33,145
Unemployment benefits—civil: Department of Labor: Unemployment trust fund	2,072	2,455	2,451

* Less than \$500 thousand.

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Current Outlays—Continued			
RETIREMENT AND SOCIAL INSURANCE BENEFITS—Con.			
Other retirement and social insurance benefits—civil:			
Civil Service Commission: Civil Service retirement and disability trust fund.....	1,789	1,932	2,174
Other trust funds.....	11	12	13
Total, other retirement and social insurance benefits.....	1,800	1,944	2,187
Total, retirement and social insurance benefits.....	29,048	33,430	37,783
OTHER SERVICES AND CURRENT OPERATING EXPENSES			
Repair, maintenance and operation of physical assets (excluding special services):			
Civil:			
Department of Agriculture: Forest Service.....	192	195	175
Department of Defense—Civil: Corps of Engineers and other.....	63	88	98
Department of the Interior:			
Bureau of Land Management.....	36	42	32
National Park Service.....	27	31	35
Bureau of Reclamation.....	52	61	64
Other ¹	45	53	56
General Services Administration: Public buildings.....	283	301	309
Tennessee Valley Authority.....	—119	—172	—147
Other agencies ¹	41	41	38
Total, repair, maintenance and operation of physical assets, civil.....	622	641	661
National defense:			
Department of Defense—Military:			
Operation and maintenance.....	18,923	19,720	22,221
Family housing.....	151	152	158
Atomic Energy Commission.....	101	119	129
Other agencies.....	*	*	*
Total, repair, maintenance and operation of physical assets, national defense.....	19,175	19,991	22,508
Total, repair, maintenance and operation of physical assets.....	19,797	20,631	23,169
Regulation and control—civil:			
The Judiciary.....	87	94	101
Department of Agriculture:			
Agricultural Research Service.....	80	86	87
Consumer and Marketing Service:			
Protective, marketing, and regulatory programs.....	77	90	102
Expenses and refunds, inspection and grading of farm products trust fund.....	29	32	32
Other ¹	4	4	5
Department of Health, Education, and Welfare:			
Food and Drug Administration and other.....	48	51	52

* Less than \$500 thousand.

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Current Outlays—Continued			
OTHER SERVICES AND CURRENT OPERATING EXPENSES—Continued			
Regulation and control—civil—Continued			
Department of Justice:			
Legal activities and general administration.....	77	81	88
Federal Bureau of Investigation.....	185	195	206
Immigration and Naturalization Service.....	80	82	86
Bureau of Prisons ¹	55	58	61
Proposed legislation for control of crime.....		10	33
Department of Labor: Wage and labor standards and other.....	31	35	37
Department of Transportation:			
Coast Guard.....	36	37	44
Federal Aviation Administration.....	44	48	52
Other.....		5	6
Federal Deposit Insurance Corporation trust fund.....	-239	-261	-274
Interstate Commerce Commission.....	27	24	24
National Labor Relations Board.....	30	32	35
Other agencies ¹	138	145	160
Total, regulation and control.....	787	850	939
Other operation and administration:			
Civil:			
International activities:			
Department of Justice: Alien property trust fund.....	2	4	53
Department of State:			
Administration of foreign affairs ¹	201	211	220
International organizations and conferences ¹	108	118	124
Educational exchange ¹	49	47	47
Other ¹	11	7	3
Foreign Claims Settlement Commission: War claims trust fund and other.....	21	200	11
United States Information Agency.....	165	171	180
Other agencies ¹	14	26	20
Total, international activities.....	572	782	657
Federal financial activities:			
Legislative branch: General Accounting Office.....	49	54	58
Treasury Department:			
Bureau of Accounts.....	34	36	46
Bureau of Customs.....	79	82	89
Bureau of the Public Debt.....	52	53	61
Internal Revenue Service.....	662	688	760
Other.....	35	33	32
Other agencies ¹	5	5	5
Total, Federal financial activities.....	915	951	1,052
Other direct Federal programs:			
Legislative branch ¹	176	199	206
Department of Commerce:			
Environmental Science Services Administration.....	112	108	114
Other.....	12	9	9

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Current Outlays—Continued			
OTHER SERVICES AND CURRENT OPERATING EXPENSES—Continued			
Other operation and administration—Continued			
Civil—Continued			
Other direct Federal programs—Continued			
Department of Defense—Civil.....	60	65	61
Treasury Department: Bureau of Accounts ¹	49	8	6
General Services Administration ¹	126	110	166
Civil Service Commission:			
Salaries and expenses and other.....	18	36	40
Civil Service retirement and disability trust fund.....	176	189	190
Employees life insurance fund trust fund.....	-69	-63	-68
Employees health benefits fund trust fund.....	-19	-21	-25
Other agencies ¹	50	63	69
Total, other direct Federal programs.....	691	705	767
Retirement, unemployment, and accident compensation for Federal employees:			
Department of Labor:			
Unemployment compensation for Federal employees and ex-servicemen.....	79	91	92
Employees compensation claims and expenses.....	57	56	53
Department of Transportation: Coast Guard: Retired pay.....	45	44	54
Civil Service Commission: Special payments and annuities.....	111	113	114
Other agencies.....	4	7	8
Total, retirement, unemployment, and accident compensation for Federal employees.....	295	311	322
Shared revenues and grants-in-aid:			
Department of Agriculture: Forest Service.....	43	45	48
Department of the Interior:			
Bureau of Land Management.....	71	73	72
Other.....	47	54	62
Treasury Department:			
Bureau of Customs.....	27	29	29
Internal Revenue Service.....	59	65	67
District of Columbia: Federal payment.....	58	81	81
Other agencies.....	21	21	22
Total, shared revenues and grants-in-aid.....	326	367	383
Total, other operation and administration, civil.....	2,800	3,116	3,180
National defense:			
Department of Defense—Military:			
Military personnel.....	19,462	21,472	22,445
Operation and maintenance.....	33	30	60
Family housing.....	265	290	302
Civil defense.....	78	69	61
Other ¹	-64	1,491	12
Selective Service System.....	58	61	64
Other agencies ¹	22	22	26
Total, other operation and administration, national defense.....	19,855	23,436	22,970
Total, other operation and administration.....	22,654	26,552	26,150

¹ Includes both Federal funds and trust funds.

Table D-2. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS
(In millions of dollars)—Continued

Description	1967 actual	1968 estimate	1969 estimate
Current Outlays—Continued			
OTHER SERVICES AND CURRENT OPERATING EXPENSES—Continued			
Interest:			
On the public debt.....	13,391	14,350	15,200
Other interest:			
On refunds:			
Treasury Department.....	120	134	137
General Services Administration.....		*	*
On uninvested funds: Treasury Department.....	13	13	12
Total, other interest.....	133	147	149
Total, interest.....	13,524	14,497	15,349
Total, other services and current operating expenses.....	56,762	62,530	65,606
UNCLASSIFIED			
Payments to other funds ¹	657	573	663
Allowances for:			
Civilian and military pay increase.....			1,600
Contingencies.....		100	350
Undistributed:			
Interfund and intragovernmental payments.....	-6,589	-7,415	-8,240
Applicable receipts from the public.....	-4,713	-4,181	-4,375
Total, budget outlays.....	158,414	175,635	186,062

* Less than \$500 thousand.

¹ Includes both Federal funds and trust funds.

SPECIAL ANALYSIS E

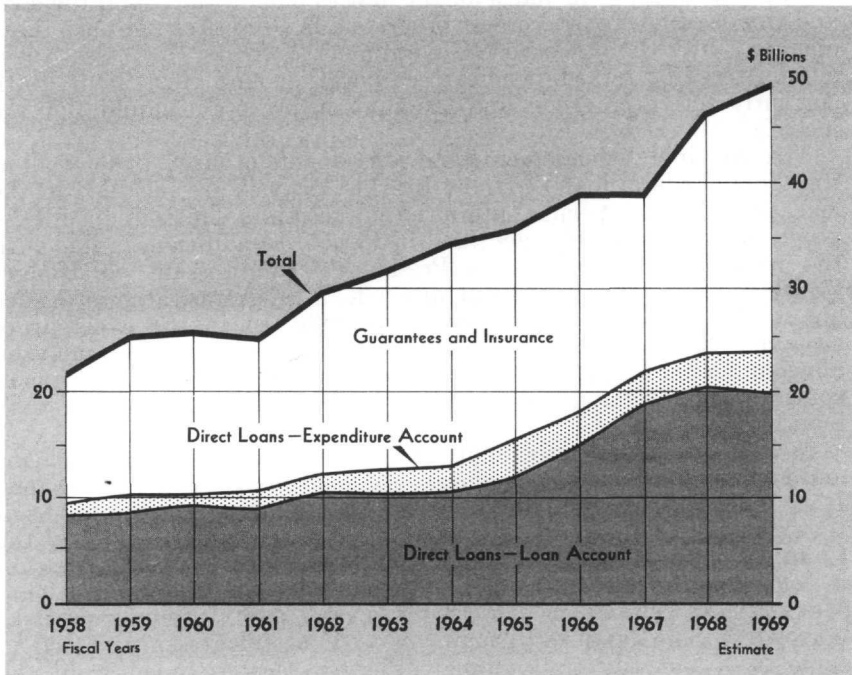
FEDERAL CREDIT PROGRAMS

INTRODUCTION

Federal credit aids—direct loans and insurance or guarantees of private loans—play a major role in Government programs for: (a) improvement of housing and encouragement of homeownership; (b) development of agricultural and other natural resources; (c) assistance to economic development and military preparedness abroad; (d) promotion of business, especially exports, transportation, and small business generally; (e) redevelopment of communities and regions; and (f) aid to higher education.

Federal Credit Programs

New Commitments



Over the past decade the overall level of Federal credit assistance has doubled, a rate of increase comparable to the rise in the gross national product. During the same period many existing programs have been broadened and new programs initiated to meet emerging needs. On the other hand, other programs established for temporary reasons in earlier years are liquidating their operations as outstanding

loans are repaid or privately refinanced. Moreover, as private investors accumulate experience with ongoing programs, they often refinance outstanding Federal loans or directly finance the new credit requirements of borrowers.

Federal credit programs help borrowers to help themselves. In several programs, the credit aids are part of a package of Federal assistance. Such a package sometimes also includes, for example, grants to provide necessary public facilities for depressed areas; grants for work-training, education, and other types of community action to help combat poverty; technical aids to help underdeveloped countries plan and construct basic transportation systems; or management advice to help rural residents plan, develop and operate their farms economically and productively.

SCOPE OF SPECIAL ANALYSIS

This analysis (a) summarizes the 1967-1969 trends in Federal credit programs, (b) indicates the relationship between the credit programs and the overall budget totals, and (c) discusses certain subsidy aspects of credit programs.

The 1969 analysis includes for the first time information on the level and trends of all Federal credit programs. It comprises not only those operated by wholly owned Government agencies, but also those administered by mixed-ownership corporations and trust funds. Both currently active programs and programs in process of liquidation are included.

The principal disbursements and repayments of most, but not all of the direct Federal loans covered by this analysis are included in the loan account; the specific appropriation accounts which finance these programs are separately identified in Part 5. In addition, in line with the recommendations of the President's Commission on Budget Concepts, two specific types of direct loan programs, accounting for about 15% of new commitments, are reflected in the expenditure account; these programs comprise (a) foreign loans made largely on noncommercial terms, and (b) other loans where the terms of the loan contract make repayment in certain respects contingent rather than mandatory.

As in previous years, the analysis includes both direct Federal loans and Federal guarantees and insurance of loans made by private lenders. It excludes all borrowing operations of Federal agencies, whether from the Treasury or the public. Pursuant to the recommendations of the Commission on Budget Concepts, sales of certificates of participation in loans by the Export-Import Bank and by the Federal National Mortgage Association as trustee for several agencies are treated as borrowing. Sales and retirements of such certificates are shown in table E-6, but the transactions otherwise are excluded from the analysis.

In addition, contrary to the practice followed in previous years, the analysis is confined to loans made and repayable in dollars and, therefore, excludes significant amounts of loans, mainly some of those made by the Agency for International Development, which are repayable in foreign currencies.¹ This exclusion facilitates reconciliation with other budget totals.

The 1969 analysis covers credit programs administered by nine departments and 10 other agencies. The estimates for 1968 and 1969 include credit aid authorized by legislation enacted during the past year.²

The analysis also reflects the impact on credit programs of proposed legislation (a) authorizing a new export expansion program by the Export-Import Bank; (b) broadening Federal assistance for existing programs of student loan insurance; (c) revising the formulas governing interest rates on college housing and academic facility loans; (d) authorizing a flexible ceiling for interest rates on insured or guaranteed housing loans; (e) accelerating the transfer of the secondary market operations of the Federal National Mortgage Association to private ownership; (f) creating two new cooperative banks for rural electric and telephone loans; (g) authorizing federally insured loans to Indians; and (h) extending authority to make credit sales of military equipment.

NEW COMMITMENTS

New commitments are the best single measure of the short-run trends in most Federal credit programs. They also give the best advance indication of trends in the financing impact of these programs, since changes in the level of new commitments usually precede corresponding changes in the volume of loans disbursed by either public agencies or private lenders and in the purchase of goods and services by the ultimate borrowers.

In this analysis, commitments are defined as approvals by Federal agencies of direct loans or of insurance or guarantees of private loans. They are shown on a gross basis, including administrative reservations, commitments which do not later result in actual credit extensions, and the unguaranteed portions of loans partially covered by Federal guarantees.

¹ Data on loans repayable in foreign currency is contained in table M-6 in Special Analysis M.

² See summary on pp. 527-528 for further details.

Table E-1. NEW COMMITMENTS FOR FEDERAL CREDIT PROGRAMS CLASSIFIED BY TYPE OF ASSISTANCE AND ACCOUNT (in millions of dollars)

Agency or program	1967 actual		1968 estimate		1969 estimate	
	Direct loans	Guaranteed and insured loans	Direct loans	Guaranteed and insured loans	Direct loans	Guaranteed and insured loans
EXPENDITURE ACCOUNT						
Funds appropriated to the President:						
Military assistance.....	65	289	72	190	61	235
Economic assistance.....	1,190	59	996	315	1,459	303
Department of Agriculture: Commodity Credit Corporation.....	1,417	166	2,112	354	2,180	400
Department of Health, Education, and Welfare.....	220	-----	236	-----	248	-----
Other programs.....	7	-----	7	-----	7	-----
Total, expenditure account.....	2,899	514	3,422	859	3,955	938
LOAN ACCOUNT						
Office of Economic Opportunity.....	32	-----	29	-----	18	-----
Department of Agriculture:						
Commodity Credit Corporation.....	277	-----	161	-----	220	-----
Rural Electrification Administration.....	472	-----	470	-----	470	-----
Farmers Home Administration.....	505	822	458	817	435	870
Department of Commerce:						
Economic Development Administration.....	75	7	72	7	86	9
Maritime Administration.....	-----	104	-----	140	-----	166
Department of Health, Education, and Welfare.....	209	-----	157	476	157	165
Department of Housing and Urban Development:						
Federal National Mortgage Association.....	2,436	-----	3,874	-----	1,651	-----
Federal Housing Administration.....	676	9,991	667	12,657	415	14,238
Public housing loans.....	23	443	52	985	67	1,265
College housing loans.....	300	-----	200	-----	300	-----
Urban renewal loans.....	177	777	211	869	214	886
Housing for the elderly loans.....	84	-----	85	-----	85	-----
Public facility loans.....	30	-----	50	-----	40	-----
Department of the Interior.....	24	8	29	6	17	11
General Services Administration.....	39	-----	-----	45	-----	-----
Veterans Administration:						
Housing loans and guarantees.....	529	2,831	539	4,005	592	4,350
Insurance policy loans.....	161	-----	155	-----	165	-----
District of Columbia.....	77	-----	119	-----	144	-----
Export-Import Bank.....	2,661	1,160	2,111	1,446	2,440	2,076
Farm Credit Administration:						
Banks for cooperatives.....	1,815	-----	2,101	-----	2,370	-----
Federal intermediate credit banks.....	6,999	-----	8,349	-----	9,481	-----
Federal Home Loan Bank Board.....	66	-----	12	-----	-----	-----
Small Business Administration.....	357	132	429	318	459	365
Other agencies or programs.....	28	96	17	12	12	8
Purchase of obligations of federally sponsored enterprises.....	850	-----	-----	-----	-----	-----
Total loan account.....	18,903	16,371	20,346	21,783	19,840	24,408
Grand total.....	21,802	16,885	23,768	22,642	23,795	25,346

Direct loans.—New commitments of \$23.8 billion for direct loans in 1969 are unchanged from the revised estimates for 1968, but roughly \$2 billion higher than the actual commitments made in 1967. Over the 2-year period, the largest increases are anticipated in short-term credit provided by the Federal intermediate credit banks and the Banks for Cooperatives in the loan account, and in commodity loans and long-term export sales credit by the Commodity Credit Corporation in the expenditure account. These three credit aids alone account for well over half of the direct loan commitments projected for 1969. On the other hand, mortgage purchase commitments by the Federal National Mortgage Association for the account of the Government are expected to be sharply lower, because legislation is proposed both to lift the statutory ceiling on interest rates, encouraging broader private credit extension, and to transfer the secondary market operations to private ownership.

Guarantees and insurance.—New commitments of \$16.9 billion in 1967 for guarantees and insurance of private loans were at the lowest level since 1961. This was primarily attributable to the sharp decline in housing construction—aggravated by the unattractiveness of investment in federally insured or guaranteed loans at the fixed statutory ceilings on interest rates.

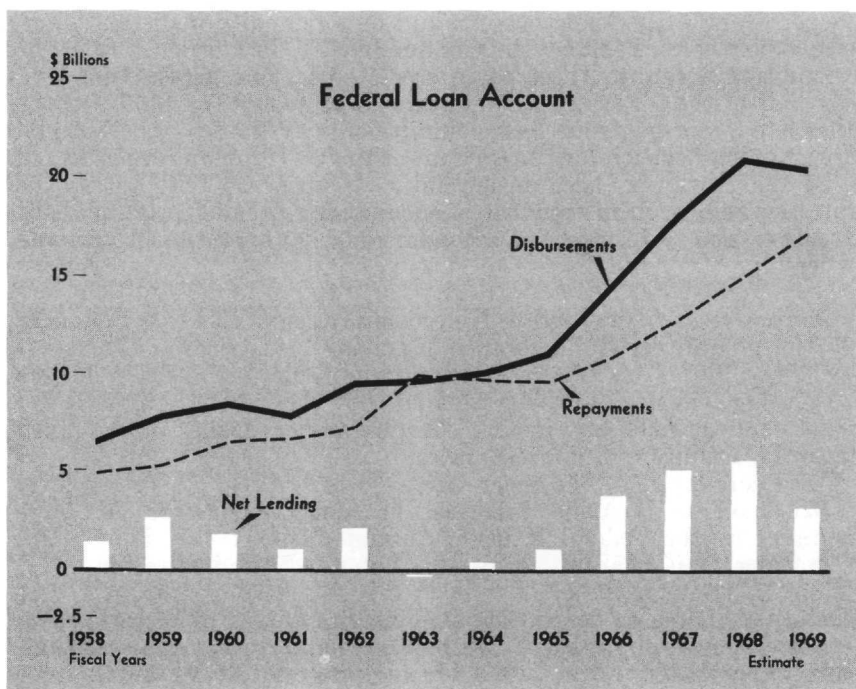
Total commitments, however, are expected to reach a record level of \$25.3 billion in 1969. Increases in commitments for mortgage insurance by the Federal Housing Administration (\$4.2 billion), and in housing loan guarantees by the Veterans Administration (\$1.5 billion) account for the great bulk of the estimated expansion. Other substantial increases are anticipated in guarantees of foreign loans by the Export-Import Bank (\$0.9 billion) and in low-rent housing loans underwritten in the public housing program (\$0.8 billion).

Disbursements and repayments.—Gross disbursements for direct loans have the most immediate impact on the budget. In long-established programs, or in programs involving short-term loans, however, the cash outflow required for such disbursements usually is largely or wholly offset by repayments on the outstanding portfolio of loans. This is true for most of the credit extensions by the Federal intermediate credit banks, the banks for cooperatives, the Farmers Home Administration and the Commodity Credit Corporation, as well as for the interim financing of public housing and urban renewal projects.

On the other hand, long-term loans, such as those to finance construction of college housing and academic facilities or rural electrification and telephone systems, as well as purchases of mortgages to help finance residential housing, have a major net impact on the budget, since repayments usually fall short of new loans. This is especially true for rapidly expanding programs, such as the Export-Import Bank. Moreover, while in some previous years substantial sales of outstanding loans have augmented repayments, the current outlook is for sales of only \$0.2 billion in 1968 and 1969.

Federal guarantees and insurance of private loans ordinarily have only minor and indirect budget consequences. Principal disbursements of Federal funds normally occur only when the borrower defaults, or

in a few programs when holders of such insured loans exercise their repurchase options.



In accordance with the recommendations of the Commission on Budget Concepts, both the budget as a whole and this analysis segregate and treat separately net lending—the excess of principal disbursements over collections of all credit programs in the loan account. The gross data on disbursements are also adjusted to reflect writeoffs, losses, and recoveries. As a result, the net lending in any year equals the change between the loans outstanding in the loan account at the beginning of the year and the total outstanding at the year end.

The same principles are followed in deriving the gross and net loan expenditures for credit programs in the expenditure account. As a result, the net loan disbursements for all credit programs in the loan account and for most of the credit programs in the expenditure account are identical with the outlays shown as “loans” in the “additions to Federal assets” category in Special Analysis D.¹ The only exceptions are for those programs in the expenditure account not financed through revolving funds, where repayments are individually recorded in miscellaneous receipts, rather than netted against expenditures. Omission of these repayments in Special Analysis D causes the total of “additions to assets” in that analysis to exceed the net loan disbursements in this analysis by \$467 million, \$177 million, and \$223 million in 1967, 1968 and 1969, respectively.

¹ See table D-2 on pp. 498-500.

Table E-2. DISBURSEMENTS AND REPAYMENTS FOR FEDERAL CREDIT PROGRAMS CLASSIFIED BY TYPE OF ACCOUNT (in millions of dollars)

Agency or program	1967 actual		1968 estimate		1969 estimate	
	Disbursements	Repayments	Disbursements	Repayments	Disbursements	Repayments
EXPENDITURE ACCOUNT						
Funds appropriated to the President:						
Military assistance ¹	43	43	34	54	6	-----
Economic assistance.....	1,169	66	1,064	84	1,191	94
Department of Agriculture: Commodity Credit Corporation.....	1,376	2,085	2,072	1,458	2,140	2,030
Department of Health, Education, and Welfare.....	222	*	238	*	238	*
Treasury Department ¹	-----	416	-----	109	11	151
Other programs.....	14	12	8	14	5	14
Total, expenditure account.....	2,823	2,622	3,416	1,720	3,591	2,288
LOAN ACCOUNT						
Office of Economic Opportunity.....	32	8	29	12	18	15
Department of Agriculture:						
Commodity Credit Corporation.....	277	15	161	190	220	196
Rural Electrification Administration.....	412	180	470	192	550	190
Farmers Home Administration.....	1,231	1,188	1,426	1,526	1,352	1,358
Department of Commerce:						
Economic Development Administration.....	34	4	58	5	72	7
Maritime Administration.....	-----	9	-----	8	-----	8
Department of Health, Education, and Welfare.....	88	3	73	1	87	4
Department of Housing and Urban Development:						
Federal National Mortgage Association.....	1,766	405	3,513	495	1,669	564
Federal Housing Administration.....	662	641	658	594	405	292
Public housing loans.....	154	144	220	200	220	235
College housing loans.....	391	29	350	34	295	38
Urban renewal loans.....	607	543	470	453	475	444
Housing for the elderly loans.....	78	1	90	1	100	2
Public facility loans.....	59	3	45	4	54	4
Department of the Interior.....	28	3	26	4	16	4
General Services Administration.....	38	40	*	46	-----	41
Veterans Administration:						
Housing loans and guarantees.....	522	252	537	225	600	238
Insurance policy loans.....	146	85	155	97	165	101
District of Columbia.....	55	36	55	39	108	43
Export-Import Bank.....	1,167	627	1,645	929	1,680	1,005
Farm Credit Administration:						
Banks for cooperatives.....	1,815	1,622	2,101	1,852	2,370	2,132
Federal intermediate credit banks.....	6,999	6,520	8,349	7,849	9,481	8,948
Federal Home Loan Bank Board.....	53	9	12	20	-----	20
Small Business Administration.....	280	212	410	296	421	320
Other agencies or programs.....	45	33	17	20	12	16
Purchase of obligations of federally sponsored enterprises.....	850	-----	-----	-----	-----	882
Total, loan account.....	17,787	12,611	20,869	15,091	20,372	17,106
Grand total.....	20,610	15,233	24,285	16,811	23,963	19,394

^{*} Less than \$500 thousand.¹ All 1969 transactions of the Foreign military sales fund are shown in a Treasury liquidation account.

Over the 1957-66 decade, net lending for all Federal programs in the loan account ranged from a high of \$3.8 billion in 1966 to a low in 1963 when repayments exceeded new loan disbursements by \$0.1 billion. The actual net lending in 1967 and the net lending now estimated for 1968 is at record levels, \$5.2 billion and \$5.8 billion, respectively. A sharp cutback to \$3.3 billion is now forecast for 1969. This reflects predominantly the \$1.8 billion reduction in net mortgage purchases by the Federal National Mortgage Association.

Loan disbursements in the expenditure account also are expected to substantially exceed repayments—by \$1.7 billion in 1968 and \$1.3 billion in 1969. This is partly because most loans for foreign economic assistance permit deferment of principal repayments during the early years.

OUTSTANDING DIRECT AND GUARANTEED LOANS

The best index of the level of Federal credit programs over a period of years is provided by the total outstanding direct and guaranteed loans. By the close of 1969, these will amount to \$156.9 billion in the loan account and an additional \$19.4 billion in the expenditure account—or a gross total of \$176.2 billion.

Outstanding direct loans in the loan account (including loans pooled as collateral for certificates of participation) will rise by an estimated \$9 billion over the 2-year period—almost half of this because of the \$4.1 billion increase in the total FNMA portfolio. Other major increases are estimated for the Export-Import Bank (\$1.4 billion) and the Federal intermediate credit banks (\$1 billion), as well as in college housing loans, VA housing loans, and REA loans.

An additional \$3 billion rise is anticipated between 1967 and 1969 in the direct loan portfolios in the expenditure account. Most of this occurs in foreign assistance credits of the Agency for International Development, long-term export sales credit by the Commodity Credit Corporation, and repayable capital contributions to student loan funds by the Department of Health, Education, and Welfare.

Outstanding guaranteed and insured loans in both accounts will rise from a total of \$99.5 billion at the end of 1967 to \$117.1 billion in 1969. Housing loans insured by the Federal Housing Administration or guaranteed by the Veterans Administration or in the low-rent public housing program account for two-thirds of this increase. Other major increases are expected in loans insured by the Farmers Home Administration (\$1.6 billion), the Export-Import Bank (\$0.9 billion), the Commodity Credit Corporation (\$0.7 billion), and the urban renewal program (\$0.7 billion).

The amounts shown include both the guaranteed and unguaranteed portion of outstanding loans in order to give a more complete picture of the economic impact of these programs and to tie in better with banking statistics. Thus, they do not indicate the estimated contingent liability of the Federal Government. The major program for which the contingent liability differs materially from the principal amount of the loans is the veterans loan guarantee program; by the end of 1969, the Government's liability will be \$17.6 billion lower than the amount of guaranteed loans outstanding under that program.

Table E-3. OUTSTANDING DIRECT LOANS, AND GUARANTEED AND INSURED LOANS FOR FEDERAL CREDIT PROGRAMS CLASSIFIED BY TYPE OF ACCOUNT (in millions of dollars)

Agency or program	1967 actual		1968 estimate		1969 estimate	
	Direct loans	Guaranteed and insured loans	Direct loans	Guaranteed and insured loans	Direct loans	Guaranteed and insured loans
EXPENDITURE ACCOUNT						
Funds appropriated to the President:						
Military assistance ¹	43	218	23	388	6	235
Economic assistance	6,074	237	7,055	552	8,152	854
Department of Agriculture: Commodity Credit Corporation	1,085	1,021	1,698	1,375	1,808	1,775
Department of Health, Education, and Welfare	959	-----	1,196	-----	1,434	-----
Treasury Department ¹	4,686	-----	4,577	-----	4,461	463
Other programs	184	-----	177	-----	168	-----
Total, expenditure account	13,031	1,476	14,727	2,315	16,030	3,327
LOAN ACCOUNT						
Office of Economic Opportunity	70	-----	87	-----	90	-----
Department of Agriculture:						
Commodity Credit Corporation	294	-----	265	-----	288	-----
Rural Electrification Administration	4,506	-----	4,785	-----	5,146	-----
Farmers Home Administration	2,229	1,636	2,129	2,505	2,123	3,260
Department of Commerce:						
Economic Development Administration	191	11	244	17	309	26
Maritime Administration	101	562	93	669	85	796
Department of Health, Education, and Welfare	164	-----	236	476	320	641
Department of Housing and Urban Development:						
Federal National Mortgage Association	7,403	-----	10,421	-----	11,527	-----
Federal Housing Administration	635	54,197	699	56,538	812	60,361
Public housing loans	68	5,772	88	6,394	73	7,299
College housing loans	2,606	-----	2,923	-----	3,180	-----
Urban renewal loans	286	1,921	304	2,271	335	2,609
Housing for the elderly loans	225	-----	314	-----	412	-----
Public facility loans	269	-----	310	-----	360	-----
Department of the Interior	170	12	192	16	203	25
General Services Administration	174	-----	128	45	87	25
Veterans Administration:						
Housing loans and guarantees	2,203	31,537	2,515	33,203	2,878	35,151
Insurance policy loans	756	-----	814	-----	878	-----
District of Columbia	180	-----	197	-----	261	-----
Export-Import Bank	4,151	1,790	4,868	1,904	5,543	2,727
Farm Credit Administration:						
Banks for cooperatives	1,302	-----	1,551	-----	1,790	-----
Federal intermediate credit banks	3,547	-----	4,047	-----	4,580	-----
Federal Home Loan Bank Board	149	-----	141	-----	121	-----
Small Business Administration	1,373	355	1,486	515	1,588	703
Other agencies or programs	88	232	85	203	81	188
Purchase of obligations of federally sponsored enterprises	882	-----	882	-----	-----	-----
Total, loan account	34,026	98,024	39,804	104,756	43,070	113,811
Grand total	47,057	99,500	54,531	107,071	59,100	117,138

¹ All 1969 transactions of the Foreign military sales fund are shown in a Treasury liquidating account.

INTEREST RATES AND MATURITIES

Two of the major ways in which Federal credit programs help achieve program objectives are by providing more favorable interest rates or maturities than many borrowers can obtain from other sources. Table E-4 summarizes the current range of interest rates charged by the various major credit programs on direct loans (or prevailing on insured or guaranteed loans) and the customary maturities for both direct and insured and guaranteed loans. These terms are on newly committed loans by currently active programs, and do not necessarily correspond to those on outstanding loans, or on loans covered by commitments made in earlier years.

Interest rates charged on direct loans vary both among the various Federal credit agencies and sometimes among the various types of loans made by a single agency. Many of the differences in rates reflect mainly differences in the cost of providing the loan (including the cost of borrowing the necessary funds), of administering the several types of loans and of incurring the varying degrees of risk of probable loss. In many cases, the rate charged is governed by statutory limits or formulas. Frequently, these are intended to assure loans at rates below those prevailing in the private market or below the cost to the Government, in order to provide special assistance to particular groups of borrowers as a method of accomplishing Federal program objectives. In some cases, the rates charged reflect mainly Government borrowing costs in earlier periods, rather than current market yields of Government obligations.

Interest rates charged on insured and guaranteed loans tend to correspond more closely to market rates of interest on comparable loans by private lenders—allowing for the reduction or removal of the normal private credit risk. In a few cases, however, interest rates on insured loans are set below the market rate and a secondary market is provided to assure the willingness of the private lender to originate the loans. The Federal Housing Administration, for example, was authorized in the Housing Act of 1961 to insure certain types of loans to finance moderate-income housing at rates well below those prevailing in the private market (currently 3%), and the Federal National Mortgage Association purchases all of such mortgages. In other cases, the Federal agency pays part of the interest costs necessary to obtain private financing, for example, for insured student loans made by private lenders under the Higher Education Act of 1965.

Maturities, both on direct and on insured or guaranteed loans, often are substantially more liberal than on private loans of similar types. Private lenders are often limited by law or supervisory policy to shorter maturities. When a Federal agency insures or guarantees the loans, however, these limitations customarily do not apply. Lenders can, safely, extend their loan maturities and borrowers can take advantage of lower periodic installments to acquire assets yielding income or tangible benefits over a long period of years.

Table E-4. INTEREST RATES AND MATURITIES FOR MAJOR ACTIVE CREDIT PROGRAMS CLASSIFIED BY AGENCY OR PROGRAM, DECEMBER 1967

Agency or program	Direct loans		Guaranteed and insured loans	
	Interest rate (percent)	Maturity (years)	Interest rate (percent)	Maturity (years)
EXPENDITURE ACCOUNT				
Funds appropriated to the President:				
Military assistance.....	0-6	3-10	3½-6¼	4-10
Economic assistance.....	¾-5¾	5-40	6-7½	5-25
Department of Agriculture: Commodity Credit Corporation.....	1 3½	1-11	3½	½-1
Department of Health, Education, and Welfare.....	0-5½	(²)		
LOAN ACCOUNT				
Office of Economic Opportunity.....	4½	15-30		
Department of Agriculture:				
Commodity Credit Corporation.....	4-7	½-5		
Rural Electrification Administration.....	2	35		
Farmers Home Administration.....	3-5	1-50	4-6½	33-40
Department of Commerce:				
Economic Development Administration.....	4¼-4¾	5-40	6-8	5-10
Maritime Administration.....	6	9-25	6	25
Department of Health, Education, and Welfare.....	3-6	0-40	6	(²)
Department of Housing and Urban Development:				
Federal National Mortgage Association.....	3-6	25-40		
Federal Housing Administration.....	5¼-6	20-40	¾-3-6	20-40
Public housing loans.....	2½-5½	0-40	2½-4¾	½-40
College housing loans.....	3	40-50		
Urban renewal loans.....	2½-5¼	0-34	2½-5¼	½-34
Housing for the elderly loans.....	3	30-50		
Public facility loans.....	4¼-4½	10-40		
Department of the Interior: (Reclamation loans).....	0-3¼	22-50		
General Services Administration.....	6	1-30		
Veterans Administration:				
Housing loans and guarantees.....	4-6¾	7-30	5¼-6¾	7-30
Insurance policy loans.....	4	(⁴)		
District of Columbia.....	0-5½	0-40		
Export-Import Bank.....	6	1¼-20	6-10	½-7
Farm Credit Administration:				
Banks for cooperatives.....	4¼-6	1-20		
Federal intermediate credit banks.....	4¼-6¾	1-7		
Federal Home Loan Bank Board.....	4-7½	1-25		
Small Business Administration.....	3-5½	1-30	3-8	1-30

¹ When commodity loan is repaid by forfeiting collateral, no interest is charged.

² On student loans, maturities begin when student leaves school and exclude periods of military or Peace Corps service.

³ In addition, property improvement loans are insured for 4-5% discount per year (equivalent to over 8% simple interest), and with maturities of 6 months to 7 years.

⁴ Indefinite.

Unlike most other programs, Government outlays on credit programs are largely or wholly repayable with interest, so that the ultimate net cost is normally low. Some programs are fully self-supporting; in most others, income from interest payments or insurance and guarantee fees covers most of the current expenses, and sometimes provides reserves for future losses. But a substantial number of loan programs contain an element of subsidy, e.g., by

lending at more favorable interest rates than the cost of money to the Government and/or at rates inadequate to defray the administrative expenses of the program or to establish an adequate reserve for probable future losses.

The Commission on Budget Concepts has recommended:

(a) "That the full amount of the interest subsidy on loans compared to Treasury borrowing costs be reflected and specifically disclosed in the expenditure account of the budget, and furthermore, that it be measured on a capitalized basis at the time the loans are made"; and

(b) "That effective measures be developed to reflect (in the expenditure rather than the loan account of the budget) the further subsidy involved in the fact that Federal loans have a larger element of risk than Treasury borrowing. This should be done by creation of allowances for losses and making appropriate credits to those allowances and charges to expense as new loans are extended."

As the Commission recognized, these recommendations will require extensive further study and consultation to develop the information and methods necessary to place them in force. While it is not possible in this budget to present reliable data on the amounts of "subsidy" involved, a preliminary review indicates that of the roughly \$20 billion in new commitments for loans estimated for the fiscal year 1968 by loan programs in the loan account, three-fourths are being made at interest rates of 5% or higher. However, the great bulk of the estimated new commitments of \$3.4 billion in direct loan commitments by programs in the expenditure account are made at lower rates of interest and/or with terms which give the borrower considerably greater option on the timing and extent of interest and/or principal payments.

GOVERNMENT-SPONSORED CREDIT PROGRAMS

Three major groups of Government-sponsored, privately owned institutions administer credit programs. The operations of the Federal land banks and of the Federal home loan banks are not reflected in the budget totals, but detailed schedules and explanatory statements are printed as annexed budgets in Part III of the Appendix. The operations of the Federal Reserve banks have no direct effect on

Table E-5. **OUTSTANDING LOANS FOR MAJOR GOVERNMENT-SPONSORED CREDIT PROGRAMS** (in millions of dollars)

Agency	Outstanding at end of—			
	1966 actual	1967 actual	1968 estimate	1969 estimate
Farm Credit Administration: Federal land banks.....	4,725	5,304	6,069	6,860
Federal Home Loan Bank Board: Federal home loan banks.....	6,783	4,302	4,600	5,600
Federal Reserve, Board of Governors: Federal Reserve banks.....	530	204	(1)	(1)
Total.....	12,038	9,810	-----	-----

¹ Estimates are not available.

budget totals, but payments of excess Federal Reserve profits are regularly made to the Treasury and these will continue to be treated as budget receipts in line with the recommendations of the Commission on Budget Concepts.

The Federal land banks anticipate a continued rapid expansion, amounting to \$2.1 billion over the 3-year period, in outstanding loans made through the nearly 700 Federal land bank associations. The Federal home loan banks, after the rapid repayment of advances during 1967, now expect a net expansion of \$1.3 billion in outstanding advances over the next 2 years. Outstanding discounts, advances, and acceptances of the Federal Reserve banks declined by \$0.3 billion during 1967.

CERTIFICATES OF PARTICIPATION IN FEDERAL LOANS

For several years the Export-Import Bank and the Federal National Mortgage Association, as trustee for five departments and agencies, have been pooling blocks of direct loans and selling certificates of participation in such pools. Receipts from these sales not only have provided private financing for the specific programs involved, but also under previous budget concepts have been treated as offsets to budget expenditures, comparable to the proceeds from direct sales of individual loans.

Table E-6. SALES AND RETIREMENTS OF CERTIFICATES OF PARTICIPATION IN FEDERAL LOANS (in millions of dollars)

Agency or program	1967 actual		1968 estimate		1969 estimate	
	Sales	Retire-ments	Sales	Retire-ments	Sales	Retire-ments
Department of Agriculture: Farmers Home Administration.....	600	-----	675	-----	500	180
Department of Health, Education, and Welfare:						
Office of Education.....	100	-----	100	-----	-----	-----
Public Health Service.....			15	-----	-----	-----
Department of Housing and Urban Development:						
Federal National Mortgage Association..	740	49	605	49	1,205	140
College housing loans.....	600	-----	1,385	-----	500	13
Housing for the elderly loans.....			60	-----	65	-----
Public facility loans.....	80	-----	80	-----	80	2
Veterans Administration.....	260	61	765	61	600	82
Small Business Administration.....	520	70	315	70	200	213
Subtotal, trusts administered by FNMA.....	2,900	180	4,000	180	3,150	630
Export-Import Bank.....	1,329	550	1,300	435	850	242
Total.....	4,229	730	5,300	615	4,000	872

In this budget, in accordance with the recommendations of the Commission on Budget Concepts, sales of participations are treated as means of financing the loan portfolio, i.e., agency borrowing, rather than sale of assets. Table E-6 summarizes the trends in sales and retirements for the six departments and agencies involved.

SUMMARY OF LEGISLATION AUTHORIZING NEW AND BROADENED
FEDERAL CREDIT PROGRAMS

The following summary lists all legislation authorizing new Federal credit programs or revising existing programs in major respects enacted during the last session of Congress. It excludes simple extensions in expiring laws and increases in funds for continuing programs.

I. Department of State—Agency for International Development and
Department of Defense

A. Foreign Assistance Act of 1967—Public Law 90-137

(1) Revises interest rates for Development Loan Fund and Alliance for Progress loans, and criteria for DLF loans; (2) revises standards for investment guarantees and basis for determining interest rates, (3) transfers the military sales fund at the end of the fiscal year 1968 from the Department of Defense to the Treasury Department to discharge outstanding liabilities and obligations arising out of previous credit sales agreements; and (4) limits guaranteed military sales credit extended in 1968 and terminates authorities for sales and guarantees as of June 30, 1968.

II. District of Columbia

A. District of Columbia Federal Payment Authorization and
Borrowing Authority Act of 1967—Public Law 90-120

Provides broader and more flexible formula to govern Federal loan authorization to the D.C. General Fund (capital outlay).

B. Amendments to the Act of June 12, 1960—Public Law 90-84

Forgives half of outstanding debt on the Dulles Interceptor sewer line.

III. Farm Credit Administration

Amendments to the Federal Farm Loan Act and the Farm Credit
Act of 1933—Public Law 90-204.

Removes statutory interest ceiling on loans made by Federal land banks and banks for cooperatives, and makes related adjustments in other interest rates.

IV. Small Business Administration and Office of Economic Opportunity

A. Small Business Act Amendments of 1967 and Small Business
Investment Act Amendments of 1967—Public Law 90-104

(1) Increases maximum maturity of business loans for construction purposes to 15 years, and (2) liberalizes authority to purchase debentures of small business investment companies and establishes new interest formula on such debentures.

B. Economic Opportunity Amendments of 1967—Public Law
90-222

Revises standards for SBA loans to provide employment and investment incentives to small businesses in areas with high proportions of unemployed or low-income individuals or businesses owned by low-income individuals.

V. Appalachian Regional Commission

A. Appalachian Regional Development Act Amendments of
1967—Public Law 90-103

Authorizes grants and loans with flexible interest and repayment requirements for expenses of planning and obtaining insured loans for low and moderate income housing construction in growth areas of Appalachian region.

SPECIAL ANALYSIS F

CIVILIAN EMPLOYMENT IN THE EXECUTIVE BRANCH

Recent substantial increases in civilian employment in the executive branch are attributable chiefly to support for Vietnam operations and to a large increase in mail volume. Because of the expected near stabilization of Vietnam defense requirements, the rise in civilian employees in fiscal 1969 is estimated to be substantially less than in 1968.

FULL-TIME PERMANENT CIVILIAN EMPLOYMENT

Full-time permanent civilian employment is estimated to reach 2,687,500 by the end of 1969. Nearly one-half of these employees will work in the Defense Department, another one-fifth in the Post Office, and about 6% in the Veterans Administration. Thus, these three agencies account for nearly three-quarters of all permanent full-time employment in the executive branch.

Table F-1 outlines the estimated changes in civilian permanent full-time employment between 1968 and 1969. Of the total anticipated increase of 46,000, over 39% is for the Post Office to service a 3.8% increase in mail volume and a further substantial rise in the number of mailing addresses. Another 6%, or 3,000 employees, is for the Department of Defense to support operations in Vietnam.

The remaining increase is for providing a larger number of public services to a growing population and expanding economy. Ten agencies account for the bulk of these added employees:

(1) The Treasury Department, up 3,500, as the Internal Revenue Service will require an additional 2,700 persons to stay abreast of 112 million tax returns, up 3 million in 1969, and the Bureau of Customs expects a 7% increase in formal cargo entries.

(2) The Department of Health, Education, and Welfare, up 3,400, mainly because the number of claims processed for old-age and survivors insurance is expected to rise, and bills and claims received under the supplementary medical insurance plan are expected to increase by 3 million.

(3) The Department of the Interior, up 2,400, chiefly for teachers to educate Indians on reservations, for personnel to continue building and to operate new power facilities initiated in prior years, for work on water pollution control (including the staffing of new laboratories), and for accommodating a 9% increase in visitors to the National Parks.

(4) The Department of Transportation, up 1,900, largely for additional workload in the Federal Aviation Administration associated with increased aviation activity, illustrated by a 15% increase in landings and takeoffs at airports with FAA towers.

(5) The Veterans Administration, up 1,900, primarily to enlarge and improve hospital services and give better medical care.

Table F-1. SUMMARY OF FULL-TIME PERMANENT EMPLOYMENT IN THE EXECUTIVE BRANCH

Agency	As of June			Increase, 1969 over 1968
	1967 actual	1968 estimate	1969 estimate	
Department of Defense, Military and military assistance.....	1, 193, 657	1, 220, 500	1, 223, 500	3, 000
Post Office Department.....	528, 254	550, 600	568, 400	17, 800
Subtotal.....	1, 721, 911	1, 771, 100	1, 791, 900	20, 800
Department of Agriculture.....	85, 723	85, 800	86, 300	500
Department of Commerce.....	25, 900	26, 200	27, 000	800
Department of Defense, Civil.....	31, 980	32, 200	32, 600	400
Department of Health, Education, and Welfare.....	97, 792	105, 400	108, 800	3, 400
Department of Housing and Urban Development.....	14, 250	14, 800	16, 200	1, 400
Department of the Interior.....	60, 606	61, 100	63, 500	2, 400
Department of Justice.....	33, 176	33, 650	34, 200	550
Department of Labor.....	9, 461	9, 700	10, 700	1, 000
Department of State.....	26, 849	26, 900	27, 000	100
Agency for International Development.....	16, 713	17, 600	18, 100	500
Peace Corps.....	1, 240	1, 400	1, 600	200
Department of Transportation.....	55, 187	57, 700	59, 600	1, 900
Treasury Department.....	81, 591	82, 000	85, 500	3, 500
Atomic Energy Commission.....	7, 013	7, 150	7, 300	150
General Services Administration.....	37, 117	38, 300	39, 700	1, 400
National Aeronautics and Space Administration.....	33, 726	32, 400	32, 600	200
Veterans Administration.....	150, 225	152, 100	154, 000	1, 900
Other agencies:				
Selective Service System.....	7, 085	7, 200	6, 900	-300
Small Business Administration.....	4, 142	4, 300	4, 700	400
Tennessee Valley Authority.....	11, 903	12, 350	12, 700	350
The Panama Canal.....	14, 571	14, 950	15, 000	50
United States Information Agency.....	11, 686	11, 650	11, 700	50
Miscellaneous agencies ¹	32, 204	33, 550	35, 100	1, 550
Subtotal.....	850, 140	868, 400	890, 800	22, 400
Allowance for contingencies.....		2, 400	4, 800	2, 400
Total.....	2, 572, 051	2, 641, 900	2, 687, 500	45, 600

¹ Excludes member-employees of the Soldiers' Home.

(6) The Department of Housing and Urban Development, up 1,400, mainly covering an anticipated growth of 100,000 FHA mortgage insurance applications, and the new or expanded activities in the Model Cities, Public Housing, and Urban Renewal programs.

(7) The General Services Administration, up 1,400, mostly to handle the increased volume of supplies required for support of military operations in Southeast Asia, and for the operation and maintenance of 3 million square feet of new Federal buildings, construction of which will have been completed.

(8) The Labor Department, up 1,000, to administer an expanded Federal manpower program including full cost on-the-job training for the disadvantaged, short-term employability training, and support for State and local manpower program planning.

(9) The Commerce Department, up 800, largely for (a) a larger number of overseas commercial exhibitions in 1969 which are expected

to boost sales of American products abroad, (b) a significant increase in weather observations and improved weather forecasting capability, and (c) a 4% increase in the disposition of patent applications.

(10) The Justice Department, up 550, mainly for crime control and civil rights activities of the FBI and the Department's attorneys, and for the expected 7 million additional inspections by the Immigration and Naturalization Service.

TOTAL FEDERAL PERSONNEL

Employees in permanent full-time positions account for nearly 90% of total civilian employment in the executive branch. The remainder consists of part-time and intermittent workers, employed largely in projects of a special, temporary, or seasonal nature.

Total Federal Government employment also includes military personnel in the executive branch and employment in the legislative and judicial branches.

	<i>As of June</i>		
	<i>1967 actual</i>	<i>1968 estimate</i>	<i>1969 estimate</i>
Civilian employment in the executive branch: ¹			
Permanent full-time.....	2,572,051	2,641,900	2,687,500
Other than permanent full-time ²	305,276	289,800	299,200
Military personnel:			
Department of Defense.....	3,374,436	3,487,510	3,474,589
Reimbursable details to other agencies.....	2,075	2,366	2,931
Department of Transportation (Coast Guard).....	36,540	37,321	38,475
Total executive branch personnel.....	6,290,378	6,458,897	6,502,695
Legislative and judicial personnel.....	34,291		
Total.....	6,324,669		

¹ Excludes member-employees of the Soldiers' Home.

² Excludes summer workers under the President's Youth Opportunity Campaign and various merchant seamen on vessels under Federal shipping contracts.

GEOGRAPHICAL DISTRIBUTION OF EMPLOYMENT

Table F-2 presents data on the geographical distribution of Federal employment. Most Federal employees—over 81%—work in the various States. Less than 11% are located in the Washington, D.C. metropolitan area (including nearby Maryland and Virginia). Another 8% are in foreign countries and in U.S. territories and possessions.

PERSONNEL COMPENSATION AND BENEFITS

Estimates of the Federal payroll and related costs are shown in table F-3. Direct compensation includes regular pay, Sunday pay, and special pay for overtime, holiday, and standby time; differentials for nightwork and overseas duty, flight and hazardous duty, etc. Related personnel benefits include the Government's share of Federal retirement and old-age, survivors', and disability insurance costs; employees' life insurance, health insurance and benefits, and similar payments; they also include cost-of-living and quarters allowances, uniform allowances (when paid in cash), and, in the case of the military personnel, they also include allowances for subsistence, reenlistment bonuses, and certain other cash payments.

Table F-2. FEDERAL CIVILIAN EMPLOYMENT BY GEOGRAPHICAL LOCATION (as of June 1967)

Location	Total ¹	Location	Total ¹
Washington, D.C., metropolitan area	² 308,712	Oregon	22,806
Alabama	62,066	Pennsylvania	143,588
Alaska	14,834	Rhode Island	14,924
Arizona	24,864	South Carolina	29,665
Arkansas	16,502	South Dakota	9,267
California	306,351	Tennessee	40,388
Colorado	41,380	Texas	144,191
Connecticut	18,315	Utah	41,412
Delaware	4,232	Vermont	3,454
Florida	65,051	Virginia	³ 81,162
Georgia	75,701	Washington	55,764
Hawaii	26,859	West Virginia	12,663
Idaho	7,717	Wisconsin	24,299
Illinois	113,761	Wyoming	4,658
Indiana	39,813	Undistributed	⁴ -7,714
Iowa	17,933		
Kansas	21,746	Total United States	2,675,458
Kentucky	35,784		
Louisiana	28,664	Outside United States:	
Maine	16,955	Territories and possessions	35,728
Maryland	³ 59,684	Foreign countries	200,432
Massachusetts	66,445		
Michigan	53,623	Total outside United States	236,160
Minnesota	29,738	U.S. citizens	(58,510)
Mississippi	19,822	Foreign nationals	⁵ (177,650)
Missouri	63,822		
Montana	9,682	Total employment	2,911,618
Nebraska	15,515	Legislative and judicial	-34,291
Nevada	7,814		
New Hampshire	4,596	Total employment executive branch	2,877,327
New Jersey	66,091	Other than full-time permanent	-305,276
New Mexico	25,399		
New York	185,521	Total full-time permanent employment, executive branch	2,572,051
North Carolina	36,617		
North Dakota	7,576		
Ohio	100,148		
Oklahoma	55,598		

¹ Distribution by State is partially estimated.

² Includes employees of the executive branch and of the legislative and judicial branches.

³ Excludes employment within the Washington, D.C., metropolitan area, which includes the District of Columbia, and the adjacent counties and cities in Maryland and Virginia.

⁴ Includes various merchant seamen on vessels under Federal shipping contracts who are distributed by State of residence and member-employees of the Soldiers' Home.

⁵ Excludes 120,383 foreign nationals working for Department of Defense under contract agreements, or other arrangements with foreign governments which provide for the furnishing of personal services.

The obligations to be incurred for civilian personnel compensation and benefits in 1969 are estimated at \$25 billion.

Some of the personnel are employed by trust funds (such as old-age and survivors insurance) and some are employed by public enterprise funds (such as the Post Office). The cost of these employees, included in Table F-3, amounts to \$7 billion.

Government pay scales for "blue collar" workers have for many years been subject to administrative adjustment to correspond to local prevailing rates in private industry. As wages in private industry advanced, Federal compensation for such workers also increased.

Pay for most other Federal workers has been set by statute. In

December 1967, the Congress enacted pay legislation which authorizes the President, without additional congressional approval, to set salary rates consistent with the standards set forth in the 1962 Salary Reform Act.

Table F-3. ESTIMATED PERSONNEL COMPENSATION AND BENEFITS
(In millions of dollars)

Description	1967	1968	1969 ¹
Total civilian personnel costs:			
Direct compensation.....	20,600	22,300	23,150
Personnel benefits.....	1,700	1,850	1,900
Total.....	22,300	24,150	25,050
MEMORANDUM			
Total military personnel costs:²			
Direct compensation.....	11,750	13,050	13,500
Personnel benefits.....	3,500	3,900	4,000
Total.....	15,250	16,950	17,500

¹ Excludes 1969 budget allowance of \$1,600 million for military and civilian pay increases, to be effective July 1, 1968, under present law.

² Excludes Reserve components.

This legislation is designed to achieve, in three steps, comparability with private industry salary levels by July 1969.

The first step was effective retroactively to October 1967 and provided an increase of 6% for postal employees and an average increase of 4.5% for all others. The second step, which is to be effective in July 1968, provides a 5% increase for postal employees, and an increase for all others equal to one-half of the difference then existing between Government salaries and comparable private salaries for the same type of occupation. The third and final step will achieve full comparability in July 1969. The compensation figures in table F-3 reflect the first step in the series.

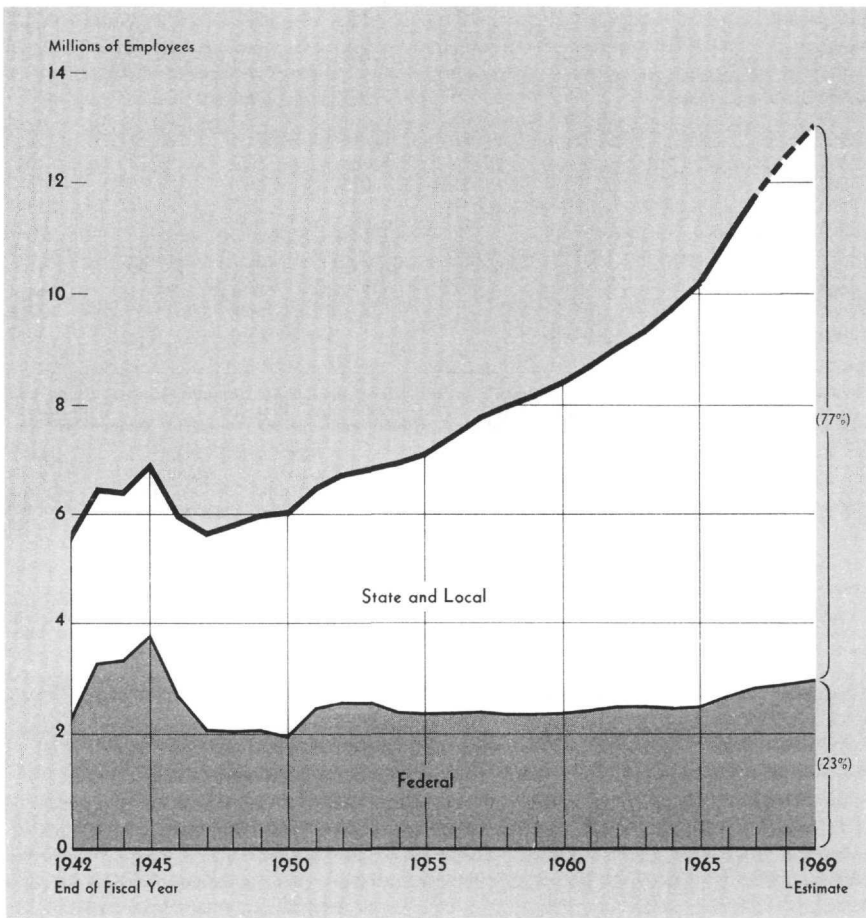
For 3 successive years, 1965-67, there has been no significant Government-wide change in the average grade of Classification Act employees. Apart from legislative changes in pay scales, average compensation for 1967 showed only a slight increase from 1966. This was due mostly to merited within-grade salary advancements and necessary reclassifications of new positions in certain agencies.

TRENDS IN NUMBERS OF EMPLOYEES AND WORKLOAD

The continued growth in population, in national income, and in economic activity, coupled with an increasing concern for the welfare of the poor and the elderly, has brought about a sharp rise in the volume of public services the Government is called upon to render. In 1969, for example, the participants in the food stamp program will rise 8%; establishments with Federal meat inspectors will increase by 78%; the number of pieces of mail delivered by the Post Office will be up 3.8% to 85 billion; the number of small business loans are expected to increase by 21%; complaint applications concerning monopolistic and unfair trade practices are projected to rise by 7%; air

carrier rate and fare cases will rise by 16%; the number of radio and television stations regulated by the Federal Communications Commission will be up 5%; a 93% increase is expected in electric rate filings to the Federal Power Commission; the number of law enforcement investigations and cases completed by the Department of Justice is expected to rise by 5%; there will be a 20% increase in outlays by Federal manpower programs, mostly aimed at the disadvantaged in both urban and rural areas; the number of applications for motor carrier operating authority is expected to increase by 8%; a 7.5% increase is projected in unfair labor practice cases; and beneficiaries of the Social Security system will increase by 4%. The increase in staff needed to carry out the new programs and to accommodate the increasing demands for existing Government services has been estimated on the assumption that existing work methods can be improved with a resulting increase in productivity.

Government Civilian Employment



A historical comparison of total Federal civilian employment in the executive branch (including temporary and part-time employment) with employment by State and local governments and U.S. population for 1942-69 is shown in table F-4.

Table F-4. GOVERNMENT EMPLOYMENT AND POPULATION, 1942-69

Year	Government employment				Population	
	Federal executive branch ¹ (thousands)	State and local governments (thousands)	All governmental units (thousands)	Federal as percent of all governmental units	Total United States (thousands)	Federal employment per 1,000 population
1942.....	2,272	3,310	5,582	40.7	135,361	16.8
1943.....	3,274	3,184	6,458	50.7	137,250	23.9
1944.....	3,304	3,092	6,396	51.7	138,916	23.8
1945.....	3,787	3,104	6,891	55.0	140,468	27.0
1946.....	2,666	3,305	5,971	44.6	141,936	18.8
1947.....	2,082	3,568	5,650	36.8	144,698	14.4
1948.....	2,044	3,776	5,820	35.1	147,208	13.9
1949.....	2,075	3,906	5,981	34.7	149,767	13.9
1950.....	1,934	4,078	6,012	32.2	152,271	12.7
1951.....	2,456	4,031	6,487	37.9	154,878	15.9
1952.....	2,574	4,134	6,708	38.4	157,553	16.3
1953.....	2,532	4,282	6,814	37.2	160,184	15.8
1954.....	2,382	4,552	6,934	34.4	163,026	14.6
1955.....	2,371	4,728	7,099	33.4	165,931	14.3
1956.....	2,372	5,064	7,436	31.9	168,903	14.0
1957.....	2,391	5,380	7,771	30.8	171,984	13.9
1958.....	2,355	5,630	7,985	29.5	174,882	13.5
1959.....	2,355	5,806	8,161	28.9	177,830	13.2
1960.....	² 2,371	6,073	8,444	28.1	180,684	13.1
1961.....	2,407	6,295	8,702	27.7	183,756	13.1
1962.....	2,485	6,533	9,018	27.6	186,656	13.3
1963.....	³ 2,490	6,834	9,324	26.7	189,417	13.1
1964.....	³ 2,469	7,236	9,705	25.4	192,120	12.9
1965.....	2,496	7,700	10,196	24.5	194,592	12.8
1966.....	2,664	8,320	10,984	24.2	196,920	13.5
1967.....	2,877	8,898	11,775	24.4	199,118	14.4
1968 (estimated) ⁴	2,932	-----	-----	23.8	-----	14.6
1969 (estimated) ⁴	2,987	-----	-----	23.0	-----	14.7

¹ Covers total end-of-year employment in full-time permanent, temporary, part-time, and intermittent positions except for summer workers under the President's Youth Opportunity Campaign; member employees of the Soldiers' Home; and various merchant seamen on vessels under Federal shipping contracts:

	1967 actual	1968 estimate	1969 estimate
Youth Opportunity Campaign.....	82,923	83,000	83,000
Merchant seamen.....	7,464	6,500	6,400
Member-employees of the Soldiers' Home.....	250	250	260

² Includes piece-rate census workers employed for the decennial census.

³ Excludes 7,411 project employees in 1963 and 406 project employees in 1964 for the public works acceleration program.

⁴ An official projection of population and of State and local government employment for 1968 and 1969 is not available. The percentages and ratios shown for these years are consistent with a range of reasonable estimates based on recent trends in population and State and local employment.

SPECIAL ANALYSIS G

FEDERAL ACTIVITIES IN PUBLIC WORKS

To aid in understanding the nature and magnitude of Federal activities affecting public works, this analysis brings together information on new authority and budget outlays relating to Federal construction and federally aided State and local public works. The analysis also includes, as a separate tabulation, information on major Federal programs affecting construction by private cooperatives and nonprofit groups. Other Federal programs which affect the level of private construction, such as Federal procurement, leases, loans, loan guarantees, and tax concessions, are not included in this analysis.

The trend of Federal expenditures for grants and direct Federal civil and defense construction is shown in the accompanying chart. Table G-1 indicates total budget outlays for public works, including net lending, over a 10-year period.

Total outlays for public works are estimated at \$10.4 billion in 1969, 52% higher than in 1960. The higher level in recent years reflects the growing need for highways, schools, public buildings, research facilities, and other structures to carry on various governmental functions. Increases in 1968 and 1969, however, have been held to a minimum by slowing down on certain construction programs in order to reduce the deficit and lessen inflationary pressures on the economy. Actions taken include reductions in 1968 under the cutback of controllable programs enacted by the Congress and a temporary postponement of new construction contracts. As a result of these actions and further reductions recommended for 1969, new obligational

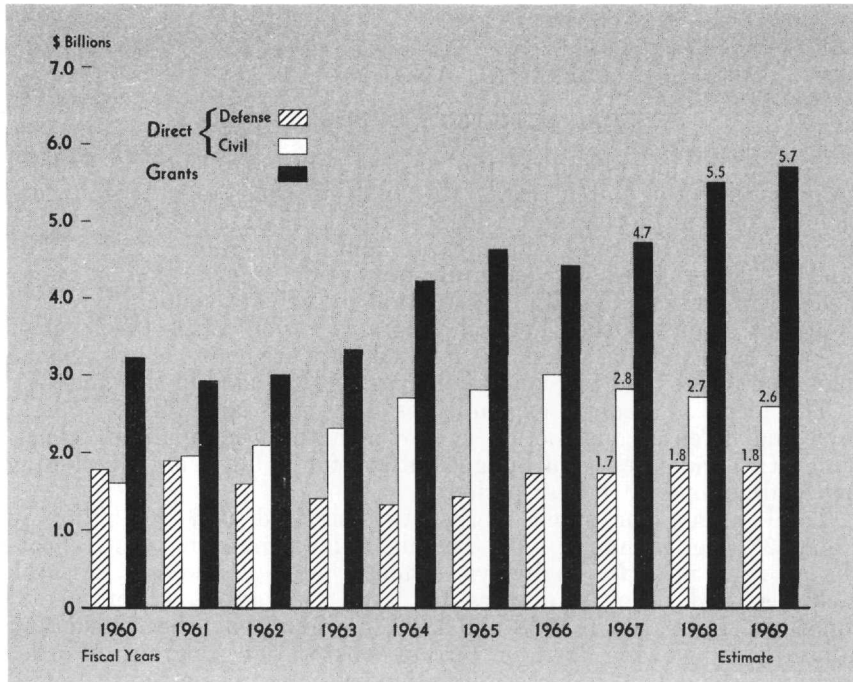
Table G-1. FEDERAL EXPENDITURES AND NET LENDING FOR PUBLIC WORKS, FISCAL YEARS 1960-69 (in millions of dollars)

From Federal funds and trust funds

Year	Total Federal outlays	Direct Federal construction			Grants	Net lending
		Total	Civil	Defense		
1960.....	6,846	3,463	1,643	1,820	3,226	156
1961.....	6,823	3,758	1,878	1,880	2,915	149
1962.....	6,938	3,693	2,085	1,608	3,037	207
1963.....	7,196	3,704	2,321	1,383	3,302	190
1964.....	8,346	4,019	2,691	1,328	4,186	142
1965.....	8,886	4,152	2,800	1,352	4,567	167
1966.....	9,428	4,693	3,014	1,679	4,446	289
1967.....	9,572	4,483	2,752	1,731	4,730	359
1968 estimate.....	10,281	4,489	2,706	1,784	5,473	319
1969 estimate.....	10,404	4,391	2,607	1,783	5,706	308

Note.—In this and the following tables, nonconstruction costs are excluded; proposed legislation is included for the years 1968 and 1969. Details may not add because of rounding. Net lending in years prior to 1967 does not reflect those repayments deposited to miscellaneous receipts, which for 1967 and later years are netted against disbursements.

Federal Expenditures for Public Works Other than Loans



authority and loan authority recommended for civil public works have been reduced by \$1.5 billion to \$8.7 billion in 1969.

As indicated in the accompanying chart, expenditures for direct Federal civil construction are estimated to decline in 1969; however, the estimated level is 59% higher than in 1960. Expenditures for defense construction have varied over the 10-year period and will be slightly lower in 1969 than in 1960. Grants for public works will continue to increase in 1969 and are 77% higher than in 1960.

DIRECT FEDERAL PUBLIC WORKS

Projects built and owned by the Federal Government are termed direct Federal works. The category includes defense and space installations; complex multiple-purpose water resource projects providing flood control, navigation, water supply, and power; research facilities; public buildings; air navigation facilities; and other structures. Budget expenditures for direct works generally measure the value of the work put in place and ultimately reflect the Federal cost of the projects.

Table G-2 provides information according to whether the direct works are for civil purposes or for national defense, by major agency. In 1969, approximately 60% of the expenditures for direct Federal public works will be for civil programs. The largest civil programs are

those of the Corps of Engineers, Bureau of Reclamation, Bonneville Power Administration, and Tennessee Valley Authority for water resources development and related power and transmission facilities. Other major direct Federal construction is undertaken by the General Services Administration, the Forest Service, the National Park Service, and the National Aeronautics and Space Administration.

Table G-2. DIRECT FEDERAL PUBLIC WORKS: EXPENDITURES AND 1969 NEW OBLIGATIONAL AUTHORITY BY AGENCY (in millions of dollars)

From Federal funds and trust funds

Type of program and agency	Expenditures			New obligational authority, 1969 estimate
	1967 actual	1968 estimate	1969 estimate	
Civil public works:				
Forest Service.....	112	137	123	139
Corps of Engineers—Civil.....	1,057	1,022	923	894
Public Health Service.....	36	47	48	30
Social Security Administration (trust funds).....	1	8	26	26
Bureau of Indian Affairs.....	56	58	55	52
National Park Service.....	52	54	51	13
Bureau of Reclamation.....	231	210	215	202
Bonneville Power Administration.....	106	115	116	114
Post Office Department.....	43	42	88	130
Coast Guard.....	29	34	70	52
Federal Aviation Administration.....	62	79	102	71
General Services Administration.....	239	214	172	61
National Aeronautics and Space Administration.....	289	160	76	45
Veterans Administration.....	60	59	66	34
Tennessee Valley Authority.....	183	249	263	28
Other.....	196	218	213	87
Subtotal, civil public works.....	2,752	2,706	2,607	1,978
National defense public works:				
Army.....	447	786	604	691
Navy.....	523	177	356	372
Air Force.....	550	568	438	278
Interservice activities.....	80	90	134	79
Civil defense centers and shelters.....	1	2	6	-----
Atomic Energy Commission.....	130	161	245	353
Subtotal, national defense public works.....	1,731	1,784	1,783	1,773
Total, direct Federal public works.....	4,483	4,489	4,391	3,752

A region or community is affected by direct Federal construction both during the period of construction and over the longer period of use of the completed structure. During the construction period, depending upon the characteristics of the project and area involved, part of the construction workers, equipment, and supplies will be drawn from the immediate area and part from more distant areas. After completion of the project, the community and the Nation benefit from the services provided by the project. Low-cost electricity, transportation, water for irrigation and for domestic consumption,

recreation, and other purposes are examples of the direct benefits provided by some Federal projects. In other instances, the community benefits indirectly as in the case of military bases, laboratories, and veterans hospitals.

GRANTS AND NET LENDING FOR PUBLIC WORKS

Federal expenditures for grants and lending in support of construction by State and local governments are summarized by agency in table G-3. The Federal expenditures are generally advances or reimbursements paid to State and local governments for specific construction projects. Most of the grants are contingent on the availability of the State and local share of project costs. The Federal contribution varies by program and may be expressed as a fixed percentage of the total cost of the project or as a variable ratio depending on such factors as population and relative financial ability of the States.

Table G-3. GRANTS AND NET LENDING FOR PUBLIC WORKS: OUTLAYS AND 1969 NEW AUTHORITY, BY AGENCY (in millions of dollars)

From Federal funds and trust funds

Type of program and agency	Expenditures and net lending			NOA and LA 1969 estimate
	1967 actual	1968 estimate	1969 estimate	
Grants to State and local governments:				
Appalachian regional development programs.....		127	219	197
Public works acceleration.....	19	12		
Soil Conservation Service.....	73	79	69	37
Farmers Home Administration.....	20	31	39	32
Economic development assistance (Commerce).....	60	99	138	170
Corps of Engineers—Civil.....	12	26	69	69
Office of Education.....	259	310	239	124
Public Health Service.....	118	219	188	191
Department of Housing and Urban Development.....	18	169	272	334
Office of Territories.....	8	14	26	17
Federal Water Pollution Control Administration.....	85	112	154	237
Federal Aviation Administration.....	64	58	73	70
Federal Highway Administration.....	3,988	4,192	4,177	4,626
Other civil.....	1	19	35	80
Subtotal, civil grants.....	4,725	5,467	5,698	6,184
Department of Defense.....	5	6	8	6
Total, grants.....	4,730	5,473	5,706	6,190
Lending to State and local governments:				
Department of Agriculture.....	8	4	2	2
Economic development assistance (Commerce).....	8	25	31	34
Office of Education.....	32	25	30	40
Department of Housing and Urban Development.....	442	465	440	402
Bureau of Reclamation.....	17	14	8	4
District of Columbia.....	21	16	67	104
Other.....	3	6	4	6
Repayments.....	-172	-235	-274	-3
Total, net lending.....	359	319	308	588

For example, the Federal Government's share of the cost of the 41,000 miles of highways comprising the Interstate Highway System is 90%. The system is now more than three-fifths completed. For most of the remaining highway grant programs, the Federal share is 50%, although for special programs, such as Appalachian development highways, the Federal share may be larger.

On the other hand, allocations to States for waste treatment facilities are made on the basis of population and per capita income. The Federal share of the cost of individual waste treatment plants may range from 30% to 55% of project costs.

Certain types of public works built by State or local governments are eligible for Federal loans on favorable terms. Most of these are in support of income-producing facilities which might otherwise be unable to provide low-cost public services such as water and sewer developments, public housing, and urban rehabilitation, including mass transportation. For example, the Department of Housing and Urban Development helps State and local governments provide housing for students and faculty in higher educational institutions by providing loans for up to 50 years at 3% per annum interest. When loans are not otherwise available on reasonable terms, the Department of Housing and Urban Development provides loans to State and local governments for the construction of public facilities for up to 40 years at an interest rate $\frac{1}{4}\%$ to $\frac{1}{2}\%$ above the average rate on all interest-bearing obligations forming part of the Federal debt.

CIVIL PUBLIC WORKS

Although the information on civil public works compiled in this analysis encompasses Federal expenditures for direct Federal construction and for grants as well as net lending to State and local governments in support of construction, only the direct works are subject to complete Federal control from project initiation to completion. Additional information on planning and programing direct Federal works is provided in the following sections on new and continuing work, planning and surveys, and on the authorized reserve of direct Federal projects.

New and continuing work.—Direct Federal construction projects often require a number of years from start to completion. The more complex water control developments may require 10 years or more to complete. For projects underway in 1969, table G-4 indicates the total cost, the progress through the budget year, and the estimated expenditures after 1969 to complete the projects. The rate of completion during and after 1969 is contingent not only on new obligational authority recommended for 1969, but also, in the case of water resource developments, on appropriations in future years. Over the years, the estimates may also be modified to take account of changes in construction costs.

Table G-4 distinguishes expenditures for projects started in prior years, new projects for which new obligational authority is recommended for 1969, and projects to be started after 1969 for which advance planning is provided in 1969. It is estimated that construction started or funded before 1969 will result in the expenditure of \$2.4

Table G-4. ESTIMATED COST OF 1969 DIRECT FEDERAL CIVIL PUBLIC WORKS BY CONTINUING AND NEW WORK (in millions of dollars)

From Federal funds and trust funds

Agency or program	Total estimated Federal cost	Expenditures prior to 1969	1969 estimated expenditures	Required to complete
Continuing work:				
Corps of Engineers—Civil	12,837	6,740	896	5,201
Tennessee Valley Authority	1,196	343	262	592
Bureau of Reclamation	6,970	4,022	213	2,735
General Services Administration	729	330	151	249
Bonneville Power Administration	634	181	110	343
Forest Service	340	203	102	35
Federal Aviation Administration	254	79	72	102
National Aeronautics and Space Administration	1,817	1,702	70	46
Veterans Administration	401	207	62	132
Bureau of Indian Affairs	681	396	51	234
National Park Service	1,155	51	48	1,056
Post Office Department	125	31	40	54
Coast Guard	78	32	39	7
Public Health Service	154	81	34	39
Social Security Administration (trust funds)	64	11	26	27
Other	1,317	855	182	280
Total, continuing work	28,750	15,264	2,358	11,129
New projects and features in 1969:				
Federal Aviation Administration	69		30	39
Coast Guard	49		30	19
Post Office	79		28	51
Forest Service	23		21	2
Public Health Service	34	9	9	17
Corps of Engineers—Civil	121	5	7	109
Office of Economic Opportunity	5		5	
Bonneville Power Administration	85		5	80
Bureau of Indian Affairs	27		4	23
National Aeronautics and Space Administration	42		4	38
Veterans Administration	29	*	3	26
Southwestern Power Administration	39		2	37
Tennessee Valley Authority	98	*	1	97
Bureau of Reclamation	13	*	*	12
Other	90	1	17	72
Total, new projects and features	803	15	166	622
Advance planning:				
General Services Administration ¹	160	100	21	38
Corps of Engineers—Civil	63	24	20	19
Post Office ¹	51		19	32
Public Health Service	14	1	5	8
Bureau of Land Management	5	2	3	*
National Park Service	18	2	2	14
Coast Guard	4		2	2
Veterans Administration	7	1	2	4
National Aeronautics and Space Administration	11	5	1	4
Bureau of Reclamation	4	3	1	*
Other	14	4	7	4
Total, advance planning	350	140	84	126
Total, direct civil public works	29,904	15,419	2,607	11,876

*Less than \$500 thousand.

¹ Includes some site costs.

billion in 1969, and an additional \$11.1 billion in later years. Expenditures for these ongoing projects represent more than 90% of the total expenditures for direct civil public works construction in 1969.

Because of the restrictive budget policy for 1969, the number of new projects or features recommended for starting has been held to a minimum. New obligational authority is recommended for the Corps of Engineers to begin construction or undertake land acquisition for 10 projects, and for the Bureau of Reclamation to initiate one project. The Post Office Department will start three new postal public buildings in 1969. Some other new projects or features will be started by the Federal Aviation Administration, the Coast Guard, and the Forest Service; and the Smithsonian Institution will begin construction of the Joseph H. Hirshhorn Museum in Washington, D.C. On all new projects, expenditures are estimated to be \$166 million in 1969, and the total cost of these projects is estimated at \$803 million.

Consistent with actions taken during the current fiscal year to hold down or reduce the level of construction expenditures, new projects such as those of the Corps of Engineers, Bureau of Reclamation, and General Services Administration which had been planned for starting in the 1968 budget, or added by the Congress, are now planned to be initiated over the 2-year period, 1968 and 1969. In table G-4, expenditures on new projects to be funded from 1968 appropriations are reflected under continuing work rather than as new projects and features. The latter category is confined to those new projects and features for which new obligational authority is recommended for 1969.

Public works planning and surveys.—Expenditures for preliminary planning, surveys, and general investigations are not included in the definition of public works used in this analysis and are therefore not reflected in the summary tables. Such studies precede construction of some types of public works and help to assure economic design of facilities. Comprehensive river basin planning requires coordinated long-range economic, hydrologic, and land-use projections prior to undertaking individual water resource projects.

As these general studies indicate a need, advance planning of the specific projects begins and, in some instances, sites must be acquired. Expenditures for advance planning of such projects are shown in table G-4.

In addition, the Department of Housing and Urban Development will disburse \$4 million in 1969 to State and local government agencies to facilitate advance planning of their public works.

Authorized reserve of civil public works.—In addition to the projects underway, agencies whose programs regularly include construction of public works generally maintain a reserve of authorized projects. Projects included in the reserve require only detailed planning and appropriations for starting. The reserve provides a basis for the selection of projects to fulfill program needs and budgetary policy. Table G-5 indicates the size and status of planning of the authorized reserve.

Table G-5. RESERVE OF PRESENTLY AUTHORIZED PROJECTS AND PROGRAMS FOR UNDERTAKING AFTER 1969 (in billions of dollars)

Agency	Cost of authorized reserve						
	Estimated total Federal cost	Status of plans as of June 30, 1968			Status of plans as of June 30, 1969		
		Contract could be let	In process	Not started	Contract could be let	In process	Not started
Corps of Engineers—Civil.....	7.1	1.3	3.2	2.6	2.6	2.2	2.4
Forest Service.....	1.2	.2	1.0	—	.2	1.0	—
Tennessee Valley Authority.....	.8	.1	.2	.5	.3	.2	.4
Bonneville Power Administration.....	.8	—	—	.8	—	.1	.7
General Services Administration.....	.6	.1	.3	.2	.4	.1	.1
Bureau of Land Management.....	.5	*	*	.4	*	*	.4
Federal Aviation Administration.....	.4	*	.1	.3	.1	.1	.2
Bureau of Reclamation.....	.3	*	.1	.2	.1	*	.2
Post Office.....	.3	—	.3	—	.1	.2	—
Public Health Service.....	.2	*	.2	.1	.1	.1	*
Veterans Administration.....	.2	—	.1	.1	.1	.1	.1
Other agencies.....	.3	*	.1	.2	.1	.1	.2
Total.....	12.7	1.9	5.5	5.4	4.1	4.1	4.6

*Less than \$50 million.

Civil public works by function.—Table G-8 classifies public works activities according to the major functional categories used in the budget, with details shown for the agencies and type of program included under each heading.

The largest civil works expenditures are reported for the commerce and transportation and the natural resources functions. Of the total \$4.9 billion to be spent in 1969 in the commerce and transportation function, grants for highways and airports predominate, although air navigational facilities and post office improvements are also important segments. In contrast, direct works related to water resources development are the major component of the total \$2.1 billion in the natural resources function. Additional information on the types of facilities included in water resources developments is provided in table G-6.

Within the remaining functional categories, a number of programs, responsive to the more urgent needs of our increasingly urban society, show larger expenditure estimates for 1969 than for 1968. Grants for urban transportation improvements and neighborhood facilities are examples in the housing and community development function. Grants for rural water and sewer systems in the agriculture function also increase in 1969 over 1968.

The Veterans Administration will continue its program to replace obsolete facilities and to expand the veterans hospital system. A new hospital will be started in San Antonio, Tex., and planning will begin for a replacement hospital in San Francisco, Calif.

In the general government function, the General Services Administration will spend \$172 million in 1969 compared with \$214 million in 1968. Only the most pressing requirements for the acquisition of sites and planning of new buildings will be met in 1969. Projects started in earlier years will be continued.

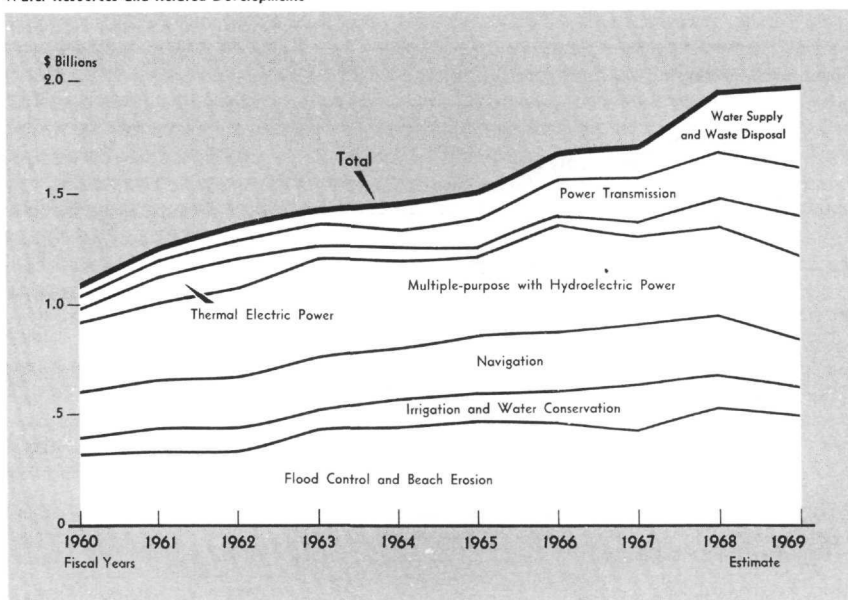
Table G-6. BUDGET OUTLAYS FOR WATER RESOURCES AND RELATED DEVELOPMENTS (in millions of dollars)

Type and agency	1967 actual	1968 estimate	1969 estimate
Flood control works:			
Corps of Engineers—Civil.....	332.2	398.4	332.5
Grants.....	12.1	25.7	69.1
Bureau of Reclamation.....	10.0	13.6	5.4
Soil Conservation Service (mostly grants).....	66.8	70.1	60.6
International Boundary and Water Commission.....	1.3	1.9	2.8
Tennessee Valley Authority.....	4.8	10.7	11.7
Total, flood control works.....	427.2	520.4	482.1
Beach erosion control: Corps of Engineers—Civil.....	1.3	3.2	1.1
Irrigation and water conservation works:			
Bureau of Reclamation.....	155.5	118.6	109.3
Loan and grant program.....	16.8	14.2	7.5
Soil Conservation Service (mostly grants).....	14.7	12.0	9.8
Bureau of Indian Affairs.....	11.5	8.5	4.5
Total, irrigation works.....	198.5	153.3	131.1
Navigation facilities:			
Corps of Engineers—Civil.....	272.3	261.2	216.1
Saint Lawrence Seaway Development Corporation.....	*	3.2	8.5
Tennessee Valley Authority.....	.7	.1	-----
Total, navigation facilities.....	273.0	264.5	224.6
Multiple-purpose dams and reservoirs with hydroelectric power facilities:			
Corps of Engineers—Civil.....	338.3	334.1	320.6
Bureau of Reclamation.....	25.3	38.5	50.2
International Boundary and Water Commission.....	8.1	8.8	7.9
Tennessee Valley Authority.....	31.6	25.5	9.7
Total, multiple-purpose facilities.....	403.3	406.9	388.4
Thermal-electric powerplants: Tennessee Valley Authority.....	65.0	126.4	170.8
Power transmission facilities:			
Tennessee Valley Authority.....	63.0	65.8	60.9
Bureau of Reclamation.....	31.5	35.7	35.2
Bonneville Power Administration.....	105.8	114.6	116.2
Southwestern Power Administration.....	3.4	4.2	5.2
Total, power transmission facilities.....	203.7	220.3	217.5
Water supply and waste disposal facilities:			
International Boundary and Water Commission.....	.1	.1	.9
Federal Water Pollution Control Administration (grants).....	84.7	111.8	154.2
Farmers Home Administration (grants).....	11.1	27.0	33.8
Bureau of Reclamation.....	8.4	4.1	14.5
Department of Housing and Urban Development:			
Grants.....	6.0	90.0	130.0
Net lending.....	24.0	16.0	19.0
Total, water supply and waste disposal.....	134.3	249.0	352.4
Total, water resources and related developments.....	1,706.3	1,944.0	1,968.0

*Less than \$50 thousand.

Budget Outlays

Water Resources and Related Developments



NATIONAL DEFENSE PUBLIC WORKS

Department of Defense—Military.—In support of the national defense, \$1.4 billion in new obligational authority is recommended for 1969 to strengthen and modernize facilities of the Armed Services. The programs will provide for the initial design and deployment of the Sentinel antiballistic missile system, additional pilot training facilities, shipyard modernization, and other program requirements to permit mission accomplishment, both at home and overseas.

Atomic Energy Commission.—In fiscal year 1969, the Atomic Energy Commission will begin construction on the 200 billion electron volt proton accelerator. Work will be continued on the \$285 million of facilities required to produce nuclear warheads for the Sentinel and other advanced weapons systems, and on other facilities for reactor and weapons development and for research in the physical sciences.

AID TO COOPERATIVES AND NONPROFIT GROUPS

Some private nonprofit groups carry on activities of a public service character, such as the provision of educational and health services and the conduct of research, which are similar to programs conducted by State and local governments. Federal assistance programs sometimes provide support both to State and local governments and to the private nonprofit institutions providing similar services. Federal expenditures in aid of construction undertaken by these non-government institutions are shown in table G-7, but are not included in the total public works expenditures reported in this analysis.

Table G-7. FEDERAL OUTLAYS FOR CONSTRUCTION BY COOPERATIVES AND NONPROFIT GROUPS (not included in public works)

(In millions of dollars)

Program	1967 actual	1968 estimate	1969 estimate
Expenditures:			
Federal construction:			
Howard University.....	1	3	3
Gallaudet College.....	*	1	1
Grants:			
Hospital construction.....	112	104	117
Health professions educational facilities.....	8	25	25
Health research facilities.....	37	37	37
Higher education facilities.....	58	89	61
Lending:			
Rural electrification and telephones.....	412	470	550
College housing.....	176	158	133
Higher education facilities.....	48	40	47
Repayments.....	-193	-207	-207
Total, expenditures and net lending.....	659	720	767

*Less than \$500 thousand.

Table G-8. FEDERAL ACTIVITIES IN PUBLIC WORKS (in millions of dollars)

By major function and agency

Function, organization, unit, and program	NEW OBLIGATIONAL AUTHORITY AND LOAN AUTHORITY			EXPENDITURES AND NET LENDING		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
CIVIL PUBLIC WORKS						
International Affairs and Finance						
Department of State:						
State Department and Foreign Service buildings.....	4.5	3.4	*	6.5	4.8	6.5
Cultural and Technical Interchange Center, Hawaii (grant).....	.2	-----	-----	*	.5	.5
United States Information Agency: Radio facilities and special interna- tional exhibitions.....	4.8	24.0	-----	20.4	16.3	13.7
Total, international affairs and finance.....	9.6	27.4	*	27.0	21.7	20.7
Space Research and Technology						
National Aeronautics and Space Adminis- tration: Research and space flight facili- ties.....	85.0	37.8	45.0	288.6	160.0	75.5

Table G-8. FEDERAL ACTIVITIES IN PUBLIC WORKS—Continued

(In millions of dollars)

By major function and agency

Function, organization, unit, and program	NEW OBLIGATIONAL AUTHORITY AND LOAN AUTHORITY			EXPENDITURES AND NET LENDING		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
CIVIL PUBLIC WORKS—Continued						
Agriculture and Agricultural Resources						
Department of Agriculture:						
Laboratories, research facilities, and Library ¹	11.2	4.9	1.0	11.5	26.3	29.1
Grants for research facilities.....	.4	1.3	2.7	.7	1.3	2.7
Soil Conservation Service: Resource conservation and development:						
Loans.....	.5			.5	1.0	
Grants.....	1.0	1.5	.9	1.1	1.5	.9
Farmers Home Administration:						
Rural renewal loans.....	1.0	1.3	1.3	1.1	1.8	1.4
Grants for rural housing.....	3.0	3.5	5.0	8.6	3.8	5.0
Grants for rural water and sewer systems.....	26.0	30.0	27.2	11.1	27.0	33.8
Total, agriculture and agricultural resources.....	43.1	42.5	38.1	34.6	62.7	72.8
Natural Resources						
Department of Agriculture:						
Soil Conservation Service: Flood prevention and watershed protection:						
Direct work.....	1.4	1.1	.7	1.4	1.1	.7
Grants.....	71.6	75.2	36.3	71.8	77.2	68.5
Loans.....	5.5	.9	.8	6.7	1.2	1.0
Forest Service: Roads and research, recreational and protective facilities ¹	156.8	186.4	139.4	112.4	136.7	122.8
Department of Defense—Civil: Corps of Engineers—Civil:						
Flood control, navigation, and multiple-purpose projects with power.....	1,013.2	1,000.5	875.7	1,034.3	996.3	900.4
Trust funds.....	25.9	20.8	18.5	23.0	26.0	23.0
Grants.....	12.1	25.7	69.1	12.1	25.7	69.1
Department of the Interior:						
Bureau of Land Management: Roads and other facilities.....	13.0	14.5	14.3	20.4	13.6	15.4
Bureau of Indian Affairs: Irrigation works, roads, and schools.....	75.1	63.8	52.3	56.3	57.5	55.1
Geological Survey: Laboratory.....				.3	*	
Bureau of Mines:						
Laboratories and demonstration plants.....	1.4	1.2		.5	1.5	.2
Anthracite mine drainage: Grants.....				.2	.1	.2
Office of Coal Research: Demonstration plants.....	4.5	5.6	7.5	4.3	4.5	8.0
Bureau of Commercial Fisheries:						
Facilities.....	1.2	1.7		1.6	1.4	1.2
Grants.....	.2	.4	.4		.2	.4

Table G-8. **FEDERAL ACTIVITIES IN PUBLIC WORKS—Continued**

(In millions of dollars)

By major function and agency

Function, organization, unit, and program	NEW OBLIGATIONAL AUTHORITY AND LOAN AUTHORITY			EXPENDITURES AND NET LENDING		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
CIVIL PUBLIC WORKS—Continued						
Natural Resources—Continued						
Department of the Interior—Continued						
Bureau of Sport Fisheries and Wildlife:						
Facilities.....	9.5	5.5	2.0	7.8	10.0	4.9
Grants.....	2.5	2.2	2.1	.1	1.8	1.6
National Park Service: Parkways, roads, buildings, and utilities ¹	56.3	52.1	13.4	52.1	54.0	51.0
Bureau of Reclamation:						
Irrigation and multiple-purpose proj- ects with power ¹	241.4	221.8	202.1	230.7	210.5	214.6
Loans, small irrigation projects.....	12.9	14.7	4.3	16.7	14.1	7.5
Repayments.....	— .1	— .8	— .8	— .1	— .8	— .8
Grants, small irrigation projects.....		.1		.1	.1	
Power transmission facilities:						
Bonneville Power Administration ¹	108.6	110.7	114.1	105.8	114.6	116.2
Southwestern Power Administration.....	4.0	5.0	5.3	3.4	4.2	5.2
Federal Water Pollution Control Ad- ministration:						
Buildings and facilities.....	5.3			1.9	1.9	.6
Grants.....	162.9	214.6	236.6	84.7	111.8	154.2
Department of State:						
International Boundary and Water Commission: Water resources proj- ects and Chamizal settlement.....	9.9	12.4	5.8	15.6	15.2	11.8
Facilities for International Pacific Hal- ibut Commission (grant).....					.2	.2
Tennessee Valley Authority: Power, water resources, and chemical facilities.....	1,044.6	39.7	27.6	182.9	248.9	263.1
Total, natural resources.....	3,039.7	2,075.8	1,827.4	2,047.3	2,129.7	2,095.9
Commerce and Transportation						
Funds appropriated to the President:						
Appalachian Regional Development Programs: Grants for highways, edu- cation, and health facilities.....		111.5	197.0		127.2	219.1
Public works acceleration:						
Grants.....				19.4	12.0	
Direct Federal work.....				1.7	1.1	
Department of Commerce:						
Economic development assistance:						
Appalachian highways: Grants.....	100.0			39.9		
Development facilities grants.....	202.6	153.0	169.5	19.6	99.4	137.9
Development facilities loans.....	25.5	22.0	33.5	7.8	24.9	30.8
Repayments.....				— 1.0	— 1.1	— 1.3
Participation in U.S. expositions: 1967 Alaska Centennial, building.....				4.0	*	*
Environmental Science Services Admin- istration: Structures.....	*	1.1	.1	.7	.3	1.1
Bureau of Standards: Buildings.....	1.4	.2	.9	11.6	5.8	1.5
Maritime Administration: Library and other improvements.....				.1	.8	

Table G-8. FEDERAL ACTIVITIES IN PUBLIC WORKS—Continued

(In millions of dollars)

By major function and agency

Function, organization, unit, and program	NEW OBLIGATIONAL AUTHORITY AND LOAN AUTHORITY			EXPENDITURES AND NET LENDING		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
CIVIL PUBLIC WORKS—Continued						
Commerce and Transportation—Continued						
Department of Defense—Civil: Panama Canal Company: Canal and harbor improvements and bridges.....				4.1	10.4	12.4
Department of the Interior: Bureau of Mines: Appalachian mining restoration grants.....	2.5			.4		
Post Office Department: Post offices, improvements and alterations.....	16.9	91.9	130.3	43.2	42.4	87.5
Department of Transportation:						
Coast Guard: Shore facilities and navigation aids.....	30.4	40.8	51.8	28.9	33.8	70.2
Federal Aviation Administration:						
Air traffic control, navigation, and research facilities.....	27.9	50.0	70.0	60.0	74.8	99.0
Dulles and National Airports.....		.2	1.0	2.4	4.6	3.2
Federal-aid airport program: Grants.....	71.0	66.0	70.0	64.1	58.0	73.0
Federal Highway Administration:						
Woodrow Wilson Bridge.....				.3	*	
Federal-aid highways and other trust funds: Grants.....	4,386.9	4,929.8	4,621.9	3,951.1	4,191.3	4,171.2
Forest and public land highways: Grants.....	45.3			37.3		
Chamizal Memorial Highway: Grant.....		4.0	4.0		1.0	5.4
Alaskan highway assistance grant.....		5.0				
St. Lawrence Seaway Development Corporation: Alterations.....		13.1		*	3.2	8.5
Total, commerce and transportation.....	4,910.5	5,488.4	5,349.9	4,295.8	4,689.8	4,919.5
Housing and Community Development						
Department of Housing and Urban Development:						
Urban transportation grants.....	98.8	95.0	133.5	11.7	64.3	107.5
Public facility loans.....	79.7	79.5	79.9	58.7	45.0	54.0
Repayments.....				-2.8	-3.6	-4.3
Grants for water and sewer facilities.....	100.0	165.0	150.0	5.7	90.0	130.0
Grants for neighborhood facilities.....	17.0	30.0	40.0	.8	15.0	32.0
Metropolitan development incentive grants.....			10.0			3.0
Advance planning, non-Federal public works:						
Loans.....				14.1	7.1	3.6
Repayments.....				-6.2	-8.5	-8.5
Liquidating programs: Repayments.....				-.5	-.5	-.4
Low-rent public housing:						
Loans.....				154.1	220.0	220.0
Repayments.....				-143.6	-200.1	-235.1

Table G-8. FEDERAL ACTIVITIES IN PUBLIC WORKS—Continued

(In millions of dollars)

By major function and agency

Function, organization, unit, and program	NEW OBLIGATIONAL AUTHORITY AND LOAN AUTHORITY			EXPENDITURES AND NET LENDING		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
CIVIL PUBLIC WORKS—Continued						
Housing and Community Development—Continued						
Grant to Washington Metropolitan Area Transit Authority.....			55.1		1.0	18.0
Federal Home Loan Bank Board: Headquarters.....	13.2				5.2	1.5
National Capital Transportation Agency: Land acquisition and construction.....	9.1			2.2	2.0	
District of Columbia: Grant for Dulles interceptor sewer.....					11.2	.8
Loans.....	43.6	79.2	103.7	21.4	15.6	67.2
Repayments.....	-1.8	-2.0	-2.6	-1.8	-2.0	-2.6
Total, housing and community de- velopment.....	359.5	446.7	569.6	113.8	261.7	386.7
Health, Labor, and Welfare						
Office of Economic Opportunity: Job Corps centers and related facilities.....	10.5	9.5	5.0	10.5	9.5	5.0
Department of Health, Education, and Welfare:						
Food and Drug Administration: Build- ings.....	3.1	1.2	.1	.6	3.3	5.1
Public Health Service:						
Federal research facilities and Na- tional Library of Medicine.....	18.3	11.2	12.5	24.5	24.7	24.2
Saint Elizabeths Hospital: Buildings.....	2.3	1.2	1.3	.9	3.1	3.7
Indian health facilities ¹	14.7	16.9	16.1	10.2	19.3	19.7
Grants for Indian health facilities.....		.2	.2	.2	.2	.2
Grants for public hospitals.....	149.0	126.0	114.4	91.3	104.2	95.4
Grants for health research facilities.....	2.0	1.5		1.6	1.6	1.6
Community health service facilities, grants.....		28.6			24.5	1.3
Grants for mental health centers.....	39.7	51.0	15.0	4.0	25.0	24.6
Grants for health educational facilities.....	115.3	146.2	61.1	20.6	63.4	64.8
Social and Rehabilitation Service: Grants for mental retardation facilities.....			6.0			2.0
Social Security Administration: Build- ings and district offices (trust funds).....	1.4	8.2	26.1	1.4	8.2	26.1
Total, health, labor, and welfare.....	356.3	401.6	257.6	165.8	286.9	273.6
Education						
Department of Health, Education, and Welfare:						
Office of Education:						
Schools in federally affected areas:						
At Federal installations.....	10.0	10.0	10.0	8.0	9.0	11.7
Grants.....	42.3	12.3	4.1	38.6	21.8	18.8

Table G-8. **FEDERAL ACTIVITIES IN PUBLIC WORKS—Continued**

(In millions of dollars)

By major function and agency

Function, organization, unit, and program	NEW OBLIGATIONAL AUTHORITY AND LOAN AUTHORITY			EXPENDITURES AND NET LENDING		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
CIVIL PUBLIC WORKS—Continued						
Education—Continued						
Department of Health, Education, and Welfare—Continued						
Office of Education—Continued						
Higher education facilities:						
Loans.....	120.0	40.0	40.0	32.3	25.4	30.4
Repayments.....				— .1	— .1	— .5
Grants.....	360.6	315.0	52.5	135.5	206.6	142.1
Vocational schools (grants).....	60.6	60.6	58.0	60.6	60.0	57.0
Libraries (grants).....	40.0	27.2	9.2	23.9	21.6	21.1
Model secondary school for the deaf.....		.3	.4			.1
Department of Housing and Urban De- velopment:						
College housing loans.....	330.0	1,045.0	321.8	215.0	192.5	162.2
Repayments.....				—15.8	—18.6	—20.8
National Science Foundation: Research facilities.....	13.6	5.6	8.0	12.4	11.5	11.5
Smithsonian Institution:						
John F. Kennedy Center for Performing Arts.....				1.8	8.0	11.0
Museums.....	3.9	2.3	16.1	3.5	3.0	7.4
Total, education.....	981.0	1,518.3	520.0	515.6	540.6	452.0
Veterans Benefits and Services						
Department of Defense—Civil:						
Army: Cemeteries.....	3.8	6.6	1.6	1.9	4.8	3.5
Soldiers' Home (trust fund).....	3.6	.3	.7	.1	3.6	1.0
Veterans Administration:						
Hospital and domiciliary facilities.....	52.1	52.6	33.3	60.0	58.0	65.7
Research facilities.....	.3	.4	.4	.3	.4	.4
Construction of State nursing homes, grants.....	4.0	4.0	4.0	.1	2.4	3.0
Corregidor-Bataan Memorial.....				*	1.1	.3
Total, veterans benefits and services.....	63.8	63.9	40.0	62.3	70.3	73.8
General Government						
Legislative Branch:						
Architect of the Capitol: Buildings and James Madison Library.....		.9	2.8	7.	7.2	6.7
Government Printing Office: Annex.....			2.5	— .3		2.3
Department of Defense—Civil:						
Army: Power and water systems						
Ryukyu Islands: Loans.....					.4	
Canal Zone Government: Improvements.....	1.4	3.6	.4	4.4	3.8	4.3
Department of the Interior:						
Office of Territories: Public facilities in Samoa, Guam, and the Trust Terri- tory of the Pacific Islands:						
Grants.....	7.0	10.4	17.0	7.9	13.8	25.6
Loans.....	.3	4.4	5.7	2.6	5.4	4.5

Table G-8. FEDERAL ACTIVITIES IN PUBLIC WORKS—Continued

(In millions of dollars)

By major function and agency

Function, organization, unit, and program	NEW OBLIGATIONAL AUTHORITY AND LOAN AUTHORITY			EXPENDITURES AND NET LENDING		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
CIVIL PUBLIC WORKS—Continued						
General Government—Continued						
Department of Justice:						
Immigration and Naturalization Service:						
Border facilities.....		*				*
Federal Prison System: Prison facilities.....				7.6	9.0	12.6
Grants for correctional and enforcement facilities.....			11.3			5.6
Treasury Department:						
Bureau of Customs: Border facilities.....	.2	.2		.4	.2	.2
Bureau of Engraving and Printing: Air conditioning.....			.5	2.0	1.1	.5
Bureau of the Mint: Philadelphia Mint.....				11.9	12.7	8.3
Secret Service: Training facilities.....			1.0			.8
General Services Administration: Construction of public buildings, sites and planning.....	199.6	134.2	60.8	239.3	214.3	171.7
Central Intelligence Agency: Headquarters.....				1.4	.2	
Total, general government.....	208.6	153.7	102.1	285.2	268.2	243.2
Total, civil public works.....	10,057.1	10,256.1	8,749.9	7,835.9	8,491.6	8,613.7
NATIONAL DEFENSE PUBLIC WORKS						
Department of Defense—Military:						
Interservice activities:						
Construction, Defense agencies.....	9.1	77.0	30.4	13.0	7.0	24.0
Loran stations.....		3.6		1.8	5.0	
Family housing.....		154.4	48.7	65.2	78.0	110.0
Civil Defense:						
Grants for shelters.....	4.9	4.5	2.4	4.0	4.0	4.7
Emergency centers and shelters.....				0.9	1.9	6.0
Army:						
Construction.....	402.5	373.8	688.3	447.2	780.0	594.0
Construction, Army Reserve.....		3.0	3.0	*	2.0	4.0
Construction, Army National Guard (includes grants).....		3.0	2.7	.7	6.0	9.0
Navy:						
Construction.....	266.9	487.6	367.5	519.1	170.0	350.1
Construction, Naval Reserve.....	5.4	5.0	5.0	3.5	7.0	6.0
Air Force:						
Construction.....	401.5	401.2	266.0	536.9	554.0	425.0
Construction, Air Force Reserve.....	3.6	3.9	4.3	5.3	5.0	4.0
Construction, Air National Guard.....	9.4	9.5	8.3	8.2	9.0	9.0
Total, Department of Defense—Military.....	1,103.4	1,526.6	1,426.7	1,605.7	1,628.8	1,545.8
Atomic Energy Commission: Facilities.....	128.3	213.1	353.0	130.4	161.0	245.0
Total, national defense public works.....	1,231.7	1,739.7	1,779.6	1,736.0	1,789.8	1,790.8
Total, civil and defense public works: Federal funds and trust funds.....	11,288.8	11,995.8	10,529.5	9,572.0	10,281.4	10,404.5

* Less than \$50 thousand.

† Includes small amounts from trust funds.

SPECIAL ANALYSIS H

FEDERAL EDUCATION, TRAINING, AND RELATED PROGRAMS

Overview.—The 1969 Federal budget provides outlays of \$11.6 billion for education, training, and related programs compared with \$10.8 billion in 1968 and \$5.2 billion in 1965, the fiscal year just preceding initiation of new programs under the historic Elementary and Secondary and Higher Education Acts of 1965. This amount totals 6.2% of total Federal expenditures and lending in 1969, compared with 3.9% for 1965.

The following table summarizes the principal categories to which Federal funds are allocated over the period 1965–69:

FEDERAL OUTLAYS FOR EDUCATION, TRAINING, AND RELATED PROGRAMS BY CATEGORY

(in billions of dollars)

Category	1965	1966	1967	1968	1969
Preschool, elementary, and secondary.....	0.8	1.8	2.5	2.6	2.8
Higher education.....	2.0	2.4	3.3	3.9	4.2
Vocational education, work training.....	.6	1.0	1.2	1.7	1.9
Training of Federal Government personnel.....	1.4	1.5	1.5	1.7	1.7
Other.....	.4	.6	.7	.9	1.0
Total.....	5.2	7.3	9.2	10.8	11.6

Of the \$6.4 billion increase during the 5-year period, \$2 billion is for elementary and secondary education, \$2.2 billion for higher education, and \$1.3 billion for vocational education and work training programs. These three categories account for 86% of the total 5-year increase.

Compared with 1968, the budget for 1969 provides increased outlays totaling \$1 billion and decreases of one-quarter of a billion dollars, a net increase of \$817 million. The principal changes are as follows:

- Preschool, elementary, and secondary education includes *increases* for education of American Indians (Interior); "Follow Through" for Head Start and other preschool children in the early elementary grades (OEO); operation of schools for American dependents overseas (Defense); payments to schools in areas affected by Federal activities, additional instructional programs for the physically and mentally handicapped and children from low-income families, and expansion of teacher training (HEW). These increases, totaling \$201 million, are offset by a *reduction* in supplementary grants for school books and equipment (HEW) of \$82 million.

- Higher education includes *expansion* of student assistance through grants, insured loans, work-study opportunities and health professions training (HEW) and GI bill benefits (VA); and medical and military research grants (HEW and Defense) which total \$316 million. These are offset in part by *decreases* in grants and loans for academic and housing facilities (HEW and HUD) totaling \$104 million.
- Vocational education and work-training provides for *increases* in training activities under the comprehensive employment programs (OEO) and vocational rehabilitation services and training (HEW) of \$212 million.

Coverage of this special analysis.—This analysis includes all programs classified in the budget functional category for education, which is largely in the nature of support of activities in educational institutions as such. It also includes other programs classified under different functional categories which use education, research, or formal training as means for accomplishing their primary objectives. For example, included are programs which involve on-the-job training activities, conduct of research at universities, national libraries and library aid programs, military, professional, and occupational training with transfer value to the civilian economy, and Federal programs which provide educational services for foreign nations through grants or exchange of persons.

The analysis does not include privately financed insured loans for college and vocational education students (although it does include Federal advances to establish loan funds and Federal interest payments on such loans). These loans will total an estimated \$641 million in 1969, compared with \$476 million in 1968. Other activities excluded are basic recruit training of military personnel and other strictly military training; scientific research conducted outside of academic institutions, or carried on in university-managed centers under Federal contracts; the school lunch and special milk programs; university service contracts, for example, for operating mental health centers; and many in-service training programs for Federal civilian employees.

The amounts reported in this analysis include some programs also covered in other special analyses. For example, both this analysis and Special Analysis I, Federal Expenditures for Medical and Health Related Programs, include funds for health related training and research programs of health agencies conducted at universities approximating \$1.2 billion in 1969. That portion of expenditures for research in academic institutions reflected in Special Analysis J, Federal Research, Development, and Related Programs, is largely included in this analysis also. The overlap between these two analyses is approximately \$1.6 billion in 1969.

Relationship of Federal funds for education, training, and related activities to Office of Education national estimates.—The tabulation of Federal funds in this analysis and Office of Education reports of expenditures by U.S. educational institutions are not prepared on

comparable bases. Many of the elements in this analysis do not flow through educational institutions and hence would not appear in the Office of Education data. These include expenditures for federally operated schools for training of military personnel, on-the-job and similar training activities carried on outside of schools or colleges, Federal student assistance paid to individuals and partially spent by them on subsistence, education in other countries, and for the Smithsonian Institution and national libraries. On the other hand, the Office of Education reports include amounts for some major programs which are omitted from this special analysis, such as funds for school lunches and school milk, and funds for research and development in university-managed, off-campus research centers.

If the estimates in this special analysis are adjusted to correspond with those of the Office of Education, the Federal contribution to financing of the Nation's educational institutions would be about 13%.

The following table summarizes these adjustments (dollars in billions):

	1967 actual	1968 estimate	1969 estimate
Federal education, training, and related activities.....	\$9.2	\$10.8	\$11.6
Less estimated amount not paid to institutions.....	4.1	5.0	5.4
Plus estimated Federal payments to educational institutions not included in this analysis.....	1.1	1.1	1.2
Total, Federal expenditures in educational institutions....	6.2	6.8	7.4
Office of Education estimate of expenditures by educational institutions ¹	48.5	51.9	55.5
Percent Federal.....	13	13	13

¹ Source: "Projections of Educational Statistics to 1976-77," Office of Education, OE-10030-67, table No. 35.

Federal funds for education, training, and related programs by level or type of aid.—The distribution of the total new obligational and lending authority and expenditures for the programs in this special analysis by level or type of assistance is presented in table H-1.

Table H-1. FEDERAL FUNDS FOR EDUCATION, TRAINING, AND RELATED PROGRAMS BY LEVEL OR TYPE (in millions of dollars)

Level or type of aid	New Obligational and Lending Authority			Outlays		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
1. Preschool, elementary, and secondary:						
(a) Current operations	2,172	2,376	2,559	2,014	2,104	2,295
(b) Facilities and equipment	382	401	269	339	397	333
(c) Teacher training	141	145	192	128	140	163
Subtotal	2,695	2,922	3,020	2,481	2,641	2,791
2. Higher education:						
(a) Institutional support	315	370	451	208	292	363
(b) Student support:						
Undergraduate	544	610	705	397	630	698
Graduate and professional	381	408	476	363	401	452
(c) Facilities and equipment	868	817	296	379	560	462
(d) Research, except educational research	1,405	1,492	1,602	1,248	1,301	1,421
(e) Other	113	129	161	59	125	177
Subtotal	3,626	3,826	3,691	2,654	3,309	3,573
3. Vocational education, work training, and other adult or continuing education	1,494	1,631	1,980	1,230	1,682	1,898
4. Educational research, curriculum development, etc.	122	127	178	97	117	136
5. Training of Federal Government personnel:						
(a) Military personnel	1,436	1,562	1,592	1,394	1,558	1,596
(b) Civilian personnel	94	110	125	91	109	125
6. International educational activities	338	341	388	276	284	309
7. Other	390	415	509	332	415	497
Total, excluding credit programs	10,195	10,934	11,483	8,555	10,115	10,925
CREDIT PROGRAMS						
8. Higher education:						
(a) Student support	235	235	251	224	239	240
(b) Facilities and equipment	504	383	526	439	399	405
Total, credit programs	739	618	777	663	638	645
Total, Federal outlays	10,934	11,552	12,260	9,218	10,753	11,570

Note: Lending authority figures in fiscal years 1967, 1968, and 1969 are adjusted to eliminate the authority from sale of participation certificates in pools of college housing and academic facility loans which are not applied to current program.

Preschool, elementary, and secondary.—The second largest category of support for education, totaling \$2.8 billion in 1969, or 24% of the total Federal outlay tabulated in this analysis, is aid for preschool, elementary, and secondary education. Both the current operations expenditures and those for facilities and equipment included in this amount represent about 7.4% of total national expenditures for these purposes in U.S. elementary and secondary schools. Note, however, that the Federal percentage would be somewhat increased if vocational education grants to local school districts were included in the above Federal estimates.

These funds are concentrated on aiding disadvantaged children, particularly children from low-income families, but also the physically and mentally handicapped, migrants, children from non-English-speaking homes, children in State institutions, and American Indians. The section of this analysis on Federal education funds for the poor provides additional comments on such programs.

Other aids for elementary and secondary education, all administered by the Office of Education, will include \$311 million for supplementary grants for school services, equipment, books, and counseling programs, and \$416 million for schools where enrollments are affected by Federal activities. In addition, increased emphasis will be placed on teacher training for elementary and secondary education primarily under authority of the Education Professions Development Act of 1967 which broadened and expanded previous laws establishing teacher fellowships and institute programs. These activities are detailed in the following table:

ELEMENTARY AND SECONDARY TEACHER TRAINING

	Teachers trained (in thousands)		
	1967	1968	1969
Office of Education:			
Full-year training.....	8	9	11
Short-term training.....	37	34	52
Teacher Corps.....	2	2	4
Subtotal.....	47	46	67
Office of Economic Opportunity: Head Start teacher training...	39	49	50
National Science Foundation: Institutes.....	34	33	32
Total.....	120	127	149

Higher education.—Expenditures and net lending in 1969 for support of higher education will amount to \$4.2 billion or 36% of the total funds included in this analysis; and an increase of 7% over 1968. These outlays represent about 21% of expenditures which are estimated for all U.S. colleges and universities in 1969.

As table H-1 shows, the 1969 increase in Federal funds for higher education goes principally to support students, institutions, and research. Outlays for facilities and equipment will decline in 1969, reflecting the budget policy to limit or defer construction.

Expenditures for institutional support in 1969 will total \$363 million. HEW and NSF provide the major portion of these funds which are awarded in large part in connection with fellowship and training grants. The Public Health Service makes grants to schools preparing professional health manpower to help meet increased costs and upgrade curricula. NIH and NIMH funds are increasingly made available for general research support to supplement research project grants.

Federal funds support students at the undergraduate, graduate, and professional levels through (1) fellowships for graduate study; (2) research contracts and grants at institutions of higher education which support thousands of research assistants, principally graduate students; and (3) grants, work-study, and loan opportunities. Table H-2 presents estimates of the number of individuals assisted, other than for training of elementary and secondary teachers, by agency and nature of aid. Support of college students under GI bill benefits is growing significantly as veterans return and further increases may be expected in 1970. In 1969, three quarters of a million college students, an increase of 190 thousand over 1968, will receive insured loans from private sources for which Federal interest payments are made. Training of health manpower under PHS programs will increase in 1969.

Table H-2. ESTIMATED NUMBER OF INDIVIDUALS ASSISTED IN FULL-TIME GRADUATE AND UNDERGRADUATE STUDY (other than for elementary/secondary teacher training) (in thousands)

Agency	Fellowships and traineeships			Research assistantships			Other ¹		
	1967	1968	1969	1967	1968	1969	1967	1968	1969
Department of Defense.....				9.7	9.8	10.2			
Department of the Interior.....	0.1	0.1	0.1						
Department of Commerce.....							1.5	1.7	1.7
Atomic Energy Commission.....	.5	.5	.6	3.3	3.4	3.4			
Department of Housing and Urban Development.....	.1	.3	.3						
Department of Health, Education, and Welfare:									
Office of Education:									
Grants.....	19.4	23.3	29.1				446.8	488.6	511.6
Direct loans.....							394.0	405.0	408.0
Insured loans.....							330.0	560.0	750.0
Public Health Service.....	52.4	57.6	66.2	7.3	7.7	8.0	38.9	58.3	68.6
Social and Rehabilitation Service.....	14.5	14.3	14.3						
National Science Foundation.....	8.9	9.4	9.4	5.0	5.0	5.4			
National Aeronautics and Space Administration.....	.8	.8	.8						
Justice Department.....	.3	.3	.1						
Veterans Administration.....	5.8	6.4	7.9				377.1	422.3	469.3
Total.....	102.0	112.6	128.1	25.4	25.9	27.1	1,589.4	1,936.0	2,209.3

¹ Involves some duplication because a number of students are assisted under more than one program.

The following table shows Federal outlays for the principal college construction aid programs.

PRINCIPAL FEDERAL AIDS FOR CONSTRUCTION OF HIGHER EDUCATION FACILITIES, EXPENDITURES AND NET LENDING

(In millions of dollars)

	1967	1968	1969
Undergraduate and graduate academic facility grants (Office of Education)	219	324	227
Academic facility loans (Office of Education)	81	66	79
College housing loans (Housing and Urban Development)	358	333	326
Medical and health education facilities (Public Health Service)	29	88	90
Health research facilities (Public Health Service)	32	32	32
Science research facilities (National Science Foundation)	58	60	52
All other programs	41	56	61
Total, grants and loans	818	959	867

University based research, exclusive of research in the education process, totaling \$1.4 billion in 1969, is financed by a number of agencies to assist in meeting their mission objectives. It includes medical and health related research under the Public Health Service (\$0.5 billion), research related to military requirements under the Department of Defense (\$0.1 billion), research in the physical and biomedical sciences under the Atomic Energy Commission (\$0.1 billion), space-related research under the National Aeronautics and Space Administration (\$0.1 billion), and research in all fields of science under the National Science Foundation (\$0.2 billion). These programs are discussed in greater detail in Special Analysis J, Federal Research, Development, and Related Programs.

Vocational education, work-training, and other adult or continuing education.—The third largest category, totaling \$1.9 billion in 1969 or 16% of the total, includes a wide variety of programs providing occupational or work experience and training, basic or continuing education.

The major portion of the expenditures in this category relates to programs which provide structured training or general work experience to persons no longer in the formal educational system. These programs, administered by the Departments of Labor, Interior, Health, Education, and Welfare, the Veterans Administration, and the Office of Economic Opportunity, are designed to reach those out of school who are untrained or whose skills have become outdated by a fast-changing technology, or those who suffer the effects of social and economic discrimination.

In 1969, 281,000 individuals will be provided on-the-job training through the Manpower Development and Training Act (MDTA), the Work Incentive Program for welfare recipients, veterans programs, and funds made available to the Department of Labor by the Office of Economic Opportunity.

Institutional training will be provided 170,000 individuals through the MDTA, Opportunities Industrialization Centers, and the Work Incentive Program.

In other training programs, the Job Corps will provide job skills, basic education, and other remedial services to about 98,000 youths and another 63,000 individuals will receive part-time skill upgrading and short-term employability training through the MDTA.

Many more individuals will be served through work experience programs which are designed to develop work habits and provide job experience leading to training and eventual participation in the regular labor force. About 121,000 disadvantaged youth and adults will be provided opportunities to engage in meaningful employment in useful community services. Another 469,000 disadvantaged youth will be provided opportunities for community service employment during the school year or in the summer to acquire the income needed to continue their education. Most of this activity is funded through the Economic Opportunity Act, but is administered by the Department of Labor.

Large numbers of disadvantaged youth and adults will acquire job skills and experience through the Concentrated Employment Program and the Special Impact Program. These programs are designed to concentrate a wide range of resources and services, including the programs discussed above, in selected areas of high unemployment.

Vocational education programs administered by the Office of Education will serve an estimated 8.6 million high school and out-of-school students. In addition, 411,000 adults will be provided basic literacy training through the Office of Education's adult literacy program.

PARTICIPANTS IN SELECTED VOCATIONAL AND TRAINING PROGRAMS

(In thousands)

Category and program	1967 actual	1968 estimate	1969 estimate
Structured training:			
On the job.....	125	186	281
Institutional.....	134	129	170
Job Corps.....	99	98	98
New careers.....	14	10	13
MDTA part-time and employability training.....		57	63
Indian manpower activities.....	11	13	14
General work experience:			
Youth school and summer work.....	454	310	469
Community work experience.....	216	126	121
Classroom education:			
Vocational education.....	6,900	7,500	8,600
Adult basic education.....	293	319	411

Education research and curriculum development.—Expenditures, principally by the Office of Education and the National Science Foundation, support a broad range of efforts to improve education through experiments, development, and demonstrations. Included is support for (1) educational laboratories which bring together the resources of institutions of higher education, States, private enterprise, and the talents of scholars, experts, artists, and other specialists to design and demonstrate improved curricula and methods of instruction for use in the Nation's classrooms; (2) research and development centers which concentrate on such specific questions as education of the disadvantaged, individualized instruction, early childhood learning, teacher education, and strengthening institutions of higher education; and (3) project grants which are awarded to institutions for improvement of school curricula and inquiries into education and its effects. In 1969, stress will be placed on prototype programs for improved instruction, especially for children from low-income, migrant, or non-English-speaking families. One of the prototypes will be a model school using the District of Columbia. A variety of research projects will involve joint efforts with the National Science Foundation, the National Institutes of Health, the Department of Housing and Urban Development, the Department of Labor, and the Office of Economic Opportunity.

Training of Federal Government personnel.—The estimated Federal outlay for this category is \$1.7 billion in 1969, or 15% of the total Federal funds for education, training, and related activities. Nearly all of this is for technical and professional training of military personnel in skills which are transferable to civilian use. It is estimated that the Department of Defense will provide training for more than 800,000 military personnel in 1969, about the same as in 1968, and for about 25,000 civilians. Department of Defense programs include the service academies, professional training, ROTC scholarships, and special training in technical skills. Other agencies will support full time or part time training for about 57,000 employees.

International educational activities.—This category includes activities of the Federal Government which support the education of foreign nationals either in this country or in their own country. Important programs are: Aid to or through American schools abroad under Economic Assistance Program (AID), Peace Corps teaching abroad, foreign language training and area studies, expenditures for the Center for Cultural and Technical Interchange between East and West, and educational exchange activities under the auspices of the Department of State.

Federal education funds for the poor.—The Federal Government has continued to increase its support of programs to ensure equality of educational opportunity among all children regardless of family income or social background. The major landmarks in this

direction were the passage of the Economic Opportunity Act of 1964 and the Elementary and Secondary and Higher Education Acts of 1965.

It is estimated that expenditures for Government programs with special focus on elementary, secondary, and higher education for the poor total \$2.5 billion in 1969, compared with \$2.1 billion in 1967. The principal programs and the participants in each are described in the paragraphs and table which follow:

- For preschool and early elementary education, \$345 million is provided in the Office of Economic Opportunity. About \$90 million will be spent for 8-week summer Head Start programs for 3- to 6-year-olds about to enter school, and about \$230 million on a comprehensive, year-round child development program for 3- to 6-year-olds. In order to continue the small but significant gains a child makes in Head Start or other pre-school programs, \$25 million is provided for Head Start Follow Through which will concentrate on experimentation with new techniques and curricula in the early elementary grades.
- Elementary and secondary programs are predominantly supported through Title I of the Elementary and Secondary Education Act which distributes \$1,073 million for education of children from low-income families through programs designed by the local districts. This Office of Education program is supplemented by Office of Economic Opportunity support for remedial and tutorial activities and by Upward Bound which provides \$35 million for an intensive summer education program to prepare poor high school students for college. In addition, the Teacher Corps provides \$22 million to train beginning teachers for service in poor urban and rural schools under the supervision of an experienced teacher. In 1969, \$12 million will be spent for a new program to experiment with means of preventing students from dropping out of school and \$153 million for expanded Federal education programs for American Indian children.
- Higher education Federal student aid programs for lower income students include:
 - \$129 million for equal opportunity grants to students from a low-income family who are admitted to college;
 - \$146 million for work-study opportunities for poor students attending college; and
 - \$180 million for loans to students who need such assistance in order to pursue their courses of study.

SCHOOL AND COLLEGE STUDENTS AIDED BY FEDERAL PROGRAMS ESPECIALLY FOR LOWER INCOME GROUPS

(In thousands)

	1967 actual	1968 estimate	1969 estimate
Elementary and secondary education:			
Title I (HEW).....	9,000	9,500	9,500
Head Start (OEO).....	680	652	652
Follow Through (OEO).....		9	79
Upward Bound (OEO).....	23	24	30
Dropout prevention (HEW).....			46
Remedial tutorial (OEO).....	39	36	43
American Indians (Interior).....	58	59	61
Subtotal.....	9,800	10,280	10,425
Higher Education:			
Equal Opportunity Grants (HEW).....	227	276	284
Work Study programs (HEW).....	220	212	228
Student loans (HEW).....	394	405	408
Subtotal.....	841	893	920
Total.....	10,641	11,173	11,345

Note:—Involves some duplication because a number of students are assisted under more than one program.

Trend in Federal funds for education, training, and related activities.—A longer perspective on Federal funds for education, training, and related activities may be seen in the table below. For the years prior to 1965 the figures are based on unpublished Office of Education tabulations, supplemented by the Bureau of the Budget, which are approximately comparable with new obligational authority for the years 1965–69. The table data also permit comparison, for the larger components of Federal funds in this analysis, with the major “functional” classifications of Federal programs used in the President’s budget.

Category	Obligations						New obligational and lending authority				
	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
“Education” function (700).....	0.8	0.9	1.1	1.4	1.3	1.5	2.4	4.3	4.9	5.1	5.1
Military technical and professional training (051).....	.8	.8	.9	1.0	1.0	1.2	1.4	1.4	1.4	1.6	1.6
“Health, labor, welfare” function (650).....	1.3	1.4	1.3	1.4	1.9	2.0	1.8	2.3	2.8	3.1	3.4
All other.....							1.6	1.6	1.8	1.8	2.2
Total education, training, and related programs.....	2.9	3.1	3.3	3.8	4.2	4.7	7.2	9.6	10.9	11.6	12.3

Note: Lending authority figures in fiscal years 1967, 1968, and 1969 are adjusted to eliminate the authority from sale of participation certificates in pools of college housing and academic facility loans which are not applied to current program.

In the decade since 1959, total Federal funds for education increased fourfold. As the table illustrates, the most dramatic increase in Federal funds—from \$0.8 billion in 1959 to \$5.1 billion in 1969—is for programs that have education as their primary purpose which are included in the “education” functional classification in the Federal Budget. This function includes the Office of Education in the Department of Health, Education, and Welfare, the National Science Foundation, the College Housing program of the Department of Housing and Urban Development, education programs for American Indians conducted through the Department of the Interior, the Smithsonian Institution, the National Foundation on the Arts and the Humanities, and the Library of Congress.

Equally significant is the increase in the “health, labor, welfare” function—from \$1.8 billion to \$3.4 billion between 1965 and 1969. This reflects the extent to which educational institutions and educational activities have been essential to the Government’s thrusts into manpower training, health research and services, and the attack on poverty. “All other” Government programs exhibit an increase, primarily due to the recent expansion in education benefits for returning veterans. The military technical and professional programs are not changing appreciably.

Federal funds for education, training, and related programs by agency.—Ten cabinet departments and more than 15 other agencies report education, training, and related programs as an integral part of their mission, although only six departments and four agencies administer education programs totaling \$250 million or more per annum. Table H-3 identifies these agencies and the major programs included in this analysis.

Of the \$11.6 billion estimated outlays on education, training, and related programs in 1969, \$4.8 billion or 41% will be made by the Department of Health, Education, and Welfare. Within this Department, \$3.3 billion or nearly three-fourths of the total HEW funds will be administered by the Office of Education. The Public Health Service, including the National Institutes of Health and the National Institute of Mental Health, will administer about \$1.1 billion. Over the 3-year period from 1967 to 1969, HEW expenditures for education-related programs show an increase of 23%.

The Department of Defense is the second largest Federal contributor to education with estimated outlays in 1969 of \$2 billion. Most of these outlays are for military technical and professional training and the increase of \$100 million over 1968 is largely associated with requirements of the present international situation.

The Office of Economic Opportunity ranks third among Federal agencies in expenditures for education, training, and related activities. In 1969 these expenditures will amount to \$1.3 billion, an increase of 20% over 1968 and 59% over 1967. All of these expenditures are directed at the poor, and include Head Start, Job Corps, and youth and adult work experience and training programs.

In total, the Department of Health, Education, and Welfare, the Department of Defense, and the Office of Economic Opportunity account for \$8.1 billion or 70% of the 1969 total Federal outlays for education, training, and related programs. The balance of \$3.5 billion is accounted for in other agencies covering a wide range of activities:

- The Department of Housing and Urban Development plays a large role in providing direct long-term loans for financing college housing and related facilities for faculty and students, including student nurses and hospital interns.
- The National Science Foundation provides funds for basic research and education in the sciences.
- The Veterans Administration supports the education of recent veterans, disabled veterans, children of totally disabled or deceased veterans, and training in medicine and dentistry.
- The Department of Labor finances programs for occupational training and manpower research.
- The Department of Interior provides elementary, secondary, and college level education and vocational training for Indians and Alaskan natives.
- The Agency for International Development finances both formal and informal education and training of individuals from developing countries.
- The National Foundation on the Arts and Humanities will be playing an increasingly important role in education and training in the arts and humanities.

Table H-3. FEDERAL FUNDS FOR EDUCATION, TRAINING, AND RELATED PROGRAMS, BY DEPARTMENT AND PROGRAM

(In millions of dollars)

Department, agency, and program	Functional code	NEW OBLIGATIONAL AND LENDING AUTHORITY			OUTLAYS		
		1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
Department of Health, Education, and Welfare:							
Office of Education:							
Elementary and secondary education:							
Education of children from low-income families and projects to prevent dropouts.....	701	1,053	1,191	1,238	1,057	1,070	1,089
Supplementary services.....	701	135	209	189	75	155	157
Schoolbooks and strengthening State educational agencies.....	701	132	134	81	121	123	88
Educational planning and evaluation.....	701			14			6
Aid to federally impacted school districts:							
Operation.....	701	416	416	396	400	341	384
Construction.....	701	53	23	15	47	31	31
School equipment, guidance, and testing.....	701	108	106	39	92	113	66
National Teacher Corps.....	701	11	14	31	13	13	22
Civil rights and other.....	701	8	10	15	9	10	13
Education of the handicapped.....	701	5	18	37	1	13	31
Aid for undergraduates and graduate college students:							
Equal opportunity grants and insured loan interest payments.....	702	152	190	215	58	160	227
Work-study.....	702	134	140	140	106	132	146
Teacher Training:							
Training of elementary and secondary teachers.....	704	87	88	132	76	85	107
Training of college teachers.....	704	84	89	102	54	86	90
Higher education academic facilities; graduate and undergraduate.....	702	540	476	113	219	324	227
International education.....	702	17	16	23	13	18	15
Other aids to higher education institutions, including aid to developing colleges.....	702	67	71	99	43	70	67
Expansion and improvement of vocational education.....	704	303	297	322	253	287	286
Grants for libraries and community services:							
Public libraries.....	704	75	62	44	56	55	53
Higher education libraries.....	704	25	25	25	8	25	25
Other libraries and community service assistance.....	704	8	19	20	5	15	20
Education research and development.....	704	91	93	150	71	88	104

Other aids to education, including salaries and expenses of Office of Education.....	704	34	38	46	27	39	45
Total, Office of Education.....		3,538	3,725	3,486	2,804	3,253	3,299
Special institutions, including American Printing House for the Blind, Gallaudet College, Howard University.....	702-704	21	29	28	17	25	28
Public Health Service:							
Construction of medical schools and other health education facilities.....	651	160	203	85	29	88	90
Health professions training.....	651	97	130	136	101	102	136
National Institutes of Health.....	651	684	730	722	583	645	655
National Institute of Mental Health.....	651	168	207	207	123	113	160
Other Public Health Service.....	651	61	72	73	31	38	50
Total, Public Health Service.....		1,170	1,342	1,223	867	986	1,091
Social and Rehabilitation Service:							
Maternal and child welfare grants.....	651	31	36	49	18	31	41
Public assistance grants to States and assistance to refugees.....	653	14	22	18	14	22	18
Research and training.....	659	60	63	78	54	60	75
Rehabilitation services and training.....	659	80	135	207	67	108	160
Total, Social and Rehabilitation Service.....		185	256	352	153	221	294
Other Health, Education, and Welfare:							
Educational broadcasting facilities.....	704	3		13	8	7	9
Public broadcasting program.....	704		4	20		4	20
Higher Education for International Understanding.....	702			11			8
†Education and training by Social Security Administration for vocational rehabilitation.....	654	18	12	12	18	12	12
Total, Department of Health, Education, and Welfare.....		4,935	5,368	5,145	3,867	4,508	4,761

† Trust fund.

Table H-3. FEDERAL FUNDS FOR EDUCATION, TRAINING, AND RELATED PROGRAMS,
BY DEPARTMENT AND PROGRAM (in millions of dollars)—Continued

Department, agency, and program	Functional code	NEW OBLIGATIONAL AND LENDING AUTHORITY			OUTLAYS		
		1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
Department of Defense:							
Support of overseas schools for dependents.....	051	84	94	112	63	74	99
Research grants and contracts with educational institutions.....	051	262	239	294	253	238	274
Professional, technical, and related training:							
Military personnel, including service academies.....	051	1,428	1,553	1,583	1,386	1,549	1,587
Civilian personnel.....	051	5	7	8	5	6	8
Civil defense research and training.....	051	13	13	8	13	13	10
Department of Defense-Civil:							
Canal Zone Government, contributions to schools, including capital outlay.....	910	10	11	11	13	13	13
Ryukyu Islands administration: Schools.....	910	6	11	12	6	11	11
Corps of Engineers: Research and training.....	401	1	2	2	1	2	2
Total, Department of Defense.....		1,809	1,929	2,030	1,740	1,905	2,004
Office of Economic Opportunity (funds appropriated to the President):							
Community Action program:							
Head Start.....	655	349	340	380	295	310	345
Adult training, remedial education, research, etc.....	655	92	100	115	85	99	108
Job Corps—Urban and rural centers.....	655	184	264	275	268	286	275
School and summer youth programs.....	655	197	146	204	125	192	198
Work Experience—Adult training, including remedial education.....	655	11	3	1	13	5	2
Migrant education.....	655	26	17	21	22	19	20
VISTA—Training of volunteers.....	655	5	3	4	5	3	4
Comprehensive employment programs.....	655	95	185	362	2	163	342
Total, Office of Economic Opportunity.....		958	1,057	1,362	814	1,076	1,293

National Science Foundation:							
Basic research and specialized research facilities.....	703	227	229	244	209	226	230
Grants for institutional science programs.....	703	88	82	66	49	72	78
Science education.....	703	123	126	131	118	115	120
Other science activities.....	703	42	58	59	39	43	52
Total, National Science Foundation.....		480	495	500	415	456	480
Veterans Administration:							
Compensation and pensions: Subsistence allowances for veterans in vocational rehabilitation.....	800	13	15	16	13	15	16
Readjustment benefits: Aid under War Orphans' Educational Assistance Act, Veterans' Readjustment Benefits Act, and vocational rehabilitation for disabled veterans.....	803	364	436	612	287	509	612
Training of medical personnel engaged in VA medical activities.....	804	54	64	74	52	64	74
Total, Veterans Administration.....		431	515	702	352	588	702
Department of Labor:							
Manpower Development and Training Act: Institutional and on-the-job training.....	652	392	386	413	275	444	430
Apprenticeship, area redevelopment, and research activities.....	652	13	14	16	14	13	15
†Department of Labor: Grants to States for school counseling and testing by employment service.....	652	3	3	3	3	3	3
Total, Department of Labor.....		408	403	432	292	460	449
Department of the Interior:							
Shared revenue payments to States and counties under miscellaneous permanent appropriations, largely mineral leasing and grant lands (estimated proportion for school support).....	400	29	30	31	29	30	30
Bureau of Indian Affairs:							
School construction, alteration, repairs, and maintenance.....	401	56	41	32	41	38	35
Indian education and related programs.....	704	118	129	155	112	114	153
Bureau of Mines: Health and safety training.....	652	2	2	2	1	1	2
Water and saline water research, including assistance to States and research.....	401	21	23	23	18	21	23
Geological survey research and training.....	409	1	1	1	*	1	1
Administration of territories, including Samoa and Trust Territory of the Pacific, prorated portion for schools.....	910	8	9	10	7	9	11
All other, Department of the Interior.....	404	5	6	6	5	6	6
Total, Department of the Interior.....		239	239	260	212	220	260

*Less than \$500 thousand. †Trust fund.

Table H-3. **FEDERAL FUNDS FOR EDUCATION, TRAINING, AND RELATED PROGRAMS,
BY DEPARTMENT AND PROGRAM** (in millions of dollars)—Continued

Department, agency, and program	Functional code	NEW OBLIGATIONAL AND LENDING AUTHORITY			OUTLAYS		
		1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
Economic Assistance (Agency for International Development)	152	205	204	240	143	145	171
Department of Agriculture:							
Agricultural research service: Training and research, including foreign currency program	355	12	10	13	11	7	7
Cooperative State research service: Payments to State agriculture experiment sta- tions for research	355	57	57	60	54	57	63
Federal extension service for cooperative extension work	355	93	97	101	93	90	101
Forest Service: Largely payments of shared revenues to States and counties for schools	402	23	24	26	23	24	25
Other, including National Agricultural Library	355	3	3	4	3	8	6
Total, Department of Agriculture		188	191	204	183	186	202
Atomic Energy Commission:							
Research, including conduct and facilities	058	100	100	106	103	105	107
Graduate and professional training and related support for higher education	058	7	7	8	7	7	8
Other	058	6	5	6	6	5	6
Total, Atomic Energy Commission		113	112	120	117	118	120
National Aeronautics and Space Administration: Research and training	251	133	115	129	141	136	129
Department of State:							
Mutual educational and cultural activities: Largely American and foreign student, teacher, professor, specialist, and leader exchange programs	153	47	45	49	49	46	47
Educational and cultural affairs: Center for Cultural and Technical Interchange Between East and West	153	6	5	5	7	6	5

Salaries and expenses: Foreign Service Institute, grants to oversea schools, etc.....	151	8	8	8	8	8
†Educational Exchange Trust Fund.....	150	*	*	*	*	*
Total, Department of State.....		62	59	63	64	61
Military Assistance: Training of military and civilian personnel administered by Department of Defense from funds appropriated to the President.....	057	27	27	28	27	28
Peace Corps: Training activities.....	152	42	39	42	50	41
Legislative Branch: Library of Congress.....	704	31	38	42	28	38
†Library of Congress, gift and trust fund income accounts.....	704	3	3	3	2	2
Smithsonian Institution.....	704	32	32	52	30	40
†Smithsonian Institution: trust fund.....	704	2	2	3	2	2
Department of Transportation:						
U.S. Coast Guard, principally Coast Guard Academy, education of uniformed personnel and overseas dependents.....	502	16	18	15	16	17
Federal Highway Administration.....	503	2	3	5	5	6
Federal Aviation Administration: Principally training of civilian Federal personnel.....	501	16	18	19	15	18
†Federal Highway Administration: Research and development.....	503	2	2	2	2	2
All other Department of Transportation, including high-speed grant research and other research.....	503	1	1	1	1	1
Total, Department of Transportation.....		37	43	42	34	44
Department of Commerce:						
Maritime Administration: State schools and other maritime training.....	502	5	6	7	6	7
Scientific and technological research.....	506	*	1	1	*	*
Other research and State assistance.....	506	13	10	8	4	12
Total, Department of Commerce.....		19	18	16	10	23
National Foundation on the Arts and Humanities.....	704	11	12	22	9	14
†National Foundation on the Arts and Humanities; fund for private contributions.....	704	1	1	2	1	1
Department of Justice: Vocational training in Federal prison industries and training in law enforcement.....	908	9	11	16	7	11
Department of Housing and Urban Development: Grants for training in community development, city planning, and transportation management.....	553	1	6	10	*	2

*Less than \$500 thousand. †Trust fund.

Table H-3. **FEDERAL FUNDS FOR EDUCATION, TRAINING, AND RELATED PROGRAMS,
BY DEPARTMENT AND PROGRAM** (in millions of dollars)—Continued

Department, agency, and program	Functional code	NEW OBLIGATIONAL AND LENDING AUTHORITY			OUTLAYS		
		1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
United States Information Agency: Information center and library activities, Foreign Service Institute, etc.	153	8	7	7	7	7	7
General Services Administration: National Archives services, presidential library activities, and national historical publications grants.	905	4	4	5	4	4	5
Tennessee Valley Authority: Mainly in-lieu-of-tax payments and cooperative research.	401	2	2	2	2	2	2
Legislative Branch: Government Printing Office: Distribution to depository libraries.	910	2	2	2	2	2	2
U.S. Arms Control and Disarmament Agency: Research.	151	1	1	1	1	1	1
Small Business Administration: Training.	506	1	1	1	1	1	1
Total, excluding credit programs.		10,195	10,934	11,483	8,555	10,115	10,925
CREDIT PROGRAMS							
Department of Health, Education, and Welfare:							
Academic facilities.....	702	203	159	163	81	66	79
Student loans to health personnel.....	651	33	43	46	33	43	46
National Defense Educational Act: Student loans.....	702	192	192	192	181	189	182
Insured student loan advances.....	702	10		13	10	7	12
Department of Housing and Urban Development: College housing loans.	702	301	224	363	358	333	326
Total, credit programs.		739	618	777	663	638	645
Total, Federal outlays.		10,934	11,552	12,260	9,218	10,753	11,570

Note: Lending authority figures in fiscal years 1967, 1968, and 1969 are adjusted to eliminate the authority from sale of participation certificates in pools of college housing and academic facility loans which are not applied to current program.

*Less than \$500 thousand. †Trust fund.

SPECIAL ANALYSIS I

FEDERAL HEALTH PROGRAMS*

Federal expenditures for medical and health related activities will rise to \$15.6 billion in 1969, 8.3% of Federal expenditures for all purposes. Comparable figures for 1967 and 1968, respectively, are \$10.8 billion and 6.8%, and \$13.9 billion and 7.9%. This rise reflects trends in Federal programs as well as a shift in the relative shares of health expenditures borne by the Federal Government, State and local governments, and by private sources. In 1965, with national expenditures for health near \$39 billion, Federal expenditures represented approximately 12% of the total (State and local governments, 13%, and private sources, 75%). On the basis of preliminary data, total spending for health purposes in 1967 has reached a level of \$47 billion with Federal expenditures representing 23% of the total, State and local, 12%, and private sources, dropping to 65%.

The marked increase in the Federal share of national health expenditures is primarily attributable to its increasing role in paying for medical care services. In 1965 the Federal Government spent \$3 billion or 9% of the total national bill of \$35 billion for medical care services.¹ In 1967 reflecting the initial impact of Medicare and Medicaid the Federal Government spent \$7.8 billion or 18% of the \$42 billion spent by the Nation for medical care services. The Federal share may exceed 20% in 1969.

Table I-1 shows the distribution of Federal health expenditures by functional category. While the increase in Federal financing for health services is striking, it should be noted that all categories show increasing Federal support over the 3-year period, 1967-1969.

Development of health resources.—Federal programs aimed at enlarging the *health resources* of the Nation include biomedical research, health manpower development, medical and health facility construction programs and efforts directed toward improving the organization and delivery of health services. These programs will account for \$3.2 billion or 20% of total Federal health expenditures in 1969.

Health research.—Federal expenditures for biomedical research will rise to \$1,513 million in 1969, an increase of \$69 million over 1968. It is estimated that the 1969 Federal obligations will represent 65% of the national effort with industry supplying an additional 25% and the remaining 10% being financed by foundations and voluntary health agencies.

Of the Federal biomedical research expenditures, about 61% will support the efforts of educational institutions and nonprofit organizations, 25% will be utilized for direct Federal research activities, and 14% will support research conducted by private industry and others.

*This analysis summarizes the medical and health related expenditures of the Federal Government. It includes activities classified in the "Health, Labor, and Welfare" function as well as health programs which are undertaken and classified as part of another function such as "National Defense," "Education," or "Veterans Benefits and Services."

¹ As used in this analysis, medical care services excludes expenditures for construction, research, and training.

Table I-1. FEDERAL EXPENDITURES FOR MEDICAL AND HEALTH-RELATED ACTIVITIES BY CATEGORY (in millions of dollars)

	1967 actual	1968 estimate	1969 estimate
Development of health resources, total.....	2, 431	2, 816	3, 163
Health research.....	1, 364	1, 444	1, 513
Training and education.....	594	732	782
Construction of hospitals and health facilities.....	391	481	642
Improving the organization and delivery of health services.....	82	159	226
Provision of hospital and medical services, total.....	7, 831	10, 382	11, 693
Direct Federal hospital and medical services.....	2, 552	2, 684	2, 783
Hospital and medical services, indirect.....	5, 279	7, 698	8, 910
Prevention and control of health problems, total.....	540	682	700
Disease prevention and control.....	386	500	491
Environmental control.....	37	50	51
Consumer protection.....	117	132	158
Total expenditures and net lending from Federal and trust funds.....	10, 802	13, 880	15, 556

As in the past, the Federal organizations with the major responsibility for medical and health related research will be the National Institutes of Health and the National Institute of Mental Health in the Department of Health, Education, and Welfare. Through the programs of the Institutes, the Federal Government provides support for the conduct of research, research training, the development of research facilities and other resources, and the dissemination and employment of new knowledge.

The primary mechanism for the support of research and development by NIH and NIMH continues to be the research project grant. In total, about 15,000 project grants will be supported in each of the 3 years. However, increasingly, these two organizations are pursuing larger collaborative research projects. For these purposes the contract is usually employed. In 1969 greater emphasis will be given to such projects as the artificial heart and kidney, organ transplants, vaccine and drug development, and fertility control.

Relatively, the largest increase in 1969 for research and development activities in HEW is for the air pollution program. A level of \$59 million is provided of which \$43 million will be for technology to control pollutants such as sulfur oxides from fossil fuels and emissions from auto exhausts. The remainder of the funds are spent primarily for determining the health and economic effects of air pollution.

In addition to the efforts of HEW, significant biomedical research activities are carried on under the auspices of the National Aeronautics and Space Administration, the Atomic Energy Commission, the Defense Department, and the Veterans Administration. While this research is directed to the primary missions of these individual agencies, the contributions have widespread application to health and medical problems of all.

Table I-2 provides a first attempt in this Special Analysis to classify Federal health research expenditures between "basic science" and "targeted research and development." In addition, estimates of targeted research and development are classified by selected program areas. As this tabulation represents the initial attempt at this classification, the figures should only be viewed as indicators of trends.

Table I-2.—FEDERAL EXPENDITURES FOR RESEARCH (in millions of dollars)

	1967 actual	1968 estimate	1969 estimate
Basic science.....	322	326	346
Targeted research and development.....	971	1,051	1,099
1. Neoplasms.....	147	155	155
2. Heart and circulatory system.....	126	136	139
3. Mental health.....	35	35	38
4. Neurological diseases and blindness.....	90	93	97
5. Air pollution and other environmental research.....	27	37	59
6. All other.....	547	595	611
Research facilities construction.....	71	67	68
Research, total.....	1,364	1,444	1,513

Training and education.—Growing levels of biomedical knowledge, increased demands for health services, and an expanding population continue to reinforce the need for more personnel trained in the health professions. Federal programs that are designed to help meet these national needs include: student loans and scholarship funds, financial aid for the construction of schools in the health professions, financial support for innovations and experiments in medical education, and training and education activities in conjunction with the medical programs of the Veterans Administration, the Public Health Service, and the Defense Department.

Through the efforts of these programs it is estimated that 318,000 students will receive training in 1969, supported by expenditures of \$691 million. As shown in table I-3, 29,700 physicians, dentists, and nurses graduating in 1969 and 15,765 paramedical trainees and other students graduating or otherwise completing their training will have received financial assistance from these programs. Additional physicians, nurses, and dentists in training have been included in the "all other" category.

Enlargement of the health education system will be supported by \$90 million of Federal expenditures in 1969, an increase of \$61 million over the 1967 level. As a result of these and previous expenditures, the spaces for first-year students will be increased as shown in table I-4.

In addition to the support provided for expansion of the medical education system and aid to students in the traditional medical professions, the Federal Government will support innovative efforts to improve curricula and develop new categories of ancillary health personnel. Revisions to expiring legislation will be proposed to increase and accelerate the output of health manpower.

The major support for students in the health professions is provided by grants from HEW, but further support of medical education and training will be provided as a byproduct of the direct medical care

Table I-3. FEDERALLY AIDED TRAINING AND EDUCATION

	Expenditures (in millions of dollars)			Numbers ¹ (in thousands)		
	1967	1968	1969	1967	1968	1969
Degree or certificate training:						
Research training.....	169	171	172	26.3	28.0	29.6
Physician training.....	42	53	57	15.3	18.7	18.4
Completing training.....				4.5	4.8	5.7
Dentist training.....	15	17	19	14.1	16.1	17.5
Completing training.....				4.9	5.4	5.6
Nurse training.....	29	37	36	26.6	42.8	47.4
Completing training.....				13.8	17.0	18.4
Other health professions training.....	57	79	80	8.2	11.6	14.5
Completing training.....				3.6	4.3	5.9
Paramedical training.....	16	19	25	4.2	3.7	4.0
Completing training.....				12.3	10.3	9.9
All other training.....	236	269	302	125.0	144.7	186.4
Total.....	564	645	691	219.7	265.7	317.8

¹ Numbers in any given year may reflect the impact of expenditures in prior years.

Table I-4. FEDERALLY AIDED HEALTH PROFESSIONS SCHOOL CONSTRUCTION

	Expenditures (in millions of dollars)			First year spaces added ¹		
	1967	1968	1969	1967	1968	1969
Medical schools.....	18	55	57	315	350	520
Dental schools.....	5	16	16	260	40	270
Other health professions schools.....	2	6	6	(²)	(²)	(²)
Nursing schools.....	4	10	10	790	1,230	790
Allied health professionals schools.....		1	1			(³)
Total.....	29	88	90			

¹ Numbers in any given year may reflect the impact of expenditures in prior years.

² Not available.

³ Spaces will be added after 1969.

service activities of other Federal agencies. For example, in 1969, an estimated 66,000 medical and paramedical personnel will be trained or continue their education as part of the ongoing medical service program of the Veterans Administration.

Construction of health facilities.—In 1969, \$428 million of Federal expenditures will support the construction or modernization of community hospitals and other health facilities and \$214 will be spent for the construction of hospitals and health facilities required for the medical service and health activities of Federal agencies.

Support for the expansion and modernization of non-Federal health facilities is provided primarily through the Hill-Burton program, and the Community Mental Health Centers Act. Since the enactment of the Hill-Burton legislation in 1946, 427,000 beds have been constructed

or modernized as a result of funds made available under the program. In 1969 alone, health facilities providing approximately 31,000 beds will be constructed or modernized with the support of Hill-Burton funds. By the end of 1968, 367 community mental health centers will have been constructed with Federal financial aid since the enactment of the authorizing legislation in 1963. An estimated 110 additional centers will come into being as a result of this program in 1969. Table I-5 shows facility construction trends over the last 3 years. The rising levels of support for nursing home or long-term care facilities construction and modernization reflect two program trends. The first of these trends is the increasing level of demand for specialized nursing home care, as an alternative to hospital care, which is brought about in part by the Medicare program support for extended medical care treatment provided in nursing homes. The second significant program trend is the development of a continuum of medical care facilities, ranging from intensive care to nursing home facilities.

Additional support for the construction of non-Federal health facilities is provided by grant and loan programs administered by the Small Business Administration, the Department of Commerce and the Department of Housing and Urban Development. The programs of the Small Business Administration and the Department of Commerce primarily support the construction of health care facilities. The activities of the Department of Housing and Urban Development support the construction of essential public facilities, including grants for the construction of basic water and sewer facilities which will contribute to the improved health of a community.

Table I-5.—HOSPITAL AND HEALTH FACILITY CONSTRUCTION

	Expenditures (in thousands of dollars)			Numbers ¹ (in thousands)		
	1967	1968	1969	1967	1968	1969
Federally supported construction of hospitals and other facilities:						
General hospitals.....	140	162	152	20.6	18.5	19.7
Long-term care facilities.....	46	51	63	9.8	11.6	11.8
Sewer and sanitation facilities.....	49	124	176	-----	-----	-----
Other.....	33	28	37	-----	-----	-----
Federal hospitals and health facilities:						
Hospitals.....	105	81	160	3.6	2.2	5.0
Nursing homes.....	2	7	1	.6	2.0	.4
Other facilities.....	15	28	53	-----	-----	-----
Total expenditures.....	390	481	642	-----	-----	-----

¹ Numbers in any given year may reflect the impact of expenditures in prior years, and include beds added, modernized, and replaced.

Organization and delivery.—A recent report by the Department of Health, Education, and Welfare noted that the total national expenditures for personal health care in fiscal 1967 reached \$40 billion. Per capita, this represents an increase over 1966, of 7% in current dollars. "In constant dollars however there was relatively no increase in per capita expenditures indicating that nearly all of the increases in personal health care expenditures was due to the rise in medical care prices."² These facts are confirmed by the Consumer Price Index for the 12-month period ending June 1967, which shows that the medical care component rose by 7.3% (more than 2½ times the 2.7% increase for all items in the index).

These trends in rising demand for health services and increasing prices are of national concern. The recent report of the National Advisory Commission on Health Manpower calls for major efforts to meet these challenges through more efficient utilization and coordination of health resources. The Federal Government has responded to these needs by establishing several programs that are designed to improve the organization and delivery of health services. In 1969, Federal expenditures for these purposes will rise to \$226 million, 42% above 1968 and 175% over 1967. Of the 1969 expenditures, 93% is estimated for programs in the Department of Health, Education, and Welfare. Most of the programs toward which these efforts are directed have been initiated in the Public Health Service which will spend an estimated \$191 million in 1969 primarily through the programs discussed below.

Federal grants under the *Partnership for Health* program will be increased by \$9 million in 1969, to a level of \$15 million, to help State and local governments initiate health planning units and expand those that already exist. These Federal grants will help create and support health planning units in virtually every State. Planning activities include ascertaining health levels, taking inventory of health resources, and determining additional resource requirements such as facilities, equipment, and manpower. In addition, these health planning units, in cooperation with the medical profession, will assess the distribution and use of health resources and evaluate the effect utilization of health services has on the health status of their populations.

The *Regional Medical Program*, initiated in 1966, will spend \$18 million in 1968 and will complete the initial planning phase for 54 regions of which 30 will move to operational phases. Expenditures of \$40 million in 1969 will support new and continued planning and are expected to result in operational programs covering the total population of the United States. This program has established cooperative arrangements between the medical profession and medical institutions in specific regions to make available to patients the latest advances in diagnosis and treatment of heart disease, cancer, stroke, and related diseases. In 1969, new emphasis will be directed towards implementing and operating under these arrangements and in focusing these voluntary professional arrangements toward efficient use of manpower and facilities.

² Department of Health, Education, and Welfare, Social Security Administration, Research and Statistics Note No. 21, Nov. 20, 1967. "Personal health care" is more limited than "Medical care services" and excludes general public health activities and expenditures by philanthropic agencies.

In the past, the Public Health Service conducted or, through grants and contracts, helped finance research in the organization, financing, and utilization of health services through a variety of programs and organizational units. The 1969 budget reflects the first full year focusing of these efforts under the proposed National Center for Health Services Research and Development. Expenditures for the Center—estimated at \$18 million in 1969—will be directed toward studies and experimental projects aimed at containing the rise in medical prices and improving the utilization of health resources. These will include demonstration models in delivery of comprehensive health services, use of health auxiliaries, and group medical practice.

Expenditures and activities classified under "Provision of Hospital and Medical Services" will also contribute towards improvement in the organization and delivery of health care. The Medicare and Medicaid programs, under authority enacted in 1967, will experiment with innovative reimbursement plans aimed at increasing incentives for more efficient medical practices. The OEO neighborhood health centers and the maternity and child centers created by the Children's Bureau will also experiment with new and improved methods of delivering health care, including the use of nonprofessional and paramedical personnel.

Expenditures for organization and delivery are classified in table I-6. Analytic studies, planning, and demonstration activities are common to all these programs, although in varying proportions. As analytic studies of systems models are developed and planning techniques can be fitted to regional and local needs, increasing expenditures are expected to be centered on demonstrations.

Table I-6. **FEDERAL EXPENDITURES FOR IMPROVING THE ORGANIZATION AND DELIVERY OF HEALTH SERVICES** (in millions of dollars)

	1967 actual	1968 estimate	1969 estimate
Analytic studies.....	18	35	46
Planning.....	17	23	45
Demonstrations.....	47	101	135
Total expenditures.....	82	159	226

Provision of services.—The category, "Provision of Hospital and Medical Services" includes (1) payments to or on behalf of individuals for hospital and medical care in non-Federal facilities and by private physicians, and (2) the expenses of health care facilities operated directly by the Federal Government. The major Federal programs which provide payments for health care are: health insurance for the aged (Medicare), medical assistance for the needy (Medicaid), maternal and child health programs, Office of Economic Opportunity health programs, and the Federal employees health benefits program. The direct care activities consist primarily of those health programs conducted by the Department of Defense, the Veterans Administration and the Department of Health, Education, and Welfare for their beneficiaries in Federal facilities. These agencies, however, also expend

substantial amounts to provide care for their beneficiaries under contract in non-Federal facilities. (See table I-7.)

In 1969, approximately two-thirds of the total Federal health budget will be expended to provide hospital and medical services to large segments of the American population. A total of \$11.7 billion will be for these purposes, an increase of \$1.3 billion over 1968 expenditures. The provision of services has been the fastest growing area of health expenditures in the Federal budget over the past few years, increasing 13% in 1969 over 1968 and almost 50% over 1967. These programs, discussed below, are estimated to account for 20% of the total national expenditures for personal health care from all sources.

Table I-7. PROVISION OF HOSPITAL AND MEDICAL SERVICES

	Expenditures (In millions of dollars)			Numbers treated (in thousands)		
	1967	1968	1969	1967	1968	1969
Provision of direct Federal hospital and medical services.....	2,552	2,684	2,783	-----	-----	-----
Inpatients treated.....	1,735	1,822	1,890	2,150	2,218	2,251
Clinic and physician visits.....	817	862	893	61,688	65,040	66,064
Provision of hospital and medical services, indirect.....	5,279	7,698	8,910	-----	-----	-----
Inpatients treated.....	3,854	5,235	6,059	14,816	14,992	15,110
Clinic and physician visits.....	1,425	2,463	2,851	(2)	(2)	(2)
Total.....	7,831	10,382	11,693	-----	-----	-----

¹ Incomplete reporting.

² Not available.

Medicare.—The aged, prior to Medicare, faced the twin spectres of reduced income and high frequency of expensive illness. The Nation's response to the health problems of the aged was a health insurance program for virtually all persons 65 and over, covering 90 days of hospital care, posthospital care in extended care facilities and services provided by home health agencies, as well as physicians' services.

The hospital insurance program is financed by an employer-employee payroll tax for persons covered by the social security and railroad retirement systems and by general fund payments for hospital services rendered to eligible aged persons not insured by either of these systems. The 1967 amendments increased the combined employer-employee payroll tax from 1% to 1.2% effective January 1, 1968. In 1969, an estimated 19.6 million persons will be eligible to receive the protection provided by the hospital insurance program. (The only significant population group not covered by the hospital insurance program are the retired Federal employees and their dependents who are eligible for the Federal employee health benefits program.) In 1969, total expenditures for hospitalization of the aged will exceed \$3.9 billion, an increase of \$500 million over 1968, reflecting anticipated increases in hospital charges and in admissions to hospitals and extended care facilities. An estimated 4.6 million aged will receive these services in 1969.

In addition to the hospital insurance program, Medicare made available, on a voluntary basis, a supplementary medical insurance plan covering mainly physician charges. In 1969, approximately 18.6 million persons, almost 95% of the aged, will be enrolled in the supplementary plan. The program is financed by monthly premiums (\$3 currently and \$4 effective April 1, 1968) by each enrollee matched equally by the Federal Government. In 1969, an estimated 7.6 million persons will benefit through payments of \$1.8 billion from the Supplementary Medical Insurance trust fund compared to 7.5 million persons and \$1.6 billion in 1968. The increase of \$211 million over 1968 expenditures results from an estimated 5% increase in physicians' charges, greater utilization of physicians' services by the aged and expanded benefits resulting from the 1967 amendments to the Social Security Act. In 1969, Medicare will account for 80% of all Federal health expenditures for the aged.

Medicaid.—Federal matching payments which defray 50% to 83% of State medical assistance payments on behalf of the poor and medically indigent will total \$1.8 billion in 1968 with 43 States and jurisdictions participating in the Medicaid program. Total expenditures, including State and local funds, are estimated at \$3.4 billion in 1968. In 1969, total Federal, State, and local medical assistance expenditures are estimated at \$4.2 billion, of which Federal grant payments are estimated at \$2.1 billion, \$360 million more than 1968. By the end of 1969, 48 States and jurisdictions are expected to be in the Medicaid program.

Increased Medicaid costs in 1969 are attributable to an anticipated rise in medical prices which is expected to account for about a third of the increase over the 1968 level. In addition, the number of individuals receiving Medicaid services will increase from 7.3 million in 1968 to 8.5 million in 1969.

The 1967 Social Security Amendments limit Federal Medicaid matching payments on behalf of the medically indigent to persons whose income does not exceed by more than one-third the State welfare payments under Aid to Families with Dependent Children. For States already in the program, the limitation does not become fully effective until January 1970, but is immediately effective for new States entering the Medicaid program.

OEO and Children's Bureau health programs.—In contrast to the overarching Federal financing mechanisms provided through the Medicare and Medicaid programs, the Children's Bureau and OEO health programs have focused their efforts on sponsoring medical resources which provide comprehensive medical services mainly for mothers and children and young adults living in low income areas. In 1969, about 50% of Children's Bureau health expenditures will be devoted to further development of comprehensive neighborhood health, maternity and infant care, and child health centers.

Health expenditures by OEO will increase from about \$111 million in 1967 to \$154 million in 1969 primarily through expansion of neighborhood health centers which will account for about 60% of OEO's health expenditures. By the end of 1967, 41 comprehensive centers

had been approved and at present 13 are in operation. All 41 will be operating by the end of 1968. The remaining OEO health expenditures cover health care services provided to children enrolled in its Head Start Program, to Job Corps enrollees, and to VISTA volunteers.

In 1969 the Children's Bureau will spend \$170 million for health care for mothers and children, \$29 million more than in 1968. The major portion of this increase will be aimed at health services to reduce the incidence of mental retardation, birth defects, and infant mortality, and to prevent or correct handicapping conditions among children.

A recent HEW report on maternal and child health programs indicated that dramatic reductions in infant mortality and handicapping conditions among children could take place through sharply focused efforts.³ Accordingly, the 1969 budget requests \$55 million—\$25 million more than in 1968—for 54 maternity and infant care centers and family planning clinics strategically located in low income areas. To prevent and correct chronic illnesses in school and preschool children, the budget for 1969 requests \$42 million—\$5 million more than in 1968—to finance 59 comprehensive children and youth health care centers. Almost 2 million children in low income areas are eligible to receive preventive and corrective health treatment in these centers. Another approach authorized by the 1967 amendments adds \$15 million to the crippled children's program to step up health screening activities which locate and treat handicapping illnesses in young children.

Financing health benefits for Federal employees.—Health benefits are provided to more than 2.7 million Federal civilian employees and their 5.8 million dependents under insurance programs managed by the Civil Service Commission. A similar program provides benefits for retired employees and their dependents. These payments are made from trust revolving funds utilizing the premium deposits of the agencies and their employees. The Government's contribution amounts to \$233 million in 1967, \$251 million in 1968, and \$257 million in 1969.

Providing medical care directly to Federal beneficiaries.—With the expansion of hospital and medical care programs financed through Federal funds, particularly for the aged and indigent, the share of total Federal expenditures allocated for the direct provision of health care in Federal facilities has declined from 40% in 1963 to 18% in 1969. In spite of the major shift in the proportions, this category remains a major program element, with expenditures totaling \$2.8 billion in 1969, an increase of 3.6% over 1968.

The three agencies primarily concerned with direct provisions of health care, the Department of Defense, Veterans Administration, and the Department of Health, Education, and Welfare, operate 542 hospitals containing 188 thousand beds, over 11% of all hospital

³ Department of Health, Education, and Welfare, Office of the Assistant Secretary for Program Coordination, "Maternal and Child Health Care Programs," October 1966.

beds in the United States. Together, these agencies expend over 98% of the funds in this category.

The Department of Defense, with 311 hospitals and 63,000 beds, will make medical care available to over 9 million servicemen, their dependents, and retired military personnel and their dependents.

With the enactment of legislation in 1967 broadening the use of community medical facilities for dependents and retired military personnel, expenditures by the Department of Defense for care provided in community hospitals and by private physicians will almost double, increasing from \$106 million in 1967 to an estimated \$200 million in 1969. In total, expenditures for care provided in both military medical facilities and community facilities will increase by \$46 million in 1969 over 1968 to a total of \$1,536 million.

To accomplish the medical care mission of the Veterans Administration, that agency will maintain and operate 166 hospitals containing 110,000 beds, 63 nursing home care units with 4,000 beds, 18 domiciliary/restoration care facilities, and 203 outpatient clinics—constituting one of the largest medical care systems in the world. The agency provides care to veterans with service-connected disabilities and veterans with non-service-connected illness to the extent that beds are available and the veteran certifies his inability to pay for care in private facilities. In 1969 the VA will treat 767,000 patients in 110,000 beds, an increase of over 2% from 1967. In addition, outpatient medical visits are expected to increase from 5.4 million in 1967 to 5.6 million in 1969. Expenditures are estimated to rise from \$1.2 billion in 1967 to \$1.3 billion in 1969.

Other persons eligible for care in the 65 hospitals and a variety of outpatient clinics operated by HEW include 400,000 American Indians and natives of Alaska, and about 500,000 seamen, Federal employees injured on the job, narcotic addicts, and persons committed or voluntarily presenting themselves for mental treatment in St. Elizabeths Hospital in Washington, D.C. Under recent legislation, Federal employees and their families stationed in remote locations where private health care facilities are unavailable may utilize hospitals of the Public Health Service on a reimbursable basis. In 1969, HEW will expend approximately \$117 million to provide direct care for these groups, an increase of 7% over 1968.

Family planning.—As pointed out by HEW's program analysis, "Maternal and child health care programs," voluntary family planning programs, by matching births with the spacing and number of children desired by parents, could significantly reduce infant mortality at a comparatively low cost. Out of the funds included for provision of health services, Federal expenditures for family planning in this country are expected to double in 1969 to a total of \$73.8 million. Almost all of the increase is in services and counseling, which rises from \$25.2 million in 1968 to \$60.6 million in 1969, largely through a major expansion in family planning services provided by Children's Bureau and OEO programs. These funds can provide family planning services to about two-thirds of a universe of 5 million women which a recent report to HEW on family planning⁴ identifies

⁴ Oscar Harkavy, "Implementing DHEW policy on family planning and population," September 1967, p. 3.

Table I-8. ESTIMATED FEDERAL EXPENDITURES FOR FAMILY PLANNING (in millions of dollars)

	1967	1968	1969
Domestic:			
Total services and counseling	18.1	25.2	60.6
HEW.....	11.8	14.2	41.0
OEO.....	4.1	7.0	15.0
Other.....	2.2	4.0	4.6
Total research and training	10.0	11.2	13.2
HEW.....	9.6	10.8	12.8
Other.....	.4	.4	.4
Total expenditures (domestic)	28.1	36.4	73.8
International: Services, research and training (primarily AID)	1.1	14.3	23.4

as needing assistance in obtaining such services. Research and training in the family planning field increases by about 18% in 1969 to a total of \$13.2 million. Virtually all of the \$2 million increase is due to expanded research activities by PHS. The 1969 increase of \$9.1 million in international family planning mainly reflects further expansion of AID activities.

Table I-9. ESTIMATED HEALTH CARE EXPENDITURES BY POPULATION AND INCOME GROUPS (in millions of dollars)

	1967	1968	1969
Total, all recipients	7,831	10,382	11,693
aged (65 and over).....	4,379	6,310	7,125
other adults (19-64).....	2,535	2,893	3,174
children and youth (0-18).....	917	1,179	1,394
Indigent, total ¹	3,178	4,100	4,749
aged (65 and over).....	1,968	2,560	2,872
other adults (19-64).....	850	1,012	1,194
children and youth (0-18).....	360	528	683
Non-indigent, total	4,653	6,282	6,944
aged (65 and over).....	2,411	3,750	4,253
other adults (19-64).....	1,685	1,881	1,980
children and youth (0-18).....	557	651	711

¹ Indigency as defined by OEO poverty guidelines.

Distribution of health expenditures by age groups and economic status.—
Table I-9 estimates the Federal expenditures only for the hospital

and medical services category as distributed among three major age groups and between indigent and nonindigent persons. Funds expended for categories relating to the development of health resources and for the prevention and control of health problems are designed to serve the entire Nation and are not normally allocable by population group or income.

The age distribution in table I-9 indicates that the largest health expenditure increase in percentage terms will be for children and youth, rising 17% in 1969 from \$1.2 to \$1.4 billion. In absolute terms, however, the largest increase will be for the aged, rising from \$6.3 billion in 1968 to \$7.1 billion in 1969. The distribution of expenditures between indigent and nonindigent indicates that 40% of Federal expenditures for the provision of hospital and medical services will aid the poor. In 1969, \$4.7 billion will be spent to provide or finance health care services for the needy, an increase of \$634 million over 1968 and a 49% increase over 1967.

The aged.—Of the total 1969 expenditures for the provision of health services both directly in Federal facilities and indirectly through Federal payments for care, approximately 61% or \$7.1 billion, will be on behalf of the aged. This is an increase of \$805 million or 13% over 1968.

While the proportion of the Nation's aged who are in the indigent category is expected to decline from 39% in 1967 to 34% in 1969 (partly because of the increased cash benefits provided in the 1967 Social Security Amendments), the amounts expended for the indigent aged will rise by \$900 million over 1967 largely due to increases in medical costs and greater utilization of services.

Medicare—the major health program for the aged—seeks to remove barriers to receipt of hospital and physician services. During the first year of the program, utilization of hospital services increased by about 20% over the pre-Medicare level. Physician services to the elderly have also shown some increases, as have use of extended medical care in nursing homes and home health services providing posthospital care. Medicare also seeks to ease the burden of medical costs upon the aged and their families. In 1966, the year immediately preceding Medicare, just under 70% of all hospital and medical services for the aged were financed from private sources—mainly the aged themselves or their families. In 1967, the first year of Medicare, 70% of these costs were borne by public sources, Federal, State, and local. It is estimated that Medicare's share of all public and private medical care expenditures for the aged will rise from 40% in 1967 to almost 50% in 1969.

In addition to Medicare, Medicaid payments for the aged are estimated at \$864 million in 1968 and \$936 million in 1969. Although the aged constitute only about 35% of all Medicaid recipients, they account for over 44% of all payments, reflecting the higher cost of treating illness affecting older people, especially the high cost of recuperative care in skilled nursing homes.

An additional \$339 million will be spent by the VA and the DOD to provide medical care for aged veterans and retired military personnel and their spouses, mainly in hospitals and clinics operated by those agencies. This is an increase of \$14 million over 1968 expenditures.

Children.—Health care service expenditures for children are expected to be \$1.4 billion in 1969, an increase of \$215 million over the 1968 level. Of the 1969 increase, \$136 million is attributable to Medicaid expansion, and \$33 million to infant care, early casefinding and follow-up treatment in the Children's Bureau and OEO health programs. These three programs account for over half the total Federal expenditures for children. The DOD dependent medical care program provides almost all of the remaining funds. About 75% of the 1969 increase will be for services to needy children. Between 1967 and 1969 expenditures for indigent children are estimated to rise by 90%, or \$323 million. The increases for children and youth reflect the very considerable unmet health needs in this category. To help meet these needs, legislation will be proposed for a child health program to provide, over the next 5 years, for families unable to afford it—access to health services from prenatal care of the mother through the child's first year.

Other adults.—The 1969 expenditures of \$3.2 billion for other adults consist mainly of programs serving persons entitled to care in Federal installations. These programs pay for health care rendered to veterans, servicemen and Federal employees, as well as eligible spouses. A total of \$2.2 billion is expended for these groups, representing 68% of the total spent for nonaged adults. Federal Medicaid payments for needy adults will be \$475 million in 1969, representing 15% of total expenditures for adults. Other Federal programs spending more than \$40 million in 1969 for health care for adults are OEO's neighborhood health centers, the Vocational Rehabilitation program, and the maternal health programs of the Children's Bureau. These programs, plus payments by Medicaid, and approximately \$500 million of the health care funds expended by the Veterans Administration, comprise the \$1.2 billion which will be spent in 1969 to provide hospital and medical care to needy adults.

Prevention and control of health problems.—Programs designed to prevent and control health problems will increase to \$700 million, as compared to \$682 million in 1968 and \$540 million in 1967.

Table I-10. **FEDERAL EXPENDITURES FOR THE PREVENTION AND CONTROL OF HEALTH PROBLEMS** (in millions of dollars)

	1967	1968	1969
Disease prevention and control.....	386	500	491
Environmental control ¹	37	50	51
Consumer protection.....	117	132	158
Total, prevention and control of health problems.....	540	682	700

¹ Excludes expenditures for air pollution and other environmental research which are included in the medical and health-related research category. Table I-2, \$27 million in 1967, \$37 million in 1968, and \$59 million in 1969.

Disease prevention and control.—Under the Partnership for Health program, \$76 million, an increase of \$16 million over 1968, will be made available for block formula grants to provide financial support to States for establishment and maintenance of public health services

developed and executed in a manner consistent with the State comprehensive health plan. In addition, \$89 million will be made available for project grants to nonprofit organizations and institutions and State and local health agencies to meet health needs of limited geographic scope (such as rat control programs), or of specialized regional or national significance. The disease prevention and control programs in other countries supported by the Agency for International Development will be continued in 1969.

In addition, expenditures of \$60 million will ensure that the national capability to deal with outbreaks of communicable diseases will be maintained. Another \$30 million will support research and community demonstration efforts to upgrade our ability to deal with long-term chronic debilitating diseases such as emphysema, chronic bronchitis, and arthritis.

Environmental control.—In the last few years the quality of the environment has taken on increased importance. This can be demonstrated in terms of anticipated national expenditures from all sources for air pollution control equipment which will more than double between 1967 and 1969; rising from \$325 million to \$700 million in 1969.⁵ Unless steps are taken to control the amount of pollution discharged into the air, by 1980 the sulfur and nitrogen oxides emitted are estimated to increase by one-third over present levels. Without the controls put on 1968 automobiles and all later models, the hydrocarbons and carbon monoxide emitted to the atmosphere are estimated to increase by about 50% during this same 12-year period. As table I-11 illustrates, the auto emissions removed by control devices, while increasing, are still not sufficient to create a downward turn in auto emissions released to the atmosphere. As older cars are replaced, the full impact of controls being installed on post-1967 automobiles can be expected to cause a decline in the level of auto exhaust pollutants.

Table I-11. SELECTED AUTO EMISSIONS KEPT OUT OF THE AIR ¹
(In millions of tons per year)

	1966	1967	1968	1969
Auto emissions released to the atmosphere:				
Hydrocarbons.....	10	11	11	11
Carbon monoxide.....	62	65	66	67
Auto emissions removed by control devices:				
Hydrocarbons.....	1	2	3	4
Carbon monoxide.....	*	1	6	11

* Less than 500 thousand tons.

¹ Unpublished data furnished by the National Center for Air Pollution Control, HEW.

Controlling pollution is both a social and scientific problem. The Air Quality Act of 1967 provides the national framework designed to obtain clean air for all severely polluted areas in the country. The initiative is left with the States to set enforceable air quality standards consistent with recommendations of the Secretary of HEW. Provision is made for standard-setting by the Secretary for nationally desig-

⁵ Unpublished data furnished by the National Center for Air Pollution Control, HEW.

nated air quality control regions in the absence of appropriate State action.

The development of devices and techniques to prevent and control air pollution is a difficult scientific problem. Devices developed to accomplish this task must be practical and economical to avoid a serious disruption of the economy, especially in the fuel and power generating industries. To find such economically feasible control technology is the objective of a \$68 million research program to be undertaken in 1968 and 1969.

On May 26, 1966, the President issued an executive order directing Federal agencies to take the lead in air pollution by abating the pollution from their own facilities. Implementation of the 5-year plans developed as a result of this executive order will begin in 1969. Expenditures of \$21.6 million will fund 89 projects in 1969 which will eliminate the more serious air pollution problems at Federal facilities.

Another environmental problem is the disposal of solid wastes such as trash, garbage, and industrial processing wastes. Increased research is supported to develop ways of greatly reducing the amount of such wastes produced, using wastes as resources rather than discarding them, and disposing of the remaining wastes in the most efficient and healthful manner. Legislation extending the solid waste program will be proposed.

Consumer protection.—Consumer protection is also an important part of the prevention and control of health problems. The Department of Agriculture will substantially increase its activities in 1969 to assure the wholesomeness of meat and poultry meat products shipped in interstate commerce. The Food and Drug Administration's consumer protection activities will be strengthened, including its National Center for Drug Analysis which is designed to ensure the purity, potency, and effectiveness of the Nation's drug supply. Eventually the results from this activity should provide more reliable data on the equivalency of similar drugs. In addition, the Clinical Laboratories Improvement Act of 1967 provides for developing and enforcing standards for the quality and accuracy of performance of the estimated 1,000 diagnostic laboratories transacting business in interstate commerce.

Legislation will be proposed to ensure the quality and wholesomeness of fish, assure the safety of our community water supplies, protect against hazardous radiation from electronic equipment, and strengthen FDA's capacity to ensure safe and adequate medical devices.

EXPENDITURES FOR HEALTH ACTIVITIES BY AGENCY

The following tables distribute the health-related expenditures of Federal agencies by the functions used in this analysis. Based on their major purposes, most of these agencies are assigned in the budget document to functions other than Health. The tables, therefore, also indicate the budget document functional code. Breaking out the health activities of these agencies, functionally assigned elsewhere in the budget document, accounts for the \$15.6 billion reported in this analysis for "health" compared to the \$10.7 billion reported in the budget document. Furthermore, this analysis incorporates a more detailed breakdown within "health" than is used in the budget document. Expenditures for health within each appropriation account are assigned to the various functional components used in this analysis. Finally, expenditures reported in this analysis cannot be added to those reported in other special analyses such as Education; in some cases the same expenditure is reflected in both analyses.

Table 1-12. FEDERAL EXPENDITURES AND NET LENDING FOR MEDICAL AND HEALTH-RELATED ACTIVITIES BY AGENCY, 1967 (in millions of dollars)

	Functional code	Health research	Training and education	Construction	Organization and delivery	Direct Federal hospital and medical services	Indirect Federal hospital and medical services	Prevention and control of health problems	Total
Department of Health, Education, and Welfare.....		996.0	414.9	220.7	65.0	114.8	4,784.6	286.8	6,882.8
Public Health Service:									
NIH.....	651	773.0	163.2		4.4			1.5	942.1
NIMH.....	651	69.0	90.3	.9	19.6	8.5		29.9	218.5
Other.....	651	117.0	133.4	218.1	34.9	106.0	18.7	184.5	812.6
Food and Drug Administration.....	651	10.0	.8	.6				46.7	58.3
Social and Rehabilitation Service.....	651, 654	27.0	19.0	1.1	6.1	.3	1,370.2		1,423.7
Social Security Administration.....	651						3,395.7		3,395.7
Other.....	701		8.2					24.2	32.5
Department of Defense.....	051	77.8	80.3	49.7		1,226.1	106.0	19.3	1,559.2
Veterans Administration.....	804	47.1	52.4	56.9	1.3	1,181.5	37.2		1,376.4
Department of State.....	151	1.5	13.7	.8	8.8	1.8	.3	110.0	136.9
Agency for International Development.....	152	(1.5)	(10.4)		(8.8)	(1.7)		(93.3)	(115.7)
Atomic Energy Commission.....	058	98.6	.7						99.3
Department of Agriculture.....	355	37.4						103.5	140.9
National Aeronautics and Space Administration.....	251	84.9							84.9
Department of Housing and Urban Development.....	553			48.4	6.8				55.2
National Science Foundation.....	703	15.1							15.1
Civil Service Commission.....	906						36.6		36.6
Office of Economic Opportunity.....	655						103.0		103.0
Department of Commerce.....	507	1.1		2.9					4.0
Department of Labor.....	652	.2	31.0				12.1	1.8	45.1
Other agencies.....		4.0	.6	11.6		27.5	2.7	18.4	64.8
Agency contributions to employee health benefit funds.....							196.8		196.8
Total expenditures for health, 1967.....		1,363.7	593.6	391.0	81.9	2,551.7	5,279.3	539.8	10,801.0

Table I-13. **FEDERAL EXPENDITURES AND NET LENDING FOR MEDICAL AND HEALTH-RELATED ACTIVITIES BY AGENCY, 1968** (in millions of dollars)

	Functional code	Health research	Training and edu- cation	Construc- tion	Organiza- tion and delivery	Direct Federal hospital and medical services	Indirect Federal hospital and medical services	Preven- tion and control of health problems	Total
Department of Health, Education, and Welfare.....		1,056.0	539.8	248.3	144.0	109.2	7,106.1	389.6	9,593.0
Public Health Service:									
NIH.....	651	811.0	165.3		23.9			2.0	1,002.2
NIMH.....	651	70.3	99.5		55.7	9.5		35.6	270.7
Other.....	651	130.9	238.9	243.6	53.1	99.4	33.6	253.3	1,052.7
Food and Drug Administration.....	651	10.8	.9	3.3				50.4	65.4
Social and Rehabilitation Service.....	651, 654	33.0	23.2	1.4	11.3	.3	2,008.2	20.9	2,098.3
Social Security Administration.....	651						5,064.3		5,064.3
Other.....	701		12.0					27.4	39.4
Department of Defense.....	051	86.6	91.0	26.1		1,305.1	175.0	20.3	1,704.1
Veterans Administration.....	804	47.5	60.3	58.0	2.0	1,235.5	38.5		1,441.8
Department of State.....	151	1.2	14.0	.5	9.5	4.9	.3	133.9	164.3
Agency for International Development.....	152	(1.2)	(10.6)		(9.5)	(4.8)		(113.7)	(139.8)
Atomic Energy Commission.....	058	99.5	.7						100.2
Department of Agriculture.....	355	36.9						116.0	152.9
National Aeronautics and Space Administration.....	251	96.1							96.1
Department of Housing and Urban Development.....	553			123.7	3.3				127.0
National Science Foundation.....	703	14.0							14.0
Civil Service Commission.....	906						40.8		40.8
Office of Economic Opportunity.....	655						111.0		111.0
Department of Commerce.....	507	1.0		6.3					7.3
Department of Labor.....	652	.3	25.2				12.1	2.3	39.9
Other agencies.....		4.5	.8	18.1		29.4	3.2	19.5	75.5
Agency contributions to employee health benefit funds.....							210.6		210.6
Total expenditures for health, 1968.....		1,443.6	731.8	481.0	158.8	2,684.1	7,697.6	681.6	13,878.5

Table I-14. FEDERAL EXPENDITURES AND NET LENDING FOR MEDICAL AND HEALTH-RELATED ACTIVITIES BY AGENCY, 1969 (in millions of dollars)

	Functional code	Health research	Training and education	Construction	Organization and delivery	Direct Federal hospital and medical services	Indirect Federal hospital and medical services	Prevention and control of health problems	Total
Department of Health, Education, and Welfare.....		1,088.0	566.0	261.2	211.4	116.7	8,242.7	372.3	10,858.3
Public Health Service:									
NIH.....	651	822.0	166.4		44.1			1.9	1,034.5
NIMH.....	651	72.0	102.3		64.7	10.8		39.4	289.2
Other.....	651	143.9	252.2	251.7	82.0	105.6	38.6	246.0	1,119.8
Food and Drug Administration.....	651	11.2	1.0	5.1				51.4	68.7
Social and Rehabilitation Service.....	651, 654	38.9	29.1	4.4	20.6	.3	2,419.2	6.2	2,518.7
Social Security Administration.....	651						5,784.9		5,784.9
Other.....	701		15.0					27.4	42.4
Department of Defense.....	051	92.7	92.6	104.1		1,335.6	200.1	21.2	1,846.3
Veterans Administration.....	804	53.2	81.1	63.5	2.0	1,291.1	38.9		1,529.8
Department of State.....	151	1.5	15.5	.2	11.0	8.4	.3	140.8	177.7
Agency for International Development.....	152	(1.5)	(11.8)		(11.0)	(8.3)		(118.9)	(151.5)
Atomic Energy Commission.....	058	104.2	.7						104.9
Department of Agriculture.....	355	43.9						141.8	185.7
National Aeronautics and Space Administration.....	251	110.2							110.2
Department of Housing and Urban Development.....	553			176.4	1.3				177.7
National Science Foundation.....	703	13.5							13.5
Civil Service Commission.....	906						40.8		40.8
Office of Economic Opportunity.....	655						154.0		154.0
Department of Commerce.....	507	1.1		7.1					8.2
Department of Labor.....	652	.3	25.3				12.7	2.6	40.9
Other agencies.....		4.4	.9	29.9		31.0	3.9	21.7	91.8
Agency contributions to employee health benefit funds.....							216.2		216.2
Total expenditures for health, 1969.....		1,513.0	782.1	642.4	225.7	2,782.8	8,909.6	700.4	15,556.0

SPECIAL ANALYSIS J

FEDERAL RESEARCH, DEVELOPMENT, AND RELATED PROGRAMS

This analysis identifies Federal funds for the conduct of research, development, and facilities related to both activities. It also provides information on several fields, such as the marine sciences, which are of broad national interest, involving the programs of many departments and agencies. The range of programs summarized in this analysis reflects the continuing importance of research and development both to advancing the objectives of the Federal Government and to furthering the economic and social welfare of the Nation as a whole.

Total Federal *obligations* for research and development, including facilities, will increase from \$16.9 billion in 1968 to \$17.8 billion in 1969. Major increases of \$0.6 billion for Defense, \$0.4 billion for the Atomic Energy Commission, and \$0.3 billion for all other agencies are offset by a decrease of \$0.4 billion for the National Aeronautics and Space Administration, reflecting a decline in requirements for the manned lunar landing program. Total *expenditures* will increase from \$16.5 billion to \$17.3 billion.¹

Research and development programs of the Federal Government are planned and executed primarily to support the missions of individual agencies. The level and content of Federal research and development therefore depends, in large measure, on such criteria as the extent to which the Federal Government has assumed responsibility for problems of national concern and their urgency; the feasibility of a scientific and technological attack on these problems; and the availability of skilled manpower and other resources. The application of these criteria is clearly evident in the scope and size of research and development related to national defense, space exploration, atomic energy, and public health. But it is also reflected in newer areas of Federal concern such as education of the disadvantaged, poverty, transportation, urban development, and crime prevention where research and development programs are coming into existence or increasing significantly in scale.

Science and technology create opportunities and generate problems which do not fit neatly into the existing structure of government. Therefore, means must be found to provide an overview of inter-related research and development programs in order to foster coordination, minimize duplication, and to work toward fulfilling broader overall Federal responsibilities and national goals in science and technology. This is exemplified in such fields as marine science and atmospheric research.

The Office of Science and Technology, in the Executive Office of the President and headed by the President's Science Adviser, is the major specific instrument of the President for the oversight and evaluation of research and development. Related to the work of this Office are the President's Science Advisory Committee and the Federal Coun-

¹ Obligations and expenditures in this analysis include trust funds.

cil for Science and Technology, both also headed by the President's Science Adviser.

Finally, the Bureau of the Budget reviews all research and development in the course of considering, on behalf of the President, agency program and financial requirements. While this review focuses on research and development largely in the context of agency mission needs, the Bureau, in cooperation with the Office of Science and Technology and other coordinating bodies, also examines those aspects of research and development which cross agency lines.

Research.—The Federal Government finances research not only to advance specific agency missions but also to support generally the progress of the Nation's social and economic welfare. Of particular importance to the latter objective is the support of basic research, especially that conducted in colleges and universities and related research organizations.

Total Federal *obligations* for the conduct of research—both basic and applied—will increase from an estimated \$5.5 billion in 1968 to \$6 billion in 1969. *Expenditures* will increase from \$5.2 billion in 1968 to \$5.7 billion in 1969.

Obligations for Research

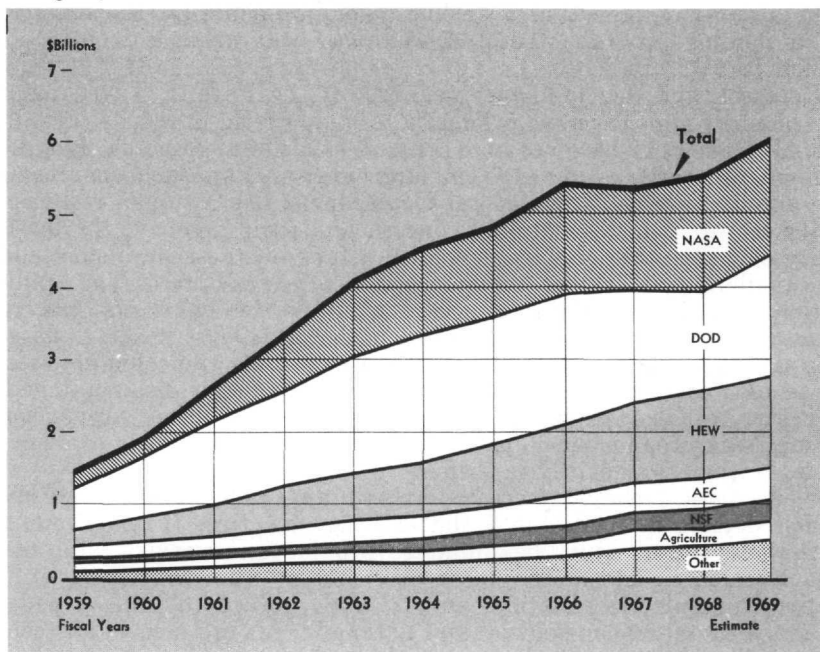


Table J-1. OBLIGATIONS AND EXPENDITURES FOR THE CONDUCT OF RESEARCH ¹ (in millions of dollars)

Department or agency	Obligations			Expenditures		
	1967	1968	1969	1967	1968	1969
Department of Defense—Military.....	1,584	1,397	1,633	1,492	1,470	1,560
National Aeronautics and Space Administration.....	1,388	1,550	1,587	1,440	1,414	1,578
Health, Education, and Welfare.....	1,137	1,204	1,320	974	1,046	1,153
Atomic Energy Commission.....	397	414	439	397	414	439
National Science Foundation.....	245	262	289	207	240	257
Agriculture.....	248	252	273	245	259	266
Interior.....	147	163	178	130	154	170
Commerce.....	52	63	62	53	54	56
Transportation.....	45	52	62	32	50	64
Veterans Administration.....	44	46	49	43	44	47
Smithsonian Institution.....	15	16	21	13	15	18
Housing and Urban Development.....	8	18	21	4	8	13
Office of Economic Opportunity.....	12	14	16	9	13	16
Justice.....	1	3	6	1	2	4
All other.....	35	38	46	45	50	54
Total.....	5,358	5,492	6,002	5,086	5,235	5,695

¹ In this table and tables J-2 and J-3 "obligations" and "expenditures" for AEC are both accrued costs which approximate obligations and expenditures for analysis purposes. "Obligations" for Defense are "budget plan" amounts which approximate obligations. Detail in all tables may not add to totals due to rounding.

The major dollar increases for research in 1969 are in the programs of the Departments of Defense and Health, Education, and Welfare, chiefly for health. Among other agencies, small but significant increases are to be noted for the National Science Foundation, the Departments of Interior, Transportation, Housing and Urban Development, and Justice and the Office of Economic Opportunity. These latter increases reflect in part the growing concern for applying research to national "civilian" problems.

Development.—The Federal Government finances development to design, fabricate, test, and evaluate prototypes of materials, devices, systems, or processes to accomplish specific agency missions. These include prototypes of complex devices such as military weapons, space vehicles, and nuclear reactors and of "systems" for such purposes as missile defense and communications.

Total *obligations* for the conduct of development are estimated to increase slightly, from \$10.8 billion in 1968 to \$11 billion in 1969. *Expenditures* will increase from \$10.6 billion to \$10.9 billion.

The major change in 1969 is a *reduction* in the development funds of NASA reflecting the progress of the Apollo manned lunar landing program beyond the most costly phases of development. Other programs of development will increase in 1969, chiefly those of the Department of Defense and of AEC for nuclear weapons development.

Obligations for Development

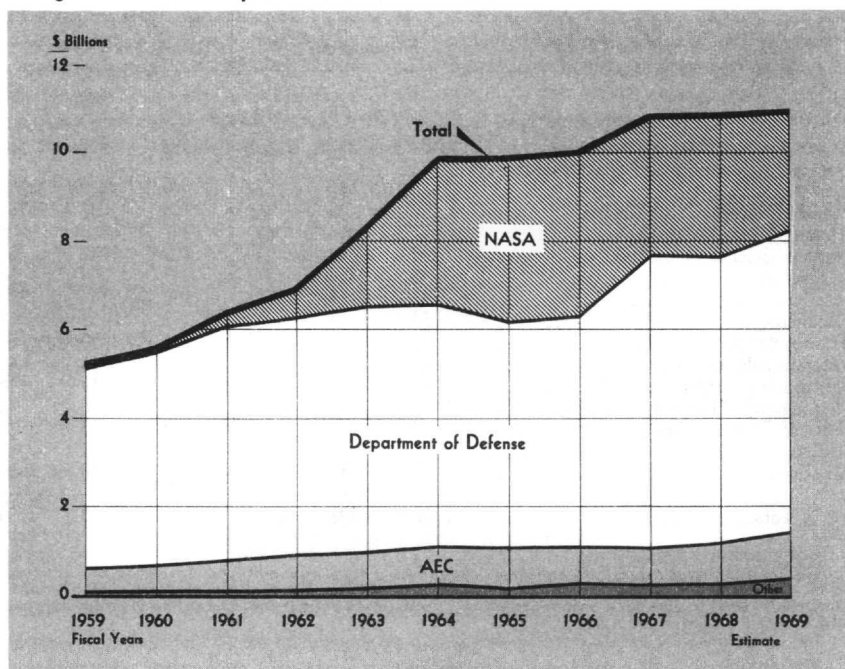


Table J-2. OBLIGATIONS AND EXPENDITURES FOR THE CONDUCT OF DEVELOPMENT (in millions of dollars)

Department or agency	Obligations			Expenditures		
	1967	1968	1969	1967	1968	1969
Department of Defense—Military.....	6,138	6,419	6,813	6,107	6,164	6,624
National Aeronautics and Space Administration.....	3,503	3,165	2,738	3,690	3,224	2,917
Health, Education, and Welfare.....	54	72	142	47	65	86
Atomic Energy Commission.....	859	948	1,062	859	948	1,062
Agriculture.....	8	8	8	8	9	9
Interior.....	30	47	48	22	41	49
Commerce.....	21	25	23	14	21	23
Transportation.....	51	64	62	51	55	56
Veterans Administration.....	1	1	1	1	1	1
Housing and Urban Development.....	3	5	23	3	4	7
Office of Economic Opportunity.....	35	40	42	26	39	42
Justice.....	2	7	12	2	4	7
All other.....	22	25	36	22	24	29
Total.....	10,727	10,826	11,010	10,852	10,599	10,910

Research and development facilities.—Total obligations for research and development facilities will increase from an estimated \$587 million in 1968 to \$754 million in 1969. Expenditures will decrease from \$681 million to \$665 million, chiefly reflecting completion of NASA manned lunar landing facilities.

The substantial increase in *obligations* in 1969 is largely attributable to the AEC for financing construction of three major research facilities, including further funding of the 200-Bev proton accelerator. Most of this increase reflects a deferral of obligations from 1968.

Table J-3. OBLIGATIONS AND EXPENDITURES FOR RESEARCH AND DEVELOPMENT FACILITIES (in millions of dollars)

Department or agency	Obligations			Expenditures		
	1967	1968	1969	1967	1968	1969
Department of Defense—Military.....	87	98	71	74	84	97
National Aeronautics and Space Administration.....	121	103	45	295	167	80
Health, Education, and Welfare.....	74	53	49	68	69	71
Atomic Energy Commission.....	223	169	459	210	206	244
National Science Foundation.....	69	71	52	70	71	64
Agriculture.....	13	23	20	18	30	38
Interior.....	32	45	29	17	30	41
Commerce.....	6	8	4	14	8	4
Transportation.....	10	13	24	9	12	20
Veterans Administration.....	3	3	—	3	2	5
Smithsonian Institution.....	(1)	(1)	(1)	(1)	(1)	1
All other.....	(1)	1	1	(1)	1	1
Total.....	638	587	754	778	681	665

¹ Less than \$500 thousand.

Further description of the research and development programs of the individual departments and agencies is included at the end of this analysis.

SELECTED GOVERNMENT-WIDE SCIENTIFIC ACTIVITIES OF THE FEDERAL GOVERNMENT

The following section summarizes overall Federal funding of several selected scientific activities which are supported by a number of agencies. These activities are significant not only to the advancement of individual agency missions but also to the support of broad national needs in science and technology.

In these and other areas of science the Office of Science and Technology and the Bureau of the Budget seek to coordinate the efforts of the Federal agencies involved. Assistance is provided by the President's Science Advisory Committee and the Federal Council for Science and Technology and in the case of the marine sciences, by the National Council on Marine Resources and Engineering Development.

ACADEMIC RESEARCH

Continuing attention has been given in the preparation of the 1969 budget to the total support of research by the Federal Government in colleges and universities.

In 1969 total Federal obligations for research grants and contracts in academic institutions will approximate \$1.6 billion, an increase of 13% over the \$1.4 billion estimated for 1968. This contrasts with an increase of 2% from 1967 to 1968.

Academic science receives special attention in the budget process because of the predominant role which researchers in institutions of higher education play in the performance of basic research that provides the foundation for the general advancement of the Nation's science and technology. Moreover, academic research is essential to the training of scientists and engineers for the future manpower demands of the country.

The Federal Government provides about three-quarters of all sponsored research funds spent by colleges and universities. Their ability to carry forward effective educational programs in science is directly affected by the volume and distribution of Federal research grants and contracts. For most Federal agencies—except the National Science Foundation—the level of their academic research support is largely determined by the need for research to carry out their mission requirements. This can result in significant changes from year to year in the financing of academic research by “mission” agencies. Hence, the importance of the overview which is maintained of the flow of Federal funds to colleges and universities and of relating the level of academic research support from the NSF to that of the mission agencies.

The overall importance of academic institutions as a national asset in science was given further, specific recognition by the President in September 1965 when he directed that all agencies administer their research funds in such a manner as to strengthen institutions of higher education and to assist in increasing the number of such institutions capable of performing research of high quality.

ATMOSPHERIC SCIENCES

The atmospheric sciences are concerned with the physical and chemical properties, composition, behavior and processes of the planetary atmospheres of the solar system. The atmospheric sciences encompass: *meteorology*—the physics and chemistry of the earth's atmosphere, including studies of such phenomena as general circulation, precipitation processes, turbulence, diffusion, and atmosphere-surface interactions; *aeronomy*—the physics and chemistry of the earth's upper atmosphere, including studies of such phenomena as airglow, aurora, magnetic fields and radiation belts; and *planetary atmospheres*—studies of extraterrestrial atmospheres.

A major part (40%) of the funding for atmospheric sciences research continues to be for space flight programs of NASA: the Nimbus program (Nimbus D, E, and F launches scheduled for 1970, 1971, and 1973 respectively) and the Mariner Mars 1969 unmanned planetary program. Exclusive of space flight programs, funding for atmospheric sciences will increase in 1969 after periods of level funding in 1966 and 1967 and a slight decrease in 1968.

There are no major increases in any particular research area although a continued modest expansion is planned for weather modification research by the Environmental Science Services Administration in the areas of precipitation modification and hail suppression, and by the

Department of Agriculture in the area of lightning suppression. The Department of Health, Education, and Welfare will increase its research on air pollution, and will seek to improve air pollution forecast methodology directed toward making 24 to 36 hour forecasts for specific urban areas.

Table J-4. OBLIGATIONS OF FEDERAL AGENCIES FOR ATMOSPHERIC SCIENCES BY FUNCTIONAL AREA (in millions of dollars)

Functional area	1967	1968	1969
Meteorology:			
Departments of:			
Agriculture.....	1	1	2
Commerce.....	11	14	17
Defense.....	23	21	25
Health, Education, and Welfare.....	3	5	6
Interior.....	4	6	6
Transportation.....	1	1	1
Atomic Energy Commission.....	5	6	6
National Aeronautics and Space Administration.....	41	57	51
National Science Foundation.....	16	16	17
Total, meteorology.....	108	127	129
Aeronomy:			
Departments of:			
Commerce.....	3	4	5
Defense.....	35	30	31
National Aeronautics and Space Administration.....	4	5	4
National Science Foundation.....	10	9	10
Total, aeronomy.....	52	48	50
Planetary atmospheres:			
National Aeronautics and Space Administration.....	47	61	30
National Science Foundation.....	1	1	1
Total, planetary atmospheres.....	48	62	31
Total, atmospheric sciences.....	208	237	210

ENVIRONMENTAL QUALITY

Increased attention is being given to the review and evaluation of the total Federal effort related to control and abatement of pollution. The ongoing Federal effort in 10 agencies involves approximately \$250 million for research, development, and demonstration work relating to the control of pollution. In April 1967 a Committee on Environmental Quality was established by the Federal Council for Science and Technology. The Office of Science and Technology, with the assistance of this Committee, will give additional attention to balance and priorities in scientific and technical aspects of Federal programs. Also advice will be provided by a continuing Panel on the Environment which is being established by the President's Science Advisory Committee.

MARINE SCIENCE AND TECHNOLOGY

The Marine Resources and Engineering Development Act of 1966 established broad national objectives for marine science and technology. Advice and assistance in policy planning and coordination is provided by the National Council on Marine Resources and Engineering Development. The 1969 budget takes into account the Council's views and recommendations as to areas deserving special emphasis.

Eleven agencies are engaged in marine science and technology, pursuing such goals as national security, international cooperation, development and exploitation of food, mineral and energy resources, improved transportation, and greater understanding of the marine environment.

The major increase in 1969 is in programs of the Navy for the Deep Submergence Systems Project, for deep ocean technology, and for ocean exploration, mapping, and charting for defense purposes. Other important increases are in the Coast Guard for a cutter equipped for subpolar oceanographic research and for development of buoy technology to collect oceanographic and environmental data; in the Coast Guard and Department of Interior for the control of pollution from oil and other wastes; and in the Department of Interior for extension of the technology for extracting fish protein concentrate. Additional funds are also planned for oceanographic research, principally by Navy and the National Science Foundation. Finally, funds are included in 1969 to initiate plans for launching, with other nations, exploration of the ocean depths.

The Commission on Marine Science, Engineering and Resources, also established by the 1966 Act, is reviewing all aspects of marine science in order to recommend an overall plan for a national oceanographic program and an appropriate Government organizational plan. The Commission's report to the President, via the Council, and to the Congress is scheduled for submission by January 1969.

Table J-5. PROGRAM PLAN OF FEDERAL AGENCIES FOR MARINE SCIENCE AND TECHNOLOGY¹ (in millions of dollars)

Department or agency	1967	1968	1969
Departments of:			
Commerce.....	35	38	38
Defense.....	278	257	298
Health, Education, and Welfare.....	8	6	8
Interior.....	64	74	76
State.....	5	5	5
Transportation.....	8	11	33
Agency for International Development.....	2	3	3
Atomic Energy Commission.....	11	13	12
National Aeronautics and Space Administration.....	(2)	2	2
National Science Foundation.....	25	38	41
Smithsonian Institution.....	2	2	2
Total.....	438	448	516

¹ The figures in this table and table J-6 are not comparable to those shown for marine science and technology last year because of changes in definition.

² Less than \$500 thousand.

**Table J-6. PROGRAM PLAN FOR MARINE SCIENCE AND TECHNOLOGY
BY FUNCTIONAL AREA (in millions of dollars)**

Functional area	1967	1968	1969
Research and development:			
Research.....	98	123	140
Development.....	111	127	142
Subtotal.....	210	250	281
Investment:			
Ships.....	69	22	17
Major equipment.....	18	30	48
Shore facilities.....	14	15	18
Other.....	2	4	3
Subtotal.....	104	72	86
Operations:			
Surveys.....	104	102	121
Services.....	20	23	26
Other.....	1	2	2
Subtotal.....	124	126	149
Total.....	438	448	516

MEDICAL RESEARCH

Federal expenditures for medical and health related research will be \$1,513 million in 1969 as compared to \$1,444 million in 1968. This is an expansion of about 5%.

The primary support of medical research in the Nation will continue to be from the Federal Government, accounting for about 65% of the national effort.

The main supporter of medical research in the Federal Government is the Department of Health, Education, and Welfare. The National Institutes of Health and the National Institute of Mental Health together account for over 50% of the Federal program. The emphasis of both agencies continues to be to support a broad spectrum of research in the life sciences through project grants. However, emphasis is increasingly on collaborative, contract research in pursuit of specific objectives including artificial organs, tissue transplantation, vaccine development, fertility control, and drug development.

Aside from these Institutes the 1969 budget provides significant increases for research and development in air pollution control technology, such as the removal of sulfur oxides; research and development on new methods for the delivery of health care; and the life sciences aspects of the Nation's space and atomic energy programs.

Table J-7. EXPENDITURES OF FEDERAL AGENCIES FOR MEDICAL AND HEALTH-RELATED RESEARCH (in millions of dollars)

Department or agency	1967 actual	1968 estimate	1969 estimate
Department of Health, Education, and Welfare:			
Public Health Service.....	959	1,010	1,032
(National Institutes of Health).....	(773)	(811)	(822)
(National Institute of Mental Health).....	(69)	(70)	(72)
(Other Public Health Service).....	(117)	(129)	(138)
Other.....	37	46	56
Total, Department of Health, Education, and Welfare.....	996	1,056	1,088
Department of Defense.....	78	87	93
Atomic Energy Commission.....	99	99	104
Department of Agriculture.....	37	37	44
National Aeronautics and Space Administration.....	85	96	110
National Science Foundation.....	15	14	14
Veterans Administration.....	47	48	53
Other.....	7	7	7
Total, medical and health-related research.....	1,364	1,444	1,513
Total, conduct of research.....	(1,293)	(1,377)	(1,445)
Total, research facilities.....	(71)	(67)	(68)

Further discussion of medical and health related research may be found in Special Analysis I, *Federal Health Programs*.

SPACE PROGRAMS

New obligational authority for the total Federal space program is estimated at \$6.6 billion in 1969, an increase of \$45 million over 1968. *Expenditures* increase \$76 million in 1969. The major increase in new obligational authority and expenditures is in the Department of Defense programs, largely for development of the orbiting laboratory (MOL). The decrease in funds for the National Aeronautics and Space Administration reflects declining requirements for the manned lunar landing, offset in part by increases for the Apollo Applications program.

Except for the operational satellite programs of the Department of Commerce, amounts for all space programs are classified as research and development for purposes of this special analysis.

All funds of the National Aeronautics and Space Administration are included in the amounts shown, with the exception of amounts specifically identified with aircraft technology. About 55% of 1969 expenditures will be devoted to the achievement of a manned lunar landing within this decade. The Apollo Applications program of extended manned flight will account for \$422 million of 1969 expenditures. The balance of the NASA funds provide for continuing unmanned space exploration with satellites and probes, development of space applications, and a continuing program of studies and supporting research.

The estimates for the Department of Defense include the projects in the Department's astronautics budget activity and certain amounts in other budget activities which contribute to the space effort, such as missile development, range operations, and various supporting research, development, and operating costs. The amounts shown include funds for the MOL, the communications, navigation, and nuclear detection satellite programs, the Titan III space booster, and for supporting research and development.

For the Atomic Energy Commission, the table includes amounts for nuclear rocket propulsion technology and nuclear power sources for space applications, including production of isotopic fuels, and amounts for aerospace safety. The amounts shown for Commerce are primarily those related to the establishment and operation of a satellite system to observe meteorological conditions. The Interior and Agriculture funds support research on remote sensing of earth resources. The amounts for the National Science Foundation are for research in astronomy using rockets and satellite-borne observation instruments.

Table J-8. NEW OBLIGATIONAL AUTHORITY AND EXPENDITURES FOR FEDERAL SPACE PROGRAMS (in millions of dollars)

Department or agency	New obligatory authority			Expenditures		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
National Aeronautics and Space Administration ¹	4,862	4,466	4,239	5,337	4,692	4,455
Department of Defense.....	1,664	1,950	2,216	1,673	1,870	2,180
Atomic Energy Commission.....	184	150	154	184	151	151
Department of Commerce: Environmental Science Services Administration.....	29	31	30	39	33	34
Department of the Interior: U.S. Geological Survey.....	3	2	4	3	2	4
Department of Agriculture: Agricultural Research Service.....		(2)	1		(2)	1
National Science Foundation.....	3	2	2	2	2	2
Total.....	6,745	6,601	6,646	7,237	6,750	6,826

¹ Excludes aircraft technology.

² Less than \$500 thousand.

WATER RESEARCH

The Ten-Year Program Report of the Committee on Water Resources Research of the Federal Council for Science and Technology continues to serve as the basic planning guide for all Federal agencies.

Research will increase by \$7 million in 1969. A continuing program in water pollution research is aimed at devising improved waste treatment processes. Desalting research will continue to emphasize studies of distillation and membrane processes leading to lower cost techniques. There will be an expansion of studies designed to provide relevant information for improved planning and management of water supplies.

Table J-9. OBLIGATIONS OF FEDERAL AGENCIES FOR WATER RESEARCH
(In millions of dollars)

Department or agency	1967 actual	1968 estimate	1969 estimate
Departments of:			
Agriculture.....	19	20	21
Defense.....	6	7	8
Health, Education, and Welfare.....	1	1	2
Interior.....	83	101	104
Atomic Energy Commission.....	2	2	3
National Science Foundation.....	1	2	2
Other.....	2	3	3
Total.....	114	136	143

PROGRAMS OF AGENCIES WITH MAJOR RESEARCH AND DEVELOPMENT ACTIVITIES

DEPARTMENT OF DEFENSE—MILITARY

The programs of the Department of Defense include research in subjects relevant to national security; exploratory, advanced, and engineering development of new systems and components; and development and improvement of weapon systems approved for introduction into the operational forces. The principal amounts for these purposes and for the operation of research and testing facilities of the Department are carried in the budget under appropriations entitled, "Research, development, test, and evaluation." Certain supporting amounts are provided in the military personnel, procurement, operations and maintenance, civil defense, military construction, and special foreign currency program appropriations, as indicated in table J-10. The budget plan presents a summary of amounts programed for research and development.

The total 1969 budget plan for research and development increases by \$602 million—or about 8%—over the 1968 level. Major items contributing to these increases are a higher level of support for research, heightened tempo of development of the Sentinel antiballistic missile system, larger requirements for the orbiting laboratory, design of the airborne warning and control system (AWACS) for air defense, and development of new weapon systems for tactical warfare applications such as the VSX antisubmarine aircraft and several new tactical missiles.

For *research*, budget plan estimates in 1969 are \$1,633 million, an increase of \$236 million over 1968 levels, more than offsetting a decrease of \$187 million from 1967 to 1968. This total covers both basic and applied research and includes appropriate projects from the Department of Defense research, exploratory development, and advanced development categories. Support of basic or phenomena-oriented research rises \$35 million over the 1967 level, the intervening 1968 amount being lower than both, due to reductions in longevity funding

of contracts. Support of established academic research centers and the encouragement of new university centers developing competence relevant to defense is included here, as well as efforts in Government laboratories and with industry. Applications-oriented research and the pursuit of new technology amount to \$1,313 million, an increase of \$62 million over 1968. The growth is spread over a wide variety of scientific disciplines and technologies directly supporting advances in weapon systems.

Development programs, including support of test and evaluation facilities, will reach a level of \$6,813 million in 1969, an increase of \$394 million over the 1968 amount. Growth in such major programs as the Sentinel antiballistic missile system, the orbiting laboratory, new tactical fighter aircraft, and improved tactical missile systems more than compensates for decreases in systems such as the C-5A transport aircraft and several versions of the F-111 aircraft. Strategic retaliatory systems such as Minuteman and Poseidon continue to receive a large portion of development resources, as do the many tactical weapons and supporting hardware under development for application in Vietnam. Construction of research and development facilities will decline \$27 million from 1968 to 1969 reflecting overall military construction priorities.

Table J-10. DEPARTMENT OF DEFENSE—MILITARY—RESEARCH AND DEVELOPMENT (in millions of dollars)

Purpose and budget title	1967 actual	1968 estimate	1969 estimate
Conduct of research and development:			
Research, development, test, and evaluation:			
Military sciences.....	618	563	659
Aircraft and related equipment.....	1,199	1,230	1,024
Missiles and related equipment.....	2,456	2,492	2,544
Military astronautics and related equipment.....	961	1,064	1,299
Ships, small craft, and related equipment.....	288	317	418
Ordnance, combat vehicles, and related equipment.....	357	331	340
Other equipment.....	985	956	1,109
Programwide management and support.....	425	437	512
Emergency fund.....		24	125
Total, research, development, test, and evaluation; budget plan.....	7,289	7,415	8,031
Military personnel.....	308	306	301
Procurement.....	92	62	64
Operations and maintenance.....	22	26	32
Civil Defense.....	10	7	7
Special foreign currency program.....	1		11
Total, conduct of research and development; budget plan.....	7,722	7,816	8,445
Research and development facilities:			
Military construction, budget plan.....	87	98	71
Total, research and development; budget plan.....	7,809	7,914	8,516
Total expenditures.....	7,672	7,718	8,280

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

The total budget plan for NASA in 1969 is \$4.4 billion, a decrease of about \$280 million from the 1968 plan, primarily because of declining requirements for the manned lunar landing program.

Funds planned for research programs will increase from 1968 to 1969, while those for development will decrease. This continues the change in emphasis within the space program from the development of a basic flight capability toward use of that capability for research purposes.

Funds for facilities decreased in 1968 and will remain at about the 1968 level in 1969. These funds will provide modifications to launch pads and tracking facilities for forthcoming deep space and manned lunar landing operations.

In table J-11, "Basic research" activities include unmanned space flight programs in physics, astronomy, biological sciences, and planetary and interplanetary exploration. Funds for technology programs which directly support these basic research activities and for the development and preparation of basic research experiments carried on manned space flights are also included in this category. The increases will provide for experiments to be flown in the Apollo applications program and for spacecraft to investigate Mars in 1971 and 1973.

Table J-11. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—RESEARCH AND DEVELOPMENT (in million of dollars)

Program and type of activity	1967 actual	1968 estimate	1969 estimate
Conduct of research:			
Basic scientific research in space:			
Spacecraft, instrumentation, conduct of experiments, and supporting costs.....	436	494	575
Procurement of launch vehicles for basic research purposes.....	40	45	45
Other basic research in space science and technology.....	122	110	130
Subtotal, basic research.....	598	649	750
Other research.....	683	787	782
Procurement of launch vehicles for other research purposes.....	53	50	55
Total, conduct of research, budget plan.....	1,334	1,486	1,587
Conduct of development:			
Manned space flight and supporting development.....	3,349	3,000	2,550
Development of launch vehicles for research purposes.....	78	60	121
Other development.....	57	65	67
Total, conduct of development, budget plan.....	3,483	3,125	2,738
Research and development facilities:			
Facility grants to colleges and universities.....	4		
Manned space flight supporting facilities.....	46	26	25
Other research and development facilities.....	40	11	20
Total, research and development, budget plan.....	4,908	4,649	4,370
Total, obligations.....	5,012	4,818	4,370
Total, expenditures.....	5,426	4,805	4,575

The "other research" category includes activities conducted to provide advanced technology for new space vehicles and aircraft. Funds required for the recently completed Surveyor and Lunar Orbiter programs, which provided data needed for the design and operation of manned lunar landing systems, are decreasing. This decrease is offset by increases in funding for applications of space technology to earth resources surveys and for aeronautical research to provide technology for new civil and military aircraft.

The "development" category includes the development and operation of manned space flight systems, except for the scientific experiments discussed above. Development of launch vehicles for all purposes including research is also in this category.

ATOMIC ENERGY COMMISSION

Operating funds of the AEC for the conduct of research and development will total \$1.5 billion in 1969. Obligations for research and development-related construction and purchases of equipment are estimated at \$459 million and expenditures at \$244 million.

The \$1.5 billion budgeted for conduct of research and development in 1969 represents an increase of nearly \$140 million, or 10%, over 1968. Two-thirds of this increase will occur in the weapons program, largely for development of warheads for the Sentinel antiballistic missile system and other advanced weapons systems. All other Commission research and development efforts will increase by an average of about 5% in 1969.

The Atomic Energy Commission's *research* programs will increase from an estimated \$414 million in 1968 to about \$439 million in 1969. Nearly 75% of this increase is for research in the physical and biomedical sciences, with the remainder attributable to an increased applied research effort in the weapons program.

A 6% increase is planned in 1969 in the physical research program, which includes research in high, medium and low energy physics; in controlled thermonuclear reactions; and in those aspects of chemistry, metallurgy, and mathematics of particular importance to nuclear science and technology.

The *development* funds of the Commission are used primarily to design and test improved nuclear weapons, to develop improved nuclear reactors, and to develop peaceful uses of radioisotopes and nuclear explosives. Increased weapons development work will account for slightly more than three-fourths of the increase from \$948 million in 1968 to \$1,062 million in 1969 in these development programs.

The reactor development program includes efforts to develop improved types of nuclear power reactors, compact nuclear electric power sources for space and terrestrial applications, and reactors for space and naval propulsion. Continued emphasis will be placed on development of a fast breeder reactor, which is expected to produce more fissionable fuel than it consumes in the process of producing power.

Obligations for research and development *facilities* are estimated to increase by \$290 million in 1969, due to the deferral from 1968 to 1969 of more than \$180 million in obligations. Expenditures will increase by about \$38 million, largely for the same reason.

The Atomic Energy Commission plans to begin construction in 1969 of the 200-Bev proton accelerator. This project, for which definitive design was authorized in the 1968 budget, will have a total design and construction cost of about \$250 million excluding supporting research equipment. The 1969 budget provides \$25 million for initiation of construction.

The 1969 budget also provides an additional \$26 million for continuation of construction of the Los Alamos Meson Physics Facility, a medium energy physics facility which is expected to produce a proton beam of extremely high intensity.

The 1969 budget further includes \$35 million to continue construction of the Fast Flux Test Facility, a test reactor capable of producing a large quantity of high energy neutrons in a controlled environment for testing fuel and other reactor materials and components for the high priority fast breeder reactor program. The total estimated capital cost of this facility is \$88 million.

Table J-12. ATOMIC ENERGY COMMISSION—RESEARCH AND DEVELOPMENT (in millions of dollars)

Program	Conduct of research and development			Research and development facilities		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
Production technology for fissionable materials.....	23	23	26	3	2	2
Development of weapons.....	419	478	570	54	55	63
Reactor development.....	455	482	510	58	68	88
Physical research.....	253	265	280	84	73	82
Biology and medicine.....	86	88	92	9	7	7
Other research and development.....	20	26	22	2	1	2
Total, expenditures.....	1,256	1,362	1,500	210	206	244

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Obligations by the Department of Health, Education, and Welfare for research and development, including facilities, will increase by \$181 million to a level of \$1,511 million in 1969. This increase is primarily in the programs of the Public Health Service.

Obligations for research and development of the Public Health Service will be \$1,272 million in 1969 as compared to \$1,169 million in 1968. About 85% of the PHS obligations are made through the National Institutes of Health and the National Institute of Mental Health. As in the past the primary mechanism of support will be the project grant. Increasingly, however, NIH and NIMH are supplementing research project support at academic institutions—particularly medical schools—with broader grants for general research support or core research resources and facilities. The trend of recent years to devote more research funds for more organized and targeted research will be continued. Programs in artificial organ transplant, vaccine and drug development, and fertility control will be stressed.

Relatively the largest program increase in the Public Health Service will be for air pollution. Under the newly enacted Air Quality Act of

1967, research and development on the removal of sulfur, nitrogen, and other impurities from fossil fuels, control of auto exhausts, and other air pollution control technology will be expanded. Generally industry, rather than universities, will conduct this work. Finally an increasing amount of research effort will be devoted to improving the methods of delivering health care.

Obligations of the Office of Education for research and development will increase from \$87 million in 1968 to \$145 million in 1969. The Office supports a broad range of efforts to improve education through experiments, development, and demonstrations. Included is support for (1) educational laboratories which bring together the resources of institutions of higher education, States, private enterprise, and the talents of scholars, experts, artists, and other specialists to design and demonstrate improved curricula and methods of instruction; (2) research and development centers which concentrate on such specific questions as education of the disadvantaged, individualized instruction, early childhood learning, and teacher education; and (3) project grants which are awarded to institutions for improvement of school curricula and studies of education and its effects. In 1969, stress will be placed on prototype programs for improved instruction especially for children from low income, migrant, or non-English-speaking families. A variety of research projects will involve joint efforts with the National Science Foundation, the National Institutes of Health, the Department of Housing and Urban Development, the Department of Labor, and the Office of Economic Opportunity.

Other, smaller research programs are supported by the Social and Rehabilitation Service, the Food and Drug Administration, and the Social Security Administration.

NATIONAL SCIENCE FOUNDATION

The National Science Foundation supports basic research in all fields of science, primarily through grants to colleges and universities. In addition, support is provided for applied research and development activities authorized by the National Sea Grant College and Program Act of 1966.

Total obligations of the Foundation for the *conduct* of research are estimated at \$289 million in 1969 compared with \$262 million in 1968.

In 1969, approximately 4,000 research project grants will be awarded to an estimated 450 academic institutions. Through these grants and the national research centers, national research programs, and the sea grant program, the Foundation will continue to give emphasis to programs in oceanography, atmospheric sciences, chemistry and the social sciences—fields of growing national interest. Additional fundamental knowledge is required in these fields if significant progress is to be made on some of the critical problems facing society in such areas as air and water pollution abatement, weather modification, urban redevelopment, and exploitation of marine resources.

A significant increase is provided for the support of basic research in physics. A major portion of the increase will permit the Foundation to assume support of critically important basic research activities, principally in nuclear and elementary particle physics, previously supported by the Department of Defense. Funds are also included for the

continued development of the 150-inch stellar telescope for the Cerro Tololo Inter-American Observatory in Chile.

The above increases are partially offset by a decrease in new commitments for research *facilities*.

DEPARTMENT OF AGRICULTURE

Obligations of the Department of Agriculture for research and development, including facilities, will increase from an estimated \$284 million in 1968 to \$301 million in 1969. Expenditures will increase from \$298 million to \$312 million.

There are no marked changes in the nature of the research and development programs of the Department in 1969. The 1969 Budget provides for strengthening agricultural research in a number of areas including the staffing of several new and expanded laboratories and watershed research centers, research on short staple cotton and mechanical classing methods for cotton. Also provided for in 1969 is an expansion in the use of foreign currencies for market development research and agricultural and forestry research.

Research will also be expanded under the economic research program in the areas of farm financial management and soil and water conservation. Commitments by State experiment stations under the Hatch Act and for cooperative forestry research will also rise.

DEPARTMENT OF THE INTERIOR

Obligations for the research and development programs of the Department of the Interior to improve conservation and the practical use of the Nation's natural resources will remain about level: \$255 million in 1968 and \$254 million in 1969. For the *conduct* of research and development, obligations will increase from \$210 million to \$226 million; but for *facilities* there will be a decrease from \$45 million to \$29 million. Research and development programs of the Department are conducted by the Geological Survey, the Bureau of Mines, the Offices of Coal Research, Saline Water, Water Resources Research, the Fish and Wildlife Service, the Federal Water Pollution Control Administration, the Bureau of Reclamation, and the Bonneville Power Administration.

Emphasis is given in 1969 to identification of new resources of minerals, particularly heavy metals in short supply, studies relating to discovery and recovery of deep-lying mineral deposits, and the appraisal and evaluation of the Nation's water resources. Further efforts are planned to develop the technology for producing low-cost fish protein concentrate.

Research will increase on water pollution and its effect on water uses and wildlife. Other research is continued on the energy potentials and marketing of coal, weather modification and water supply augmentation, and particularly on the development of low-cost methods for economically producing water from sea or brackish waters for industrial and municipal purposes.

A new program will be started in fiscal year 1969 to develop a more efficient technology for underground mining and tunneling.

DEPARTMENT OF TRANSPORTATION

Obligations of the Department of Transportation for research and development, including facilities, will total \$148 million in 1969, an increase of \$19 million over 1968. Expenditures will total \$140 million in 1969, \$22 million more than 1968.

Within the Department the largest increase is in the programs of the Coast Guard. The obligations of the Coast Guard for the *conduct* of research and development will increase from \$9 million in 1968 to \$17 million in 1969. Major elements of this increase are research on the control of pollution by oil or other wastes and the development of buoy technology to collect oceanographic and environmental data.

The obligations of the Coast Guard for research and development *facilities* show a major increase, from \$1 million in 1968 to \$14 million in 1969 largely for a new oceanographic cutter.

Under the Office of the Secretary studies will be pursued on improved traffic flows and rail passenger and freight demands in the Northeast Corridor and on coordination among various modes of transportation.

Research and development in the Federal Aviation Administration will continue at about the same program level, with obligations of \$47 million in 1969. The research and development activities of the FAA include air traffic control; navigation; aviation weather; aircraft safety; and aviation medicine. The supersonic aircraft program is not included in this analysis.

The Federal Railroad Administration will obligate \$19 million in 1969 for research and development, a decrease of \$4 million below 1968. *Expenditures* will, however, increase from \$17 million in 1968 to \$23 million in 1969. The obligations drop in 1969 is a result largely of completion of initial funding of the New York to Boston phase of the Northeast Corridor demonstration program.

The Federal Railroad Administration will also expand in 1969 its support of research on a linear induction propulsion system and the development of tracked air cushion vehicles.

The Federal Highway Administration research and development program will increase from \$42 million in 1968 to \$45 million in 1969. The increase in 1969 largely reflects further emphasis on making automotive travel safer.

DEPARTMENT OF COMMERCE

The Department of Commerce will obligate \$90 million for research and development in 1969, a decrease of \$6 million from 1968, principally reflecting a reduction in facilities. Expenditures in 1969 will total \$82 million, slightly below 1968.

The Environmental Science Services Administration will increase its research on severe storms, weather modification, air-sea interaction, and electromagnetic spectrum utilization. Increased research on environmental forecasting and data gathering systems will support the World Weather program. Expanded efforts will be made to develop satellite sensors for use with horizontal sounding balloons in order to obtain improved weather observations.

The National Bureau of Standards will strengthen its research on the properties of matter and materials, physical measurements, automatic data processing, and building technology. Intensified research

on the flammability of fabrics will support future development of flammability standards.

The Economic Development Administration will conduct research aimed at determining the causes of unemployment and economic distress and formulating solutions. Studies will be undertaken to develop a general body of knowledge concerning regional economic development.

OTHER AGENCIES

Among other agencies, a number of programs also show significant increases.

The Veterans Administration will continue to expand research in medical and prosthetic fields of particular interest to the agency's medical care mission.

Increases for the Smithsonian Institution mainly reflect expansion of archeological and biological research financed under its foreign currency program. Greater emphasis will also be given to astrophysics, ecology, and marine and tropical biology utilizing the Smithsonian's unique research resources.

The Department of Housing and Urban Development will increase its research on metropolitan and urban development stressing such areas as land use, community development, urban administration, and reducing housing costs.

The Department of Justice will expand its support of research on the causes of crime and the effectiveness of various techniques for rehabilitating offenders. This increase is attributable to the proposed expansion of programs under the Law Enforcement Assistance Act and the enactment of the Safe Streets and Crime Control Act.

HISTORICAL SUMMARY

Table J-13 below gives historical data on total research and development expenditures by major agency.

Table J-13. EXPENDITURES FOR RESEARCH AND DEVELOPMENT,¹
1954-69 (in millions of dollars)

Fiscal year	Department of Defense ²	NASA ³	AEC	D/HEW	NSF	Other	Total
1954-----	2,487	90	383	63	4	121	3,148
1955-----	2,630	74	385	70	9	140	3,308
1956-----	2,639	71	474	86	15	161	3,446
1957-----	3,371	76	657	144	31	183	4,462
1958-----	3,664	89	804	180	33	220	4,990
1959-----	4,183	145	877	253	51	293	5,803
1960-----	5,654	401	986	324	58	315	7,738
1961-----	6,618	744	1,111	374	77	356	9,278
1962-----	6,812	1,257	1,284	512	105	403	10,373
1963-----	6,849	2,552	1,335	632	142	478	11,988
1964-----	7,517	4,171	1,505	793	190	519	14,694
1965-----	6,728	5,093	1,520	738	192	604	14,875
1966-----	6,735	5,933	1,462	879	225	768	16,002
1967-----	7,680	5,426	1,466	1,090	278	775	16,715
1968-----	7,727	4,805	1,568	1,180	311	924	16,515
1969-----	8,292	4,575	1,744	1,310	321	1,028	17,270

¹ Including research and development facilities.

² Includes civil functions.

³ National Advisory Committee for Aeronautics prior to 1958.

SPECIAL ANALYSIS K

FEDERAL AID TO STATE AND LOCAL GOVERNMENTS

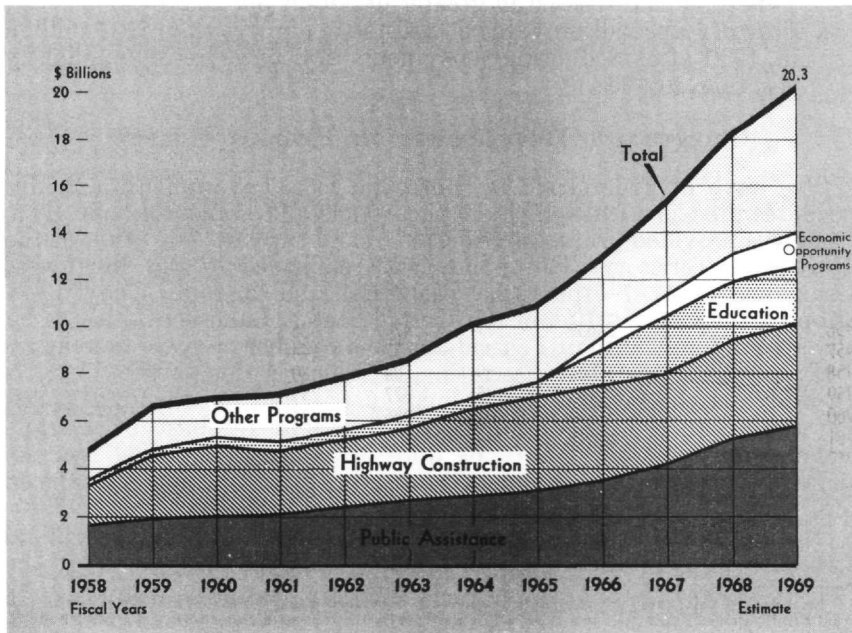
In recent years, the Nation has witnessed a significant growth in the scope of cooperative governmental efforts to solve national problems. In 1969, the scale of Federal grant programs is estimated to exceed \$20 billion. By sharing these sizable resources, the Federal Government is encouraging vital national goals to be pursued jointly by Federal, State, and local units. Special emphasis is being given to areas which have an important influence on the life of every individual such as education, health, welfare, and urban development.

These jointly administered programs:

- Make it possible to pursue broad national objectives in a way which recognizes the diversity of local conditions and needs;
- Spread creative innovation in public services from one jurisdiction to another; and
- Preserve a more equitable and responsive total tax system—by relieving some of the pressure on overburdened State and local tax sources.

Federal Aid to State and Local Governments

Federal Fund and Trust Fund Expenditures



HIGHLIGHTS FOR FISCAL YEAR 1969

The emphasis of Federal-aid programs has shifted from time to time in response to changing conditions. For 1969:

- *Total Federal grants* to State and local governments are estimated to increase by \$1.9 billion over 1968, to \$20.3 billion.¹ This represents more than a threefold increase in the short span of only a decade, and is nearly 52% greater than the rise in total Federal expenditures for domestic purposes over the same period.
- *Public assistance and highways* continue to be the largest grant programs. Together, they constitute about half of total Federal aid payments.
- The *fastest growing* grants are those to advance the war on poverty, to provide decent medical care for the needy, to improve the facilities and services in our urban centers, and to upgrade the elementary and secondary educational opportunities available to children of low-income families. Between 1965 and 1969, grants administered by the Office of Economic Opportunity will show an increase of \$1.3 billion, and those for the new elementary and secondary education program will rise by \$1.4 billion. During the 1967-69 period alone expenditures for Medicaid will grow some \$949 million, and those for housing and community development will rise \$1 billion.
- *Total aids for metropolitan or urban areas* have risen from \$4 billion in 1961 to an estimated \$12 billion in 1969. Thus, Federal aids benefiting urban areas have grown by about \$8 billion, or nearly 205% in less than a decade. (Included in these amounts are grants to States which subsequently benefit urban areas. This topic is discussed in greater detail on pp. 165-167.)
- *Federal loans* will provide net assistance of more than \$525 million in 1969 after deducting repayments and other receipts, slightly less than in 1968.

GROWTH AND DEVELOPMENT OF FEDERAL GRANTS

The birth of Federal aid to State and local governments actually predates the Constitution. Under the Articles of Confederation in 1785, Congress provided grants of Federal land to support education in the Northwest Territory. This policy was reaffirmed in the Northwest Ordinance of 1787—the same year that the historic Convention adopted the Constitution of the United States. Land continued to be the predominant form of Federal aid for a number of years thereafter.

There was a brief, but interesting, interlude in this pattern in 1837. In that year the Federal Government distributed surplus funds totaling more than \$28 million among the States on the basis of congressional representation. The funds were technically “deposits,” but no repayment was ever demanded. Moreover, no restriction was placed on the use of the money.

Minimum requirements were first introduced in the Federal-aid structure in the Morrill Act of 1862 (which provided land for the

¹ Included in this amount are grants-in-aid and shared revenues from both Federal funds and trust funds. Shared revenues are a relatively small portion of the total, accounting for less than 2% in each of the years covered. Loans are discussed separately. Unless statements are made to the contrary, no aid figures in this analysis will include lending.

support of higher education). These requirements included a definition of objectives, State matching, and a report on the use of funds. The federal system evolved gradually over the ensuing half century.

The early years of the 20th century saw aid extended for agriculture, highways, and limited social welfare programs. However, it was not until the crisis of the thirties that Federal aid reached any significant scale. At that time a broad array of welfare, housing, and economic security programs was inaugurated. The post-World War II period witnessed a further expansion of health and housing programs and a significantly augmented highway construction effort.

Not until the 1960's did the Nation experience a comparable expansion of new joint governmental initiatives. Recently, significant steps have been taken to help finance health services and medical care for the indigent, to launch a concerted attack on poverty, to rejuvenate blighted neighborhoods in our cities, to broaden educational opportunities, and to develop economically depressed regions of the Nation.

Factors underlying growth in Federal aids.—Increasing population along with rapid urbanization have led to greater demands for the services traditionally provided by State and local governments—such as education, health, community facilities, and transportation. Rapid economic change and rising affluence have given rise to the demand for new and better services, and stimulated programs to safeguard individual economic security. While the major burden for providing such public services rests directly upon the more than 80,000 State and local governmental jurisdictions, the Federal Government also plays a vital role. It provides assistance both by giving direct financial aid to State and local governments and by fostering a sound and growing economy, which concomitantly enlarges State and local tax bases.

Federal-aid programs by function.—The foregoing factors, coupled with the changing nature of State and local program needs, have altered substantially the focus of Federal aids at several junctures in the past two decades. These changes can be traced in the accompanying table.

Table K-1. PERCENTAGE DISTRIBUTION OF FEDERAL AIDS TO STATE AND LOCAL GOVERNMENTS BY FUNCTION

Function	1950 actual	1955 actual	1960 actual	1965 actual	1969 estimate
Agriculture and agricultural resources.....	5	7	3	5	3
Natural resources.....	2	3	3	3	3
Commerce and transportation.....	21	19	43	40	24
Housing and community development.....	1	4	4	5	9
Health, labor, and welfare.....	69	57	41	40	48
Education.....	2	8	5	6	12
Other.....	1	2	1	1	1
Total.....	100	100	100	100	100

The Federal-Aid Highway Act of 1956 significantly modified the pattern of aid to State and local governments which had prevailed in the preceding decade. By 1960, with the infusion of more than \$2¼ billion in additional funds for highway grants, commerce and transportation programs moved to a dominant position in Federal assistance activities.

In more recent years, both the nature and number of aid programs have changed appreciably. In the last 5 years, the Congress enacted several programs which are aimed primarily at broadening the scope of individual opportunity and development. The cumulative effect of these programs has been to place the principal emphasis of Federal aid once again on health, labor, and welfare activities—as well as to give added impetus to education and housing and community development efforts. In 1969, these programs will account for 69% of total estimated aid payments.

TYPES OF FEDERAL AID

In this analysis, *Federal aid* is defined as the flow of resources in support of State and local governmental functions which serve a national purpose. For the most part, this aid is then synonymous with *grants* of money to governmental bodies. However, in a few cases, it also covers resources channeled to quasi-governmental and private, nonprofit institutions where the use is primarily to provide new, or to augment existing, governmental services. (Examples include a number of community action programs to combat poverty, and aid for the construction of private, nonprofit hospitals and colleges.) In a similar vein, there are a few “nonmoney” aids, basically the provision of excess food for welfare recipients. The rationale is a simple one: The Federal Government can provide \$1 million worth of food or \$1 million to buy food. In either case, it constitutes \$1 million of welfare assistance. Finally, this analysis excludes certain research and development contracts as being payment for services rendered the Federal Government, rather than aid to the State college or university doing the research under carefully defined research objectives.

Direct assistance.—The principal forms of direct assistance to States and localities are *grants*, *shared revenues*, and *loans*.

In 1969, Federal grants are estimated to reach \$20.0 billion, and shared revenues will account for an additional \$249 million. Thus, grants will account for 98.8% of the total Federal aid in 1969.

There are basically two kinds of grants—formula and project grants. Formula grants are those in which, by law or administrative regulation, sums of money are allocated among States or their subdivisions according to specific measures of program need—such as population, per capita income, or the like. Project grants, on the other hand, are allotted in response to specific applications, presenting particular proposals for which assistance is requested. (Project grants, and their rapid growth, are discussed in greater detail on p. 164.)

Shared revenues are mainly receipts from the sale or lease of Government assets. The revenues generally come from the sale of natural resources and are shared with the jurisdiction in which the income-producing asset is located. Frequently, the funds are restricted in use to programs such as education or highways.

Federal *loans* to State and local governments have to be repaid, and are therefore of a fundamentally different nature than other forms of direct aid. In 1969, net outlays for loans to State and local governments is estimated to exceed \$525 million. (For more detailed information on lending programs, see table K-11 on p. 174.)

The functional distribution of the several kinds of aid is shown in the accompanying table K-2.

Table K-2. TYPES OF FEDERAL AID BY FUNCTION, 1969 (in millions of dollars)

Function	Federal aid			Net outlays for loans
	Grants	Shared revenues	Total	
National defense.....	32.5		32.5	
International affairs and finance.....	5.3		5.3	
Agriculture and agricultural resources.....	644.0		644.0	70.0
Natural resources.....	476.2	140.8	617.0	6.7
Commerce and transportation.....	4,806.0		4,806.0	29.5
Housing and community development.....	1,812.5		1,812.5	105.8
Health, labor, and welfare.....	9,744.3		9,744.3	
Education.....	2,398.2		2,398.2	309.1
Veterans benefits and services.....	14.8		14.8	
General government.....	114.2	108.6	222.8	4.5
Total.....	20,048.0	249.4	20,297.3	525.6

Indirect assistance.—Apart from direct Federal aid, many other Federal activities which are not included in this analysis affect the finances of State and local governments. For example, there are a number of assistance programs for which expenditure information cannot be obtained readily, such as State and local participation in Federal employee training programs, technical assistance and advice provided by a host of Federal agencies, and a number of related services. Similarly, States and localities have first call on obtaining (at relatively nominal costs) land and equipment of the Federal Government which is declared surplus to Federal needs.

State and local governments also receive special beneficial treatment through the tax system. For example, the interest cost savings to these units of government which result from exempting interest on State and local bonds from Federal income taxes have been estimated at between \$1 billion and \$2 billion. Similarly, since taxpayers may deduct certain State and local taxes from Federal taxable income, a portion of State and local taxes is offset by a reduction in the taxpayers' Federal liability. In 1967 the value of this deduction in terms of tax savings to individuals was approximately \$4.7 billion. It should also be noted that the Federal credit for payment of State inheritance and estate taxes has definitely encouraged States to make more effective use of this resource at a revenue cost to the Federal Treasury currently estimated at some \$300 million.

SIGNIFICANT FEATURES OF THE 1969 AID PROGRAM

This section focuses only on the 1969 aid program and some of its more significant features.

Major program changes for 1969.—In 1969, total expenditures under existing and proposed programs for financial assistance to State

and local governments are estimated to be \$1.9 billion more than for 1968 and \$5 billion more than the actual total for 1967.

The major increases in Federal expenditures for grants cover a number of important programs.

- Health, labor, and welfare grants will rise an estimated \$970 million as the Medicaid program continues to build up momentum.
- Grants for housing and community development are up by an estimated \$628 million, or 53%, over 1968 as the Model Cities program reaches the action stage for the first time and as other programs to assist in solving urban problems are intensified.

Decreases in expenditures in 1969 are expected to occur in grants for equipment, books, and guidance counseling (\$81 million), and higher education activities (\$73 million)—as older grants are replaced by programs better suited to current educational needs, and as less essential construction of facilities is postponed.

Federal-aid programs by agency.—In 1969 the Department of Health, Education, and Welfare will spend approximately \$9.4 billion through its grant programs—about 46% of total Federal aid. Another 22% or \$4.4 billion will be accounted for by the Department of Transportation. The Office of Economic Opportunity and the Departments of Agriculture and Housing and Urban Development will finance an additional 22% of Federal-aid programs. The detailed table at the end of this analysis lists the various programs of Federal aid to State and local governments by function, type of aid, agency, and major program group.

Table K-3. **FEDERAL GRANTS BY AGENCY** (in millions of dollars)

Agency	1967 actual	1968 estimate	1969 estimate
Executive Office of the President.....	0.4	0.3	*
Funds appropriated to the President:			
Economic opportunity programs.....	1,050.4	1,272.0	1,426.0
Other (primarily public works acceleration and disaster relief).....	74.6	195.9	267.6
Department of Agriculture.....	989.6	1,227.5	1,346.8
Department of Commerce.....	79.8	115.3	156.2
Department of Defense:			
Military.....	26.4	27.1	32.5
Civil.....	14.5	28.2	71.6
Department of Health, Education, and Welfare.....	7,182.0	8,776.2	9,395.4
Department of Housing and Urban Development.....	707.7	1,103.0	1,713.5
Department of the Interior.....	274.7	374.4	471.7
Department of Justice.....	2.6	16.1	50.6
Department of Labor.....	559.6	629.0	669.3
Department of State.....	6.6	6.1	5.5
Department of Transportation.....	4,092.5	4,371.0	4,417.0
Treasury Department.....	86.8	93.7	96.1
Civil Service Commission.....			12.0
Veterans Administration.....	9.9	13.4	14.8
Other independent agencies.....	23.4	30.8	51.7
National Capital region ¹	58.0	82.0	99.0
Total expenditures for Federal aid.....	15,239.5	18,362.3	20,297.3

*Less than \$500 thousand.

¹ Includes Federal payments to the District of Columbia of the following amounts: 1967, \$58.0 million; 1968, \$70.0 million; 1969, \$80.2 million.

IMPACT OF FEDERAL GRANTS

The term "fiscal federalism" has taken on new currency in the past few years.² Increasing attention has been focused on the financial problems of State and local governments and the response of the Federal Government to help meet their burgeoning needs.

Federal aid in relation to Federal and State-local outlays.—The rapid increase in Federal aid to State and local governments has become an increasingly important factor in the finances of all levels of government. Federal aid as a proportion of Federal expenditures has nearly doubled in the past decade—rising from 6.1% of the total in 1958 to an estimated 10.8% in 1968. In terms of domestic programs, 21.8% of Federal expenditures will take the form of aids to State and local governments in 1968. Because of strenuous efforts on their own behalf, the relative increase in the impact of Federal aid has not been quite as marked for the recipient State and local governments as it has been for the Federal Government. Nevertheless, Federal aid has risen as a proportion of State and local revenues, moving from 12% in 1958 to an estimated 17% in 1967.

Table K-4. FEDERAL-AID EXPENDITURES IN RELATION TO TOTAL FEDERAL EXPENDITURES AND TO STATE-LOCAL REVENUE

	Amount (millions)	Federal aid		
		As a percent of—		
		Total Federal expenditures	Domestic Federal expenditures ¹	State-local revenue ²
1958.....	\$4,935	6.1	14.6	12.0
1959.....	6,669	7.4	16.6	14.6
1960.....	7,040	7.8	17.2	13.8
1961.....	7,112	7.4	15.7	13.2
1962.....	7,893	7.5	16.4	13.5
1963.....	8,634	7.7	16.4	13.7
1964.....	10,141	8.6	18.2	14.8
1965.....	10,904	9.3	18.8	14.8
1966.....	12,960	9.9	20.3	15.6
1967.....	15,240	9.9	20.7	16.9
1968 estimate.....	18,362	10.8	21.8	(³)
1969 estimate.....	20,296	11.1	21.6	(³)

¹ Excluding expenditures for national defense, space, and international affairs and finance.

² Based on compilations published by Governments Division, Bureau of the Census. Excludes State-local revenue from publicly operated utilities, liquor stores, and insurance trust systems.

³ Not available.

⁴ Space does not permit a full treatment of this subject. The forthcoming report by the Advisory Commission on Intergovernmental Relations, entitled "Fiscal Balance in the American Federal System," discusses many of the more significant issues.

Matching requirements.—The pattern of State and local spending is influenced to some extent by Federal grants. This influence is exercised mainly through requiring the recipient to match Federal-aid funds with their own resources. The matching, or cost-sharing requirements are of two kinds: *variable* matching, which takes account of the differing abilities of States to support aided functions, and *fixed ratio* matching under which each is required to share in the same proportion of program cost.

In 1966, State and local governments had to provide a minimum of between \$5 billion to \$5½ billion of their own funds to receive the \$13 billion of Federal grants. This means that, on the average, the recipients must raise \$1 for every \$2 forthcoming from the Federal Government. This ratio varies by major function, ranging from one-fourth of total program costs in a number of areas to one-half in natural resources. However, State and local government matching funds account for only about 7% to 8% of general expenditure out of their own revenue sources. The largest grant programs, public assistance and highways, similarly account for the largest share of total required matching funds.

In 1969, required matching funds will rise to an estimated range of \$8½ billion to \$9¼ billion, nearly \$3 to \$5 billion more than in 1966.

Division of responsibility among governments.—For the past decade or so, a remarkable stability exists in the proportionate share of public services provided by Federal, State, and local units of government. Federal grants, and grants from States to local governments, have contributed to this stability by matching resources with program need. From the turn of the century until the end of World War II local government expenditures declined relative to those of the States. However, the resurgence of such State and local functions as education and highways, significantly aided by inter-governmental grants, helped to restore States and localities to a position of predominance. Now, about two-thirds of total civilian expenditures by all governmental units are made by State and local governments, with the latter alone accounting for about 44%.

Table K-5. DIRECT SPENDING FOR GENERAL DOMESTIC¹ PROGRAMS—PERCENTAGE DISTRIBUTION

Fiscal year	Federal	State	Local	Total
1966.....	33	24	44	100
1965.....	34	23	43	100
1960.....	36	22	42	100
1955.....	38	21	41	100
1950.....	46	19	35	100
1944.....	60	12	28	100
1936.....	49	15	36	100
1902.....	28	9	62	100

Note.—Expenditures in the form of intergovernmental transfers are shown by the level of government that spends the funds, rather than by the level that provides grants for public services. This is done in order to indicate *direct* spending by the three levels of government and to avoid "double counting."

¹ Direct general expenditures, excluding those for defense, space, and international programs. Excludes trust funds and Government-operated enterprises.

Source: Tabulations of the Governments Division, Bureau of the Census.

ADMINISTRATION OF FEDERAL-AID PROGRAMS

The effective administration of Federal-aid programs, while always important, has received increasing attention recently. Special emphasis has been placed on the means of coordinating the growing number of aid programs and on measures to enhance intergovernmental cooperation.

Administrative costs of Federal aids.—The major focus of this analysis is to show the resources transferred from the Federal Government to State and local governments to help them meet their public responsibilities. For this reason, the Federal cost of administering grant programs has been excluded from the amounts shown.

Nevertheless, it is helpful to know how much these programs cost to administer. On the basis of a recent survey done in the Bureau of the Budget, Federal administrative costs were found to constitute 2% of aids provided to State and local governments—about the same proportion as prevailed 10 years ago. The costs ranged from 0.2% for public assistance to 4% for public housing programs. The variation in cost among programs is principally attributable to the nature of the grant. Many project grants, such as urban renewal and public housing, require more time and attention than formula grants (like public assistance) where most of the administrative costs are incurred locally.

Table K-6 arrays the administrative costs as a percentage of Federal aid provided for 3 years (1956, 1966, and 1969). The sharp declines in these costs for urban renewal and public housing reflect the rapid growth of the grant outlays, with a relatively stable cost of administration.

Table K-6. ADMINISTRATIVE EXPENSES AS A PERCENTAGE OF
SELECTED FEDERAL-AID EXPENDITURES¹

Program	1956 actual	1966 actual	1969 estimate
Highways.....	1.7	1.2	1.5
Public assistance (including medical aid).....	.1	.2	.2
Employment security programs.....	2.3	3.4	3.4
Low-rent public housing.....	11.3	4.0	3.8
Urban renewal.....	23.3	3.2	2.0
Vocational rehabilitation.....	3.0	1.9	1.2
Office of Education grants.....	(²)	1.7	1.9
Hospital construction.....	(²)	1.5	1.4
Economic opportunity programs.....	(²)	1.6	1.1
Average of above (including prorated indirect expenses).....	1.7	1.8	1.7
Average of above (excluding indirect expenses).....	1.2	1.2	1.2

¹ This tabulation follows the general approach outlined in an earlier study done by I. M. Labovitz of the Library of Congress, entitled "Federal Expenditures Associated with the Administration of Program of Grants-in-Aid to State and Local Governments," Legislative Reference Service, Apr. 17, 1957. The administrative costs are taken from a sample of grants representing 80% to 85% of total Federal aid for the years covered. Administrative costs generally cover salaries, expenses, travel, and related expenses of the organizational unit directly administering the grant. Certain indirect overhead costs were also added to the direct costs incurred, including the costs of collecting, accounting for, and auditing the use of the aid moneys. The amounts shown for 1956 are those listed in the study by the Library of Congress.

² Not available.

Growth in number of aid programs.—The number as well as the magnitude of Federal-aid programs has grown in response to the increasing array of problems faced by State and local governments which are also of significant national concern.

While not strictly comparable to the concept of aid used in this analysis, the Legislative Reference Service of the Library of Congress has tabulated the number of aid programs in effect during a recent 3-year period. In early 1964, the number of major assistance programs was 116. Two years later the number of programs had grown to 162. In many cases, a given program has within it several different grant authorizations. The total number of such authorizations rose from 239 in 1964 to 399 in 1966.

Table K-7. NUMBER OF AID AUTHORIZATIONS IN EFFECT AT SPECIFIED DATES

Functional category	Apr. 1, 1964	Jan. 4, 1965	Jan. 10, 1966
National defense.....	11	11	11
Agriculture and agricultural resources.....	12	12	15
Natural resources.....	33	41	54
Commerce and transportation.....	23	25	37
Housing and community development.....	17	23	32
Health, labor, and welfare.....	94	114	153
Education.....	37	42	82
Veterans benefits and services.....	1	3	3
General government.....	11	12	12
Total number of authorizations.....	239	283	399
Total number of major programs.....	(116)	(135)	(162)

Source: Labovitz, I. M., "Number of Authorizations for Federal Assistance to State and Local Governments Under Laws in Force at Selected Dates During 1964-66" (Library of Congress), July 5, 1966.

On an agency basis, the largest number of programs—more than 45% of total authorizations—is administered by the Department of Health, Education, and Welfare.

The Departments of Agriculture, Interior, and Housing and Urban Development combined account for an additional 25%.

Three-fifths or 226 of the 399 grants-in-aid authorizations in effect at the end of 1966 were of the project variety. This compared with 126 or 53% of such programs in 1964. Thus, project grants represent a sizable share of the total, and the proportion is gradually increasing.

The growth in project grants can be attributed to the increasing complexity of the problems which confront the Nation. Localities are encouraged to experiment and demonstrate ideas and methods that allow for the development of workable solutions based on the uniqueness of each community's needs and resources. At the same time Congress, in legislating new grant programs, specifies that an executive agency examine proposals made by an applicant for efficacy and soundness before committing Federal funds.

The need for project grants also reflects the fact that certain types of grants, such as urban renewal, place great stress on local initiative and local sensing of needs—factors that do not lend themselves to simple accommodation in a formula.

Measures to coordinate Federal-aid programs.—While easing State and local financial problems, the sharp growth of aid programs has focused attention on the need for coordination and improvement in their administration.

Several steps are being taken in a continuing program to improve the administration of grant programs and to facilitate harmonious and effective intergovernmental relations:

- High-level liaison with State and local governments is being provided through the Vice President of the United States and the Executive Office of the President. In 1967, trips to 40 State capitals were made by teams of officials from the Federal grant agencies for the express purpose of resolving problems associated with grant administration.
- Processing time required for the review of grant applications is being reduced by 50% as directed by the President for a number of grant programs (including water and sewer grants). The President also has directed that reduction techniques developed for these programs be applied to the grant programs of other agencies.
- The Bureau of the Budget is forming an Operational Coordination Staff to focus on problems of grant-in-aid administration and intergovernmental relations.
- Under new procedures, State and local chief executives will have the opportunity to comment on draft Federal regulations affecting their programs.
- The coordination of Federal aids in metropolitan areas of the United States has been improved by giving metropolitan or regional planning agencies the opportunity to review and comment on applications for federally aided development projects which vitally affect metropolitan growth and development.

Efforts to refine the grant as an instrument of cooperative intergovernmental action are clearly worthwhile. Grants have served national, State, and local purposes well in the past and offer even more promise for the future. These joint Government programs have proven effective by—combining available resources, specifying certain minimum standards of performance, and decentralizing their actual administration.

AIDS TO URBAN AREAS AND REGIONS

Increasing attention has been focused recently on three cross-cutting issues concerning Federal aids:

- (1) The amount of these aids which assist metropolitan or urban areas in meeting their pressing needs;
- (2) The geographical distribution of Federal aids; and
- (3) The extent to which aids compensate for low income.

Aids to urban areas.—In 1969, approximately \$12 billion of the \$20 billion of total Federal aids will be spent in standard metropolitan statistical areas (SMSA's) to help fill the growing gap between their needs and resources. This represents an increase of about \$8 billion or nearly 205% over the amount of aid provided to these urban areas in 1961. The amount will have increased almost \$3 billion in the short span of only 3 years.

Standard metropolitan statistical areas (SMSA's) were chosen as the definition of "urban" for the figures in this section, since SMSA's are generally combinations of entire counties; and counties, in turn, are the smallest geographical unit for which information on Federal aids is generally available. These areas cover the bulk of the urban population and display the urban phenomena which place heavy pressure on public service requirements: high population density and rapid population growth. Nevertheless, the amounts shown still only represent approximations based on the best information readily available.

The table below shows the major sources of urban aid, by function and program, for selected years.

Table K-8. **FEDERAL-AID EXPENDITURES IN URBAN AREAS**
(In millions of dollars) ¹

Function and program	1961 actual	1967 actual	1969 estimate
National defense (civil defense and National Guard centers)	10	21	26
Agriculture and agricultural resources	155	242	342
Natural resources	54	115	211
Commerce and transportation:			
Highways	1,398	2,154	2,336
Economic development		17	84
Airports	36	35	40
Other	1	12	3
Housing and community development:			
Public housing	105	184	253
Water and sewer facilities		3	72
Urban renewal	106	279	525
Model cities			218
Urban transportation		38	135
National Capital region	25	58	98
Other	2	42	135
Health, labor, and welfare:			
Office of Economic Opportunity		788	945
School lunch, special milk, food stamp	131	225	313
Hospital construction	48	74	76
Community health	33	120	326
Public assistance (including medical care)	1,170	2,296	3,119
Vocational rehabilitation	37	74	137
Employment security and manpower training	303	527	624
Other	21	100	248
Education:			
Elementary and secondary	222	1,179	1,180
Higher education	5	112	105
Vocational education	28	163	175
Other	3	44	91
Other functions		8	44
Total aids to urban areas	3,893	8,908	11,912

¹ Excludes loans and repayable advances.

The major increases in Federal grants for urban areas occur in housing and community development, education, and programs to improve the welfare of our disadvantaged citizens.

The emphasis in this analysis is on those programs which provide financial assistance to urban communities to help them meet their

public service needs. It includes grants made to States which subsequently benefit metropolitan areas.

There are a number of other Federal programs which have an important bearing on urban development including direct Federal construction and various loan (and loan insurance) activities. No attempt has been made to add up all the various forms of funds to reach an overall total. However, the Department of Housing and Urban Development estimates that the total Federal financial commitment for urban social and community development aids could be considered to exceed \$37 billion in 1969—more than twice the level in 1961. The Department's figures indicate the magnitude of Federal financial involvement in communities of 2,500 population or over, as measured by obligations or commitments—including loans insured or guaranteed.

While the tabulations are not fully comparable, the estimates of the Department of Housing and Urban Development do serve to put in perspective the possible dimensions of urban-area expenditures not covered by this analysis.

Regional distribution of Federal aids.—The distribution of Federal aids on a regional basis ranges from a high of more than \$3.1 billion in the Southeast to a low of \$504 million in the Rocky Mountain area. However, when account is taken of population differences, the Rocky Mountain area ranks highest with grant payments per capita reaching nearly \$108 while the Great Lakes and Mideast regions are lowest with \$47 and \$52 per capita, respectively. Population density and per capita income are the two major factors which account for this wide variation.

Table K-9. REGIONAL DISTRIBUTION OF FEDERAL AID, FISCAL YEAR 1966

Region	Total (in millions of dollars)	Per capita	Percent of State and local govern- ment general revenue
New England.....	684.2	60.85	14.4
Mideast.....	2,147.8	51.59	11.5
Great Lakes.....	1,832.7	47.31	11.9
Plains.....	1,112.2	69.81	16.3
Southeast.....	3,125.2	73.29	21.3
Southwest.....	1,160.5	73.31	19.2
Rocky Mountain.....	504.0	107.69	21.5
Far West.....	2,006.8	79.52	14.6
United States.....	¹ 12,960.1	66.14	15.6

¹ Includes \$386.8 million for Puerto Rico, the Virgin Islands, and other adjustments.

Sources: "Annual Report of the Secretary of the Treasury," and "Governmental Finances in 1965-66," Bureau of the Census. This report provides additional information concerning State distribution of Federal grants.

Population density is inversely related to the level of per capita aids. The population density of the Rocky Mountain area is the lowest of the regions, while per capita aids are highest. At the other end of the scale, per capita aids are lowest in the Great Lakes and Mideast where population density is the greatest. This inverse relationship stems primarily from aids for highway construction and other

grants where program needs are not a direct function of population density.

Per capita aid is also inversely related to per capita income. There are two reasons for this relationship. First, some grant programs, such as grants for hospital construction, require lower matching by the relatively poorer States. Second, certain grant programs, such as those for public assistance and elementary and secondary education, are designed as aids to the disadvantaged and, hence, tend to flow to States having individuals with lower incomes.

Equalization of Federal grants.—It is the latter tendency which reflects the growing impact of fiscal equalization provisions common to several recent grant programs. These provisions are designed to help States with relatively meager resources to participate more effectively in many jointly financed programs.

In a recent study by the Bureau of the Budget, the overall impact of Federal grants was found to demonstrate definite equalizing effects.³

Many programs contain explicit equalization provisions in which the Federal share varies inversely with income. However, equalization is also attributable to several new grant programs in which caseload rather than an explicit fiscal capacity equalization factor (per capita income) is used as the method of allocating funds. Title I of the Elementary and Secondary Education Act is designed to aid children of low-income families to obtain a decent education. This program has a built-in equalization effect of significant dimensions because it distributes funds to school districts on the basis of the number of school-age children from families with incomes below \$2,000 and the number of children from families receiving welfare aid to families with dependent children. Highway grants reduce somewhat the overall tendency toward equalization because they are large in absolute amount and are not necessarily related to income or fiscal capacity.

OUTLOOK

Federal grants have been a vital and growing force through which the various units of the federal system have cooperated to meet ever-changing and ever more pressing national problems. The need to refine this system and continue its vitality—the need to keep it responsive to the people and to maintain the relative balance of power among the governmental units—demands constant attention. There are a number of changes now pending before the Congress or being introduced this year directed at this objective.

Improved timing of funds for education.—There has been a growing consensus that Federal grants for education are being made too late in the year to be used most effectively. At the State and local level, budget planning for education usually begins early in the spring. Yet, the amount of Federal aid—an increasingly important source of funds—is often not known until September or October; or even as late as January or February—when the school year has already begun.

³ "Equalization Effect of Federal Grants: Fiscal Year 1966," Fiscal Analysis Staff, Bureau of the Budget, June 1967. Excluding Alaska and Hawaii, which are special cases, the correlation coefficient for the relationship between State per capita grants and per capita income was -0.301 in 1966, indicating the presence of equalization.

The problem has been particularly acute for elementary and secondary education and for assistance to students in higher education.

To facilitate State and local planning, and to encourage more effective use of Federal-aid funds, a new funding schedule is being proposed for these two important education categories mentioned above. Under legislation already enacted, funds are being sought this spring for the school year beginning next September. At the same time, the budget for 1969 proposes an advance appropriation for the school year beginning September, 1969. This approach will permit more effective local planning and utilization of Federal grant funds. Legislation will be proposed to permit similar advance financing of grant and loan assistance to college students.

Pooling funds for related grants.—The proposed Joint Funding Simplification Act of 1967 (H.R. 12631) would facilitate the pooling of related grant funds in support of a single, comprehensive project. Moreover, this approach would simplify the administration of grants considerably without compromising any of the substantive requirements in the law such as basic eligibility criteria, matching requirements, and related substantive matters.

The following kinds of administrative improvements could be accomplished under the proposed legislation: (1) combined project applications, approvals, accounting and audits; (2) a single project manager or lead agency to supervise the administration of aids on behalf of all participating Federal agencies, and (3) more uniform technical and administrative requirements.

Under such an approach, for example, a jointly funded Neighborhood Center might draw on the combined resources of nearly a dozen grant programs now administered by four Federal agencies. The experience gained under this approach could point the way for a number of possible consolidations of related grants.

Consolidation and increased flexibility of student aids for higher education.—Legislation is being proposed this year to combine two categorical programs for student aid in the higher education field. Funds for National Defense Student Loans and the College Work-Study program would be consolidated in a single package and institutions would be given authority to move some portion of the funds among these two programs and Equal Opportunity Grants—mirroring the practice of many college campuses in considering these assistance programs as an integral unit of student aid.

Manpower for public service.—Legislation to aid State and local governments in the attraction and training of competent manpower is now pending before the Congress. The ability to provide essential services in the 1970's hinges in significant measure on the ability of these governments to attract the competent personnel required to meet the needs of both today and the future.

As intergovernmental fiscal and program relationships grow in volume and complexity, continuing emphasis will be given to enhancing the competence of all the partners in the federal system, and to improving the operation of the system itself.

Table K-10. **FEDERAL AID TO STATE AND LOCAL GOVERNMENTS¹**
(Expenditures in millions of dollars)

Agency and program	Functional code	1967 actual	1968 estimate	1969 estimate
National defense:				
Executive Office of the President: Office of Emergency Planning—Federal contributions to State and local planning.....	059	0.4	0.3	*
Department of Defense—Military:				
Civil defense shelters and financial assistance.....	051	25.7	25.1	29.5
Construction of Army National Guard centers.....	051	.7	2.0	3.0
Total, national defense.....		26.8	27.4	32.5
International affairs and finance:				
Department of State: East-West Cultural and Technical Interchange Center.....	153	6.6	5.8	5.3
Agriculture and agricultural resources:				
Department of Agriculture:				
Commodity Credit Corporation and Consumer and Marketing Service: Removal of surplus agricultural commodities and value of commodities donated.....	351	278.4	420.8	444.3
Rural water and waste disposal facilities.....	352	11.1	27.0	33.8
Rural housing for domestic farm labor.....	352	8.6	3.8	5.0
Resource conservation and development.....	354	1.1	1.5	.9
Agricultural Research Service: Grants for basic scientific research.....	355	2.3	2.1	1.9
Agricultural experiment stations.....	355	54.9	56.1	62.4
Cooperative agricultural extension service.....	355	89.4	86.2	93.9
Payments to States, territories, and possessions, Consumer and Marketing Service.....	355	1.8	1.8	1.8
Commodity Credit Corporation: Grants for research.....	355	.3	.2	.1
Total, agriculture and agricultural resources.....		448.0	599.4	644.0
Natural resources:				
Department of Agriculture:				
Watershed protection and flood prevention.....	401	71.8	77.2	68.5
Grants for forest protection, utilization, and basic scientific research.....	402	18.8	18.4	18.3
National forest and grassland funds; payments to States and counties (shared revenue).....	402	42.9	44.6	47.7
Department of Defense—Civil: Corps of Engineers:				
Payment to California, flood control.....	401	12.1	25.7	69.1
Payments to States, Food Control Act of 1954 (shared revenue).....	401	2.4	2.5	2.5
Department of the Interior:				
Water pollution control.....	401	99.0	139.8	190.9
Payments to States and counties from grazing receipts, grasslands, and sales of public lands (shared revenue).....	401	1.0	.9	1.0
Bureau of Indian Affairs: Resources management.....	401	.9	1.0	1.1
Bureau of Reclamation:				
Grants.....	401	.1	.1	-----
Payments to Arizona, Nevada, and Klamath restoration area (shared revenue).....	401	.7	.7	.8
Office of Water Resources Research.....	401	5.8	7.9	9.3
Office of Saline Water.....	401	-----	1.8	3.3
Payments from grant lands: Oregon, California, and Coos and Douglas Counties (shared revenue).....	402	21.2	22.4	22.5
Mineral Leasing Act payments (shared revenue).....	403	48.4	50.0	50.2

See footnotes at end of table.

Table K-10. **FEDERAL AID TO STATE AND LOCAL GOVERNMENTS**¹—Con.
(Expenditures in millions of dollars)

Agency and program	Functional code	1967 actual	1968 estimate	1969 estimate
Natural resources—Continued				
Department of the Interior—Continued				
Bureau of Mines:				
Mine drainage and solid waste disposal.....	403	0.2	0.1	0.2
Aid for commercial fisheries.....	404	2.7	5.6	5.9
Payment to Alaska from Pribilof Island fund (shared revenue).....	404	.3	.3	.1
Fish and wildlife restoration and management.....	404	22.5	25.4	31.6
Wildlife refuge fund and grasslands payments (shared revenue).....	404	1.2	1.0	1.1
Land and water conservation grants.....	405	22.2	56.3	74.5
Preservation of historic properties.....	405	*	.3	.7
Department of State: Pacific Halibut Commission.....	404	-----	.2	.2
Federal Power Commission: Payments to States (shared revenue).....	401	.1	.1	.1
Tennessee Valley Authority: Payments in lieu of taxes (shared revenue).....	401	11.9	13.1	14.8
Water Resources Council.....	401	1.6	2.4	2.7
Total, natural resources.....	-----	387.7	497.9	617.0
Commerce and transportation:				
Funds appropriated to the President: Public works acceleration.....				
507	19.4	12.0	-----	-----
Department of Commerce:				
State marine schools.....	502	.4	.4	.4
Office of State Technical Services.....	506	1.2	5.1	5.2
Economic development assistance.....	507	19.8	109.8	150.6
Appalachian development.....	507	58.8	139.5	232.8
Department of Transportation:				
Chamizal Memorial Highway.....	503	-----	1.0	5.4
Forest and public lands highways.....	503	37.3	-----	(²)
Highway beautification.....	503	24.3	79.7	81.2
Highway safety.....	503	.8	26.2	70.0
Federal-aid highways (trust fund).....	503	3,965.9	4,206.1	² 4,187.4
Federal Aviation Administration: Federal-aid airport program.....	501	64.1	58.0	73.0
Total, commerce and transportation.....	-----	4,192.2	4,637.8	4,806.0
Housing and community development:				
Funds appropriated to the President: Alaska mortgage indemnity grants.....				
551	2.6	-----	-----	-----
Department of Housing and Urban Development:				
Alaska housing.....	551	-----	-----	1.0
Low-income housing.....	552	2.3	1.8	3.8
Low-rent public housing program.....	552	245.6	283.5	337.9
Urban planning grants.....	553	21.8	31.0	46.0
Open space land and urban beautification.....	553	19.1	60.0	60.0
Grants for basic water and sewer facilities.....	553	5.7	90.0	130.0
Grants for neighborhood facilities.....	553	.8	15.0	32.0
Model city grants.....	553	-----	22.4	241.6
Urban renewal.....	553	370.4	500.0	700.0
Urban transportation assistance.....	553	42.1	98.3	150.0
Metropolitan development incentive grants.....	553	-----	-----	3.0
Other aids for urban renewal and community facilities.....	553	-----	1.0	8.2

See footnotes at end of table.

Table K-10. FEDERAL AID TO STATE AND LOCAL GOVERNMENTS¹—Con.
(Expenditures in millions of dollars)

Agency and program	Functional code	1967 actual	1968 estimate	1969 estimate
Housing and community development—Continued				
National Capital region:				
Federal payments to District of Columbia.....	555	58.0	70.0	80.2
Washington Metropolitan Area Transit Authority.....	555	-----	1.0	18.0
Dulles sewer project.....	555	-----	11.2	.8
Total, housing and community development.....	-----	768.3	1,185.2	1,812.5
Health, labor, and welfare:				
Funds appropriated to the President:				
Disaster relief.....	659	52.6	44.5	34.8
Office of Economic Opportunity:				
Community action programs:				
Head Start.....	655	287.3	293.5	294.0
Local initiative.....	655	220.6	301.4	314.0
Other.....	655	154.2	179.6	196.4
Work and training programs:				
School year and summer.....	655	129.6	172.9	156.6
Comprehensive employment.....	655	141.1	207.3	406.8
Special impact.....	655	-----	15.4	21.9
Work experience program.....	655	117.6	101.9	36.2
Department of Agriculture:				
Special milk and school lunch.....	659	302.1	319.0	344.8
Food stamp.....	659	106.0	168.8	223.5
Department of Health, Education, and Welfare:				
Hospital construction.....	651	204.9	217.8	212.0
(Portion to private, nonprofit institutions).....	651	(91.3)	(104.2)	(95.4)
Health manpower.....	651	31.6	130.3	172.4
Comprehensive health planning and services.....	651	*	72.0	110.0
Regional medical programs.....	651	3.0	13.7	34.6
National Institutes of Health.....	651	1.6	1.6	1.6
Mental health.....	651	11.0	49.6	57.4
Health services.....	651	19.0	65.9	17.1
Disease prevention and environmental health.....	651	89.2	76.6	19.4
Maternal and child welfare.....	651	178.7	214.1	248.7
Public assistance:				
Medical assistance.....	651	1,173.0	1,761.0	2,121.6
Work incentives (training and child care).....	652	-----	13.9	113.8
Income maintenance payments.....	653	2,610.1	2,976.0	2,960.9
Social services for welfare recipients.....	653	392.0	460.2	589.3
Juvenile delinquency.....	659	-----	-----	20.0
Vocational rehabilitation.....	659	185.5	280.1	341.0
Mental retardation.....	659	-----	-----	8.7
Administration on Aging.....	659	3.5	7.1	16.1
Department of Labor:				
Manpower development and training activities.....	652	22.1	60.2	58.2
Grants to States for administration of employment security programs (trust fund).....	652	535.8	567.0	609.3
Development of labor mobility.....	652	1.8	1.8	1.8
Equal Opportunity Commission.....	652	.1	.8	.9
Total, health, labor, and welfare.....	-----	6,973.8	8,774.1	9,744.3

See footnotes at end of table.

Table K-10. FEDERAL AID TO STATE AND LOCAL GOVERNMENTS¹—Con.
(Expenditures in millions of dollars)

Agency and program	Functional code	1967 actual	1968 estimate	1969 estimate
Education:				
Department of Health, Education, and Welfare:				
Assistance to schools in federally affected areas.....	701	417.4	341.2	381.9
Elementary and secondary educational activities.....	701	1,364.4	1,473.0	1,404.4
Higher education activities (including land-grant colleges).....	702	187.4	247.0	174.2
Vocational education.....	704	232.8	255.1	249.8
Arts and humanities educational activities.....	704	.4	.5	.3
Grants for library services and construction.....	704	57.4	84.8	94.8
Training teachers of the handicapped.....	704	*	12.0	21.5
Community services and National Teacher Corps.....	704	7.0	10.0	11.5
Civil rights educational activities.....	704	3.3	4.7	7.0
Teaching of the blind and deaf.....	704	1.0	1.2	1.3
Educational television facilities.....	704	7.9	6.7	8.2
Education professions development.....	704			7.5
Department of the Interior: Bureau of Indian Affairs:				
Education and welfare services.....	704	10.8	11.4	14.8
National Foundation on the Arts and Humanities.....	704	8.9	14.3	21.0
Total, education.....		2,298.7	2,461.9	2,398.2
Veterans benefits and services:				
Veterans Administration:				
Aid to State homes.....	804	8.8	9.3	10.0
Grants for construction of State nursing homes.....	804	.1	2.4	3.0
Administrative expenses.....	805	1.1	1.7	1.8
Total, veterans benefits and services.....		9.9	13.4	14.8
General government:				
Civil Service Commission: Intergovernmental personnel assistance.....	906			12.0
Funds appropriated to the President: Transitional grants to Alaska.....	910	*		
Department of the Interior:				
Grants to territories.....	910	25.9	37.0	51.4
Internal revenue collections, Virgin Islands (shared revenue).....	910	11.1	12.4	12.5
Department of Justice:				
Law enforcement assistance:				
Education and training.....	908	1.6	2.7	5.6
Other.....	908	1.1	4.0	8.1
Crime prevention and control.....	908		9.4	36.9
Treasury Department:				
Tax collections for Puerto Rico (shared revenue).....	910	59.3	65.0	67.0
Bureau of Customs: Refunds, transfers and expenses of operation, Puerto Rico and the Virgin Islands (trust fund shared revenue).....	904	27.5	28.7	29.1
General Services Administration: Hospital facilities in the District of Columbia.....	905		*	
President's Crime Commissions.....	908	.8	*	
American Revolution Bicentennial Commission.....	910		.1	.2
Total, general government.....		127.3	159.4	222.8
Total, grants-in-aid and shared revenue.....		15,239.5	18,362.3	20,297.3

* Less than \$500 thousand.

¹ Grants-in-aid unless otherwise specified. Excludes loans which are shown separately in table K-11 on p. 174.

² Reflects proposed transfer of forest and public lands highways to the Highway trust fund.

Table K-11. FEDERAL LOANS TO STATE AND LOCAL GOVERNMENTS

Agency and program	Disbursements			Net outlays		
	1967 actual	1968 estimate	1969 estimate	1967 actual	1968 estimate	1969 estimate
Agriculture and agricultural resources:						
Soil and water loans.....	84.0	80.0	75.0	83.0	77.0	70.0
Natural resources: Reclamation loans.....	16.8	14.1	7.5	16.7	13.3	6.7
Commerce and transportation: Economic development.....	38.0	24.9	7.8	6.8	23.8	29.5
Housing and community development:						
Department of Housing and Urban Development:						
Community disposal loans.....	4.1	3.0	6.4	3.5	2.4	-.8
Low-rent public housing program.....	154.1	220.0	220.0	10.5	19.9	-15.1
Public facility loans.....	58.7	45.0	54.0	55.9	41.4	49.7
Public works planning advances.....	14.2	7.1	3.6	7.9	-1.4	-4.9
Urban renewal fund.....	601.3	453.2	455.2	58.3	.9	11.9
Urban transit fund.....				-.2	-.2	-.2
District of Columbia: Capital outlays and operations.....	52.2	55.2	108.3	19.0	16.2	65.2
Total, housing and community development.....	884.6	783.5	847.5	154.9	79.2	105.8
Education:						
Department of Health, Education, and Welfare:						
Higher education activities.....	38.2	148.5	150.9	37.8	148.1	149.9
Other.....	58.5	15.0	18.8	58.4	14.9	17.8
Department of Housing and Urban Development: College housing.....	215.0	192.5	162.2	191.1	173.9	141.4
Total, education.....	311.7	356.0	331.9	295.3	336.9	309.1
General government:						
Department of Defense—Civil: Corps of Engineers: Construction of power systems, Ryukyu Islands.....	.2	.4		.2	.4	
Department of the Interior: Administration of territories.....	5.0	5.4	4.5	5.0	5.4	4.5
Total, general government.....	5.2	5.8	4.5	5.2	5.8	4.5
Total.....	1,310.1	1,264.3	1,297.2	561.9	536.0	525.6

SPECIAL ANALYSIS L

PRINCIPAL FEDERAL STATISTICAL PROGRAMS

Principal statistical programs of the Federal Government in the 1969 budget are summarized in this analysis. The general year-to-year level of statistical activities of the various agencies is reflected in the amounts shown for current statistical programs. Recommendations in 1969 for current statistics total \$133.7 million. Periodic statistics, as distinguished from current, are characteristically derived from census-type surveys taken once or twice a decade, and amounts fluctuate widely from year to year depending upon the nature and periodicity of the activities. Recommendations for the periodic programs for 1969 aggregate \$24.7 million.

Objectives of these programs are to provide accurate, comprehensive, and timely information on the functioning of the economy and welfare of the people, both for Government decisions and for private and general public use. The functions of collecting, processing, and analyzing current general-purpose statistical information are often closely related to other agency objectives. To indicate the interrelationships of the statistical programs carried out by different agencies and to aid in evaluating the Government's overall statistical system, the significant components of current Federal statistical activity are brought together and classified by broad subject areas in this special analysis. These areas and the amounts involved for the current program are summarized in table L-1. Information by agencies for both current and periodic programs is shown in table L-2.

Current statistical programs covered by this analysis represent the entire programs of some agencies but only that portion of the programs of other agencies constituting general-purpose statistical activity.

When adjustments are made because of reorganization of statistical units or activities they are carried back to both the current and previous years so that all 3 years covered by the special analysis are on a comparable basis.

A brief description of the major program changes is shown below by broad subject areas. The agencies which contribute to each subject area are shown in table L-1. Adjustments made for additional amounts required for increased pay costs and for savings resulting from increased productivity are not itemized in descriptive statements but are reflected in the totals.

Table L-1. OBLIGATIONS FOR PRINCIPAL CURRENT STATISTICAL PROGRAMS, BY BROAD SUBJECT AREAS (in millions of dollars)

Program	1967 actual	1968 estimate	1969 estimate
Labor statistics (Departments of Agriculture, Interior, and Labor; National Science Foundation).....	26.9	26.9	29.3
Demographic and social statistics (Departments of Agriculture, Commerce, and Health, Education, and Welfare; National Science Foundation; Office of Economic Opportunity).....	32.9	40.5	46.6
Prices and price indexes (Departments of Agriculture, Commerce, and Labor).....	6.3	6.9	7.7
Production and distribution statistics (Departments of Agriculture, Commerce, Defense, Interior, and Transportation; Civil Aeronautics Board; Interstate Commerce Commission).....	31.0	31.5	33.5
Construction and housing statistics (Departments of Commerce and Housing and Urban Development; Federal Home Loan Bank Board).....	2.9	3.5	5.1
National income and business financial accounts (Departments of Agriculture, Commerce, and Treasury; Federal Trade Commission; Securities and Exchange Commission).....	10.3	11.0	11.5
Total, principal current programs.....	110.2	120.2	133.7

LABOR STATISTICS

Manpower and employment data.—Funds are requested to strengthen the research program conducted and sponsored by the Office of Manpower Research in the Manpower Administration, Department of Labor (\$900,000). First priority in the development of research projects under title I of the Manpower Development and Training Act is being given to those which can assist in attacking unemployment in urban slums.

A requested increase of \$120,000 is included in the 1969 budget for the Economic Research Service, Department of Agriculture, to measure and study labor-mechanization adjustments in agriculture. This study would cover the problems of reduction of farm labor required per unit of output with technological advances that increase productive capacity of farms, the larger capital resources needed to support the smaller labor component, and improvement of training and skills so that earnings of workers in agriculture can be made more comparable with those in off-farm employment.

Wages and industrial relations.—Funds are recommended to inaugurate a semiannual survey of general changes in wage rates and benefits in nonmanufacturing industries, comparable to the existing series for manufacturing (\$200,000). This information will round out the data needed to relate the magnitude of wage and fringe benefit changes to changes in productivity and prices. It will also be used in studying problems of labor demand and supply among industries.

Table L-2. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)

Agency	1967 actual	1968 estimate	1969 estimate
CURRENT PROGRAMS			
Department of Agriculture:			
Economic Research Service: Statistical activities.....	3.8	3.9	4.7
Statistical Reporting Service.....	13.7	14.2	14.7
Department of Commerce:			
Bureau of the Census.....	16.4	17.1	18.2
Office of Business Economics.....	2.8	2.9	3.3
Department of Defense: Corps of Engineers: Domestic shipping statistics.....	1.1	1.1	1.1
Department of Health, Education, and Welfare:			
National Center for Educational Statistics.....	2.1	2.4	2.9
National Center for Health Statistics.....	8.2	8.3	9.5
Social Security Administration: Statistical and research activities.....	10.0	14.8	16.8
Social and Rehabilitation Service: Statistical and research activities.....	1.8	2.0	2.2
Department of Housing and Urban Development: Statistical activities.....	.4	.5	1.3
Department of the Interior: Bureau of Mines: Mineral statistics.....	2.6	2.6	2.5
Department of Labor:			
Bureau of Employment Security: Statistical activities.....	3.2	3.3	3.5
Bureau of Labor Statistics.....	20.6	21.0	22.7
Manpower Administration, Office of Manpower Research: Statistical activities.....	4.0	4.0	4.9
Department of Transportation: National transportation sta- tistics.....	.4	.7	1.8
Treasury Department: Internal Revenue Service: Statistical reporting.....	5.8	6.2	6.2
Civil Aeronautics Board: Statistical and research activities.....	.6	.7	.8
Federal Home Loan Bank Board: Statistical activities.....	.6	.7	.8
Federal Trade Commission: Financial statistics.....	.4	.4	.4
Interstate Commerce Commission: Reports and statistics.....	1.1	1.1	1.1
National Science Foundation: Statistics and special analyses.....	4.4	4.5	4.9
Office of Economic Opportunity: Statistical and research activi- ties.....	5.9	7.4	9.0
Securities and Exchange Commission: Operational and business statistics.....	.3	.3	.4
Total, current programs.....	110.2	120.2	133.7
PERIODIC PROGRAMS			
Department of Commerce: Bureau of Census:			
1964 Census of Agriculture.....	1.9	.4	-----
1967 economic censuses.....	3.0	7.5	6.9
1967 Census of Governments.....	1.3	1.0	.3
Preparation for 19th decennial censuses.....	2.8	7.6	17.5
Modernization of computing equipment.....	1.9	4.0	-----
Department of Agriculture: Statistical Reporting Service: Com- puter purchase and related costs.....	.5	-----	-----
Department of Health, Education, and Welfare: National Center for Health Statistics: Computer purchase and related costs.....	1.1	-----	-----
Total, periodic programs.....	12.5	20.5	24.7
Total, principal statistical programs.....	122.7	140.7	158.4

DEMOGRAPHIC AND SOCIAL STATISTICS

Population statistics.—No increase is requested for this area since principal emphasis on population statistics during 1969 will be in connection with the 19th decennial census covered below under Periodic Programs. Work will continue on development of intercensal estimates of population and income for small areas based on use of administrative records. Consultation with and provision of technical assistance to States in making local population estimates will be expanded out of existing funds.

Health and vital statistics.—An increase of \$1.2 million is requested for the National Center for Health Statistics. This increase would be used primarily for initiating a study of family planning and the problems related to population growth and change, for consultative services to State vital statistics agencies and the training of their personnel, and for studies of methodology to obtain data on birth and death rates in geographic areas as small as census tracts. In addition, the increased funds would be used to extend the study of patients discharged from hospitals, with emphasis on collecting data which could be of value in promoting the effectiveness of hospital care (\$85,000) and to obtain more comprehensive data on health manpower in order to design programs or provide assistance in expanding the supply of this category of workers (\$100,000).

The family planning and population growth study (\$450,000) is designed as part of a continuing survey to be conducted on a 2-year cycle to examine family planning and the economic problems of population growth and change. Services to State vital statistics agencies (\$380,000) include the establishment of an Applied Statistics Training Institute to increase the quantity and quality of health statisticians and thereby improving and increasing the quality and coverage of State and local health data. Funds (\$225,000) are also proposed for methodological studies required to produce birth and death rates for census tracts.

Educational statistics.—The 1969 budget recommends an increase of \$440,000 for the National Center for Educational Statistics. These funds are for the purpose of conducting methodological studies to improve the accuracy, timeliness, and coverage of widely needed educational data. Special surveys will also be conducted in areas that have been neglected: the scope and effectiveness of informal education; adequacy of school library facilities in secondary schools; facilities for, dimensions and effectiveness of, adult education; and tracing careers in higher education in terms of majors taken and grades achieved.

Social security statistics.—An increase of \$2 million is recommended for the statistical and research activities of the Social Security Administration. The major part of this increase would cover staff costs for additional work on the basic new program of health insurance, expanded retirement benefits, and new applications of computer technology.

In the health insurance area, the current Medicare survey provides data on use of services and accruing liabilities. This continuing survey would be supplemented by special studies to provide information on gaps in covered services and to gather information not otherwise available through the regular reporting system. The proposed increase

would also cover the costs of processing and analyzing the data collected in the "before" and "after" Medicare study designed to evaluate the health insurance program and a study of hospital accounting in connection with Medicare.

The survey of disabled adults would be continued as scheduled. This is a three-part survey which collected information from households in 1967 and will cover persons in institutions in 1968. Funds proposed for 1969 would provide for the third part of the survey which would provide data on individuals in nursing homes and extended care facilities. Each part of the survey would be supplemented by mail followup of families and representative payees.

Funds are included in the 1969 budget for fieldwork on the retirement history survey. This is a longitudinal survey which would follow persons in the 58-62 age group for a period of 10 to 12 years to evaluate the changing needs of those who are retired or about to retire.

The proposed increase would also permit work to continue on a number of analytical and research studies on special subjects such as income-maintenance programs, lifetime earnings, alternative measures of program adequacy, and social security in other countries.

Welfare statistics.—A net increase of \$163,000 is recommended for this area. Although the level is not substantially changed a number of new studies will be undertaken, replacing those that have been completed. Major studies in 1969 will focus on determining the costs, benefits, and effectiveness of major public welfare and related programs. Interest will be centered on the evaluation of ongoing programs as well as the collection of essential information for future program development. Among the programs and areas of concern to be covered are: alternative forms of day care, particularly family-type care with built-in child development provisions; increasing the potential employability of AFDC mothers; use of subprofessionals and volunteer staff; and an evaluation of family planning services.

Other studies will focus on evaluation of employment and training, histories of a national sample of Department of Labor referrals (AFDC), determining the effectiveness of employment incentives—as used by various welfare departments—and the provision of social services to encourage employment. There will be an increased emphasis on studies to determine the relative cost and merits of alternative approaches to providing necessary services for the aged, and on an assessment of public welfare agency programs for the prevention and reduction of births out of wedlock in the AFDC caseload. Considerable emphasis will also be given to studies of various approaches—particularly neighborhood service centers—for delivery of social services.

Plans also call for the development of increasingly analytical reports on the utilization of medical care for adult welfare recipients and the medically indigent. Studies relating to children and youth will include a national sample survey to secure demographic and social data, an evaluation of federally aided State and local programs providing family planning services, a study of county trends in infant mortality, and the development of procedures for classifying small areas in regard to level of living. Reporting statistics covering juvenile courts are to be extended and amplified.

Economic opportunity.—This area includes basic research and statistics on poverty and evaluation of antipoverty programs. An increase of \$1.6 million is requested for 1969 for the Office of Economic

Opportunity. These funds will be devoted primarily to expanded evaluation activity, particularly of the effectiveness of the manpower and community action programs. Work will continue in 1969 at about the same level as in 1968 on basic research concerning the nature, causes, prevention, and alleviation of poverty.

The 1969 budget recommends an increase of \$592,000 for the Economic Research Service, Department of Agriculture, to assemble, coordinate, and analyze data from primary and secondary sources that will serve as indicators of changes in the rural economy. Major kinds of information needed for this purpose on a current basis include changes in population, migration, employment, incomes, and public facilities. The information would be used to guide programs for development in rural areas and to appraise the need for new programs or policies.

PRICES AND PRICE INDEXES

The 1969 budget requests funds for a stepped-up program in three aspects of price data compiled by the Bureau of Labor Statistics. First, \$300,000 is included to extend to additional industries the series of wholesale price indexes presented on an industry sector basis consistent with input-output. Second, \$100,000 is requested to place the wholesale price index on a more realistic basis by collecting actual transaction prices for major commodities whose transaction prices deviated from those quoted or listed in wholesale markets. Finally, there is an additional \$120,000 to initiate work on obtaining price data for commodities in U.S. import and export trade.

The 1969 budget includes a proposal for additional research by the Statistical Reporting Service, Department of Agriculture, on the effect of shifts in the relation between producers and processors on prices received by farmers, and further development of the data transmission and processing system of the Service.

PRODUCTION AND DISTRIBUTION

An increase of \$325,000 is requested for the Bureau of the Census to undertake new activities in this area. The present monthly reporting of manufacturers' inventories would be expanded to include inventories held by manufacturers at their nonmanufacturing locations, such as central offices, warehouses, and sales branches, and would also contain a more complete defense-nondefense break in the sales, orders, and inventories data (\$150,000).

Additional funds requested would also expand the collection of statistics on service trades receipts to several important services not now covered. These include certain services (law firms, architectural and engineering service firms, and travel agencies) covered for the first time in the 1967 Census of Business, and, to the extent they are now under the social security system, other types such as medical, private educational, and accounting services (\$175,000).

There are persistent demands for still further improvements in the content, accuracy, and timeliness of statistics pertaining to the production, inventory, and marketing of agricultural commodities. In order to assure that the responsibility of the Federal Government for this information is met in the most efficient, economical way, the

Department of Agriculture, through its Statistical Reporting Service, will conduct a comprehensive review and appraisal of the crop and livestock estimates program of the Service, the contribution of other Federal data-gathering activities to that program, and the role of related State activities. The review, for which \$150,000 is requested, will be carried out with the close collaboration of the Bureau of the Budget.

An increase of \$1.1 million is proposed in 1969 for the statistical work of the Department of Transportation. These funds would be used to determine transportation information needs, exploration of problems of data collection, processing, and analysis, and for pilot projects in the use of data for program planning purposes.

CONSTRUCTION AND HOUSING STATISTICS

A total of \$525,000 is recommended for improvement of the construction value-in-place series produced by the Bureau of the Census. These improvements are in three segments of construction. The first involves placing residential construction upon an actual monthly progress reporting basis instead of the present reliance upon estimating from generalized construction patterns (\$250,000). In this way actual progress would be recorded rather than using an insensitive pattern which does not reflect unusual weather conditions or shortages in labor or materials.

Secondly, the present nonresidential sampling frame would be studied and assessed. Expansion in sample size would be instituted where necessary to reduce overall sampling error and to provide significant data for additional construction types (\$200,000).

Thirdly, State and local construction, representing a primary component of the public sector, would be placed on a monthly progress reporting basis (\$75,000). This would replace the present unsatisfactory system of quarterly surveys which delays monthly reports and depends upon interpolation for individual months during the quarter.

The budget also includes an increase for the statistical work of the Department of Housing and Urban Development. New surveys would be undertaken to determine the rates at which new rental units are absorbed by the market (\$150,000), to study the effect of new housing on the existing supply by collecting information on the successive units that change hands when a new unit is occupied (\$100,000), and to determine the size preferences among prospective occupants of new housing developments (\$50,000).

Funds are requested for a quarterly survey of residential mortgage lending by savings and loan associations, commercial and mutual savings banks, and insurance and mortgage companies (\$200,000). This would permit, for the first time, a comprehensive collection of data on the gross and net flows of mortgage funds and the volume of loan commitments.

A series of three studies dealing with the effects of taxes and tax policies would be instituted (\$350,000): the impact of property taxes on slum properties, the effect of tax incentives on urban renewal in those States that have granted tax concessions for this purpose, and the extent to which tax considerations influence builders' decisions to build multifamily residential structures.

NATIONAL INCOME AND BUSINESS FINANCIAL ACCOUNTS

Economic accounts.—With the additional \$370,000 requested for the Office of Business Economics for 1969, estimates of gross national product produced in each industry would be developed on a quarterly basis; the existing plant and equipment survey would be expanded to (1) include industries not now covered, and (2) to provide separate information on expenditures for plant and expenditures for equipment; and the OBE quarterly econometric model would be further developed to improve its ability to forecast economic activity as well as to test the economic impact of alternative policies. Also included are funds for rental of a large computer.

Financial statistics.—An addition of \$110,000 is provided for the Securities and Exchange Commission to increase the scope and detail of information on capital markets, including liquid assets held by nonfinancial institutions and private placements and retirements of corporate securities, and on operations of financial institutions in credit markets.

PERIODIC PROGRAMS

Preparation for 19th decennial censuses.—An increase of \$10 million is requested for preparatory work in connection with the 19th decennial censuses. Of this amount, \$7 million is for the Census of Population, Unemployment, and Housing, and \$3 million for the Census of Agriculture.

During 1969, work on the Census of Population, Unemployment, and Housing involves completion of the dress rehearsal program; updating the national residential mailing list; development of tabulation and processing specifications; further research in field methodology for hard-to-enumerate areas; completion of a major portion of the geographic preparatory work; preparation of primary computer programs; preparation of data collection materials; and development of selected address coding guides for the place-of-work inquiry.

The Census of Agriculture involves a complete count of the number of farms, the characteristics of farms and farm operations, uses of agricultural land, production and sales of farm products, farm credit and debt, and principal cash expenditures. During 1969, preparatory work includes developing specifications and basic operating plans, reviewing the content of report forms with concerned individuals and organizations in the light of problems encountered in the past, preparing mailing lists, and writing and testing electronic computer programs.

Economic censuses and Census of Governments.—The bulk of the data collected in these censuses, covering the year 1967, will be tabulated in 1969. The publication program will also be started. Expenditures during 1969 will be at a reduced level from 1968.

SPECIAL ANALYSIS M

FOREIGN CURRENCY AVAILABILITIES AND USES

Many agencies of the Government are engaged in activities throughout the world which involve payments in foreign currencies. From some of its activities, particularly the sale of surplus agricultural commodities on concessional terms, the Government acquires foreign currencies without spending dollars. This analysis presents summary data on these foreign currency availabilities and uses.

Most currencies accrue to the credit of the United States because of past or current international agreements that deal primarily with (1) sales of commodities (usually surplus agricultural commodities) to foreign purchasers for local currencies, or (2) loans of dollars or foreign currencies which may be repaid in the currency of the borrower. Currencies also become available in much smaller amounts under other kinds of international agreements and from the normal operations of the U.S. Government abroad. With respect to these sources, sales of commodities for foreign currency will be phased out over the next few years.

The use of a large part of the foreign currencies owned by the United States is committed by the terms of the international agreements under which they are received. Some must be used on a loan or grant basis for mutually beneficial purposes in the country; these are called "country-use" currencies. Currencies available for the purposes of U.S. agencies are called "U.S. use" currencies.

Management of U.S. use currencies.—The Federal Government has established procedures to ensure the maximum use of the foreign currencies which are available for U.S. purposes. Efficient use of these currencies is important not only as a matter of sound financial management but because of the need to improve the balance-of-payments position of the United States.

It is useful for both administrative and analytical purposes to divide U.S. use foreign currencies into two categories:

Excess currencies are the currencies of countries for which the Treasury Department determines (after reviewing the availabilities and prospective uses) that the supply is great enough to more than cover our requirements for the next 2 years. For 1968, the excess currency countries are: Burma, Ceylon, Congo (Kinshasa), Guinea, India, Israel, Pakistan, Poland, Tunisia, United Arab Republic (Egypt), and Yugoslavia. All but Congo (Kinshasa) are expected to remain excess currency countries in 1969.

To make effective use of excess foreign currencies, separate appropriations for "special foreign currency programs" have been provided for several years. These appropriations finance programs which may include projects of lower priority than those financed through regular appropriations. The use of these appropriations results in an expenditure being reported for the using agency and a receipt for the Commodity Credit Corporation or other fund which acquired the currency.

In addition, payments from regular appropriations may also be made in excess foreign currencies, and agencies are encouraged to substitute the use of such currencies for dollars.

Nonexcess currencies are those of all countries not designated as "excess." In many of these countries, our supply of currencies is far below our needs, and it is necessary to purchase currencies commercially to meet our requirements. In some of these countries, however, the supply of currencies available for U.S. programs is above our immediate needs, but not by a great enough amount for the country to be declared an excess currency country. Special efforts are made to use these "near-excess" currencies, rather than U.S. dollars, wherever possible. It is not appropriate, however, to seek additional uses for such currencies, and they are not available for use under the special appropriations. The "near-excess" countries currently are: Bolivia, Ghana, Indonesia, Morocco, and Sudan.

Total availabilities of foreign currencies owned by or in the custody of the United States are as follows:

Table M-1. CASH AVAILABILITY OF FOREIGN CURRENCIES

(In millions of dollar equivalents)

	1967 actual	1968 estimate	1969 estimate
Currencies owned by the United States:			
For U.S. uses:			
Excess currencies.....	1,534	1,638	1,779
Nonexcess currencies.....	377	529	430
Subtotal, for U.S. uses.....	1,911	2,167	2,209
For country uses.....	1,664	1,329	1,074
Amounts unfunded in Treasury accounts.....	-52	-78	-88
Total.....	3,523	3,418	3,195
Currencies held in trust.....	140	161	161

Need for foreign currencies.—As indicated in table M-2, the need for foreign currencies in U.S. operations often does not correspond to their availability on a country-by-country basis. Although the United States will have over \$2 billion available for U.S. programs, less than \$500 million will be in nonexcess currencies. We must, therefore, purchase over \$2.2 billion of currencies to meet our total requirements. (These figures are based on projections of future collections and requirements; foreign currency transactions are subject to more fluctuation and are, generally, less predictable than U.S. dollar transactions.) In nonexcess currency countries a strong effort is made in the negotiation of commodity sales agreements to obtain the maximum amount possible for U.S. uses. Despite this, in the normal course of its worldwide operations, the Government must purchase large amounts of many currencies while at the same time it is accumulating large inconvertible balances for others.

**Table M-2. FOREIGN CURRENCIES AVAILABLE TO MEET
U.S. REQUIREMENTS, 1969 (in millions of dollar equivalents)**

Country	Estimated supply for 1969	1969 estimated require- ments (expenditures)		Amounts available for use after 1969	Require- ments for commer- cial purchase in 1969
		Other than special programs	Special programs		
Excess currencies:					
Burma	15.0	1.2	0.6	13.2	
Ceylon	10.3	.7	1.9	7.7	
Guinea	4.1	3.0	.3	.8	
India	803.0	11.9	28.4	762.7	
Israel	46.4	8.5	16.1	21.8	
Pakistan	168.4	8.4	8.9	151.1	
Poland	464.8	3.9	6.6	454.3	
Tunisia	18.6	1.1	1.8	15.7	
United Arab Republic (Egypt)	166.7	1.4	4.8	160.5	
Yugoslavia	81.9	2.6	11.8	67.5	
Total, excess currencies	1,779.2	42.7	81.2	1,655.3	
Nonexcess currencies:					
Bolivia ¹	8.7	17.9			9.2
Canada	6.4	94.6			88.2
France	3.1	130.2	.1		127.2
Germany, Federal Republic of	8.6	894.6	.2	(²)	886.2
Ghana ¹	1.4	1.4		(²)	
Indonesia ¹	5.0	.3	.1	4.6	
Italy	1.9	74.6	.2		72.9
Japan	44.6	258.0	.1	22.0	235.5
Korea	12.4	64.7	(²)		52.3
Morocco ¹	16.8	10.3		6.5	
Philippines	6.3	84.9			78.6
Spain	14.7	41.5	.2		27.0
Sudan ¹	1.3	1.1		.2	
Thailand	8.5	126.7	(²)		118.2
United Kingdom	4.0	80.1	.6		76.7
Vietnam	90.4	368.0	(²)		277.6
Other countries	195.6	374.9	.7	4.9	184.9
Total, nonexcess currencies	429.7	2,623.8	2.2	38.2	2,234.5
Total	2,208.9	2,666.5	83.4	1,693.5	2,234.5

¹ Currently designated as "near-excess" currency countries, but this designation may not be effective in 1969.

² Less than \$50 thousand.

U.S. uses of foreign currencies.—Table M-3 summarizes transactions of U.S. use foreign currencies. Disbursing officers are required to use foreign currencies owned by the Government, if they are available, before purchasing such currencies commercially with U.S. dollars.

Table M-3. SUMMARY OF FOREIGN CURRENCY TRANSACTIONS, U.S. USES

(In millions of dollar equivalents)

	1967 actual	1968 estimate	1969 estimate
Cash balances brought forward:			
Excess currencies	1,221	1,387	1,528
Nonexcess currencies	61	43	34
Subtotal, cash balances brought forward	1,282	1,430	1,562
Collections:			
Public Law 480 sales	138	230	137
Foreign assistance programs (including special letters of credit) ..	110	122	110
Interest on public deposits	25	23	23
Other nonloan collections	52	60	52
Loan repayments (principal and interest):			
Public Law 480 loans	117	143	162
Foreign assistance loans (including Development Loan Fund)	178	159	163
Subtotal, collections	620	737	647
Net transfer to country use	9		
Total availabilities	1,911	2,167	2,209
Expenditures (deduct):			
Foreign currency expenditure authorizations	10	10	12
With dollar credits to—			
Foreign assistance programs (special letters of credit)	108	119	105
Miscellaneous receipts of the general fund	170	152	114
Commodity Credit Corporation, Agriculture	156	300	241
Other	16	24	44
Deposits for replacement currencies	*		
Subtotal, expenditures ¹	460	605	516
Adjustments due to changes in exchange rates	-21		
Cash balances carried forward	1,430	1,562	1,693

*Less than \$500 thousand.

¹ Excludes sales of country-use currencies, subject to later replacement, as follows: 1967, \$27 million; 1968, \$10 million; and 1969, \$2 million.

Recommendations for special foreign currency program appropriations 1969.—Most U.S. uses of foreign currencies are covered by unrestricted dollar appropriations. Table M-4 shows the separate appropriations for special foreign currency programs, which are limited to the use of excess foreign currencies.

Table M-4. SPECIAL FOREIGN CURRENCY PROGRAM APPROPRIATIONS—NEW OBLIGATIONAL AUTHORITY (in thousands of dollar equivalents)

	1967 enacted	1968 estimate	1969 estimate
Library of Congress: Collection and distribution of library materials.....	2,076	2,003	2,440
Department of Agriculture: Agricultural Research Service: Salaries and expenses.....	4,500	8,500	12,700
Department of Commerce:			
International activities: Salaries and expenses.....	200	200	200
Environmental Science Services Administration: Research and development.....	500	750	500
National Bureau of Standards: Research and technical services.....	500	500	500
Department of Defense: Special foreign currency program.....	7,348		12,800
Department of Health, Education, and Welfare:			
Office of Education: Educational research and training.....	1,000		4,000
Public Health Service: Scientific activities overseas.....	10,000	15,000	30,000
Social and Rehabilitation Service: Research and training.....	4,500	5,000	7,500
Department of the Interior: Bureau of Commercial Fisheries: Management and investigations of resources.....	500	100	100
Department of Labor: Bureau of International Labor Affairs: Special foreign currency program.....	75	75	360
Department of State:			
Administration of Foreign Affairs:			
Acquisition, operation, and maintenance of buildings abroad.....	6,250	5,025	3,050
Overseas schools program.....			700
Educational Exchange: English language teaching program in Poland.....			2,300
Smithsonian Institution: Museum programs and related research.....	2,316	2,316	6,000
United States Information Agency:			
Salaries and expenses.....	10,941	8,604	9,340
Special international exhibitions.....	350	387	428
Total.....	51,056	48,460	92,918

Foreign currency expenditure authorizations.—The 1968 Foreign Assistance and Related Agencies Appropriation Act authorized the expenditure of \$6 million in excess currencies for assistance to American schools and hospitals abroad. The 1969 budget recommends \$3.1 million for American schools and hospitals in Poland and the United Arab Republic (Egypt). In addition, excess currencies are made available under permanent authorizations for emergency relief assistance and for the purchase of goods and services in Afghanistan (using Pakistan rupees) and Nepal (using Indian rupees). Some unexpended balances of prior foreign currency expenditure authorizations remain for Defense family housing. Table M-5 summarizes all transactions under foreign currency authorizations for U.S. uses which do not require charges to dollar appropriations.

Table M-5. SUMMARY OF FOREIGN CURRENCY AUTHORIZATIONS FOR U.S. USES (in thousands of dollar equivalents)

	1967 actual	1968 estimate	1969 estimate
New authorizations to spend foreign currency receipts:			
Funds appropriated to the President:			
Emergency relief.....	3,407	1,000	1,000
Assistance to third countries.....	3,997	8,000	8,000
American schools and hospitals abroad.....	1,000	5,986	3,100
Department of State.....	731		
Total authorizations.....	9,135	14,986	12,100
Expenditures:			
Funds appropriated to the President:			
Emergency relief.....	2,629	1,374	1,241
Assistance to third countries.....	6,355	7,208	7,685
American schools and hospitals abroad.....		500	3,000
Department of Defense.....	407	490	500
Department of State.....	745		
Total expenditures.....	10,136	9,572	12,426

Country uses.—A far larger amount of foreign currency is used outside of the appropriations process, as summarized in table M-6. These consist of loans and grants in the host country for common defense and economic development.

Table M-6. SUMMARY OF FOREIGN CURRENCY TRANSACTIONS—COUNTRY USES (in millions of dollar equivalents)

	1967 actual	1968 estimate	1969 estimate
Balances brought forward.....	1,008	780	675
Collections:			
Public Law 480 sales.....	657	545	395
Foreign assistance program.....	8	4	4
Subtotal, collections.....	665	549	399
Net transfer to U.S. uses (deduct).....	9		
Total availabilities.....	1,664	1,329	1,074
Outlays (deduct):			
Public Law 480 country loans and grants.....	852	624	444
Public Law 480 loans to private enterprise.....	35	24	23
Other foreign assistance programs.....	8	6	5
Subtotal, outlays.....	895	654	472
Adjustments due to changes in exchange rates.....	11	*	
Balances carried forward.....	780	675	602

*Less than \$500 thousand.

Trust funds.—As a result of international agreements, the United States receives and spends foreign currencies for the benefit of the other country. These currencies are held in trust funds by the Treasury. Table M-7 summarizes foreign currency trust fund activity.

Table M-7. SUMMARY OF FOREIGN CURRENCY TRUST FUNDS

(In millions of dollar equivalents)

	1967 actual	1968 estimate	1969 estimate
Balances brought forward.....	33	47	56
New authorizations to spend foreign currency—permanent:			
Advances from foreign governments.....	107	114	105
Total availabilities.....	140	161	161
Expenditures (deduct):			
Advances from foreign governments.....	92	105	109
Adjustments due to changes in exchange rates.....	-1		
Balances carried forward.....	47	56	52

Loans.—As a result of various loan programs, the United States has outstanding loans of over \$5 billion equivalent repayable in foreign currency. Over \$3 billion of this is in excess currencies. The loan repayments and interest are available for U.S. uses.

Table M-8. BALANCES OF OUTSTANDING LOANS REPAYABLE IN FOREIGN CURRENCIES AS OF JUNE 30, 1967 (in millions of dollar equivalents)

Excess currency countries:		Nonexcess currency countries:	
Burma.....	37	Brazil.....	101
Ceylon.....	14	China (Taiwan).....	156
India.....	1,838	Greece.....	124
Israel.....	276	Japan.....	102
Pakistan.....	562	Morocco.....	209
Tunisia.....	67	Spain.....	220
United Arab Republic (Egypt).....	360	Turkey.....	387
Yugoslavia.....	291	Other.....	751
Total, excess currencies.....	3,445	Total, nonexcess currencies.....	2,050
		Total.....	5,495

INDEX

A

- Administrative budget:
 - Debt outstanding, relation of, to consolidated cash statement and unified budget, 10
 - Expenditures by agency, summary, 11
 - Explanation of, 5-6
 - Financing, relation of, to consolidated cash statement and unified budget, 9
 - Receipts, by source, summary, 11
 - Relation of, to unified budget and consolidated cash statement, 7
 - Results under, compared with consolidated cash statement, unified budget and flow of Government-administered funds, 13
- Agricultural resources, dollar expenditures to finance exports, 20
- Agriculture, Department of, research and development, 152
- Aid to State and local governments:
 - Administrative expenses as a percentage of Federal aid expenditures, 163
 - Analysis, 155-174
 - Authorizations in effect, by functional category, at specified dates, 164
 - Expenditures:
 - By agency, 170-174
 - In relation to total Federal expenditures and to State-local revenue, 161
 - Grants, by agency, 160
 - Payments in urban areas, by program, 165-167
 - Percentage distribution, by function, 1950-69, 157
 - Percentage distribution, direct spending for domestic program, by Federal, State, and local governments, 162
 - Regional distribution, fiscal year 1967, 167-168
 - Types of Federal aid, by function, 159
- Air pollution, 128-130
- Assets, monetary, definition of, 9
- Atmospheric sciences research and development, obligations of agencies by functional area, 140-141
- Atomic Energy Commission, research and development, 149-150

B

- Balances, public enterprise funds, 27-28
- Balances, trust funds, June 30, 1966-69, 30
- Borrowing, definition of, 10
- Borrowing by Government enterprises, 31-32
- Budget authority, public enterprise funds, 27
- Budget concepts, comparison of old and new, 5-13
- Budget outlays:
 - Education, training, and related programs, 94
 - Investment, operating, and other, analysis, 34-54

- Budget outlays—Continued
 - Public enterprise funds, by agency, 24-25
 - Trust funds, 28, 29

C

- Cash, definition of, 9
- Census, 19th Decennial, 182
- Census, economic, 182
- Census of governments, 182
- Children, disadvantaged, education of, 104-105
- Commerce, Department of, research and development, 153-154
- Comparison of results, old and new budget concepts, 13
- Compensation, Federal personnel, 72-74
- Consolidated cash statement:
 - Debt outstanding, relation of, to administrative budget and unified budget, 10
 - Explanation of, 6
 - Financing, relation of, to administrative budget and unified budget, 9
 - Relation of, to unified budget and administrative budget, 7
 - Results under, compared with administrative budget, unified budget, and flow of Government-administered funds, 13
- Construction:
 - By cooperative and nonprofit groups, Federal outlays for, 86-87
 - Education facilities, 102
 - Federal and federally financed, 77-93
 - Health facilities, 117-119
 - Research and development facilities, 138-139
 - Statistics, 181
- Credit programs, Federal:
 - Analysis, 55-69
 - Disbursements and repayments, by type of account, 59-62
 - New commitments, by type and agency or program, 57-58
 - Summary of legislation, 68-69

D

- Debt issuances, by Government enterprises, 31-32
- Debt outstanding, 10
- Defense, Department of—Military, research and development, 146-147
- Defense, national, public works, expenditures, net lending, LA and NOA, by major function and agency, 93
- Demographic statistics programs, 178-180
- Development, scientific, obligations and expenditures for, by agency, 138
- Domestic transfer payments, 1960-69, 18

E

- Economic activity, level of, 15
- Economic opportunity statistics, 179-180

Education and training programs:
 Aid to students, graduate and undergraduate,
 by agency and type of aid, 101
 Analysis, 94-114
 Expenditures and NOA:
 By department and program, 108-114
 By level or type, 98
 Disadvantaged children, 104-105
 Health manpower, 117-118
 Outlays by category, 94
 Education statistics, 179
 Employment, Federal civilian:
 Analysis, 70-76
 By geographical location, 72-73
 Compensation and benefits, 72-74
 In relation to population and other Govern-
 ment employment, 1942-68, 75-76
 Retirement, 18
 Summary, full-time permanent, as of June
 1966-68, 70-72
 Totals, 72
 Trends in workload and numbers, 74-75
 Environmental science, research and develop-
 ment, discussion, 141
 Expenditures:
 Administrative budget, by agency, summary,
 11
 Aid to State and local governments, by
 agency, 170-174
 Education, training, and related programs:
 By department and program, 108-114
 By level or type, 98
 Higher education facilities, 102
 Health and related programs:
 By category, 116
 By functional program and agency, 131-134
 National income accounts, Federal sector:
 Discussion, 21-23
 Percent of GNP, 18
 Relation of, unified budget to, 17-20
 Trends, 14-17
 Public works:
 1959-68, 77
 By agency and program, 78-80
 By major function and agency, 87-93
 Relation of, in administrative budget, con-
 solidated cash statement, and unified
 budget, 7
 Research and development, by agency, 1954-
 69, 154

F

Family planning services, 125-126
 Federal aid programs, *see under* Aid
 Financing, relation of new and old budget
 concepts, 9
 Flow of Government-administered funds, 12-13
 Foreign currencies:
 Availabilities and uses, analysis, 183-189
 Available to meet U.S. requirements, 185
 Balances outstanding, loans repayable in, 189
 Cash availability of, 1966-68, 184
 Special program appropriations—NOA, 187
 Summary of authorizations, U.S. uses, 188
 Summary of transactions, country uses, 188

Foreign currencies—Continued
 Summary of transactions, U.S. uses, 186
 Trust funds, summary, 189

G

Government-administered funds, purchases of
 U.S. securities, 33
 Government civilian employment, Federal,
 State and local, in relation to population,
 1942-68, 75-76
 Government enterprises, borrowing by, 31-32
 Grants, public works, by agency, 80-81
 Grants-in-aid, 1960-69, 18
 Grossing of proprietary receipts from the
 public, 8

H

Health, Education, and Welfare, Department
 of, research and development, 150-151
 Health and related programs:
 Air pollution, 128-130
 Analysis, 115-134
 Expenditures and net lending:
 By category, 116
 By functional program, 131-134
 By population and age group, 126
 Facilities construction, 117-119
 Family planning, 125-126
 Federally aided training and education, 115-
 118
 Hospital and medical services, provision of,
 121-128
 Organization and delivery of health services,
 120-121
 Prevention and control of health problems,
 128-130
 Research, expenditures for, 115-117, 143-144
 Statistics, 178
 Hospitals:
 Construction, 119
 Services, 122
 Housing statistics, 181

I

Interest rates and maturities, 64-66
 Interior, Department of the, research and de-
 velopment, 152
 Intragovernmental and interfund transactions,
 1958-69, totals, 8
 Investment, operating, and other budget out-
 lays, analysis, 34-54
 Investment in U.S. securities, Government-
 administered funds, 33

L

Labor statistics programs, 176
 Loan authority, education, training, and related
 programs, by level or type, 98
 Loan authority, public works, by major func-
 tion and agency, 87-93
 Loans, balances outstanding, repayable in
 foreign currency, 189
 Loans, direct and guaranteed, 62-63
 Loans, *see also* Credit programs

M

- Marine science and technology, program plan, by agency and functional area, 142-143
- Monetary assets, definition of, 9

N

- National Aeronautics and Space Administration, research and development, 147-148
- National defense, public works, 86
- National economic accounts, 182
- National income accounts, Federal sector:
 - Discussion, 14-23
 - Expenditures as a percent of GNP, 18
 - Receipts and expenditures, by category, 20-23
 - Relation of, to unified budget, 17-20
 - Trends and size of major components, 14-17
- National Science Foundation, research, 151-152
- Net lending:
 - Education, training, and related programs, higher education facilities, 102
 - Health and related programs, by functional program and agency, 131-134
 - Public works, by major function, agency or program, 80, 87-93
- Netting and grossing, national income accounts, Federal sector, 19
- New obligational authority:
 - Education, training, and related programs:
 - By department and program, 108-114
 - By level and type, 98
 - Public works:
 - By agency and program, 78-80
 - By major function and agency, 87-93
 - Special foreign currency programs, 187

P

- Participation certificates, 5
- Participation sales, Federal credit programs, discussion, 67
- Payments to the public, totals, 12
- Pollution, air and water, 128-130, 141
- Poor, education of, 104-105
- Population statistics, 178
- Poverty program statistics, 179-180
- President's Commission on Budget Concepts, 5
- Price indexes, 180
- Production and distribution statistics, 180
- Proprietary receipts, grossing, under new budget concept, 8
- Public enterprise funds:
 - Analysis, 24-33
 - Balances, 27-28
 - Budget authority, by agency, 27
 - Gross outlays and applicable receipts, by agency, table, 24-25
- Public works:
 - Analysis, 77-93
 - Civil, by major function and agency, 87-93
 - Construction by cooperative and nonprofit groups, outlays for, 86-87
 - Defense, by major function and agency, 86, 93

Public works—Continued

- Direct, estimated cost for continuing new work, 82
- Direct, expenditures and NOA, by agency and program, 78-80
- Expenditures and net lending, 1959-68, 77
- Grants and net lending, by agency and program, 80-81
- Reserve of authorized projects and programs, 84
- Water resources and related developments, outlays for, 85
- Purchases of U.S. securities by Government-administered funds, 33

R

Receipts:

- Administrative budget, by source, summary, 11
- Definition of, 10
- From the public, totals, 12
- National income accounts, Federal sector, 14-17, 20-21
- Public enterprise funds, by agency, 24-25
- Relation of, in administrative budget, consolidated cash statement, and unified budget, 7
- Trust funds, 28-29
- Repayments, major credit programs, 59-62
- Research and development:
 - Academic, 139-140
 - Analysis, 135-154
 - Atmospheric sciences, 140-141
 - Atomic Energy Commission, 149-150
 - Defense, Department of—Military, 146-147
 - Environmental quality, 141
 - Expenditures and obligations, by agency, 1954-69, 137, 154
 - Facilities for, by agency, 138-139
 - Health, expenditures for, by program, 115-117
 - Marine sciences and technology, 142-143
 - Medical and health-related, 115-117, 143-144
 - National Aeronautics and Space Administration, 147-148
 - Pollution, 141
 - Space programs, 144-145
 - Water resources, 145-146

S

- Securities, U.S., purchases of, by Government-administered funds, 33
- Seigniorage, 10
- Social security statistics, 178
- Social statistics programs, 178-180
- Space programs, expenditures and NOA, by agency, 144-145
- State and local governments, aid to, *see under* Aid
- Statistical programs:
 - Analysis, 175-182
 - Obligations for, by broad subject areas, 176
 - Obligations for, current and periodic, by agency, 177
- Student aid programs, 1956-67, 101

T

Taxes, changes in rates, 15
 Teacher training, elementary and secondary, 99
 Training, *see* Education and training programs
 Transfer payments, domestic 1960-69, 18
 Transportation, Department of, research and development, 153
 Trust funds:
 Analysis, 28-29
 Foreign currency, summary, 189
 Outlays by fund, 28-29
 Receipts, 28-29
 Revolving, transactions of, 29

U

Unified budget:
 Debt outstanding, relation of, to consolidated cash statement and administrative budget, 10
 Explanation of, 5
 Financing, relation of, to the administrative budget and the consolidated cash statement, 9

Unified budget—Continued

 Relation of, to administrative budget and consolidated cash statement, 7
 Relation of, to national income accounts, Federal sector, 17-20
 Results under, compared with administrative budget, consolidated cash statement, and flow of Government-administered funds, 13
 Timing under new and old budget concepts, 8
 Urban areas, Federal-aid payments in, by program, 165-167

V

Vocational education, 103

W

Wage statistics, 176
 Water research, obligations, by agencies, 145-146
 Water resources and related developments, expenditures for, 85
 Welfare statistics, 179



