

# SPECIAL ANALYSES BUDGET OF THE UNITED STATES GOVERNMENT FISCAL YEAR 1977



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## THE BUDGET DOCUMENTS

Data and analyses relating to the budget for 1977 are published in four documents:

*The Budget of the United States Government, 1977* contains the information that most users of the budget would normally need, including the Budget Message of the President. The *Budget* presents an overview of the President's budget proposals and includes explanations of spending programs and estimated receipts. This document also contains a description of the budget system and various summary tables on the budget as a whole. (Price \$3.45.)

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### 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.

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PART 1

ECONOMIC AND FINANCIAL  
ANALYSES

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## INTRODUCTION

*Part 1* provides analyses and tabulations which cover Government finances and operations as a whole, and reflect the ways in which Government finances affect the economy. These special analyses encompass those designated A through G.

*Special Analysis A* presents the Federal budget estimates in terms of the national income accounts. It is designed to explain the relationships of the unified budget of the Federal Government to the national income accounts, which constitute the most widely used measure of aggregate economic activity in the United States. It also includes an explanation of how the new "benchmark" revisions affect the Federal sector receipts and expenditures.

*Special Analysis B* classifies budget information by the groups of funds (Federal and trust) which comprise the budget.

*Special Analysis C* describes current developments and trends in Federal borrowing and debt, and the investment by Government accounts in Federal securities. It summarizes Federal and federally assisted borrowing from the public in order to display some measure of the Government's impact on the credit markets.

*Special Analysis D* classifies budget outlays in terms of the duration and nature of the benefits derived, distinguishing those of an investment or development type from those which primarily yield current benefits. Apart from this analysis the U.S. budget, unlike those of some other governments, includes outlays which are for "capital" or investment-type activities in the same accounts in which "current" activities and costs are shown.

*Special Analysis E* covers Federal credit programs—direct loans, guarantees of private loans, and loans of federally sponsored credit agencies. It includes estimates of loan subsidy costs, and provides an aggregate measure of total credit supplied to the public under Federal auspices.

*Special Analysis F* provides an enumeration of revenue losses due to provisions of the Federal income tax laws that allow a special exclusion, exemption, or deduction from gross income or that provide a special credit, preferential rate of tax, or deferral of tax liability.

*Special Analysis G* reflects obligation levels for the principal programs of the Federal Government for collecting current statistics, and current spending for periodic statistics obtained in census-type surveys usually conducted every 5 or 10 years. Also included are staffing levels for major statistical agencies.

*Special Analysis H* deals with the levels of civilian employment in the executive branch. It also contains figures on total Federal personnel costs (including military personnel).

## SPECIAL ANALYSIS A

### FEDERAL TRANSACTIONS IN THE NATIONAL INCOME ACCOUNTS

The budget is designed to serve several purposes:

- It is an *economic document* that reflects the taxing and spending policies of the Government for promoting economic growth, high employment, relative price stability, and a strong balance-of-payments position.
- It proposes an *allocation of resources* between the private and public sectors and within the public sector. Through its impact on consumption and investment decisions and the distribution of income it also affects allocation decisions within the private sector.
- It sets forth the *President's request to Congress* for appropriation action on existing or new programs and for 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 satisfy all these purposes fully. The budget document and related Treasury reports provide complete, detailed information on the finances of the Federal Government. For study of aggregate economic activity, however, the national income accounts (NIA) of the United States provide the most useful measures.

This special analysis shows the Federal budget as measured in the national income accounts. The analysis is divided into four major sections. The first shows the size, composition, and trends in Federal sector receipts and expenditures. Additional details will be published in the February 1976 issue of the Department of Commerce publication, *Survey of Current Business*. The second section shows quarterly estimates of Federal sector receipts and expenditures seasonally adjusted at annual rates. The third section explains how the recent "benchmark" revisions in the gross national product (GNP) and related accounts affect the Federal sector. The final section of this analysis explains the major differences between the budget and the NIA concepts. A discussion of fiscal policy can be found in the *Economic Report of the President*.

The *Survey of Current Business* data are almost always in terms of calendar years. In contrast, in this special analysis and all budget documents, all references to a year refer to a fiscal year unless specifically labeled to the contrary.

### FEDERAL SECTOR RECEIPTS AND EXPENDITURES

Table A-1 shows Federal sector NIA receipts, expenditures, and deficits for 1975-77, including those for the transition quarter (TQ).<sup>1</sup>

<sup>1</sup> The transition quarter is the quarter from July 1-September 30, 1976. Starting in calendar year 1976 the Federal fiscal year will convert from a July 1-June 30 basis to an October 1-September 30 basis. This 3-month period is required to make the conversion to a new fiscal year and is being maintained as a separate accounting period.

Table A-1. FEDERAL RECEIPTS AND EXPENDITURES IN THE NATIONAL INCOME ACCOUNTS (in billions of dollars)

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>RECEIPTS</b>				
Personal tax and nontax receipts.....	126.4	136.4	41.5	160.4
Corporate profits tax accruals.....	40.6	47.5	13.3	58.2
Indirect business tax and nontax accruals.....	22.4	24.0	5.8	24.3
Contributions for social insurance.....	92.0	99.5	25.9	121.8
<b>Total receipts.....</b>	<b>281.5</b>	<b>307.4</b>	<b>86.5</b>	<b>364.7</b>
<b>EXPENDITURES</b>				
Purchases of goods and services.....	117.6	130.0	33.1	139.4
Defense.....	(80.3)	(86.7)	(21.6)	(92.8)
Nondefense.....	(37.3)	(43.3)	(11.5)	(46.6)
Transfer payments.....	134.8	158.7	40.1	168.2
Domestic ('to persons').....	(131.7)	(155.1)	(39.3)	(164.4)
Foreign.....	(3.1)	(3.6)	(.8)	(3.8)
Grants-in-aid to State and local governments.....	48.3	57.8	15.0	59.3
Net interest paid.....	22.0	26.0	7.3	32.0
Subsidies less current surplus of Government enterprises.....	5.7	6.2	1.7	5.6
Wage disbursements less accruals.....	.4	-----	-----	-----
<b>Total expenditures.....</b>	<b>328.7</b>	<b>378.7</b>	<b>97.2</b>	<b>404.5</b>
<b>Deficit (-).....</b>	<b>-47.2</b>	<b>-71.3</b>	<b>-10.7</b>	<b>-39.8</b>

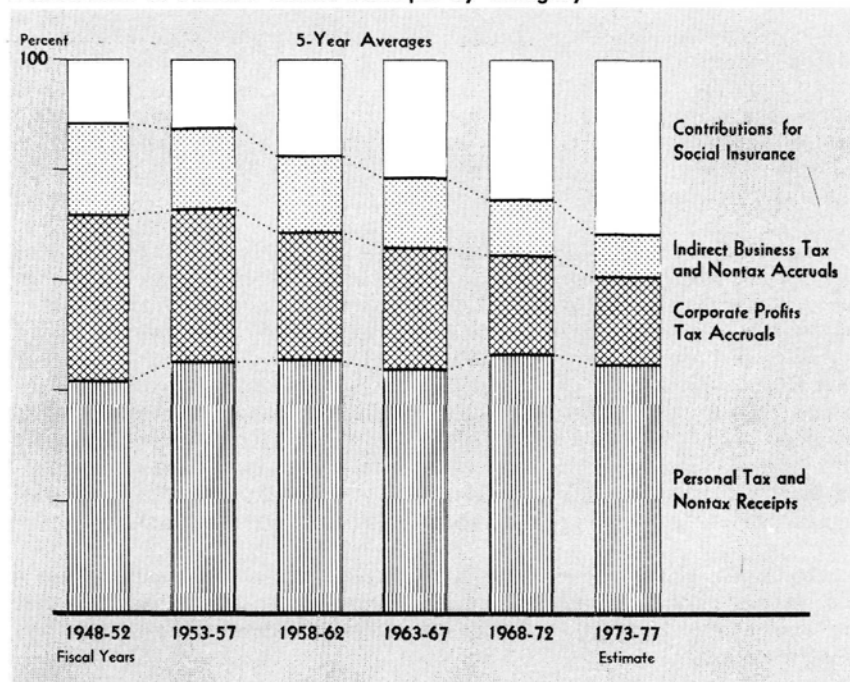
**Trends in Federal sector receipts.**—Table A-1 divides receipts into four major categories, which are also illustrated in the chart on the distribution of Federal sector receipts by category.

**Personal tax and nontax receipts.**—The largest receipt category—personal tax and nontax receipts—is composed primarily of individual income taxes but also includes estate and gift taxes and some miscellaneous receipts. Increases in income—because of both real growth and inflation—automatically increase these receipts. Since personal income taxes are progressive, these receipts normally grow at a faster rate than personal income. However, tax reductions have been enacted periodically over the past three decades that have offset most of the increase in effective tax rates resulting from the progressive tax structure. This is illustrated in table A-2, which shows Federal sector receipts at 10-year intervals as a percent of GNP.

Table A-2. FEDERAL SECTOR RECEIPTS AS A PERCENT OF GNP

Description	1947 actual	1957 actual	1967 actual	1977 estimate
Personal tax and nontax receipts.....	8.4	8.5	8.3	8.7
Corporate profits tax accruals.....	4.8	4.8	3.9	3.2
Indirect business tax and nontax accruals.....	3.5	2.7	2.0	1.3
Contributions for social insurance.....	2.5	2.7	4.6	6.6
<b>Total receipts.....</b>	<b>19.2</b>	<b>18.7</b>	<b>18.9</b>	<b>19.9</b>

## Distribution of Federal Sector Receipts by Category



*Corporate profits tax accruals.*—These tax accruals are volatile because corporate profits are among the most volatile components of national income. The NIA corporate profits taxes generally differ from the corresponding budget category primarily because: (1) The NIA show the deposit of earnings by the Federal Reserve System as corporate profit taxes while the budget treats them as miscellaneous receipts; and (2) the NIA record corporate profits taxes when the profits are earned (that is, accrued), while the unified budget records the cash receipts.

Estimates of corporate profits tax accruals are normally subject to greater margins of error than any other category of receipts. The NIA estimate is derived from estimates of corporate profits before tax and effective tax rates. These estimates are subject to significant revisions based on later data. As is shown in table A-9, statistical revisions have reduced the estimate of corporate profits tax accruals for 1974 by \$2.0 billion from the estimate of a year ago, even though both estimates were for a period that had ended.

The secular decline in corporate profits tax receipts relative to GNP and to total receipts (as shown in the chart above) results mainly from three factors: (1) a long-term decline in corporate profits relative to GNP; (2) a narrowing of the corporate profits tax base resulting from changes in the definition of corporate profits for tax purposes (largely increases in permissible depreciation allowances); and (3) the nearly constant nominal tax rate on taxable corporate profits.

*Indirect business tax and nontax accruals.*—These receipts are composed of excise taxes, customs duties, rents, and royalties. Over time, this category has become a much less important part of total Federal sector receipts, partly because these taxes normally do not rise in proportion to the increase in the economy and partly because some of the applicable taxes, such as the automobile and telephone excise taxes have been reduced or repealed. The import fees on crude oil and petroleum products, most of which have been eliminated, are classified as an indirect business tax.

*Contributions for social insurance.*—This group of receipts constitutes the second largest category of Federal sector receipts. The rapid rise in these receipts since World War II has been caused by the growth in the labor force and in wage rates, the expanded coverage of existing social insurance programs, the enactment of new ones, and the higher taxable wage base and contribution rates needed to finance liberalization of benefits. As a result of the rapid rise in social insurance taxes (mainly social security) and the passage of legislation reducing or eliminating individual income taxes for many low- and moderate-income individuals and families, millions of Americans now pay significantly higher social insurance taxes than income taxes.

*Major tax changes.*—Federal sector receipts in the budget reflect the impact of tax changes scheduled under current law and proposed tax legislation. The major changes in taxes reflected in the budget are the following:

- The recently enacted Revenue Adjustment Act of 1975 extended through the first half of calendar 1976 the withholding rates in effect for the last 8 months of calendar year 1975. Had the provision of the temporary tax reductions previously in effect been permitted to expire, personal taxes would have increased about \$12 billion and corporate taxes by about \$2 billion (seasonally adjusted annual rates) for January–June 1976.
- Proposed permanent individual and corporation income tax cuts effective July 1, 1976. These reductions will reduce personal taxes by about \$22 billion and corporate profits tax accruals by about \$3½ billion in 1977.
- Elimination of the \$2 import fee on crude oil, effective December 20, 1975, as a result of the recently enacted energy bill. This reduces indirect business taxes about \$3 billion (at annual rates) in comparison to the last half of calendar year 1975.
- Increases, under current law, in the social security tax base from \$14,100 in calendar year 1975 to \$15,300 and \$16,500, respectively, in the subsequent 2 years. Each of these base increases raises contributions for social insurance by about \$2 billion at annual rates. In addition, legislation is proposed to increase the combined employer-employee social security tax rate from 11.7% to 12.3% effective January 1, 1977. This rate increase will increase receipts \$3½ billion in 1977.
- Proposed increases in the unemployment insurance tax rate and base starting January 1, 1977, which would increase contributions for social insurance by \$2 billion (about \$3 billion at annual rates) in 1977.

Part 4 of the budget discusses tax changes and proposed legislation (on a unified budget basis) in greater detail.

**Trends in Federal sector expenditures.**—Federal sector expenditures are also divided into several major groupings. The primary division is between purchases of goods and services (which are divided between defense and nondefense purchases) and all other transactions. Purchases are that portion of the Nation's output that is bought directly by the Federal Government and therefore included in GNP. The other expenditure categories consist primarily of payments to individuals and grants to other levels of government. These groups, in turn, can use the income to finance their own purchases of goods and services, to save, and—in the case of State and local governments—to hold down taxes or make transfers to individuals.

A major shift in the composition of Federal sector expenditures has been underway for years. As the chart on expenditures shows, defense purchases of goods and services have been a declining share of Federal spending ever since the Korean War. There has been a corresponding rise in other components, especially grants-in-aid and domestic transfer payments. While this shift has been underway for two decades, it has accelerated in recent years. In 1975, defense purchases as a percentage of Federal sector expenditures were at the lowest level since the start of World War II.

**Distribution of Federal Sector Expenditures by Category**

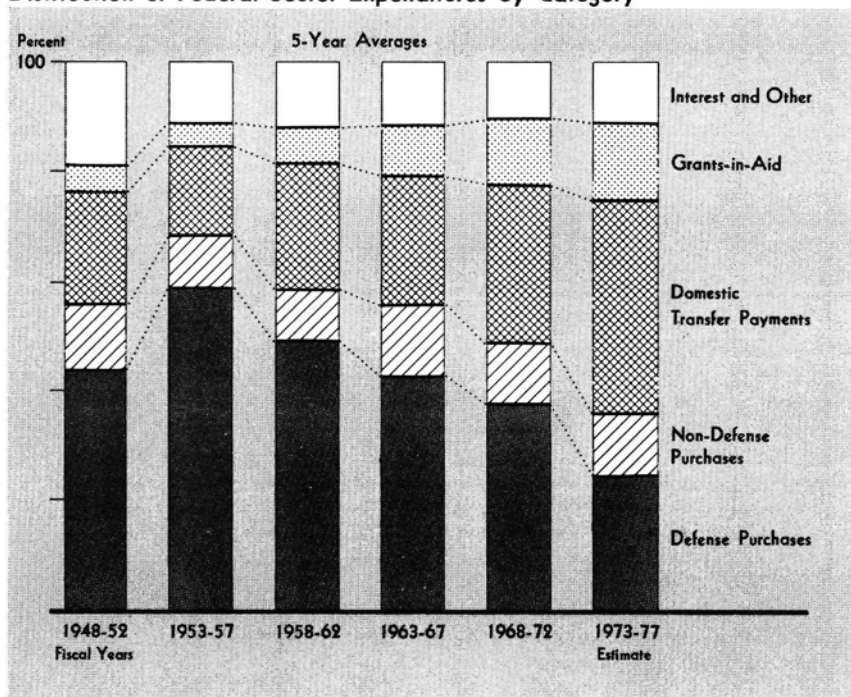




Table A-3 shows Federal sector expenditures by category as a percent of GNP at 10-year intervals.

Table A-3. FEDERAL SECTOR EXPENDITURES AS A PERCENT OF GNP

Description	1947 actual	1957 actual	1967 actual	1977 estimate
Defense purchases.....	4.3	9.8	8.7	5.1
Nondefense purchases.....	1.7	1.3	2.5	2.5
Domestic transfer payments.....	3.7	3.3	4.8	8.9
Foreign transfer payments.....	.8	.4	.3	.2
Grants-in-aid to State and local governments.....	.7	.9	1.9	3.2
Net interest paid.....	1.8	1.2	1.2	1.7
Subsidies less current surplus of Government enterprises.....	.3	.6	.7	.3
<b>Total expenditures.....</b>	<b>13.3</b>	<b>17.5</b>	<b>20.0</b>	<b>22.0</b>

Defense purchases and foreign transfer payments are largely devoted to the conduct of our national defense and foreign affairs.<sup>1</sup> In 1947 defense purchases—reduced by receipts from large sales of World War II materials—were only 4.3% of GNP while foreign transfer payments were 0.8% of GNP. The total of these—5.1%—roughly reflects the cost of the conduct of external affairs. In 1957—after the Korean war defense buildup—they totaled 10.2% of GNP, and by 1977 they will be back down to about 5.3% of GNP.

In contrast, spending on nondefense purchases, domestic transfer payments, and grants-in-aid has risen dramatically. In 1947 this spending was equal to 6.1% of GNP; in 1977 it is estimated to equal 14.7% of GNP.

*Defense purchases of goods and services.*—With the implementation of the definitional changes in the NIA, defense purchases now consist of all purchases of goods and services under programs included in the national defense function in the budget document. Almost all defense purchases are made by the Department of Defense—Military, but this category also includes defense purchases by the Energy Research and Development Administration (ERDA) and some other accounts.

The 1977 budget calls for an increase in defense purchases of \$6.1 billion in 1977 over 1976. A large part of this increase offsets the impact of inflation; but the budget plan calls for a reversal in the pattern of reducing defense spending in real terms.

While defense purchases are not estimated in constant prices, the budget includes constant price estimates of outlays in the national defense function. There is sufficient similarity between this category and defense purchases in the NIA that these figures give a rough approximation of the same transactions. The unified budget estimates of national defense outlays in constant prices are as follows (in billions of 1969 dollars):

1962.....	64.3
1967.....	75.6
1972.....	62.8
1976 estimate.....	53.7
1977 estimate.....	54.2

<sup>1</sup> Although in recent years a significant portion of foreign transfers arises from payments under general domestic social programs—for example, payments to social security retirees living abroad.

*Nondefense purchases of goods and services.*—This category covers the goods and services purchased by Federal nondefense agencies. These include such programs as operation of national forest, park and recreation areas; space exploration; promotion of commerce; acquisition and disposal of agricultural commodities; construction of flood control and navigation projects; operation of the Federal airway system; a wide variety of medical and other scientific research; the capital outlay of Government enterprises; Federal law enforcement; and operation of veterans hospitals. Table A-4 shows the composition of this spending by agency for the years 1974 through 1977.

Table A-4. NONDEFENSE PURCHASES OF GOODS AND SERVICES BY AGENCY (in billions of dollars)

	1974 actual	1975 actual	1976 estimate	1977 estimate
Department of Agriculture:				
Commodity Credit Corporation (CCC) .....	-2.2	0.1	—*	0.5
Other .....	1.9	2.3	2.5	2.3
Department of Commerce .....	.7	.8	1.0	1.1
Department of Defense—Civil .....	1.7	2.0	2.2	2.2
Department of Health, Education, and Welfare .....	4.5	5.4	6.0	5.7
Department of Housing and Urban Development .....	.9	.9	1.0	1.1
Department of the Interior .....	1.7	2.0	2.3	2.3
Department of Justice .....	1.1	1.3	1.5	1.5
Department of Labor .....	.7	1.2	1.7	1.4
Department of State .....	.7	.7	1.1	1.0
Department of Transportation .....	2.8	2.9	3.3	3.5
Department of the Treasury .....	2.0	2.6	2.8	2.7
Energy Research and Development Administration .....	.8	1.3	2.1	3.1
Environmental Protection Agency .....	.4	.5	.6	.5
General Services Administration .....	1.0	.4	.3	.3
National Aeronautics and Space Administration .....	3.2	3.2	3.4	3.6
Postal Service <sup>1</sup> .....	.7	.8	.9	.9
Veterans Administration .....	3.4	4.0	4.6	5.0
All other <sup>2</sup> .....	4.5	4.9	6.0	7.9
<b>Total</b> .....	<b>30.5</b>	<b>37.3</b>	<b>43.3</b>	<b>46.6</b>

\*Less than \$50 million.

<sup>1</sup> Not included in budget outlays.

<sup>2</sup> Includes allowances for civilian agency pay raises and contingencies.

Note.—Excludes the transition quarter.

Generally, nondefense purchases consist mainly of the cost of operating the various nondefense agencies. In the case of Government enterprises (including the CCC and the Postal Service), however, the purchases figures represent net capital formation.

*Domestic transfer payments.*—This is now the largest category of Federal sector expenditures. Spending for domestic transfers has expanded rapidly in recent years, mainly because of more beneficiaries and higher benefit payments under the social insurance programs. Table A-3 shows the growth in domestic transfer payments as a percent of GNP at 10 year intervals, and the chart on the distribution of Federal sector expenditures by category shows this growth trend over time relative to total Federal sector expenditures. Table A-5 provides data on the composition of domestic transfer payments by major program and by functional category. As can readily be seen,

Table A-5. FUNCTIONAL COMPOSITION OF DOMESTIC TRANSFER PAYMENTS (in billions of dollars)

Description	Actual										Estimate	
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>HUMAN RESOURCES PROGRAMS</b>												
Income security:												
Social security (OASDI).....	19.5	20.5	22.5	25.8	28.6	34.0	38.0	46.6	53.2	61.5	70.3	80.1
Railroad retirement.....	1.2	1.2	1.4	1.5	1.6	1.9	2.1	2.4	2.6	3.0	3.5	3.7
Civil service retirement.....	1.7	1.9	2.1	2.4	2.7	3.2	3.7	4.5	5.6	7.0	8.3	9.9
Unemployment benefits.....	2.1	2.1	2.2	2.2	3.0	5.6	6.5	4.8	5.5	12.6	18.1	15.6
Benefits for coal miners.....					*	.3	.4	.9	1.0	.9	1.0	.9
Supplemental security income.....									1.9	4.3	4.7	5.4
Food stamps.....	.1	.1	.2	.2	.5	1.5	1.8	2.1	2.7	3.5	4.6	4.1
Special payments, Treasury <sup>1</sup> .....										1.7	1.3	.6
Other.....	.1	.1	.2	.2	.2	.3	.3	.4	.4	.5	.7	.7
Total.....	24.6	26.0	28.5	32.3	36.7	46.7	52.8	61.7	72.8	95.1	112.5	120.8
Health:												
Medicare.....		3.0	5.0	6.2	6.7	7.5	8.3	9.0	10.9	14.1	16.5	18.7
Other.....	.3	.3	.3	.3	.4	.4	.4	.4	.4	.5	.6	.6
Total.....	.3	3.3	5.4	6.6	7.2	7.9	8.8	9.4	11.3	14.6	17.1	19.3

Education, training, employment, and social services:												
Education.....	.2	.4	.7	.7	.9	.9	.9	1.0	1.0	1.4	1.6	1.5
Training and employment <sup>2</sup> .....	.2	.1	.1	.1	.2	.4	.6	.5	.5	1.1	1.2	1.0
<b>Total.....</b>	<b>.4</b>	<b>.6</b>	<b>.9</b>	<b>.9</b>	<b>1.0</b>	<b>1.3</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>2.5</b>	<b>2.8</b>	<b>2.5</b>
Veterans benefits and services.....	4.7	5.3	5.6	6.2	6.9	8.0	8.8	9.7	10.4	12.7	14.7	12.9
<b>Total human resources programs.....</b>	<b>30.0</b>	<b>35.1</b>	<b>40.4</b>	<b>45.9</b>	<b>51.8</b>	<b>64.0</b>	<b>71.9</b>	<b>82.4</b>	<b>96.0</b>	<b>124.9</b>	<b>147.1</b>	<b>155.4</b>
<b>ALL OTHER FUNCTIONS</b>												
National defense (military retired pay).....	1.6	1.8	2.1	2.4	2.8	3.3	3.8	4.3	5.1	6.2	7.2	8.3
All other functions (includes allowance for contingencies).....	.2	.2	.3	.3	.4	.4	.4	.4	.5	.5	.7	.8
<b>Total functions not included in human resources grouping.....</b>	<b>1.8</b>	<b>2.0</b>	<b>2.3</b>	<b>2.7</b>	<b>3.2</b>	<b>3.7</b>	<b>4.2</b>	<b>4.7</b>	<b>5.6</b>	<b>6.7</b>	<b>7.9</b>	<b>9.1</b>
<b>Total domestic transfer payments.....</b>	<b>31.8</b>	<b>37.2</b>	<b>42.7</b>	<b>48.7</b>	<b>55.0</b>	<b>67.7</b>	<b>76.1</b>	<b>87.1</b>	<b>101.7</b>	<b>131.7</b>	<b>155.1</b>	<b>164.4</b>

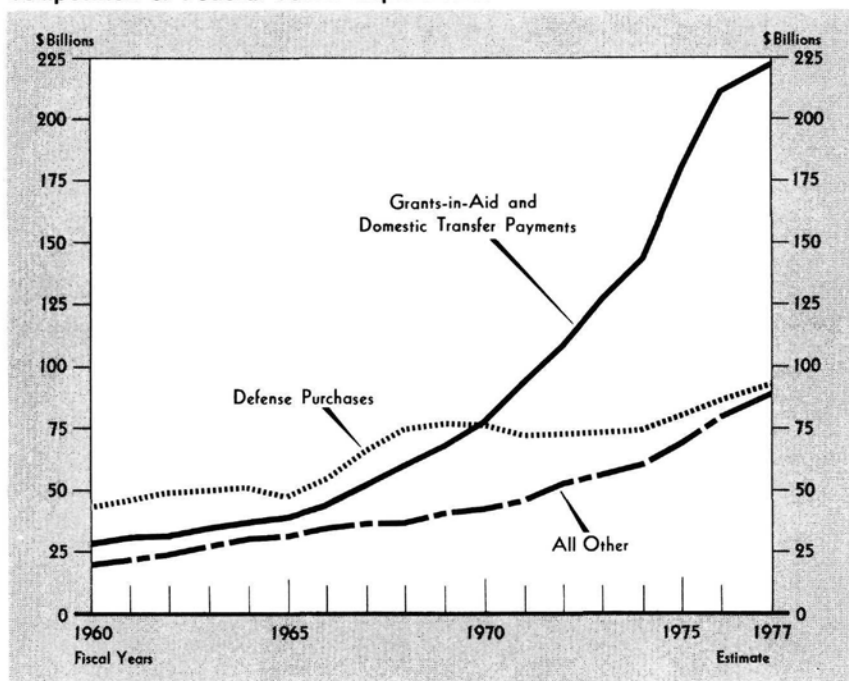
\*Less than \$50 million.

<sup>1</sup> Includes the \$50 tax rebate and the earned income credit to the extent that tax credits exceed tax liabilities otherwise owed.

<sup>2</sup> Includes a relatively small amount classified as social services.

Note.—Excludes the transition quarter. Data on the transition quarter are shown in table A-8.

## Composition of Federal Sector Expenditures



spending on human resources programs—especially income security programs—dominates domestic transfer payments. This spending is expected to continue to rise in 1977, but at a much slower rate than in most recent years. There is extensive discussion of program trends (on a unified budget basis) in Part 5 of the budget and elsewhere in the budget documents.

*Grants-in-aid.*—These expenditures comprise programs designed to help State and local governments provide general public services or to finance programs for the needy. There is a substantial degree of substitutability between grants-in-aid and domestic transfer payments and—to a lesser degree—nondefense purchases. For example, low-income veterans could be eligible for free medical care under medicaid (grants), in a veterans hospital (nondefense purchases), or, perhaps, medicare (transfer payments). The supplemental security income transfer payments are a substitute for the preexisting program of grants to States for public assistance for the elderly and handicapped. In addition, there is significant substitutability between different grant programs; for example, the President has proposed to replace medicaid and several other health programs by a block grant starting in 1977. Hence, in some cases a more accurate picture of Federal efforts to meet domestic needs through income transfers is obtained by treating grants and domestic transfer payments together rather than looking at them separately.

Table A-6. FUNCTIONAL COMPOSITION OF FEDERAL GRANTS-IN-AID (in billions of dollars)

Description	Actual										Estimate	
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>HUMAN RESOURCES PROGRAMS</b>												
Income security:												
Public assistance cash benefits.....	2.8	2.7	3.2	3.6	4.1	5.5	6.6	5.9	5.4	5.1	5.9	5.9
Child nutrition and related programs.....	.2	.2	.2	.3	.4	.6	.9	1.1	1.2	1.7	2.4	2.4
Administration of unemployment benefits.....	.2	.2	.2	.3	.3	.4	.4	.5	.5	.6	.9	.9
Other.....			.1	.1	.1	.1	.1	.1	.2	.3	.3	.3
Total.....	3.2	3.2	3.7	4.2	4.9	6.6	7.9	7.6	7.3	7.6	9.6	9.6
Health:												
Medicaid/General health financing assistance.....	.8	1.2	1.8	2.3	2.7	3.4	4.6	4.6	5.8	6.8	8.1	9.0
Other (includes research, construction, services, and medical training).....	.5	.7	.9	.8	1.2	1.1	1.4	1.6	1.9	2.3	2.2	1.7
Total.....	1.3	1.9	2.7	3.1	3.9	4.5	6.0	6.2	7.6	9.2	10.4	10.7
Education, training, employment, and social services:												
Education.....	1.9	2.8	3.3	3.2	3.6	3.9	4.1	4.1	3.9	4.7	4.4	4.2
Training and employment.....	.3	.3	.5	.5	.5	.8	1.6	1.9	1.9	2.7	5.1	3.5
Social services.....	.3	.6	.7	.9	1.1	1.4	2.6	2.3	2.2	3.2	3.5	3.6
Total.....	2.4	3.7	4.5	4.5	5.2	6.1	8.2	8.4	8.1	10.7	13.1	11.3
Veterans benefits and services.....	*	*	*	*	*	*	*	*	*	.1	.1	.1
Total human resources programs.....	6.9	8.8	10.9	11.9	14.0	17.2	22.2	22.3	23.0	27.6	33.2	31.8

See footnotes at end of table.

Table A-6. FUNCTIONAL COMPOSITION OF FEDERAL GRANTS-IN-AID (in billions of dollars)—Continued

Description	Actual										Estimate	
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>ALL OTHER FUNCTIONS</b>												
Natural resources, environment, and energy:												
Environment.....	.1	.1	.2	.2	.2	.5	.5	.7	1.6	2.0	2.5	4.0
Other.....	.1	.1	.1	.2	.2	.2	.3	.3	.3	.5	.5	.5
Total.....	.2	.2	.3	.4	.4	.8	.8	1.1	2.0	2.5	3.0	4.5
Community and regional development:												
Urban renewal.....	.3	.4	.5	.5	1.0	1.0	1.2	1.0	1.2	1.4	1.4	1.0
Other HUD grants.....	*	.1	.1	.2	.3	.5	.7	.9	.8	.8	1.3	1.8
Area and regional development.....	.1	.1	.2	.3	.3	.4	.4	.5	.5	.6	.8	.8
Other.....	.3	.3	.4	.3	.5	.4	.4	.5	.4	.5	.5	.4
Total.....	.7	.8	1.2	1.3	2.2	2.4	2.8	2.9	2.9	3.3	4.0	4.0
Commerce and transportation:												
Highways (including safety).....	3.9	4.0	4.2	4.2	4.4	4.6	4.7	4.7	4.5	4.7	6.4	6.8
Urban mass transit.....			*	.1	.1	.2	.3	.4	.5	.9	1.5	1.7
Other (mainly airport construction).....	.1	.1	.1	.1	.1	.1	.1	.2	.2	.3	.4	.4
Total.....	4.0	4.1	4.3	4.4	4.6	4.9	5.1	5.3	5.3	5.9	8.3	9.0

General science, space, and technology (mainly research grants)-----	.5	.5	.6	.6	.7	.6	.6	.6	.7	.8	.8	.8
Law enforcement and justice-----	*	*	*	*	*	.2	.3	.5	.7	.7	.8	.8
Revenue sharing and general purpose fiscal assistance:												
General revenue sharing-----								6.6	6.1	6.1	6.3	6.5
Other-----	.2	.2	.3	.2	.3	.3	.4	.4	.4	.5	.5	.4
Total-----	.2	.2	.3	.2	.3	.3	.4	7.0	6.5	6.7	6.8	7.0
All other functions (includes allowance for contingencies)-----	.2	.3	.3	.3	.4	.4	.4	.5	.5	.7	.8	1.2
Total functions not included in human resources grouping-----	5.8	6.0	6.9	7.3	8.6	9.6	10.4	18.1	18.6	20.7	24.6	27.4
Total grants-in-aid-----	12.7	14.8	17.8	19.2	22.6	26.8	32.6	40.4	41.6	48.3	57.8	59.3

\* Less than \$50 million.

Note.—Excludes the transition quarter. Data on the transition quarter are shown in table A-8.



The chart on the composition of Federal sector expenditures combines grants-in-aid and domestic transfer payments. Table A-6 shows detail on grants-in-aid by budget function and major activity, and table A-5 shows similar detail for domestic transfer payments.

Program detail on grant expenditures may be found in Special Analysis O of this document. While the definition of Federal aid used in that analysis differs somewhat from that used in the NIA, the programs largely overlap and Special Analysis O shows the relationship between the two data series.

*Foreign transfer payments.*—There are three major types of foreign transfer payments: expenditure of dollars to assist foreign economic development, grants to foreign governments of foreign currencies that are earned from the sale of surplus agricultural products, and payments under social security and similar programs to individuals living abroad. Although payments to individuals are gradually rising (roughly in proportion with the rise in GNP), total foreign transfer payments have been stable (and a declining proportion of GNP) for many years.

*Net interest paid.*—Net interest is highly dependent on the size of Federal debt, loans outstanding, and the interest rates on both borrowing and lending. The coverage in this category has expanded substantially due to the net impact of two of the definitional changes that are explained in detail below. These changes are the inclusion of interest paid to and received from foreigners as part of net interest paid and the imputation of interest payments by banks equal to the value of their services provided to the Government without charge.

*Subsidies less current surplus of Government enterprises.*—Subsidies less current surplus of Government enterprises consist of two elements: (a) Subsidy payments to resident businesses (including farms); and (b) the "current surplus" or "deficit" of Government enterprises. A subsidy is a monetary grant to a unit engaged in commercial activities. Examples are payments to farmers for land retirement, payments to air carriers, and the construction and operating differential subsidies paid to operators of U.S.-flag merchant ships.

"Government enterprise" is the term used in the NIA to designate certain business-type operations of the Government (usually appearing in the budget as public enterprise revolving funds). The operating costs of Government enterprises are, to a great extent, covered by the sale of goods and services to the public, as distinguished from tax receipts. The difference between the sales and the current operating expenses of a Government enterprise constitutes its surplus or deficit. The largest of these enterprises are the Commodity Credit Corporation, the Postal Service (which is no longer included in the budget), and the Tennessee Valley Authority.

Table A-7 shows the composition of this aggregation by major category.

Table A-7. SUBSIDIES LESS CURRENT SURPLUS OF GOVERNMENT ENTERPRISES (in billions of dollars)

Description	Actual										Estimate	
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>Subsidies:</b>												
Commodity Credit Corporation.....	2.0	3.1	2.6	3.0	3.1	3.6	3.0	4.0	2.4	0.6	0.3	0.4
Maritime.....	.3	.3	.3	.3	.3	.4	.4	.4	.4	.5	.6	.7
Housing (HUD).....	.2	.3	.3	.4	.5	.8	1.3	1.7	1.9	2.1	2.4	3.0
Railroad.....	-----	-----	-----	-----	-----	*	.1	.1	.1	.5	.7	.5
Small Business Administration.....	-----	-----	-----	-----	-----	-----	-----	.7	*	-----	-----	-----
Other (mainly Agriculture).....	.5	.6	.6	.5	.4	.4	.4	.4	.3	.5	.3	.2
Subtotal.....	<u>3.1</u>	<u>4.2</u>	<u>3.7</u>	<u>4.2</u>	<u>4.4</u>	<u>5.2</u>	<u>5.2</u>	<u>7.3</u>	<u>5.2</u>	<u>4.2</u>	<u>4.3</u>	<u>4.8</u>
<b>Enterprise surpluses (—) or deficits:</b>												
Commodity Credit Corporation.....	1.6	.7	.3	.5	.6	.6	.6	1.3	1.5	.3	.4	.3
Postal Service.....	.8	1.0	.9	.9	1.3	2.0	1.4	1.3	2.0	2.1	2.4	1.7
Tennessee Valley Authority.....	— .1	— .1	— .1	— .1	— .2	— .2	— .2	— .2	— .3	— .4	— .3	— .4
Federal Housing Administration.....	— .2	— .2	— .2	— .2	— .2	— .3	— .3	— .3	— .1	— .1	*	— .1
Federal Deposit Insurance Corporation.....	— .1	— .1	— .1	— .1	— .1	— .1	— .2	— .1	— .1	— .2	— .2	— .2
Federal Savings and Loan Insurance Corporation.....	— .1	— .1	— .1	— .1	— .1	— .1	— .1	— .1	— .2	— .2	— .2	— .2
All other <sup>1</sup> .....	— .2	— .3	— .3	— .3	— .2	— .3	— *	.1	— .2	— .1	— .2	— .2
Subtotal.....	<u>1.7</u>	<u>1.0</u>	<u>.4</u>	<u>.4</u>	<u>1.1</u>	<u>1.7</u>	<u>1.2</u>	<u>1.8</u>	<u>2.7</u>	<u>1.5</u>	<u>1.9</u>	<u>.9</u>
<b>Total subsidies less current surplus...</b>	<u>4.8</u>	<u>5.2</u>	<u>4.1</u>	<u>4.6</u>	<u>5.4</u>	<u>6.8</u>	<u>6.4</u>	<u>9.1</u>	<u>7.9</u>	<u>5.7</u>	<u>6.2</u>	<u>5.6</u>

\* Less than \$50 million.

<sup>1</sup> Includes impact of retroactive pay raises.

Note.—Excludes the transition quarter.

*Wage disbursements less accruals.*—This is an adjustment item occasionally made in the NIA to take account of the fact that wages and salaries are not always received at the same time as they are earned. The national income component of wages and salaries is counted in the GNP on an accrual basis; that is, when the income is earned rather than when it is received. Personal income, however, including wage and salary disbursements, is estimated on the basis of when the cash is received.

Ordinarily, wage and salary payments disbursed in one period but earned in the preceding period are approximately offset by payments disbursed in the next period but earned in the current period, thus making the adjustment between national income and personal income small or zero.

#### QUARTERLY ESTIMATES

Table A-8 presents quarterly NIA receipts and expenditures estimates (at seasonally adjusted annual rates) for the period covered by the budget.

The translation of the budget into national income accounts categories is necessarily inexact. The budget itself is a mixture of a forecast of what receipts and outlays are expected to be for some items under current law and a Presidential request for congressional approval of proposed amounts for others. For this special analysis each budget receipt and outlay is analyzed and translated into NIA categories. Imprecision and possible error are inevitable even when the translation is made using annual data. When these annual estimates are converted into quarterly distributions seasonally adjusted at annual rates, the imprecision is further increased. The data presented in table A-8 are the best available estimates of the quarterly NIA receipts and expenditures consistent with the 1977 budget, but should be used with clear recognition of their limitations.

Table A-8. FEDERAL RECEIPTS AND EXPENDITURES IN THE NATIONAL INCOME ACCOUNTS, QUARTERLY, 1975-77

(In billions of dollars; seasonally adjusted at annual rates)

Description	Actual						Estimated						
	July-Sept 1974	Oct-Dec 1974	Jan-Mar 1975	Apr-June 1975	July-Sept 1975	Oct-Dec 1975 <sup>1</sup>	Jan-Mar 1976	Apr-June 1976	July-Sept 1976	Oct-Dec 1976	Jan-Mar 1977	Apr-June 1977	July-Sept 1977
<b>RECEIPTS</b>													
Personal tax and nontax receipts.....	134.6	137.4	137.6	99.3	130.5	135.2	136.6	142.2	143.6	152.0	155.5	162.3	172.8
Corporate profits tax accruals.....	51.8	42.9	32.1	35.5	43.4	46.8	48.5	51.1	53.5	55.2	56.1	59.4	62.2
Indirect business tax and nontax accruals.....	22.1	21.7	22.3	23.5	25.5	25.4	22.6	22.7	23.1	23.9	24.1	24.4	24.9
Contributions for social insurance.....	90.8	91.1	91.7	91.9	93.9	96.4	103.4	106.3	108.7	111.4	123.7	126.3	129.0
<b>Total receipts.....</b>	<b>299.2</b>	<b>293.1</b>	<b>283.6</b>	<b>250.1</b>	<b>293.3</b>	<b>303.8</b>	<b>311.1</b>	<b>322.3</b>	<b>328.9</b>	<b>342.5</b>	<b>359.4</b>	<b>372.4</b>	<b>388.9</b>
<b>EXPENDITURES</b>													
Purchases of goods and services.....	113.6	118.2	119.4	119.2	124.2	129.8	131.4	134.5	133.5	137.1	139.0	140.3	141.1
Defense.....	(78.4)	(80.5)	(81.4)	(82.1)	(84.9)	(87.4)	(87.3)	(87.3)	(88.2)	(90.9)	(92.4)	(93.7)	(94.2)
Nondefense.....	(35.1)	(37.7)	(38.0)	(37.1)	(39.3)	(42.3)	(44.1)	(47.2)	(45.3)	(46.2)	(46.6)	(46.6)	(46.9)
Transfer payments.....	121.2	127.8	139.2	150.5	152.5	154.6	163.3	163.6	163.3	163.0	166.6	168.4	174.5
Domestic ("to persons").....	(118.0)	(124.8)	(136.2)	(147.3)	(149.5)	(151.5)	(159.7)	(159.6)	(159.5)	(159.2)	(162.8)	(164.6)	(170.7)
Foreign.....	(3.2)	(3.0)	(3.0)	(3.2)	(3.0)	(3.1)	(3.6)	(4.0)	(3.8)	(3.8)	(3.8)	(3.8)	(3.8)
Grants-in-aid to State and local governments.....	44.0	45.0	50.1	52.8	56.8	57.1	58.2	59.1	60.8	59.0	59.3	59.5	59.5
Net interest paid.....	21.4	22.0	22.4	22.6	23.4	25.7	26.9	28.3	29.0	30.0	31.2	32.7	34.2
Subsidies less current surplus Government enterprises.....	5.5	5.1	6.3	7.1	6.9	7.0	4.8	5.9	5.2	5.4	5.4	5.4	5.8
Wage disbursements less accruals.....	1.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>Total expenditures.....</b>	<b>307.2</b>	<b>318.6</b>	<b>337.4</b>	<b>352.3</b>	<b>363.8</b>	<b>374.2</b>	<b>384.6</b>	<b>391.4</b>	<b>391.8</b>	<b>394.5</b>	<b>401.5</b>	<b>406.3</b>	<b>415.1</b>
<b>Deficit (-).....</b>	<b>-8.0</b>	<b>-25.5</b>	<b>-53.7</b>	<b>-102.2</b>	<b>-70.5</b>	<b>-70.4</b>	<b>-73.5</b>	<b>-69.1</b>	<b>-62.9</b>	<b>-52.0</b>	<b>-42.1</b>	<b>-33.9</b>	<b>-26.2</b>

<sup>1</sup> Preliminary.

Note: Because of the methods normally used in seasonally adjusting NIA data, the average of seasonally adjusted data for the four quarters of a fiscal year may not be equal to the unadjusted fiscal year total.

## IMPACT OF THE "BENCHMARK" REVISIONS ON THE FEDERAL SECTOR NIA

The Department of Commerce has recently completed a major ("benchmark") revision of the gross national product (GNP) and subsidiary accounts. The data contained in this analysis are based on the revised series.

The "benchmark" revisions made by the Department of Commerce are of two kinds—"statistical" and "definitional."<sup>1</sup> The statistical changes are based on revised or new data—they are more accurate estimates. Statistical revisions are a normal—and necessary—part of the U.S. national economic accounting. The accounts are based almost entirely on data produced by other agencies for other purposes and adapted for national economic accounting. Since the timing, quality of data, and comprehensiveness of coverage are primarily determined by the producers of the raw data, there are significant gaps and lags in producing GNP and related estimates. Yet the utility of the GNP estimates is based largely on timeliness. To meet this need the Department of Commerce has adopted a regular cycle for producing and refining these data.

Even with a regular procedure for making corrections, some information may become available too late to be reasonably incorporated in the regular revision cycle—after 3 years estimates become "final" and are not further revised until a new "benchmark" is developed. Thus, when a comprehensive "benchmark" revision occurs (the previous one was in 1965) the Department of Commerce revises data many years back if needed. While the revised series contain some statistical revisions going back many years, those for years prior to 1972 are generally far smaller than the definitional revisions.

The definitional revisions are made because conditions change. In any comprehensive data system such as that underlying the GNP a great many judgmental decisions are made in classifying transactions. Over time some of these judgments are made obsolete by changes in the economy. These changes may be relatively minor at first but become significant problems at a later date. In the case of atomic energy activities (discussed below), for example, when the program started it was clearly a defense program. Over time, the nature of the program changed so that a significant part of the atomic energy development program is now nondefense.

Table A-9 shows—for 1974—the total impact of both statistical and definitional changes in the Federal sector NIA. As table A-9 shows, virtually all of the definitional changes involve transfers of transactions from one expenditure category to another. Two definitional revisions affect receipts categories:

- Corporate tax accruals include a change in the treatment of "carryback provisions" affecting receipts estimates as far back as 1948. Losses are now recorded in the years when they occur rather than when the tax liabilities are offset.
- Social insurance contributions include contributions for Federal employees for workmen's compensation.

<sup>1</sup> Distinction may be made between "definitional" and "classificational" revisions. For purposes of simplicity and clarity no such distinction is made in this section.

**Table A-9. FEDERAL RECEIPTS AND EXPENDITURES IN THE NATIONAL INCOME ACCOUNTS FOR 1974: COMPARISON OF JANUARY 1975 AND CURRENT ESTIMATES (in billions of dollars)**

Description	January 1975 "actuals"	Defini- tional revisions	Statistical revisions	Current "actuals"
<b>RECEIPTS</b>				
Personal tax and nontax receipts.....	123.1	-----	-.2	122.9
Corporate profits tax accruals.....	45.6	(1)	-2.0	43.6
Indirect business tax and nontax accruals.....	21.6	-----	-.2	21.4
Contributions for social insurance.....	83.3	.3	.1	83.7
<b>Total receipts.....</b>	<b>273.6</b>	<b>.3</b>	<b>-2.3</b>	<b>271.6</b>
<b>EXPENDITURES</b>				
Purchases of goods and services.....	110.3	-5.2	-.6	104.5
Defense.....	(75.4)	(-1.0)	(-.4)	(74.0)
Nondefense.....	(34.9)	(-4.2)	(-.2)	(30.5)
Transfer payments.....	104.2	.5	*	104.7
Domestic ("to persons").....	(101.3)	(.5)	(*)	(101.7)
Foreign.....	(2.9)	-----	(*)	(3.0)
Grants-in-aid to State and local governments.....	41.5	-----	.1	41.6
Net interest paid.....	17.4	2.4	*	19.8
Subsidies less current surplus of Government enter- prises.....	4.7	2.6	.6	7.9
Wage disbursements less accruals.....	.2	-----	-*	.1
<b>Total expenditures.....</b>	<b>278.3</b>	<b>.3</b>	<b>.1</b>	<b>278.7</b>
<b>Deficit (-).....</b>	<b>-4.7</b>	<b>-----</b>	<b>-2.4</b>	<b>-7.1</b>

\*Less than \$50 million.

1 This adjustment affected many years but not 1974.

Table A-10 shows in detail the definitional changes affecting Federal sector expenditures and these are discussed in the remainder of this section.

**Table A-10. COMPOSITION OF DEFINITIONAL REVISIONS TO FEDERAL SECTOR EXPENDITURES (1974 data; in billions of dollars)**

Definitional Revision	Defense pur- chases	Non- defense pur- chases	Domes- tic trans- fers	Net interest paid	Subsidies less current sur- plus of gov- ernmental enterprises
Foreign interest.....	.1	-3.1	-----	3.1	-----
CCC inventory valuation adjustment.....	-----	-1.5	-----	-----	1.5
Low-rent housing payments.....	-----	-1.2	-----	-----	1.2
Imputed bank service charges and interest.....	-----	.7	-----	-.7	-----
ERDA (AEC) nondefense.....	-.8	.8	-----	-----	-----
Fleet reserve payments.....	-.4	-----	.4	-----	-----
Maritime construction subsidies.....	-----	-.2	-----	-----	.2
Auto depreciation allowances.....	.1	*	-.2	-----	-----
Reclassification of enterprises.....	-----	.3	-----	-----	-.3
Grossing of workmen's compensation.....	-----	-----	.3	-----	-----
<b>Total.....</b>	<b>-1.0</b>	<b>-4.2</b>	<b>.5</b>	<b>2.4</b>	<b>2.6</b>

\*Less than \$50 million.

*Foreign interest.*—Under the prior definition interest payments to and receipts from abroad were included in purchases of goods and services; they are now included in net interest paid. At the time the practice originated this category generally totaled well under \$100 million annually; including these transactions as purchases eliminated the need for a reconciliation line between net exports as shown in the balance-of-payments figures and those shown in the national income accounts. While this decision had pragmatic value when the transactions were relatively minor, by 1975 they totaled \$3½ billion.

*CCC adjustment.*—The computation of a CCC adjustment creates equal and offsetting changes in nondefense purchases and the current surplus (or deficit) of this Government enterprise. Previously, the nondefense purchase estimates were based on the acquisition price of agricultural commodities for both the initial purchase and the subsequent sale. Under the new definition, nondefense purchases will be based on current market prices for the acquisition and sale of commodities. The difference between the acquisition price and market price will be reflected as part of the CCC surplus or deficit.

*Low-rent housing payments.*—A large portion of budget outlays for low-rent public housing go to State or local government housing agencies classified as Government enterprises. These payments were included in nondefense purchases on the rationale that subsidies could not be paid to Government enterprises; in effect, they were treated as purchases of housing services for the benefit of the renter. Under the new definition these payments are recognized as being subsidies; thus, nondefense purchases are reduced and subsidies increased by the value of these payments.

*Imputed bank service charges and interest.*—The Federal Government maintains interest-free accounts in commercial banks in exchange for having those banks service Government checks and perform other services without charge. Under the new definition the NIA includes as nondefense purchases an imputed service charge by the banks for the value of services rendered and includes an imputed receipt of interest by the Government from banks equal to the imputed service charge. This raises nondefense purchases and lowers net interest paid by equal amounts.

*ERDA (AEC) nondefense.*—When the Atomic Energy Commission (the predecessor agency to Energy Research and Development Administration) was established it was clearly a national defense program, and was so classified in both the budget and the NIA. Over time, however, the AEC became involved in a large-scale nondefense program, especially in the promotion and regulation of nuclear energy for peaceful purposes. When the functional structure of the budget was changed in the 1976 budget it took cognizance of this gradual shift in operation of ERDA by dividing the outlays between national defense and nondefense functions. The 1976 budget also anticipated that ERDA nondefense activities would no longer be classified as defense purchases in the NIA but the actual implementation of this change occurred in the benchmark revision under discussion.

*Fleet reserve.*—Fleet reserve retired pay in the budget is part of the category "military retired pay." It arises when naval and marine enlisted personnel complete 20 years of service and opt for retirement instead of remaining a full 30 years. These personnel are subject to being called up in case of an emergency, so the NIA treated these payments as compensation (defense purchases), the same as reserve pay. However, unlike other reservists, the recipients of fleet reserve pay are retired from the Armed Forces and are not required to perform any military duty to earn their payments. The NIA now treats these expenditures as transfer payments.

*Maritime construction subsidies.*—The Maritime Administration pays both construction and operating differential subsidies to encourage a strong domestic merchant marine. The operating differential payments—which compensate for the higher wage levels on U.S.-flag ships—have traditionally been counted as subsidies. But the construction differential subsidies have been counted as nondefense purchases. Prior to 1957 the Maritime Administration would pay for the construction of merchant ships in U.S. shipyards and then sell the ships at prices roughly comparable to foreign ship costs to U.S.-flag carriers. The acquisition cost would count as purchases and the sale as negative purchases. In July 1956, the program was converted to having U.S.-ship operators purchase the ships from U.S. shipyards with the Maritime Administration paying the difference between the total cost and the cost if the ship had been constructed abroad. This payment had been carried as nondefense purchases but—under the revision—is treated as subsidies retroactive to the time (July 1956) the financing procedure was changed.

*Auto depreciation allowances.*—The auto depreciation adjustment arose out of the Government reimbursing its employees for using their personal cars in Government service. In the NIA the reimbursement was split into two categories—that part which was payment for the cost of fuel, oil, etc. and that part considered as depreciation on the value of the car. The former part of the payment was always considered purchases of goods and services, but the depreciation allowance was considered a transfer payment. Generally the recipients of these payments fail to distinguish between the two components—both are looked on as simply part of the value of service rendered. This revision eliminates the distinction in the NIA; all of the reimbursement is now treated as a purchase of goods and services. The bulk of these purchases are by defense agencies, but some nondefense purchases are affected by the same revision.

*Reclassification of enterprises.*—Reclassification of certain Government agencies from being Government enterprises to "Government" has resulted in raising nondefense purchases (as measured) and reducing enterprise deficits (or raising enterprise surpluses). The criterion for classifying an activity as a Government enterprise is that operating income must cover at least one-half of the operating expenses. In the past, interest income was included in the operating income in making these calculations but was excluded from the calculations in estimating the enterprise surplus or deficit, since interest was included in net interest paid. Under the new procedure,



interest is left out of the computation in deciding whether an activity is to be included as a Government enterprise. This resulted in reclassification of 9 activities—primarily credit programs—as being part of Government rather than Government enterprises. The net transactions of these activities that would have—in the past—counted as enterprise deficits now count as nondefense purchases.

*Grossing workmen's compensation.*—In the past the NIA treated Federal budget outlays for workmen's compensation (for Federal employees) as nondefense purchases; that is, as part of the cost of maintaining the Federal labor force. This treatment is appropriate in measuring the cost of the labor force to the Government. However, these are also payments to individuals for which no current service is rendered and, hence, are transfer payments. Under the new definition the NIA will continue to show this amount as nondefense purchases and will also show an identical amount of transfer payments and imputed social insurance contributions. This is the same treatment that has been given all along for unemployment compensation for ex-Federal employees. Since receipts and expenditures are increased by identical amounts, the surplus or deficit is unaffected by this change.

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

Table A-11 shows the major differences between the budget and the Federal sector of the NIA. These differences are explained below.

Table A-11. RELATIONSHIP OF THE BUDGET TO THE FEDERAL SECTOR, NIA (in billions of dollars)

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>RECEIPTS</b>				
<b>Total budget receipts.....</b>	<b>281.0</b>	<b>297.5</b>	<b>81.9</b>	<b>351.3</b>
Government contribution for employee retirement (grossing).....	5.1	5.6	1.5	6.1
Other netting and grossing.....	2.4	2.4	.6	2.7
Adjustment to accruals.....	-6.4	3.0	2.7	5.5
Other.....	-7	-1.1	-2	-9
<b>Federal sector, NIA receipts.....</b>	<b>281.5</b>	<b>307.4</b>	<b>86.5</b>	<b>364.7</b>
<b>EXPENDITURES</b>				
<b>Total budget outlays.....</b>	<b>324.6</b>	<b>373.5</b>	<b>98.0</b>	<b>394.2</b>
Lending and financial transactions.....	-4.8	-5.4	-1.2	-3.2
Government contribution for employee retirement (grossing).....	5.1	5.6	1.5	6.1
Other netting and grossing.....	2.4	2.4	.6	2.7
Defense timing adjustment.....	-6	.5	-1.5	-.5
Bonuses on Outer Continental Shelf land leases.....	2.0	2.6	.3	5.4
Other.....	-1	-5	-5	-2
<b>Federal sector, NIA expenditures.....</b>	<b>328.7</b>	<b>378.7</b>	<b>97.2</b>	<b>404.5</b>

*Lending and financial transactions.*—Conceptually, the national income accounts measure the Nation's current income and production, and therefore do not include transactions—such as loans—that are an exchange of assets and liabilities rather than current income or production. Loan transactions have a significant economic impact, affecting income and output, but they are analyzed more appropriately within a different accounting framework. Special Analysis C (Borrowing, Debt, and Investment) and Special Analysis E (Federal Credit Programs) both contain information on the financial market implications of the budget.

Most of the lending and financial transactions shown in table A-11 are shown in Special Analysis E. However, this total differs from the total for direct loans shown in Special Analysis E because: (a) The NIA records nonrecourse agricultural commodity loans as purchases rather than loans; (b) capital contributions to international financial institutions, while not technically loans, are excluded from the NIA and treated as financial transactions; and (c) Special Analysis E separately also shows credit transactions of privately owned Government-sponsored enterprises that are not included in the budget or the Federal sector NIA (since they are private enterprises) and therefore do not require reconciliation.

*Government contribution for employee retirement.*—The contributions of Government agencies to the retirement trust funds of their employees are not included in the budget totals. While the outlays are recorded in each agency's budget, they are offset by an intragovernmental deduction. However, the NIA counts Government payments for employee retirement as part of the compensation paid to Government employees and, therefore, as Government expenditures; this treatment maintains comparability with the treatment of employee retirement contributions in the rest of the economy. This category includes contributions by Government enterprises such as the Postal Service; Government enterprise contributions increase the current deficit of enterprises rather than nondefense purchases. The receipt of these retirement contributions is treated in the NIA as contributions for social insurance. Since receipts and expenditures are increased by equal amounts, this treatment has no effect on the surplus or deficit. Over 75% of these payments go to the civil service retirement fund, while most of the remainder is for Federal employees insured under social security.

*Other netting and grossing.*—The budget normally counts as receipts only income from taxation or similar sources that arises from the exercise of governmental power to compel payment. Money received in the course of business-type transactions, therefore, is normally shown as offsets against expenditures. For instance, receipts from two major insurance programs operated by the Veterans Administration (National Service Life Insurance and U.S. Government Life Insurance) are netted against expenditures in the budget since these programs are voluntary, commercial-type activities. However, in the NIA these insurance premiums are treated as social insurance receipts just as are receipts from compulsory Government programs. Adjustments of this type affect total receipts and expenditures

equally and thus do not alter the surplus or deficit of either the budget or the Federal sector NIA. Other netting and grossing also includes some imputed contributions for social insurance for unemployment compensation and workmen's compensation for Federal employees.

*Timing adjustments.*—The budget records receipts at the time the cash is collected regardless of when the income is earned, while outlays (except interest) are generally recorded at the time the checks are issued. The NIA attempt to record most receipts from the business sector in the time period in which the income is earned rather than when taxes are actually paid, while personal income taxes and social insurance contributions are recorded at the time of payment by the individual taxpayer.

The principal timing adjustment to expenditures is for defense purchases. Procurement items (such as missiles or airplanes) purchased under most fixed-price contracts are recorded in the Federal sector NIA as defense purchases at the time of delivery to the Federal Government rather than when they are fabricated or when they are paid for; work in progress is counted as part of private business inventories until the articles are completed and delivered to the Government. In both the budget and the NIA accounts, public debt interest is recorded when it accrues.

*Bonuses on Outer Continental Shelf land leases.*—In recent years bonuses paid on the Outer Continental Shelf oil leases have become a significant reconciliation item between the unified budget and the NIA. The budget records these bonuses as proprietary receipts and, therefore, deducts them from budget outlays. The NIA excludes these transactions as being a transfer of assets because the payments are not included in calculating book profits under current corporate accounting practice.

*Other.*—This category includes some miscellaneous adjustments, largely for certain specialized aspects of the national income accounts, such as the purchase and sale of land and geographical exclusions arising out of transactions with Puerto Rico, the Virgin Islands, and other U.S. territories. Certain nondefense timing adjustments are included here because of the difficulty in separating them from other adjustment categories. This category includes adjustments for certain foreign currency transactions that are not included in the budget and transactions of Federal agencies or activities that are excluded from the budget but included in the Federal sector NIA.

Table A-12. FEDERAL TRANSACTIONS IN THE NATIONAL INCOME ACCOUNTS, 1966-77 (in billions of dollars)

Description	Actual										Estimate	
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>RECEIPTS, NATIONAL INCOME BASIS</b>												
Personal taxes and nontaxes.....	57.5	64.4	71.4	90.0	93.6	87.5	100.3	107.3	122.9	126.4	136.4	160.4
Corporate profits tax accruals.....	30.8	30.3	33.2	37.0	33.0	32.0	34.2	40.5	43.6	40.6	47.5	58.2
Indirect business tax and nontax accruals....	15.5	15.8	17.1	18.6	19.2	20.0	19.9	20.7	21.4	22.4	24.0	24.3
Contributions for social insurance.....	28.9	35.5	38.4	44.5	49.2	52.9	59.1	71.5	83.7	92.0	99.5	121.8
<b>Total receipts, national income basis...</b>	<b>132.7</b>	<b>146.0</b>	<b>160.0</b>	<b>190.1</b>	<b>194.9</b>	<b>192.5</b>	<b>213.5</b>	<b>240.0</b>	<b>271.6</b>	<b>281.5</b>	<b>307.4</b>	<b>364.7</b>
<b>EXPENDITURES, NATIONAL INCOME BASIS</b>												
Purchases of goods and services.....	72.4	86.0	95.0	98.0	97.0	94.8	100.9	101.5	104.5	117.6	130.0	139.4
Defense.....	(54.1)	(67.0)	(74.9)	(76.1)	(75.3)	(72.1)	(72.5)	(73.2)	(74.0)	(80.3)	(86.7)	(92.8)
Nondefense.....	(18.3)	(19.0)	(20.1)	(21.9)	(21.7)	(22.7)	(28.4)	(28.4)	(30.5)	(37.3)	(43.3)	(46.6)
Transfer payments.....	34.1	39.3	44.8	50.9	57.0	70.1	78.9	89.7	104.7	134.8	158.7	168.2
Domestic ("to persons").....	(31.8)	(37.2)	(42.7)	(48.7)	(55.0)	(67.7)	(76.1)	(87.1)	(101.7)	(131.7)	(155.1)	(164.4)
Foreign.....	(2.3)	(2.2)	(2.1)	(2.2)	(2.0)	(2.3)	(2.8)	(2.7)	(3.0)	(3.1)	(3.6)	(3.8)
Grants-in-aid to State and local governments..	12.7	14.8	17.8	19.2	22.6	26.8	32.6	40.4	41.6	48.3	57.8	59.3
Net interest paid.....	8.7	9.6	10.5	12.1	13.6	14.2	14.1	15.9	19.8	22.0	26.0	32.0
Subsidies less current surplus of Government enterprises.....	4.8	5.2	4.1	4.6	5.4	6.8	6.4	9.1	7.9	5.7	6.2	5.6
Wage disbursements less accruals.....	-----	-----	-----	-----	-.1	.1	-----	-.5	.1	.4	-----	-----
<b>Total expenditures, national income basis.....</b>	<b>132.7</b>	<b>154.9</b>	<b>172.2</b>	<b>184.7</b>	<b>195.6</b>	<b>212.7</b>	<b>232.9</b>	<b>256.1</b>	<b>278.7</b>	<b>328.7</b>	<b>378.7</b>	<b>404.5</b>
<b>Excess of receipts (+) or expenditures (-), national income basis.....</b>	<b>+*</b>	<b>-8.9</b>	<b>-12.2</b>	<b>+5.4</b>	<b>-.6</b>	<b>-20.2</b>	<b>-19.5</b>	<b>-16.1</b>	<b>-7.1</b>	<b>-47.2</b>	<b>-71.3</b>	<b>-39.8</b>

\* \$50 million or less.

Note.—Excludes the transition quarter. Data on the transition quarter are shown in table A-1.

## SPECIAL ANALYSIS B

### FUNDS IN THE BUDGET

This analysis classifies budget information by the groups of funds that comprise the budget. It also presents information on the nature of receipts for the largest trust funds.

#### DISTRIBUTION OF TOTALS, BY FUND GROUPS

Table B-1 shows the distribution of total budget receipts and outlays between the Federal funds and the trust funds. The two groups together, after deducting for transactions that flow between them, make up the budget totals.

**Table B-1. BUDGET RECEIPTS AND OUTLAYS, BY FUND GROUP**

(in millions of dollars)

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>RECEIPTS</b>				
Federal funds:				
Total in fund accounts.....	195,324	207,620	56,799	245,483
Intrafund transactions.....	-1,265	-1,586	-269	-1,502
Proprietary receipts from the public.....	-6,050	-6,357	-1,411	-10,973
Receipts from off-budget Federal agencies.....	-505	-1,304	-360	-2,252
Receipts, Federal funds.....	<u>187,505</u>	<u>198,373</u>	<u>54,758</u>	<u>230,755</u>
Trust funds:				
Total in fund accounts.....	125,831	144,180	35,826	168,147
Intrafund transactions.....	-1,035	-1,092	-3	-1,295
Proprietary receipts from the public.....	-5,240	-7,347	-1,886	-8,096
Receipts from off-budget Federal agencies.....	-967	-988	-153	-1,072
Receipts, trust funds.....	<u>118,590</u>	<u>134,754</u>	<u>33,783</u>	<u>157,684</u>
Interfund transactions.....	-25,098	-35,593	-6,647	-37,177
<b>Total budget receipts.....</b>	<u><b>280,997</b></u>	<u><b>297,534</b></u>	<u><b>81,894</b></u>	<u><b>351,262</b></u>
<b>OUTLAYS</b>				
Federal funds:				
Total in fund accounts.....	246,347	286,170	71,805	300,971
Intrafund transactions.....	-1,265	-1,586	-269	-1,502
Proprietary receipts from the public.....	-6,050	-6,357	-1,411	-10,973
Receipts from off-budget Federal agencies.....	-505	-1,304	-360	-2,252
Outlays, Federal funds.....	<u>238,527</u>	<u>276,923</u>	<u>69,764</u>	<u>286,243</u>
Trust funds:				
Total in fund accounts.....	118,412	141,631	36,897	155,634
Intrafund transactions.....	-1,035	-1,092	-3	-1,295
Proprietary receipts from the public.....	-5,240	-7,347	-1,886	-8,096
Receipts from off-budget Federal agencies.....	-967	-988	-153	-1,072
Outlays, trust funds.....	<u>111,171</u>	<u>132,205</u>	<u>34,855</u>	<u>145,171</u>
Interfund transactions.....	-25,098	-35,593	-6,647	-37,177
<b>Total budget outlays.....</b>	<u><b>324,601</b></u>	<u><b>373,535</b></u>	<u><b>97,971</b></u>	<u><b>394,237</b></u>
<b>Budget deficit.....</b>	<u><b>-43,604</b></u>	<u><b>-76,001</b></u>	<u><b>-16,077</b></u>	<u><b>-42,975</b></u>

## FEDERAL FUNDS

The Federal funds are derived mainly from taxes and borrowing. Most of these funds are not restricted by law to any specific governmental purpose. There are four types of Federal fund accounts—general funds, special funds, public enterprise (revolving) funds, and intragovernmental revolving and management funds.

Table B-2. FEDERAL FUND RECEIPTS AND OUTLAYS (in millions of dollars)

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>RECEIPTS BY SOURCE</b>				
Individual income taxes.....	122,386	130,822	40,003	153,641
Corporation income taxes.....	40,621	40,056	8,416	49,461
Excise taxes.....	9,400	10,214	2,380	10,250
Estate and gift taxes.....	4,611	5,100	1,400	5,800
Customs duties.....	3,676	3,800	1,000	4,300
Miscellaneous receipts.....	6,811	8,381	1,559	7,303
<b>Total receipts, Federal funds.....</b>	<b>187,505</b>	<b>198,373</b>	<b>54,758</b>	<b>230,755</b>
<b>OUTLAYS BY AGENCY</b>				
Legislative branch.....	724	900	223	958
The Judiciary.....	283	341	94	390
Executive Office of the President.....	93	89	19	73
Funds appropriated to the President:				
Foreign assistance.....	4,345	5,245	906	3,951
Other.....	520	498	19	208
Agriculture.....	9,722	14,199	3,257	10,754
Commerce.....	1,589	1,989	557	2,159
Defense—Military <sup>1</sup> .....	85,015	89,756	24,474	99,557
Defense—Civil.....	2,045	2,131	702	2,163
Health, Education, and Welfare.....	37,343	41,714	10,077	44,258
Housing and Urban Development.....	7,488	7,204	1,927	7,174
Interior.....	2,166	2,575	854	2,603
Justice.....	2,067	2,281	618	2,250
Labor.....	5,220	16,360	3,195	10,076
State.....	818	1,236	374	1,018
Transportation.....	3,824	4,818	1,161	4,817
Treasury.....	41,371	45,515	12,252	51,500
Energy Research and Development Administration.....	3,165	4,078	1,192	5,311
Environmental Protection Agency.....	2,530	3,193	838	4,500
General Services Administration.....	—625	186	45	—605
National Aeronautics and Space Administration.....	3,264	3,515	908	3,674
Veterans Administration.....	16,270	18,805	4,365	16,980
Other independent agencies.....	11,718	13,095	2,035	16,214
Undistributed offsetting receipts: Rents and royalties on the Outer Continental Shelf.....	—2,428	—3,000	—500	—6,000
Allowances <sup>2</sup> .....	.....	200	175	2,260
<b>Total outlays, Federal funds.....</b>	<b>238,527</b>	<b>276,923</b>	<b>69,764</b>	<b>286,243</b>
<b>Excess of outlays (—).....</b>	<b>—51,023</b>	<b>—78,550</b>	<b>—15,006</b>	<b>—55,488</b>

<sup>1</sup> Includes allowances for civilian and military pay raises for Department of Defense.

<sup>2</sup> Includes allowances for civilian agency pay raises, and contingencies.

*Receipts and outlays.*—The receipts of the general and special funds in 1977 are estimated at \$230.8 billion. Outlays of all the Federal funds are estimated at \$286.2 billion. The distribution of receipts by source, and outlays by agency, is shown in table B-2. The proprietary

receipts of the general fund and special funds, the Federal 'intrafund receipts and the collections credited to public enterprise and intra-governmental funds, have all been offset in arriving at the outlays for each agency.

*Obligations.*—The obligations (net) for Federal funds are estimated at \$321.8 billion for 1977, as set forth in table B-3. These transactions largely flow from budget authority for Federal funds of \$311.9 billion for the year, although in part the obligations were authorized by prior years' budget authority.

Table B-3. OBLIGATIONS INCURRED, NET, IN FEDERAL FUNDS

(in millions of dollars)

Department or other unit	1975 actual	1976 estimate	TQ estimate	1977 estimate
Legislative branch.....	688	916	216	1,006
The Judiciary.....	290	349	88	398
Executive Office of the President.....	73	70	18	73
Funds appropriated to the President:				
International security assistance.....	1,899	3,049	-15	2,567
International development assistance.....	1,733	2,231	235	1,590
Other.....	435	584	11	242
Agriculture.....	9,597	14,136	3,474	10,893
Commerce.....	1,478	2,387	454	1,865
Defense—Military <sup>1</sup> .....	83,804	100,250	23,968	107,289
Defense—Civil.....	1,828	2,207	666	2,207
Health, Education, and Welfare.....	37,803	41,538	12,194	45,775
Housing and Urban Development.....	27,988	38,246	3,799	27,755
Interior.....	2,258	2,816	881	2,524
Justice.....	2,090	2,277	565	2,142
Labor.....	6,164	16,993	2,304	9,014
State.....	964	1,108	386	1,084
Transportation.....	4,477	6,327	1,219	5,986
Treasury.....	41,413	45,428	12,258	51,520
Energy Research and Development Administration.....	3,514	4,933	1,302	6,047
Environmental Protection Agency.....	4,928	5,350	1,244	6,783
General Services Administration.....	-801	195	61	-584
National Aeronautics and Space Administration.....	3,246	3,965	931	3,693
Veterans Administration.....	16,171	19,270	4,465	16,945
Civil Service Commission.....	4,153	5,184	128	7,717
Export-Import Bank.....				3,348
Federal Home Loan Bank Board.....	915	-9	-87	-384
Postal Service.....	1,875	1,690	431	1,459
Railroad Retirement Board.....	4	288	10	290
Other independent agencies.....	4,461	6,074	2,326	5,949
Allowances <sup>2</sup> .....		225	150	2,590
Undistributed offsetting receipts:				
Rents and royalties on the Outer Continental Shelf.....	-2,428	-3,000	-500	-6,000
<b>Total.....</b>	<b>261,020</b>	<b>325,075</b>	<b>73,180</b>	<b>321,783</b>

<sup>1</sup> Includes allowances for civilian and military pay raises for Department of Defense.

<sup>2</sup> Includes allowances for civilian agency pay raises and contingencies.

*Balances of prior authority.*—Table B-4 shows the balances of budget authority carried forward in Federal funds at the end of each fiscal year. To the extent that valid Government obligations have been incurred and remain unpaid, amounts sufficient to pay them may be carried over into the next year. Unobligated balances may be carried forward

Table B-4. FEDERAL FUND BALANCES OF BUDGET AUTHORITY (in millions of dollars)

Department or other unit	Start 1975		End 1975		End 1976		End TQ		End 1977	
	Obligated	Unobligated	Obligated	Unobligated	Obligated	Unobligated	Obligated	Unobligated	Obligated	Unobligated
Legislative branch.....	44	202	6	256	22	213	15	209	64	116
The Judiciary.....	22	*	29	13	37	9	31	6	39	-----
Executive Office of the President.....	47	*	26	1	7	-----	6	-----	6	-----
Funds appropriated to the President:										
International security assistance.....	3,395	5	2,994	15	2,854	-----	2,473	-----	2,883	9
International development assistance.....	4,506	10,647	4,684	10,371	5,009	10,278	4,745	10,276	4,601	10,588
Other.....	1,893	259	1,292	461	1,129	337	1,074	294	1,018	275
Agriculture.....	4,467	6,974	4,329	12,530	4,266	12,430	4,484	11,314	4,623	12,206
Commerce.....	1,759	310	1,658	624	2,055	519	1,952	545	1,658	339
Defense—Military <sup>1</sup> .....	28,566	15,093	27,238	16,691	37,732	12,270	37,227	11,130	44,958	14,797
Defense—Civil.....	798	203	581	157	658	75	622	63	666	32
Health, Education, and Welfare.....	13,806	1,695	14,159	2,252	14,183	1,663	16,301	930	17,818	692
Housing and Urban Development.....	84,508	36,791	105,014	59,279	136,056	31,704	137,928	28,553	158,509	18,967
Interior.....	1,284	633	1,368	2,106	1,609	1,599	1,636	1,516	1,558	1,339
Justice.....	1,216	154	1,235	172	1,231	57	1,177	53	1,069	54
Labor.....	1,596	756	2,473	7,049	3,097	2,423	2,206	701	1,143	1
State.....	92	74	228	235	99	12	110	9	176	20
Transportation.....	2,160	5,462	2,808	13,076	4,317	11,049	4,375	10,613	5,545	8,632
Treasury.....	271	55	307	133	220	2,435	226	2,387	245	2,403
Energy Research and Development Agency.....	1,441	354	1,791	412	2,646	500	2,756	500	3,492	500
Environmental Protection Agency.....	5,516	8,136	7,909	11,719	10,066	7,140	10,472	6,085	12,755	20
General Services Administration.....	380	10	206	47	215	24	231	—2	251	7
National Aeronautics and Space Administration.....	916	479	897	462	1,347	50	1,370	51	1,389	52
Veterans Administration.....	1,429	1,940	1,323	1,983	1,788	2,051	1,889	1,957	1,854	2,108
Civil Service Commission.....	10	6	17	5	11	4	11	5	11	5
Export Import Bank.....	-----	-----	-----	-----	-----	-----	-----	-----	11,135	-----
Federal Deposit Insurance Corporation.....	-----	3,000	-----	3,000	-----	3,000	-----	3,000	-----	3,000
Federal Home Loan Bank Board.....	*	8,196	—10	9,271	—13	7,280	—2	7,367	—8	7,751
Other independent agencies.....	3,214	3,409	2,896	2,819	3,055	11,357	3,817	10,208	3,945	10,031
Allowances <sup>2</sup> .....	-----	-----	-----	-----	25	-----	-----	-----	330	-----
<b>Total.....</b>	<b>163,335</b>	<b>104,848</b>	<b>185,459</b>	<b>155,141</b>	<b>233,722</b>	<b>118,480</b>	<b>237,132</b>	<b>107,772</b>	<b>281,735</b>	<b>93,943</b>

\* Less than \$500 thousand.

<sup>1</sup> Includes balances of allowances for civilian and military pay raises for Department of Defense.<sup>2</sup> Includes balances of allowances for civilian agency pay raises and contingencies.



in accordance with specific provisions of law, usually in order to permit completion of projects as contemplated at the time the appropriations were first made, but also to provide funding for activities of a continuing nature (such as business-type enterprises) or for standby emergency purposes (such as backup for insurance of the Federal Deposit Insurance Corporation).

### PUBLIC ENTERPRISE FUNDS

The public enterprise funds are a subgroup of Federal funds. They carry on a cycle of business-type operations, primarily with the public, on behalf of the Government. Some are incorporated enterprises; others are unincorporated. The general fund usually supplies them with capital, although in a few cases they may borrow from the public. Data on public enterprise funds are included on a net outlay basis in table B-2 through B-4. Gross outlays and applicable receipts are shown in table B-5.

*Receipts and outlays.*—Receipts of public enterprise funds are estimated at \$27.8 billion in 1977, and gross outlays are planned to total \$33.6 billion, resulting in net outlays of \$5.8 billion.

### TRUST FUNDS

The trust funds are collected and used for specific purposes; in this sense they are administered in a fiduciary capacity by the Government. They include trust revolving funds, which, like the public enterprise funds, carry on a cycle of business-type operations and are normally stated net of collections by the funds.

*Cash operations.*—Trust fund receipts are estimated at \$157.7 billion in 1977, with outlays planned at \$145.2 billion, as shown in table B-6. The transactions of the Federal old-age and survivors and disability insurance funds are far larger than any other trust fund.

In fiscal periods 1975-77, this group of funds has excesses of receipts, except for the transition quarter,<sup>1</sup> of the following amounts (in millions of dollars):

	1975 actual	1976 estimate	TQ estimate	1977 estimate
Total receipts, trust funds.....	118,590	134,754	33,783	157,684
Total outlays, trust funds.....	111,171	132,205	34,855	145,171
Excess of receipts or outlays (-), trust funds.....	7,419	2,549	-1,072	12,513

*Receipts by funds.*—Table B-7 presents information classifying the trust fund receipts by major fund, and by source for each such fund.

*Outlays by funds.*—Corresponding information on trust fund outlays, classifying the data for the larger funds, is found in table B-8.

<sup>1</sup> Outlays exceed receipts primarily because Federal payments to the trust funds for retirement benefits occurs in fiscal year 1977.

Table B-5. PUBLIC ENTERPRISE FUND TRANSACTIONS (in millions of dollars)

Description	Applicable receipts				Gross outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Funds appropriated to the President:								
Foreign assistance.....	492	808	152	535	688	741	135	495
Other.....	*	*	*	*	1	2	1	2
Agriculture:								
Commodity Credit Corporation <sup>1</sup> .....	3,297	3,528	580	3,564	4,038	5,160	1,020	4,256
Farmers Home Administration.....	8,261	7,119	1,854	9,095	7,059	7,619	1,969	8,331
Federal Crop Insurance Corporation.....	55	74	-----	74	74	71	2	79
Commerce.....	61	69	18	78	25	34	25	33
Defense:								
Military.....	4	6	1	6	44	12	2	12
Civil (Panama Canal Company).....	254	275	73	309	251	278	73	307
Health, Education, and Welfare.....	148	161	47	157	254	336	77	287
Housing and Urban Development:								
Government National Mortgage Association.....	2,052	6,343	1,891	1,314	4,156	6,813	2,082	1,463
Urban renewal fund.....	597	626	157	736	1,944	2,051	457	1,712
Low-rent public housing fund.....	695	658	164	658	641	658	164	658
Federal Housing Administration.....	1,298	1,286	328	1,449	2,386	2,447	533	2,279
Other.....	260	265	62	269	347	647	109	510
Interior.....	142	438	111	478	302	509	135	602
Transportation.....	51	65	17	55	795	1,412	387	1,643
Treasury.....	3	1,302	1,500	2,101	1	1,301	1,500	2,101
Energy Research and Development Administration.....	-----	-----	-----	-----	-----	3	1	-----
Environmental Protection Agency.....	1	1	*	1	*	1	*	*
General Services Administration.....	3	3	1	3	1	2	*	2
Veterans Administration.....	794	1,007	200	1,353	794	881	224	950

See footnotes at end of table.

Table B-5. PUBLIC ENTERPRISE FUND TRANSACTIONS (in millions of dollars)—Continued

Description	Applicable receipts				Gross outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Other independent agencies:								
Emergency Loan Guarantee Board.....	7	7	1	5	*	*	*	1
Export-Import Bank.....				2,203				3,509
Farm Credit Administration.....	7	8	2	8	7	8	2	8
Federal Home Loan Bank Board:								
Federal Savings and Loan Insurance Corporation.....	496	476	112	540	180	164	28	212
Revolving fund.....	35	65	25	94	1,272	370	10	42
National Credit Union Administration.....	32	36	10	42	18	20	5	21
Pennsylvania Avenue Development Corporation.....								4
Small Business Administration.....	463	649	125	662	1,060	1,121	225	1,032
Tennessee Valley Authority.....	1,249	1,794	446	2,047	2,016	2,906	696	3,097
<b>Total.....</b>	<b>20,756</b>	<b>27,070</b>	<b>7,879</b>	<b>27,837</b>	<b>28,354</b>	<b>35,568</b>	<b>9,864</b>	<b>33,647</b>
Receipts from the public.....	(18,247)	(23,735)	(7,197)	(24,666)				
Receipts from other accounts.....	(2,509)	(3,335)	(682)	(3,171)				

\*Less than \$500 thousand.

<sup>1</sup> Receipts include advances from foreign assistance and special export programs of \$778 million in 1975, \$1,090 million in 1976, \$146 million in the TQ, and \$1,169 million in 1977.

Table B-6. OUTLAYS AND RECEIPTS OF TRUST FUNDS (in millions of dollars)

Description	Outlays				Receipts			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Federal old-age, and survivors, and disability insurance trust funds.....	64,658	73,767	19,922	84,022	66,676	70,782	18,864	84,819
Health insurance trust funds.....	14,781	17,433	4,562	19,646	16,904	18,559	5,059	23,028
State and local government fiscal assistance trust fund.....	6,138	6,272	1,627	6,549	6,205	6,355	1,626	6,542
Unemployment trust fund.....	13,211	18,500	3,700	16,500	8,195	16,700	3,400	16,900
Railroad employees retirement funds.....	3,077	3,474	902	3,678	2,772	3,255	494	3,771
Federal employees retirement funds.....	7,128	8,506	2,331	10,105	11,468	13,032	2,124	15,935
Airport and airway trust funds.....	579	820	278	1,131	1,058	1,117	283	1,240
Highway trust funds.....	4,843	6,625	1,924	6,915	6,774	6,328	1,902	7,115
Foreign military sales trust fund.....	3,537	5,900	1,564	7,000	4,415	6,500	1,664	7,200
Veterans life insurance trust funds.....	816	728	129	750	873	904	241	970
Other trust funds (nonrevolving).....	444	658	165	612	491	649	168	628
Trust revolving funds.....	-801	-1,054	-207	-1,273	-----	-----	-----	-----
Subtotal.....	118,412	141,631	36,897	155,634	125,831	144,180	35,826	168,147
Intrafund transactions.....	-1,035	-1,092	-3	-1,295	-1,035	-1,092	-3	-1,295
Proprietary receipts from the public.....	-5,240	-7,347	-1,886	-8,096	-5,240	-7,347	-1,886	-8,096
Receipts from off-budget Federal agencies.....	-967	-988	-153	-1,072	-967	-988	-153	-1,072
<b>Total.....</b>	<b>111,171</b>	<b>132,205</b>	<b>34,855</b>	<b>145,171</b>	<b>118,590</b>	<b>134,754</b>	<b>33,783</b>	<b>157,684</b>

Table B-7. TRUST FUND RECEIPTS (in millions of dollars)

[Amounts under proposed legislation are shown separately]

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
Federal old-age, survivors, and disability insurance trust funds:				
Social insurance taxes and contributions.....	62,458	66,465	17,917	76,912
Interest on Federal securities.....	2,808	2,837	692	2,654
Federal payment as employer for employee retirement.....	916	963	255	1,054
Other (mainly receipts of special Federal payments).....	494	517	*	717
Proposed legislation.....				3,482
Subtotal Federal old-age, survivors, and disability insurance trust funds.....	66,676	70,782	18,864	84,819
Health insurance trust funds:				
Social insurance taxes and contributions.....	13,158	13,981	3,910	15,978
Interest on Federal securities.....	712	794	212	872
Federal payment as employer for employee retirement.....	166	175	46	191
Other (mainly receipts of special Federal payments).....	2,868	3,606	884	5,997
Proposed legislation.....		3	8	-10
Subtotal Health insurance trust funds.....	16,904	18,559	5,059	23,028
State and local government fiscal assistance trust fund:				
Deposits for general revenue sharing.....	6,205	6,355	1,626	6,542
Unemployment trust fund:				
Social insurance taxes and contributions.....	6,771	7,723	2,214	9,964
Interest on Federal securities.....	639	465	86	336
Advances from general fund.....	785	8,512	1,100	5,700
Proposed legislation.....				900
Subtotal Unemployment trust fund.....	8,195	16,700	3,400	16,900
Railroad employees retirement funds:				
Social insurance taxes and contributions.....	1,489	1,639	430	1,942
Interest on Federal securities.....	274	290	70	255
Receipts from other trust funds.....	1,010	1,083		1,289
Other (mainly receipts of special Federal payments).....	-2	243	-6	250
Proposed legislation.....				35
Subtotal Railroad employees retirement funds.....	2,772	3,255	494	3,771
Federal employees retirement funds:				
Social insurance taxes and contributions.....	2,561	2,760	703	2,804
Interest on Federal securities.....	2,143	2,434	728	2,733
Federal payment as employer for employee retirement (including payment on prior year liabilities):				
Agencies included in budget.....	5,769	6,605	537	9,320
Agencies excluded from budget.....	967	988	153	1,072
Other receipts.....	28	6	3	6
Proposed legislation.....				*
Supplemental now requested.....		239		
Subtotal Federal employees retirement funds.....	11,468	13,032	2,124	15,935

See footnotes at end of table.

Table B-7. TRUST FUND RECEIPTS (in millions of dollars)—Continued

[Amounts under proposed legislation are shown separately]

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Airport and airway trust funds:</b>				
Excise taxes.....	962	969	254	1,046
Interest on Federal securities.....	96	141	38	186
Proposed legislation.....	-----	7	-9	8
Subtotal Airport and airway trust funds.....	1,058	1,117	283	1,240
<b>Highway trust funds:</b>				
Excise taxes.....	6,188	5,711	1,746	6,502
Interest on Federal securities.....	586	617	156	613
Other receipts.....	*	-----	-----	-----
Subtotal Highway trust funds.....	6,774	6,328	1,902	7,115
Foreign military sales trust fund.....	4,415	6,500	1,664	7,200
<b>Veterans life insurance trust funds:</b>				
Interest on Federal securities.....	399	425	117	460
Other receipts.....	474	479	124	510
Subtotal Veterans life insurance trust funds.....	873	904	241	970
Other trust funds (nonrevolving).....	491	649	168	628
Subtotal.....	125,831	144,180	35,826	168,147
Intrafund transactions.....	-1,035	-1,092	-3	-1,295
Proprietary receipts from the public.....	-5,240	-7,347	-1,886	-8,096
Receipts from off-budget Federal agencies.....	-967	-988	-153	-1,072
<b>Total receipts.....</b>	<b>118,590</b>	<b>134,754</b>	<b>33,783</b>	<b>157,684</b>

\*Less than \$500 thousand.

Table B-8. TRUST FUND OUTLAYS (in millions of dollars)

[Amounts under proposed legislation are shown separately]

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Federal old-age, survivors, and disability insurance trust funds:</b>				
Benefit payments.....	62,469	71,386	19,581	82,166
Payments to other trust funds.....	1,010	1,083	-----	1,289
Administrative expenses and other.....	1,179	1,298	353	1,393
Proposed legislation.....	-----	-----	-12	-826
Subtotal Federal old-age, survivors, and disability insurance trust funds.....	64,658	73,767	19,922	84,022

Table B-8. TRUST FUND OUTLAYS (in millions of dollars)—Continued

[Amounts under proposed legislation are shown separately]

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Health insurance trust funds:</b>				
Benefit payments.....	14,118	16,871	4,745	20,995
Administrative expenses and other.....	663	877	218	882
Proposed legislation.....	-----	-315	-401	-2,231
Subtotal Health insurance trust funds.....	14,781	17,433	4,562	19,646
<b>State and local government fiscal assistance trust fund:</b>				
Payments for general revenue sharing.....	6,138	6,272	1,627	6,549
<b>Unemployment trust fund:</b>				
Withdrawals for benefit payments.....	12,025	17,042	3,329	14,708
Administrative expenses and other.....	1,186	1,458	371	1,492
Proposed legislation.....	-----	-----	-----	300
Subtotal Unemployment trust fund.....	13,211	18,500	3,700	16,500
<b>Railroad employees retirement funds:</b>				
Benefit payments and claims.....	3,052	3,445	895	3,645
Administrative expenses and other.....	25	29	7	33
Subtotal Railroad employees retirement funds..	3,077	3,474	902	3,678
<b>Federal employees retirement:</b>				
Benefit payments and claims.....	6,899	8,284	2,272	9,926
Refunds to former employees.....	208	206	55	231
Administrative expenses and other.....	21	16	4	18
Proposed legislation.....	-----	-----	*	-70
Subtotal Federal employees retirement.....	7,128	8,506	2,331	10,105
<b>Airport and airway trust funds:</b>				
Current programs.....	579	671	160	654
Proposed legislation.....	-----	149	118	476
Subtotal Airport and airway trust funds.....	579	820	278	1,131
<b>Highway trust funds:</b>				
Current programs (mainly grants to States).....	4,843	5,275	1,924	6,915
Supplemental now requested.....	-----	1,350	-----	-----
Subtotal Highway trust funds.....	4,843	6,625	1,924	6,915
<b>Foreign military sales trust fund.....</b>	3,537	5,900	1,564	7,000
<b>Veterans life insurance trust funds.....</b>	816	728	129	750
<b>Other trust funds (nonrevolving).....</b>	444	658	165	612
<b>Trust revolving funds.....</b>	-801	-1,054	-207	-1,273
Subtotal.....	118,412	141,631	36,897	155,634
Intrafund transactions.....	-1,035	-1,092	-3	-1,295
Proprietary receipts from the public.....	-5,240	-7,347	-1,886	-8,096
Receipts from off-budget Federal agencies.....	-967	-988	-153	-1,072
<b>Total outlays.....</b>	<b>111,171</b>	<b>132,205</b>	<b>34,855</b>	<b>145,171</b>

\*Less than \$500 thousand.

*Balances of the trust funds.*—The balances of the trust funds continue to increase, as shown in the following end-of-year figures (in millions of dollars):

	1974 actual	1975 actual	1976 estimate	TQ estimate	1977 estimate
Open book balances.....	5,001	5,276	5,810	5,910	6,044
Investments in U.S. securities:					
Public debt.....	128,795	135,939	137,954	136,782	149,286
Agency debt.....	1,340	1,340	1,340	1,340	1,215
<b>Total.....</b>	<b>135,136</b>	<b>142,555</b>	<b>145,104</b>	<b>144,032</b>	<b>156,545</b>

A summary of the balances by fund is presented in table B-9. The amounts include both open-book balances with Treasury and investments in U.S. securities. Part of the balances is obligated, part unobligated. The balances on an authorization basis exceed the cash balances because for a few accounts budget authority is not the same as receipts; these differences are listed in the note appended to the table.

Table B-9. TRUST FUND BALANCES (in millions of dollars)

Description	As of June 30			As of Sept. 30	
	1974 actual	1975 actual	1976 estimate	TQ estimate	1977 estimate
Federal old-age, survivors, and disability insurance trust funds.....	46,136	48,153	45,169	44,110	44,908
Health insurance trust funds.....	9,172	11,294	12,420	12,916	16,298
State and local government fiscal assistance trust fund.....	1,607	1,674	1,756	1,756	1,750
Unemployment trust fund.....	12,428	7,412	5,612	5,312	5,712
Railroad retirement accounts.....	4,581	4,275	4,056	3,649	3,741
Federal employees retirement funds.....	34,480	38,821	43,346	43,139	48,969
Airport and airway trust funds.....	1,534	2,013	2,311	2,316	2,424
Highway trust funds.....	7,667	9,597	9,300	9,278	9,479
Foreign military sales trust fund.....	1,202	2,081	2,681	2,781	2,981
Veterans life insurance trust funds.....	7,594	7,651	7,826	7,938	8,158
Other trust funds (nonrevolving).....	669	716	708	710	726
Trust revolving funds.....	8,066	8,867	9,920	10,127	11,400
<b>Total.....</b>	<b>135,136</b>	<b>142,555</b>	<b>145,104</b>	<b>144,032</b>	<b>156,545</b>

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 moneys, and to borrow from the public. The reconciliation is as follows:

	1974	1975	1976	TQ	1977
Balance available on an authorization basis.....	155,766	166,299	168,661	165,642	179,114
Unfinanced contract authority:					
Airport and airway trust fund.....	-1,008	-514	-494	-489	-484
Highway trust funds.....	-17,351	-19,180	-15,091	-13,715	-13,434
Foreign military sales trust fund.....	-10,768	-15,046	-18,318	-18,324	-20,054
Other.....	-7	-7			
Unappropriated receipts:					
Available as needed, on an indefinite basis.....	-42	35	15	15	15
Available for appropriation by Congress:					
Soldiers' Home permanent fund.....	93	94	93	92	91
Airport and airway trust fund.....	932	1,426	1,711	1,766	1,871
Highway trust funds.....	7,515	9,443	8,522	9,038	9,421
Retained as permanent endowment.....	6	6	6	6	6
<b>Balance available on a cash basis.....</b>	<b>135,136</b>	<b>142,555</b>	<b>145,104</b>	<b>144,032</b>	<b>156,545</b>



For 1977, as in many recent years, the largest net investments are expected to be those of the trust funds established by the Social Security Act as amended.

*Trust revolving funds.*—The activities of the trust revolving fund subgroup are shown in table B-10. The largest of these funds are those used by the Civil Service Commission to buy insurance for Government employees.

Table B-10. **TRUST REVOLVING FUND TRANSACTIONS** (in millions of dollars)

Description	Applicable receipts				Gross outlays			
	1975 act.	1976 est.	TQ est.	1977 est.	1975 act.	1976 est.	TQ est.	1977 est.
Civil Service Commission (employees' life insurance and health benefits).....	2,423	3,118	866	3,840	2,062	2,702	759	3,373
Federal Deposit Insurance Corporation.....	928	736	212	836	520	128	138	68
All other trust revolving funds.....	263	298	76	404	231	268	50	365
<b>Total trust revolving funds <sup>1</sup>.....</b>	<b>3,614</b>	<b>4,152</b>	<b>1,154</b>	<b>5,080</b>	<b>2,813</b>	<b>3,098</b>	<b>947</b>	<b>3,806</b>
Receipts from the public....	(2,194)	(2,303)	(667)	(2,879)				
Receipts from other ac- counts.....	(1,420)	(1,850)	(488)	(2,201)				

<sup>1</sup> Excludes right-of-way revolving fund which is a part of the highway trust funds.

## SPECIAL ANALYSIS C

### BORROWING, DEBT, AND INVESTMENT

The major fiscal operations of the Federal Government include not only taxation and expenditure but also:

- The borrowing of cash to meet current requirements not covered by receipts and to refinance maturing debt;
- The investment of balances that trust funds and other Government accounts do not currently need for outlays; and
- The provision of assistance, including Government guarantees, for certain non-Federal borrowing.

This analysis summarizes current developments in Federal borrowing. It also discusses the size and growth of the Federal debt and the interest on the Federal debt, agency borrowing, agency investment in U.S. Government securities, the statutory debt limit, and borrowing by Government-sponsored enterprises. The analysis concludes with a brief discussion of the trend in Federal and federally assisted borrowing and the relationship of this trend to total funds raised by non-financial sectors in the economy. Excluded from this analysis are other types of Federal liabilities, which include accounts payable, obligations for undelivered orders, long-term contracts, insurance commitments, and the obligation for such future payments as social security, employee retirement, and veterans compensation.

Special Analysis E examines the related subject of Federal credit programs, which include direct loans, loans by Government-sponsored enterprises, and Government-guaranteed loans. The factors discussed in both Special Analyses C and E are significant in appraising the impact on financial markets of the programs contained in the 1977 Federal budget.

### BORROWING AND REPAYING DEBT

The Federal Government borrows from two principal sources. First, it sells debt to the public, primarily in order to finance Federal deficits. Second, it sells debt to the Government agencies that accumulate surpluses in separate funds, primarily trust funds, required by law to be invested in Federal securities. Most Federal debt has been issued by the Treasury and is called "public debt," but a small portion has been issued by other Government agencies and is called "agency debt."<sup>1</sup>

The gross Federal debt includes debt held by both the public and the agencies. Since Treasury borrowing from the agencies is an internal transaction between two funds both within the Government itself, only borrowing from the public affects the volume of securities sold in the financial markets and the taxes required to pay interest on the Federal debt.

<sup>1</sup> The term "agency debt" is defined more narrowly in the budget than in the securities market, where it may include not only the debt of the Government agencies listed in table C-5 but also the debt of other issuers such as the Government-sponsored enterprises listed in table C-8.

Borrowing from the public—whether by the Treasury or by an agency—has a significant impact on financial markets and the rest of the economy, and it is consequently an important concern of Federal fiscal policy. For most purposes borrowing from the Federal Reserve System should be distinguished from borrowing from the rest of the public. Federal Reserve purchases of debt are undertaken to carry out monetary policy, not to earn income, and affect the economy by expanding bank reserves and the money stock. They thus have a markedly different motivation and effect on financial markets than do purchases by other sectors of the public. The debt held outside the Federal Reserve System, in contrast, enters into investment portfolios of businesses and individuals and by this means affects interest rates, other financial conditions, and the size and composition of private assets. Almost all interest received by the Federal Reserve System is returned to the Treasury as receipts, called deposits of earnings, so the net cost to the Government of Federal Reserve holdings of debt is very small. The estimates in this analysis for the current and future years do not divide the debt held by the public between the Federal Reserve System and the rest of the public, despite the significance of this division, because the Federal Reserve's open market operations depend on future economic developments and on policy decisions not yet made.

Table C-1 summarizes Federal borrowing from 1975 through 1977. In 1975 the total Federal borrowing (net of the refunding of securities)—i.e., the rise in gross Federal debt—was \$57.9 billion. The borrowing from Government agencies was \$7.0 billion, and the bor-

Table C-1. FEDERAL BORROWING (in millions of dollars)

Description	Borrowing or repayment ( - ) of debt				Debt outstanding end 1977 estimate
	1975 actual	1976 estimate	TQ estimate	1977 estimate	
Gross Federal debt:					
Treasury debt <sup>1</sup> .....	58,953	90,000	18,912	67,601	709,701
Agency debt <sup>2</sup> .....	-1,069	-200	-44	-1,229	9,810
Gross Federal debt <sup>2</sup> .....	57,884	89,800	18,868	66,372	719,511
Less debt held by Government agencies:					
Treasury debt.....	7,077	2,321	-1,129	13,021	159,496
Agency debt.....	-46	-22	-2	-149	1,769
Debt held by Government agencies....	7,031	2,299	-1,131	12,872	161,265
Total, debt held by the public <sup>2</sup> .....	50,853	87,500	20,000	53,500	558,246
Composed of:					
Debt held by the Federal Reserve System....	4,344	NA	NA	NA	NA
Debt held by others.....	46,509	NA	NA	NA	NA

NA=Not available.

<sup>1</sup> Includes \$9 million of Federal Financing Bank debt in 1975.

<sup>2</sup> Agency borrowing, gross Federal borrowing, and borrowing from the public in 1977 exclude the reclassification on October 1, 1976, of an estimated \$340 million of Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

rowing from the public was \$50.9 billion. Of the amount borrowed from the public, \$4.3 billion was borrowed from the Federal Reserve System and \$46.5 billion from the rest of the public—commercial banks, foreign central banks, other financial institutions and businesses, and individuals.

Borrowing from the public—after rising from \$3.0 billion in 1974 to \$50.9 billion in 1975—is expected to rise further to \$87.5 billion in 1976 and then fall to \$53.5 billion in 1977. The very large increase in borrowing in 1975 and 1976 has occurred primarily because the recession automatically reduced tax receipts and raised unemployment benefits and because tax reductions and some expenditure programs were enacted to stimulate the economy. The estimated decline in borrowing in 1977 is due to both the economic recovery and the President's proposed program of budget restraint. By the end of 1977 gross Federal debt is expected to be \$719.5 billion, with 78% held by the public (including the Federal Reserve System) and the remainder by the agencies. Ninety-nine percent of the gross Federal debt will have been issued by the Treasury.

Until recent years the Federal debt was held almost entirely by domestic individuals and institutions. After World War II the debt held in foreign balances and international accounts tended to grow gradually and at the end of 1969 amounted to \$10 billion.<sup>2</sup> However, due to international monetary developments, in 1970 the foreign and international holdings began to grow much faster, and by the end of 1975 they had risen to \$66 billion. Most of the Treasury debt held abroad is owned by foreign central banks. The annual borrowing from abroad is shown below for 1970–75 in comparison with the annual borrowing from the domestic public, exclusive of the Federal Reserve System (in billions of dollars):

	1970	1971	1972	1973	1974	1975
Foreign and international.....	3.7	17.9	17.3	10.2	-2.5	9.1
Domestic (excluding Federal Reserve System).....	-3.5	-6.3	-3.8	5.3	*	37.4
Total borrowing from the public (excluding Federal Reserve System).....	<u>.2</u>	<u>11.6</u>	<u>13.5</u>	<u>15.5</u>	<u>-2.5</u>	<u>46.5</u>

\*Less than \$50 million.

Whereas before 1970 total borrowing from the public was nearly the same as borrowing from the domestic public, the table shows that since that time they have been quite different. During 1970–72, \$39 billion was borrowed from abroad while \$14 billion of debt held by the domestic public (exclusive of the Federal Reserve System) was redeemed. During most of 1973–75 borrowing from abroad remained large, though not predominant, accounting for over a quarter of Federal borrowing from the public (exclusive of the Federal Reserve System).

<sup>2</sup> The estimates of Federal debt held in foreign balances and international accounts do not include agency debt, the holdings of which are believed to be small. The data were adjusted to exclude the special non-interest-bearing notes issued to the International Monetary Fund and international lending agencies. These notes are not part of gross Federal debt.

## BORROWING AND GOVERNMENT DEFICITS

Table C-2 shows how borrowing from the public is related to the Federal deficit. Until recent years the budget deficit constituted practically the entire deficit of the Federal Government, but during 1975-77 the deficit of the off-budget Federal agencies is also significant. In 1975 the total Government deficit was \$53.1 billion. The greater part of this amount, \$50.9 billion, was financed by borrowing from the public, and the remaining \$2.3 billion was financed by other means. Some of these other means of financing the deficit can be either positive or negative. In years when they add up to a negative total, such as is estimated for 1976, they, like the deficit itself, must be financed by borrowing from the public.

Table C-2. MEANS OF FINANCING THE FEDERAL DEFICIT

(In millions of dollars)

Description	1975 actual	1976 est.	TQ est.	1977 est.
Budget surplus or deficit (—)	—43,604	—76,001	—16,077	—42,975
Surplus or deficit (—) of off-budget Federal agencies <sup>1</sup>	—9,544	—9,342	—4,040	—11,060
Total, surplus of deficit (—)	—53,149	—85,343	—20,117	—54,035
Means of financing other than borrowing from the public:				
Decrease or increase (—) in cash and monetary assets	—273	—1,411	—	—
Increase or decrease (—) in liabilities for:				
Checks outstanding, etc. <sup>2</sup>	1,362	167	131	422
Deposit fund balances	579	—1,585	—182	—591
Seigniorage on coins	626	672	168	704
Total, means of financing other than borrowing from the public	2,295	—2,157	117	535
Total, requirements for borrowing from the public	—50,853	—87,500	—20,000	—53,500
Reclassification of securities <sup>3</sup>	—	—	—	—340
Change in debt held by the public	50,853	87,500	20,000	53,840

<sup>1</sup> The off-budget Federal agencies consist of the Rural Electrification and Telephone revolving fund, Rural Telephone Bank, Housing for the Elderly or Handicapped fund (as of September 1, 1974), Pension Benefit Guaranty Corporation, Federal Financing Bank, Export-Import Bank (until October 1, 1976), Postal Service, certain activities of the United States Railway Association, and Energy Independence Authority.

<sup>2</sup> Besides checks outstanding, includes military payment certificates, accrued interest (less un-amortized discount) payable on Treasury debt, and, as an offsetting change in assets, certain collections in transit.

<sup>3</sup> On October 1, 1976, Federal debt held by the public is estimated to increase by \$340 million due to a reclassification of Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

The means of financing a deficit other than borrowing from the public are:

- A decrease in cash or monetary assets;
- An increase in monetary liabilities for checks outstanding, etc.;
- An increase in deposit fund balances, which include the balances of the Exchange stabilization fund and liabilities that arise when the Federal Government temporarily holds money in deposit

as an agent for someone else (such as State income taxes withheld from Federal employees' salaries and not yet paid to the State); and

- Seigniorage, which is the face value of minted coins less the cost of their production.

As the figures in table C-2 indicate, the extent to which a large deficit can be financed by means other than borrowing from the public is very limited. Consequently, the total Government deficit and the borrowing from the public tend to be closely related.

Borrowing from the agencies largely depends on the surpluses of the trust funds, which own 93% of the Federal debt held by Government agencies. Agency investment in Federal securities and the total trust fund surplus during 1974-77 are compared in the table below (in billions of dollars):

	1974 actual	1975 actual	1976 estimate	TQ estimate	1977 estimate
Agency investment in Federal debt.....	14.8	7.0	2.3	-1.1	12.9
Total trust fund surplus or deficit (-)....	14.0	7.4	2.5	-1.1	12.5

As this table shows, the agency investment in Federal securities is similar in size to the total trust fund surplus throughout this period, and the yearly changes in level are likewise similar. The differences are accounted for by two factors. Certain agencies other than trust funds buy and sell Federal debt, as shown in table C-6, and the trust funds increase and decrease their open book balances.<sup>3</sup>

#### SIZE AND GROWTH OF FEDERAL DEBT

Gross Federal debt has risen substantially over most of the past four and a half decades, from about \$16 billion in 1929 to \$544.1 billion at the end of 1975. Table C-3 presents the detail of Federal debt since 1954 and shows that a sizable part of the increase is held in Federal Government accounts (primarily trust funds) rather than being owed to the public. From the end of 1954 to the end of 1975, gross Federal debt rose by 101% while Federal debt held by the public rose by 77%. Federal debt held by the public apart from the Federal Reserve System rose still less, by 56%—an annual compound rate of growth of 2.2% over the 21 years—because during this period the Federal Reserve System bought a large quantity of Federal debt in the market, thereby expanding the reserves of the banking system and providing for growth in the Nation's money stock.

During the depression of the 1930's and during World War II, Federal debt held by the public increased greatly, not only in absolute amount but also, as shown in the following chart, as a proportion of total net indebtedness: Federal, State and local, and private. Whereas Federal debt held by the public was only 9% of total net debt at the end of calendar year 1929, it had risen to 62% by the end of calendar year 1945. Federal borrowing was large during these years, particularly to finance World War II, and borrowing by other sectors was restricted by low incomes and poor credit-worthiness during the depression and by controls and scarcities during the war.

<sup>3</sup> Open book balances comprise cash assets not currently invested. As shown in Special Analysis B, they are very small relative to trust fund holdings of Federal debt.

Table C-3. COMPARISON OF TRENDS IN FEDERAL DEBT AND GROSS NATIONAL PRODUCT (in billions of dollars)

Fiscal year	Debt outstanding, end of year					GNP	Debt held by public as percent of GNP
	Gross Federal debt	Federal Government accounts	Held by				
			The public				
			Total	Federal Reserve System	Other		
1954	270.8	46.3	224.5	25.0	199.5	363.5	61.8
1955	274.4	47.8	226.6	23.6	203.0	381.0	59.5
1956	272.8	50.5	222.2	23.8	198.5	410.9	54.1
1957	272.4	52.9	219.4	23.0	196.4	433.3	50.6
1958	279.7	53.3	226.4	25.4	200.9	441.7	51.2
1959	287.8	52.8	235.0	26.0	209.0	471.3	49.9
1960	290.9	53.7	237.2	26.5	210.7	498.3	47.6
1961	292.9	54.3	238.6	27.3	211.4	509.0	46.9
1962	303.3	54.9	248.4	29.7	218.7	545.8	45.5
1963	310.8	56.3	254.5	32.0	222.4	577.1	44.1
1964	316.8	59.2	257.6	34.8	222.8	616.4	41.8
1965	323.2	61.5	261.6	39.1	222.5	658.0	39.8
1966	329.5	64.8	264.7	42.2	222.5	722.4	36.6
1967	341.3	73.8	267.5	46.7	220.8	773.5	34.6
1968	369.8	79.1	290.6	52.2	238.4	830.3	35.0
1969 <sup>1</sup>	367.1	87.7	279.5	54.1	225.4	904.2	30.9
1970 <sup>2</sup>	382.6	97.7	284.9	57.7	227.2	960.2	29.7
1971	409.5	105.1	304.3	65.5	238.8	1,019.8	29.8
1972	437.3	113.6	323.8	71.4	252.3	1,111.8	29.1
1973 <sup>3</sup>	468.4	125.4	343.0	75.2	267.9	1,238.4	27.7
1974	486.2	140.2	346.1	80.6	265.4	1,358.6	25.5
1975	544.1	147.2	396.9	85.0	311.9	1,440.0	27.6
1976 estimate	633.9	149.5	484.4	NA	NA	1,593.0	30.4
TQ estimate	652.8	148.4	504.4	NA	NA	NA	NA
1977 estimate <sup>4</sup>	719.5	161.3	558.2	NA	NA	1,837.0	30.4

NA=Not available.

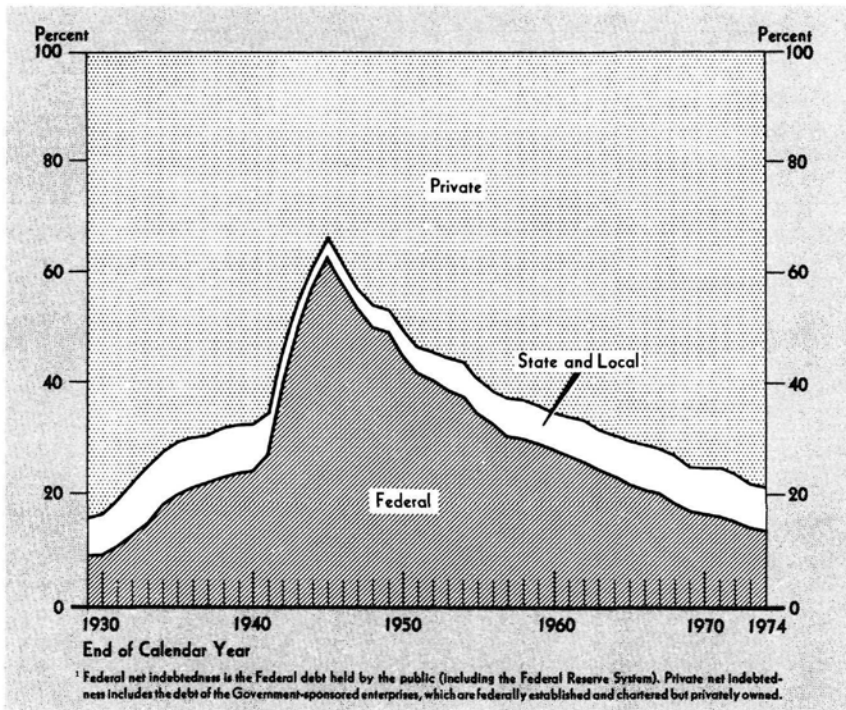
<sup>1</sup> During 1969, 3 Government-sponsored enterprises became completely privately owned, and their debt was removed from the totals for the Federal Government. At the dates of their conversion, gross Federal debt was reduced \$10.7 billion, debt held by Government accounts was reduced \$0.6 billion, and debt held by the public was reduced \$10.1 billion.

<sup>2</sup> Gross Federal debt and debt held by the public were increased \$1.6 billion due to a reclassification of the Commodity Credit Corporation certificates of interest from asset sales to debt.

<sup>3</sup> A procedural change in the recording of trust fund holdings of Treasury debt at the end of the month increased gross Federal debt and debt held in Government accounts by about \$4.5 billion.

<sup>4</sup> Gross Federal debt and debt held by the public are estimated to increase \$0.3 billion due to a reclassification of the Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

From 1945 to 1974, however, private debt increased as a proportion of total debt in every year, and in every year the Federal debt held by the public (including the Federal Reserve System) decreased as a proportion of the total. State and local government debt has risen in amount every year and has risen in proportion to total debt for the period as a whole. From the end of calendar year 1953 to the end of 1974, Federal debt held by the public rose 59%, State and local government debt rose 570%, and private debt rose 561%. By the end of calendar year 1974, Federal debt held by the public was only 13% of total debt. As a result of these trends, Federal debt and borrowing, although still significant, have become relatively much smaller influences in the financial markets. Complete data for calendar year 1975 are not yet available, but it is probable that the large Federal

Percent Distribution of Net Indebtedness<sup>1</sup>

deficit caused Federal debt held by the public to rise as a percentage of total debt. This does not significantly affect the comparison of trends over three decades.

During the same period Federal debt has decreased relative to gross national product. As shown in table C-3, debt held by the public equaled 62% of gross national product at the end of 1954 but declined steadily to 25% by the end of 1974. In 1975, however, debt held by the public rose as a percentage of gross national product, and it is expected to rise further in 1976 before leveling off in 1977.

The interest cost of the debt may be more significant than the amount of the debt for some types of comparison designed to measure the importance of Federal indebtedness. Interest on the debt held by the public has risen much faster than the debt itself, due to a strong upward trend since World War II in the interest rates that must be paid on new borrowings and on refunded debt. Between 1954 and 1975 the Federal debt held by the public grew 77%, but, as shown in table C-4, the interest paid to the public more than quadrupled. For this period as a whole, interest payments to the public grew faster than gross national product. In the first 5 years, 1954-58, interest was equal to 1.39% of gross national product, whereas by the last 5 years, 1971-75, the proportion had risen moderately to 1.59%. On the other hand, the proportion of budget outlays devoted to paying interest on the debt held by the public did not show any trend over the period as a whole and fluctuated around an average of 7.7%. Interest as a percentage of both gross national product and budget outlays is expected to rise in 1976 and 1977.



Table C-4. COMPARISON OF TRENDS IN INTEREST ON FEDERAL DEBT (in billions of dollars)

Fiscal year	Interest on the gross Federal debt					Interest on debt held by the public as a percent of	
	Total	Federal Government accounts	Paid to			GNP	Budget outlays <sup>2</sup>
			The public				
			Total	Federal Reserve System <sup>1</sup>	Other		
1954.....	6.4	1.3	5.2	0.5	4.7	1.42	7.29
1955.....	6.4	1.2	5.2	.4	4.8	1.36	7.56
1956.....	6.8	1.3	5.6	.5	5.1	1.35	7.90
1957.....	7.3	1.4	5.9	.7	5.3	1.37	7.73
1958.....	7.8	1.4	6.3	.7	5.6	1.44	7.68
1959.....	7.8	1.4	6.4	.8	5.6	1.36	6.96
1960.....	9.5	1.5	8.1	1.0	7.1	1.62	8.73
1961.....	9.3	1.5	7.8	1.0	6.8	1.53	7.95
1962.....	9.5	1.6	7.9	1.0	6.9	1.45	7.40
1963.....	10.3	1.6	8.7	1.1	7.6	1.50	7.78
1964.....	11.0	1.8	9.2	1.2	8.0	1.50	7.80
1965.....	11.8	2.0	9.8	1.4	8.4	1.49	8.29
1966.....	12.6	2.1	10.4	1.7	8.7	1.44	7.75
1967.....	14.2	2.6	11.6	2.0	9.6	1.51	7.36
1968.....	15.6	3.0	12.6	2.4	10.2	1.52	7.07
1969.....	17.7	3.5	14.1	2.9	11.2	1.56	7.66
1970.....	20.0	4.4	15.6	3.5	12.2	1.63	7.95
1971.....	21.6	5.3	16.3	3.7	12.6	1.60	7.73
1972.....	22.5	5.8	16.6	3.7	12.9	1.49	7.16
1973.....	24.8	6.3	18.5	4.3	14.2	1.49	7.51
1974.....	30.0	7.7	22.4	5.5	16.9	1.65	8.33
1975.....	33.5	8.8	24.7	6.0	18.7	1.71	7.60
1976 estimate.....	38.4	9.2	29.2	NA	NA	1.83	7.81
TQ estimate.....	10.6	2.4	8.1	NA	NA	NA	8.31
1977 estimate.....	45.6	9.6	36.0	NA	NA	1.96	9.13

NA=Not available.

<sup>1</sup> Estimated as the average of calendar year figures. The 1975 estimate is tentative.<sup>2</sup> Budget outlays for 1954-77 are given in the Budget, part 8, table 22.

Since the end of World War II the composition of the Federal debt has changed, with an increasingly large proportion of Federal securities having a relatively short maturity. One contributing factor is the statutory ceiling of  $4\frac{1}{4}\%$  that has been maintained since 1918 on the interest rate that could be paid on Treasury bonds.<sup>4</sup> Because long-term market rates exceeded  $4\frac{1}{4}\%$  after 1965, the ceiling eventually prevented the Treasury from selling long-term obligations. Since 1965 the average maturity of Treasury marketable debt has declined from about 5 years to about 3 years. This restriction on Treasury borrowing was relaxed in March 1971 by a law that allowed the Treasury to issue up to \$10 billion of long-term bonds at interest rates above  $4\frac{1}{4}\%$ . In July 1973 the restriction was relaxed further by exempting from this limit those bonds held by Government accounts

<sup>4</sup> Until 1967, 5-year notes were the longest term security that could be issued without regard to this limitation. In 1967 the maximum maturity of notes was raised to 7 years.

and the Federal Reserve System. Treasury now has \$18.7 billion of bonds outstanding that have been sold since the change of law in 1971, including bonds held by Government accounts and the Federal Reserve System. The effective interest rates have been 6.1% and higher with an average of 7.4%. The authority to sell bonds under this exception has now been used up.

### BORROWING BY FEDERAL AGENCIES

A few Government agencies are authorized to sell their own debt instruments to the public and to other Government agencies and funds. This agency borrowing is part of the gross Federal debt. For those agencies included in the budget, the authorization to borrow is budget authority and the disbursement of such borrowed money is a budget outlay.

Agency debt includes the borrowings of off-budget Federal agencies, which are Government owned and controlled but whose transactions have been excluded from the budget totals under provisions of law. The agencies that have borrowed while off-budget consist of the Export-Import Bank, the Postal Service, the Federal Financing Bank, and the United States Railway Association. Part of the debt of the Export-Import Bank and the Postal Service was issued during periods when they were in the budget. The debt of the Federal Financing Bank is classified by Treasury as public debt rather than agency debt.

Agency borrowing was shown in total in table C-1 and is shown by agency in table C-5. In 1975 the repayment of agency debt exceeded new agency borrowing by \$1.1 billion. In 1976 and 1977 repayments are expected to exceed new borrowing by small amounts. The agency debt outstanding on September 30, 1977, is estimated to be \$9.8 billion, which is about 1% of gross Federal debt.

Agency debt will be increased by an estimated \$340 million on October 1, 1976, due to reclassifying as Federal debt the certificates of beneficial interest in pools of loans issued by the Export-Import Bank and classified up to that date as loan asset sales. Since this is a reclassification of existing securities, it does not constitute Federal borrowing. Therefore agency borrowing, borrowing from the public, and gross Federal borrowing in 1977 will be an estimated \$340 million less than the change in debt from the end of the transition quarter to the end of 1977. Certificates redeemed after the reclassification will show as repayment of Export-Import Bank debt in table C-5. The issuance of new certificates after the reclassification would be shown as borrowing, but the Export-Import Bank does not plan to sell more certificates of beneficial interest after that date.

A further classification change arises from the transfer of all assets and liabilities of certain expiring funds to the Revolving fund (liquidating programs) in the Department of Housing and Urban Development. Debt of \$143 million was transferred from the Public facility loan fund on April 1, 1975, and debt of \$467 million is scheduled to be transferred from the College housing fund on October 1, 1976. These transfers do not constitute borrowing by the Revolving fund (liquidating programs) or repayment of debt by the fund that expires.

Table C-5. AGENCY BORROWING <sup>1</sup> (in millions of dollars)

Description	Borrowing or repayment (-) of debt				Debt out- standing, end 1977 estimate
	1975 actual	1976 estimate	TQ estimate	1977 estimate	
<b>Borrowing from the public:</b>					
Agriculture: Farmers Home Admin. <sup>2</sup> ----	-1	-----	-----	-25	291
Defense-----	-87	-92	-25	-98	900
Health, Education, and Welfare <sup>2</sup> -----	-1	-----	-----	-4	125
Housing and Urban Development:					
College housing loans <sup>2 3</sup> -----	-1	-----	-----	-----	-----
Public facility loans <sup>2 3</sup> -----	-----	-----	-----	-----	-----
Federal Housing Administration-----	61	90	19	50	576
Housing for the elderly <sup>2</sup> -----	-*	-----	-----	-----	64
Gov. National Mortgage Association <sup>2</sup> -----	-73	-41	-17	-99	545
Revolving fund (liquidating pro- grams) <sup>2 3</sup> -----	*	-----	-----	-4	391
Veterans Administration <sup>2</sup> -----	-44	-39	-18	-55	553
Export-Import Bank <sup>4</sup> -----	-295	4	-----	-789	2,144
Postal Service-----	-----	-----	-----	-----	250
Small Business Administration <sup>2</sup> -----	-1	-----	-----	-55	227
Tennessee Valley Authority-----	-570	-100	-----	-----	1,975
All other-----	-11	-*	-*	-*	2
<b>Total, borrowing from the public <sup>4</sup>----</b>	<b>-1,023</b>	<b>-178</b>	<b>-41</b>	<b>-1,079</b>	<b>8,042</b>
<b>Borrowing from other funds:</b>					
Agriculture: Farmers Home Admin. <sup>2</sup> ----	1	-----	-----	-21	156
Defense-----	-19	-15	-2	-14	128
Health, Education, and Welfare <sup>2</sup> -----	1	-----	-----	-3	65
Housing and Urban Development:					
College housing loans <sup>2 3</sup> -----	1	-----	-----	-----	-----
Public facility loans <sup>2 3</sup> -----	-----	-----	-----	-----	-----
Federal Housing Administration-----	18	-3	-----	-----	67
Housing for the elderly <sup>2</sup> -----	*	-----	-----	-----	33
Gov. National Mortgage Association <sup>2</sup> -----	4	-----	-----	-62	442
Revolving fund (liquidating pro- grams) <sup>2 3</sup> -----	*	-----	-----	-4	211
Veterans Administration <sup>2</sup> -----	4	-----	-----	-----	549
Export-Import Bank-----	-6	-4	-----	-----	-----
Small Business Administration <sup>2</sup> -----	1	-----	-----	-46	117
Tennessee Valley Authority-----	-51	-----	-----	-----	-----
<b>Total, borrowing from other funds..</b>	<b>-46</b>	<b>-22</b>	<b>-2</b>	<b>-149</b>	<b>1,769</b>
<b>Total, agency borrowing included in gross Federal debt <sup>4</sup>-----</b>	<b>-1,069</b>	<b>-200</b>	<b>-44</b>	<b>-1,229</b>	<b>9,810</b>
<b>MEMORANDUM</b>					
<b>Borrowing from Federal Financing Bank:</b>					
Tennessee Valley Authority-----	1,435	1,100	300	1,000	3,835
Export-Import Bank-----	4,049	1,437	393	2,028	7,908
Postal Service-----	1,000	1,280	500	1,398	4,678
United States Railway Association-----	34	-5	-1	-2	26
<b>Total, agency borrowing from Fed- eral Financing Bank-----</b>	<b>6,518</b>	<b>3,812</b>	<b>1,192</b>	<b>4,424</b>	<b>16,447</b>

\*Less than \$500 thousand.

<sup>1</sup> Excludes agency borrowing from Treasury.<sup>2</sup> Certificate of participation in loans issued by the Government National Mortgage Association on behalf of several agencies.<sup>3</sup> The debt of the Public facility loan fund (\$143 million) was transferred to the Revolving fund (liquidating programs) on April 1, 1975, and the debt of the College housing fund (\$467 million) is scheduled to be transferred on October 1, 1976.<sup>4</sup> Borrowing in 1977 does not include the reclassification on October 1, 1976, of an estimated \$340 million of Export-Import Bank certificates of beneficial interest as debt instead of loan asset sales.

The Federal Financing Bank (FFB) was created in December 1973 under the Treasury Department in order to assist and coordinate agency borrowing and Government-guaranteed borrowing and to reduce the cost to the Government of some of its borrowing activities. It was given the authority to purchase agency debt and Government-guaranteed obligations and, in turn, to finance these transactions by borrowing from the Treasury or the public. Since the FFB can borrow from the Treasury (or the public) at lower interest rates than other agencies would have to pay in the market, this procedure reduces the cost of agency borrowing activities. The FFB thus serves as a conduit for agency borrowing, and Treasury (or FFB) securities replace the securities of other agencies in the market. Agency borrowing from the FFB is not included in gross Federal debt. It would be double or triple counting to add together the agency borrowing from the FFB, the FFB borrowing from Treasury, and the Treasury borrowing from the public (or the FFB borrowing from the public) that was necessary to provide the FFB with funds to lend to the agencies.

The FFB began financial operations in May 1974 and borrowed \$1.5 billion in 8-month bills from the public in July 1974. All its other borrowing, however, has been from the Treasury, because Treasury can borrow from the public at slightly lower interest rates than FFB would have to pay. No further FFB borrowing from the public is planned. The FFB has substantial authority to borrow from either the Treasury or the public. With the approval of the Secretary of the Treasury, the FFB is authorized to borrow from the Treasury without a statutory limitation on the amount and also to have outstanding at any one time up to \$15 billion of publicly issued debt.

As shown in the memorandum section of table C-5, the FFB is having a profound effect on agency borrowing.<sup>5</sup> Four agencies that would otherwise borrow mostly in the market borrowed \$6.5 billion from the FFB in 1975 and are expected to borrow \$3.8 billion in 1976 and \$4.4 billion in 1977. Because of this shift in the source of borrowing, almost no new agency borrowing from the market took place in 1975 or is scheduled to take place in 1976 and 1977. The change in agency debt outstanding is thus determined almost solely by the repayment of maturing debt and consequently is negative throughout the period. If FFB did not exist and if agency borrowing were the same, the agency component of gross Federal debt would be about \$14 billion higher at the end of 1977 than is now estimated and the Treasury component would be correspondingly lower.

By the end of 1977, \$4.4 billion of agency debt, or more than two-fifths of the total, will be obligations of the four agencies listed in table C-5 that plan to borrow in the future only from the FFB. A total of \$3.8 billion, or over a third of all agency debt, will consist of certificates of participation in pools of loans issued by the Government National Mortgage Association as trustee on behalf of several agencies, which are identified in table C-5. The issuance of these certificates of participation was discontinued after 1968. A further \$1.0 billion of agency debt will be family housing mortgages assumed a number of years ago by the Department of Defense. The remaining agency debt,

<sup>5</sup> FFB purchases of Government-guaranteed obligations are shown in table C-9.

Table C-6. AGENCY INVESTMENT IN FEDERAL SECURITIES  
(In millions of dollars)

Description	Increase or decrease (-) in holdings				Holdings, end of 1977 estimate
	1975 actual	1976 estimate	TQ estimate	1977 estimate	
<b>Investment in Treasury debt:</b>					
Health, Education, and Welfare:					
Federal old-age and survivors insurance trust fund.....	2,175	-1,881	-634	1,038	37,860
Federal disability insurance trust fund.....	-37	-1,131	-424	-240	6,362
Federal hospital insurance trust fund.....	1,897	1,476	583	2,435	14,205
Federal supplementary medical insurance trust fund.....	148	-295	-86	947	1,944
Housing and Urban Development:					
Federal Housing Administration.....	200	180	48	141	1,775
Government National Mortgage Association.....	249	222	28	-108	1,459
Other.....	8	31	5	23	200
Labor: Unemployment trust fund.....	-4,938	-1,800	-300	400	5,484
Transportation:					
Highway trust fund.....	1,937	-285	-20	200	9,430
Airport and Airway trust fund.....	1,058	366	5	109	2,416
Treasury: Exchange stabilization fund <sup>1</sup> .....	-913				1,451
Veterans Administration:					
National service life ins. trust fund.....	111	210	117	326	7,369
Other trust funds.....	-6	6	8	14	1,065
Other.....	33	32	8	32	390
Civil Service Commission:					
Civil Service retirement and disability trust fund.....	4,276	4,494	-212	5,802	48,315
Other trust funds.....	359	421	107	467	3,026
Federal Deposit Insurance Corp.: Trust fund.....	404	618	73	842	7,798
Federal Home Loan Bank Board: FSLIC.....	316	311	84	338	4,333
Postal Service.....	-72	-583	-120		
Railroad Retirement Board: Trust funds.....	-290	-209	-403	140	3,737
Other trust funds.....	50	26	16	24	275
Other Federal funds.....	82	102	-10	85	543
Other off-budget Federal agencies.....	31	11	-1	6	59
<b>Total, investment in Treasury debt.....</b>	<b>7,077</b>	<b>2,321</b>	<b>-1,129</b>	<b>13,021</b>	<b>159,496</b>
<b>Investment in agency debt:</b>					
Agriculture: CCC.....	-6	-6		-6	29
Health, Education, and Welfare:					
Federal old-age and survivors insurance trust fund.....					555
Federal hospital insurance trust fund.....					50
Housing and Urban Development:					
Federal Housing Administration.....	-*	-*	-*	-*	192
Government National Mortgage Association.....	-21	-12	-2	-8	201
Veterans Administration: National service life insurance trust fund.....				-75	235
Civil Service Commission: Civil Service retirement and disability trust fund.....					375
Federal Home Loan Bank Board: FSLIC.....	*			-10	132

See footnotes at end of table.

Table C-6. AGENCY INVESTMENT IN FEDERAL SECURITIES—Continued  
(In millions of dollars)

Description	Increase or decrease (—) in holdings				Holdings end of 1977 estimate
	1975 actual	1975 estimate	TQ estimate	1977 estimate	
Postal Service.....	—19	—4	-----	-----	-----
Railroad Retirement Board: Trust funds.....	-----	-----	-----	—50	-----
<b>Total, investment in agency debt...</b>	<b>—46</b>	<b>—22</b>	<b>—2</b>	<b>—149</b>	<b>1,769</b>
<b>Total, agency investment in Federal debt.....</b>	<b>7,031</b>	<b>2,299</b>	<b>—1,131</b>	<b>12,872</b>	<b>161,265</b>
<b>MEMORANDUM</b>					
Investment by Federal funds.....	860	860	161	486	9,254
Investment by trust funds.....	7,144	2,015	—1,172	12,379	150,501
Investment by off-budget Federal agencies.....	—972	—576	—121	6	1,510

\* Less than \$500 thousand.

† The change in holdings is not estimated due to the uncertainties in foreign exchange, and the estimated 1977 year-end holdings are taken to be the actual holdings at the end of 1975.

which is mostly for programs that will continue to borrow from the public, will constitute only 7% of the total—\$643 million of Federal Housing Administration debentures issued in payment of insurance claims and \$6 million of other obligations.

The Treasury provides capital to business-type Government enterprises both in the form of capital stock and in the form of debt. The provision of debt is shown as “borrowing from Treasury” on the statements of financial condition for enterprises in the Budget Appendix. However, the equity and the debt instruments are the same in substance; and it would be double counting to add together the agency borrowing from the Treasury and the Treasury borrowing from the public that was necessary to provide the agencies with this capital. Therefore, agency borrowing from Treasury is excluded from figures on agency borrowing and debt in all other parts of the budget documents.

#### AGENCY INVESTMENT IN FEDERAL SECURITIES

Trust funds and some public enterprise funds accumulate cash in excess of current requirements in order to meet future claims and demands. Such cash surpluses are invested mostly in Treasury debt and, to a very small extent, in agency debt. Purchases of these securities are not counted as budget outlays, and redemptions are not counted as budget receipts.

Net investment by trust funds and other Federal agencies declined sharply from \$14.8 billion in 1974 to \$7.0 billion in 1975 and, as shown in table C-6, is estimated to decline further to \$2.3 billion in 1976. In 1977 this decline is expected to be reversed, with agency investment rising to \$12.9 billion, which is near the 1974 level.

The major cause of the decrease in agency investment from 1974 to 1975 was the large rise in unemployment, which substantially increased the benefit payments of the unemployment trust fund and to some lesser extent reduced the employment tax receipts of the social

security trust funds. Disinvestment by the unemployment trust fund is considerably reduced in 1976, despite much higher outlays, because some State funds have disinvested entirely and the Labor Department will advance \$8.5 billion to the trust fund. However, the effect of the unemployment trust fund is estimated to be offset by several important factors, the largest of which is a sizable swing from investment to disinvestment by the old age, survivors, and disability insurance trust funds. The expected rise in agency investment in 1977 is caused in large measure by continued economic recovery, which reduces unemployment benefits and raises trust fund tax receipts, and by proposed legislation to increase taxes for the social security and unemployment trust funds by \$5.4 billion.

Total agency holdings of Federal securities will reach an estimated \$161.3 billion by September 30, 1977. This will constitute 22% of the gross Federal debt. Two major groups of trust funds—the social security funds and the Civil Service Commission funds—will account for 68% of total agency holdings, and all the trust funds together will account for 93%. Ninety-nine percent of the holdings will be Treasury debt, and the holdings of agency debt will continue to decline by small amounts each year.

#### LIMITATIONS ON FEDERAL DEBT

Statutory limitations have customarily been placed on Federal debt. Beginning with the enactment of the Second Liberty Bond Act in 1917, the limitation on the amount of debt developed in several steps from being an authorization of an amount for each specific issue to being an overall ceiling on the total amount of most outstanding Federal debt. The latter type of limitation has been in effect since 1941. The limit currently applies to the total of:

- Almost all public debt issued by the Treasury since September 1917, whether held by the public or by the Government;
- Agency debt in the form of participation certificates issued during 1968 under the Participation Sales Act of 1966; and
- Other debt issued by Federal agencies (and the District of Columbia Armory Board) which, according to explicit statute, is fully guaranteed as to principal and interest by the United States.

Until recently debt subject to limit also included \$825 million of special non-interest-bearing notes issued by the Treasury to the International Monetary Fund. These notes, while part of the debt subject to limit, were not part of gross Federal debt. On March 14, 1975, however, these notes were redeemed and replaced by a demand liability in the form of a letter of credit of equal value, which does not constitute any kind of debt. At one time special non-interest-bearing notes were also issued to various international lending organizations, but they were redeemed earlier. The redemption of these notes was in accordance with a recommendation of the President's Commission on Budget Concepts, which viewed them as representing an exchange of assets (in the case of the International Monetary Fund) or an unpaid obligation or contingent liability (in the case of the international lending organizations) rather than a payment that had been made and that in turn had increased the Government's debt.<sup>6</sup>

<sup>6</sup> *Report of the President's Commission on Budget Concepts* (Washington: U.S. Government Printing Office, 1967), pp. 31–32 and 59.

The statutory limit on the Federal debt was \$495 billion from June 30, 1974, to February 19, 1975. This limit consisted of a permanent limit of \$400 billion and a temporary increase to that limit of \$95 billion. The \$495 billion limit was scheduled to last until March 31, 1975, but the Federal debt subject to limit increased faster than expected. Consequently on February 19, 1975, the statutory limit was temporarily raised to \$531 billion. It was temporarily raised further to \$577 billion on June 30 and to \$595 billion on November 14, 1975. The temporary increase to \$595 billion expires on March 15, 1976, after which a further increase will be necessary to permit the Federal Government to meet its obligations.

The outstanding debt subject to limit is shown in table C-7 and compared with the gross Federal debt and the Federal debt held by the public. The debt subject to limit was \$534.2 billion at the end of 1975 and is expected to rise to \$624.2 billion and \$710.4 billion at the end of 1976 and 1977, respectively. These amounts are substantially more than the permanent debt limit of \$400 billion. The debt subject to limit equals about 98% of the gross Federal debt. As table C-7 shows, almost all of the difference is accounted for by agency debt not subject to the general limitation.

Table C-7. DEBT SUBJECT TO STATUTORY LIMIT (in millions of dollars)

Description	End of year			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Federal debt held by the public .....	396, 906	484, 406	504, 406	558, 246
Federal debt held by Government agencies.....	147, 225	149, 525	148, 393	161, 265
Total, gross Federal debt.....	544, 131	633, 931	652, 799	719, 511
Deduct:				
Treasury debt not subject to limit <sup>1</sup> .....	624	614	614	614
Agency debt not subject to general limitation:				
Department of Defense.....	1, 276	1, 168	1, 140	1, 028
Tennessee Valley Authority.....	2, 075	1, 975	1, 975	1, 975
Export-Import Bank.....	2, 593	2, 593	2, 593	2, 144
Postal Service.....	250	250	250	250
Participation certificates <sup>2</sup> .....	3, 125	3, 125	3, 125	3, 125
Coast Guard.....	2	2	2	2
Total, Federal debt not subject to limit .....	9, 945	9, 727	9, 700	9, 138
Federal debt subject to statutory limit.....	534, 186	624, 204	643, 099	710, 373
District of Columbia Armory Board bonds.....	20	20	20	20
Total, debt subject to statutory limit.....	534, 207	624, 223	643, 119	710, 393

<sup>1</sup> Includes \$9 million of Federal Financing Bank debt in 1975.

<sup>2</sup> Certificates of participation in loans issued by the Government National Mortgage Association on behalf of several agencies (excluding certificates issued during 1968).

The debt subject to statutory limit is expected to increase more than the debt held by the public in both 1976 and 1977: \$90.0 billion compared to \$87.5 billion in 1976, and \$67.3 billion compared to \$53.8 billion in 1977. The slower growth in the debt held by the public is due primarily to the surpluses of certain funds in the Federal



budget—principally the trust funds. Because these surpluses are largely invested in Federal debt, they reduce the debt held by the public. However, since the Federal debt acquired by these funds is almost all subject to the statutory debt limit, this investment does not reduce the amount of debt subject to limit.

Agency debt subject to the statutory limit is comprised almost exclusively of debentures issued by the Federal Housing Administration and participation certificates sold in 1968. These two categories together make up only about one-seventh of total agency debt. However, most other agency debt is subject to special statutory limits. For example, the Postal Service is limited to \$2 billion of annual borrowing and \$10 billion of outstanding bonds.

### FEDERALLY ASSISTED BORROWING

The impact of the Government on borrowing includes not only its own borrowing to finance Federal operations but also its assistance to certain borrowing by the public. Federally assisted borrowing is of two types: borrowing by Government-sponsored enterprises, and Government-guaranteed borrowing by non-Federal borrowers.

Seven Government-sponsored enterprises, which were federally established and chartered but are entirely privately owned, borrow under Government auspices. The transactions of these enterprises are not included within the Federal budget, and their debt is not part of gross Federal debt. These enterprises are essentially financial intermediaries, borrowing in the securities market and lending their borrowed funds for specifically authorized purposes either directly or by purchasing loans originated by the private group that they were established to assist.

The borrowing programs of all seven enterprises are subject to Federal supervision. In addition, they all consult the Treasury Department, either by law or by custom, in planning their market offerings. The Student Loan Marketing Association now borrows exclusively from the Federal Financing Bank.<sup>7</sup> The Federal National Mortgage Association and the Federal home loan banks are required to obtain Treasury approval of the terms and timing of specific offerings. In addition to their Federal sponsorship, all of the enterprises have a history of successful financial performance. Hence, despite the absence of Federal guarantees, the obligations of these enterprises are sold at interest rates only moderately higher than the rates on Treasury issues.

As shown in table C-8, the borrowing of these seven Government-sponsored enterprises was \$11.9 billion in 1975 and is expected to be \$8.0 billion in 1976 and \$14.9 billion in 1977. These figures are calculated net of the borrowing by one Government-sponsored enterprise from another, a type of transaction that over this period consists primarily of the Federal Home Loan Mortgage Corporation borrowing from the Federal home loan banks or repaying its debt. During 1975-77, as in most years, borrowing largely reflects support for the housing

<sup>7</sup> The securities of the other Government-sponsored enterprises are not Government guaranteed and therefore cannot be bought by the FFB.

market from the Federal home loan banks, Federal National Mortgage Association, and Federal Home Loan Mortgage Corporation. Nearly two-thirds of the debt outstanding at the end of 1977 will have been issued by these enterprises. The sharp rise in borrowing estimated for 1977 is due to a large rise in mortgage purchases and advances to savings institutions expected to be provided by these enterprises. Special Analysis E discusses lending by the Government-sponsored enterprises.

**Table C-8. NET CHANGES IN DEBT OF GOVERNMENT-SPONSORED ENTERPRISES (in millions of dollars)**

Description	Increase or decrease (-)				Debt outstanding end 1977 estimate
	1975 actual	1976 estimate	TQ estimate	1977 estimate	
Health, Education, and Welfare: Student Loan Marketing Association.....	-10	165	60	335	800
Housing and Urban Development: Federal National Mortgage Association.....	3,004	1,801	750	3,710	34,497
Farm Credit Administration:					
Banks for cooperatives.....	612	496	389	450	4,502
Federal intermediate credit banks.....	1,500	1,553	408	1,759	13,299
Federal land banks.....	3,000	2,399	695	2,618	19,876
Federal Home Loan Bank Board:					
Federal home loan banks.....	3,963	-754	1,545	2,048	23,483
Federal Home Loan Mortgage Corporation <sup>1</sup> .....	2,229	2,280	491	3,155	12,226
<b>Total.....</b>	<b>14,298</b>	<b>7,940</b>	<b>4,337</b>	<b>14,076</b>	<b>108,684</b>
Less increase in holdings of debt issued by Government-sponsored enterprises..	2,379	-39	94	-854	3,275
<b>Total, borrowing by Government-sponsored enterprises.....</b>	<b>11,919</b>	<b>7,978</b>	<b>4,243</b>	<b>14,929</b>	<b>105,409</b>

<sup>1</sup> Figures include the sale of participation certificates, which in previous years were classified as a sale of loan assets rather than as borrowing in the statement of financial condition for the FHLMC in the Budget Appendix.

The other type of federally assisted borrowing, Government-guaranteed borrowing, is borrowing by individuals, private corporations, State and local governments, or foreign countries for which the United States Government guarantees the payment of principal and/or interest in whole or in part. Government-guaranteed borrowing is the same as Government-guaranteed lending. The major part of Government-guaranteed debt consists of mortgages on residential property. As shown in table C-9, Government-guaranteed borrowing was \$16.4 billion in 1975 and is expected to be \$18.0 billion in 1976 and \$13.2 billion in 1977. Special Analysis E presents detailed data on the guarantee programs.

#### TOTAL FEDERAL AND FEDERALLY ASSISTED BORROWING

Table C-9 summarizes Federal and federally assisted borrowing from the public. For the purpose of this table, Government-sponsored enterprises are excluded from the public and defined in the same

sector as the Federal Government. Federal borrowing from the public is presented in total. Borrowing by Government-sponsored enterprises and Government-guaranteed borrowing are presented both in total and as net amounts, the latter having been adjusted in order to remove double counting in the derivation of total Federal and federally assisted borrowing from the public. Double counting would otherwise occur when one type of Federal or federally assisted debt is bought or sold by a Government agency or a Government-sponsored enterprise.

Table C-9. NET BORROWING FROM THE PUBLIC BY GOVERNMENT, GOVERNMENT-SPONSORED ENTERPRISES, AND GOVERNMENT-GUARANTEED BORROWERS (in billions of dollars)

Description	Borrowing or repayment (-)				Debt outstanding end 1977 estimate
	1975 actual	1976 est.	TQ est.	1977 est.	
Federal borrowing from the public <sup>1 2</sup> .....	50.9	87.5	20.0	53.5	558.2
Borrowing by Government-sponsored enterprises <sup>3</sup> ....	11.9	8.0	4.2	14.9	105.4
Less increase in holdings of Federal debt .....	2.3	-.5	*	*	2.5
Less increase in Government-sponsored debt held by Federal agencies:					
Federal Home Loan Bank Board .....	1.2	.3	-*	-.1	1.5
Federal Financing Bank .....	.1	.2	.1	.3	.8
Net Government-sponsored borrowing from the public .....	8.2	8.0	4.2	14.6	100.6
Government-guaranteed borrowing <sup>4</sup> .....	16.4	18.0	3.7	13.2	235.1
Less increase in Government-guaranteed loans held by:					
Federal agencies:					
Federal Financing Bank .....	6.2	5.6	2.8	8.3	22.9
Government National Mortgage Corporation ..	1.6	-2.0	-.1	-.1	2.8
Government-sponsored enterprises:					
Student Loan Marketing Association .....	.1	.2	.1	.3	.8
Federal National Mortgage Association .....	2.6	1.2	.5	2.4	32.0
Federal Home Loan Banks .....	.2	-*	*	*	.2
Federal Home Loan Mortgage Corporation .....	.1	-.1	-*	-.1	1.7
Net Government-guaranteed borrowing from the public .....	5.7	13.1	.4	2.4	174.6
Total, Federal and federally assisted borrowing from the public .....	64.7	108.7	24.6	70.5	833.5

\* Less than \$50 million.

<sup>1</sup> See table C-1.

<sup>2</sup> Borrowing in 1977 excludes the reclassification on October 1, 1976, of an estimated \$0.3 billion of Export-Import Bank certificates of beneficial interest from loan asset sales to debt.

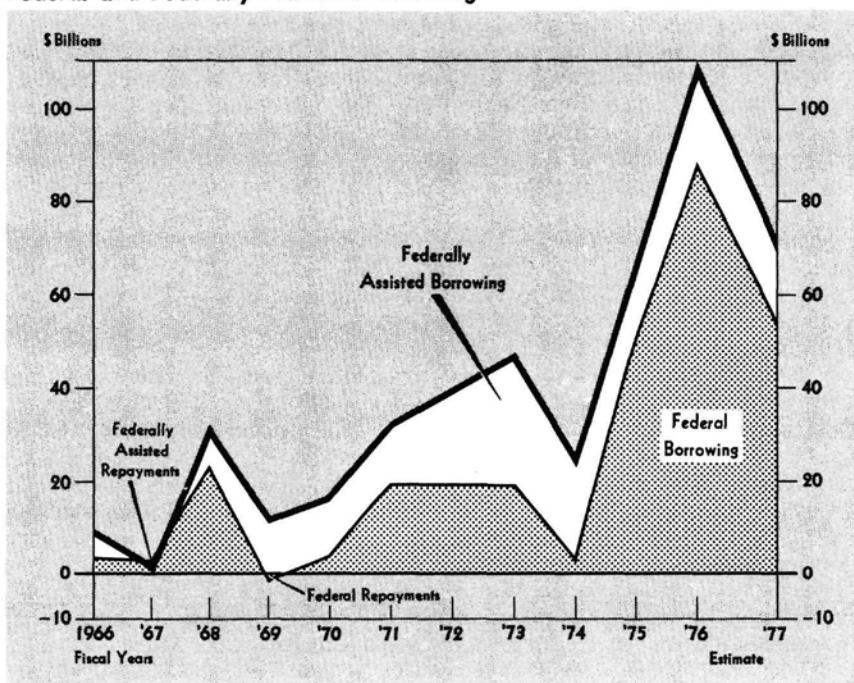
<sup>3</sup> See table C-8.

<sup>4</sup> The same as Government-guaranteed loans. See table E-7.

Federal and federally assisted borrowing from the public during 1975-77 is made up predominantly of Federal borrowing to finance the large budget deficits. In addition, the Federal Financing Bank expects to acquire almost half of the increase in Government-guaranteed obligations over this period. Since the FFB finances these acquisitions by borrowing from the Treasury, which in turn borrows from the public, these transactions substitute Federal borrowing for Government-guaranteed borrowing in the market.

The following chart depicts the trends in Federal and federally assisted borrowing from the public between 1966 and 1977. The series is volatile, and the recent and expected fluctuations are dominated by the Federal deficit. Total Federal and federally assisted borrowing fell to \$24.1 billion in 1974 because of a sharp drop in the Federal deficit and rose dramatically to \$64.7 billion in 1975 and to an estimated \$108.7 billion in 1976 because of large and rising deficits in these years. The total is expected to decrease significantly in 1977 as the Federal deficit falls again.

### Federal and Federally Assisted Borrowing



As the chart shows, Federal and federally assisted borrowing is now substantially higher than a decade ago. Much of the increase parallels the growth in the economy and in the total funds raised by the non-financial sector through the sale of debt securities and other forms of borrowing and through the sale of corporate equities. However, although the existence of trends is difficult to discern because of the volatility of the series, to some extent the total Federal and federally assisted borrowing from the public seems to have increased as a proportion of the total funds raised. This proportion increased from 15% during 1960-67 to 22% during 1968-74 and to 36% in 1975. Thus, despite the generally decreasing share of Federal debt in total debt, Government programs since 1968 have influenced the allocation of funds raised in financial markets more than they did in the immediately preceding years. In 1975 the Government impact was unusually large, and the estimated totals for Federal and federally assisted borrowing imply that it will remain large relative to most years in 1976 and 1977.

## SPECIAL ANALYSIS D

### INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS

This analysis divides outlays between those that are of an investment or "capital" nature and those directed to operating or "current" purposes. Budget outlays are classified into three categories; investment, current, and other. Each of the major classifications is further subdivided so that civil and national defense outlays can be separately analyzed. The national defense category uses the same definitions as the national defense function in the budget; the civil grouping includes all other functions.

*Investment-type outlays.*—These outlays yield benefits over several years: purchases of Federal physical assets, loans (both domestic and foreign); State, local, and private physical assets; and developmental expenditures that add to the Nation's capacity for better education, technical innovation, and health services.

*Current outlays.*—These outlays provide benefits in the year that they are made. Included are aid and special services to agriculture, business, labor, homeowners, tenants, and veterans; payments to other nations; and Federal welfare obligations. Also included are: payments from retirement and social insurance trust funds established to provide an assured income to contributors or their families in the event of unemployment, retirement, disability, or death; and, other services and current operating expenses. Finally, this category includes transactions such as: operation and administration of Federal departments and agencies; repair, maintenance, and operation of physical assets; regulatory and control activities; and interest.

*Other outlays.*—These outlays cannot be precisely classified in either of the above two categories and are placed in this residual classification. Included are: Allowances for contingencies; and certain financial adjustments that cannot be distributed, such as proprietary receipts and the employer share of employee retirement.

These three categories of outlays are summarized in table D-1 for 1975-77.

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

	Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>INVESTMENT-TYPE OUTLAYS</b>				
<b>Additions to Federal assets:</b>				
Civil:				
Loans and other financial investments.....	4.7	6.4	1.6	3.9
Physical assets:				
Public works.....	4.1	4.8	1.4	5.5
Major commodity inventories.....	.3	.2	*	-.1
Major equipment and other physical assets.....	.9	1.3	.4	1.3
National defense.....	19.2	20.0	5.9	23.7
<b>Additions to State, local, and private assets:</b>				
Civil.....	9.9	12.3	3.4	14.5
National defense.....	*	*	*	*
<b>Developmental outlays:</b>				
Civil.....	29.5	35.7	8.9	34.3
National defense.....	9.7	10.0	2.7	11.4
<b>Subtotal, investment-type outlays:</b>				
Civil.....	49.4	60.7	15.7	59.4
National defense.....	28.9	30.1	8.6	35.2
<b>Total.....</b>	<b>78.4</b>	<b>90.8</b>	<b>24.4</b>	<b>94.6</b>
<b>CURRENT OUTLAYS</b>				
<b>Current expenses for aids and special services:</b>				
Civil.....	55.6	65.7	15.3	62.1
National defense.....	5.2	7.8	1.8	8.0
<b>Retirement and social insurance benefits—civil.....</b>	<b>101.6</b>	<b>118.2</b>	<b>30.8</b>	<b>130.2</b>
<b>Other services and current operating expenses:</b>				
Civil:				
Interest.....	23.3	26.8	7.7	32.9
Other.....	17.4	19.7	5.7	20.7
National defense.....	58.2	61.8	16.4	65.0
<b>Allowances, Department of Defense.....</b>	<b>-----</b>	<b>.1</b>	<b>*</b>	<b>1.6</b>
<b>Subtotal, current outlays:</b>				
Civil.....	197.8	230.4	59.5	246.0
National defense.....	63.4	69.7	18.2	74.5
<b>Total.....</b>	<b>261.2</b>	<b>300.0</b>	<b>77.6</b>	<b>320.5</b>
<b>OTHER</b>				
<b>Allowances for:</b>				
Civilian agency pay raises.....	-----	-----	-----	.8
Contingencies.....	-----	.2	.2	1.5
Employer share, employee retirement (—).....	—4.0	—4.2	—1.0	—4.5
<b>Proprietary receipts from the public (—):</b>				
Civil.....	—5.3	—6.3	—1.4	—10.0
National defense.....	—5.8	—7.0	—1.8	—8.6
<b>Subtotal, other outlays:</b>				
Civil.....	—9.3	—10.3	—2.2	—12.2
National defense.....	—5.8	—7.0	—1.8	—8.6
<b>Total.....</b>	<b>—15.0</b>	<b>—17.3</b>	<b>—4.0</b>	<b>—20.9</b>
<b>Total budget, outlays:</b>				
Civil.....	238.0	280.7	73.0	293.1
National defense.....	86.6	92.8	25.0	101.1
<b>Total.....</b>	<b>324.6</b>	<b>373.5</b>	<b>98.0</b>	<b>394.2</b>

\*Less than \$50 million.

Table D-2 shows civil investments and current operating outlays as a percentage of total budget outlays. Net civil outlays will be 75.2% of total budget outlays in 1976 and 74.3% in 1977. Investment-type outlays are projected to drop from 16.2% of total budget outlays in 1976 to 15.1% in 1977, while current outlays increase from 61.7% in 1976 to 62.4% in 1977.

Table D-2. CIVIL INVESTMENTS AND CURRENT OPERATING OUTLAYS  
(Percent of total budget outlays)

	1973 actual	1974 actual	1975 actual	1976 esti- mate	TQ esti- mate	1977 esti- mate
<b>INVESTMENT-TYPE OUTLAYS</b>						
<b>Additions to Federal assets:</b>						
Loans.....	0.2	0.7	1.3	1.5	1.4	0.8
Other financial investments.....	.1	.2	.2	.3	.3	.2
Public works—sites and direct con- struction.....	1.3	1.3	1.3	1.3	1.4	1.4
Major commodity inventories.....	-.2	-.1	.1	.1	*	—*
Major equipment.....	.1	.1	.1	.1	.1	.1
Other physical assets—acquisition and improvement.....	.3	.2	.2	.3	.3	.3
Subtotal, additions to Federal assets.....	1.8	2.3	3.1	3.4	3.6	2.7
<b>Additions to State, local, and private assets:</b>						
State and local assets.....	3.0	3.0	2.7	3.0	3.2	3.4
Private assets.....	.4	.3	.3	.3	.2	.2
Subtotal, additions to State, local and private assets.....	3.4	3.3	3.1	3.3	3.4	3.7
<b>Developmental outlays:</b>						
Education, training and health.....	6.3	6.0	6.3	6.8	6.3	5.8
Research and development.....	2.9	3.0	2.7	2.7	2.7	2.8
Engineering and natural resource surveys.....	.1	.1	.1	.1	.1	.1
Subtotal, developmental out- lays.....	9.2	9.0	9.1	9.6	9.0	8.7
Total investment-type outlays..	14.4	14.6	15.2	16.2	16.0	15.1
<b>CURRENT OUTLAYS</b>						
<b>Current expenses for aids and special services:</b>						
Agriculture.....	2.2	1.2	.5	.4	.3	.4
Business.....	1.3	1.5	1.2	1.1	1.1	1.1
Labor.....	.6	.6	.6	.9	.9	.7
Homeowners and tenants.....	.6	.6	.6	.8	.8	.8
Veterans.....	5.1	5.0	5.1	5.1	4.4	4.4
International aids.....	.6	.5	.6	.3	.2	.4
Welfare aids.....	5.3	5.8	6.5	6.9	5.9	6.3
Other aids and special services.....	2.4	2.4	2.2	2.1	1.9	1.6
Subtotal, current expenses for aids and special services.....	18.1	17.6	17.1	17.6	15.6	15.8

Table D-2. CIVIL INVESTMENTS AND CURRENT OPERATING OUTLAYS  
(Percent of total budget outlays)—Continued

	1973 actual	1974 actual	1975 actual	1976 esti- mate	TQ esti- mate	1977 esti- mate
<b>CURRENT OUTLAYS—Continued</b>						
<b>Retirement and social insurance benefits:</b>						
Insurance benefits.....	23.9	25.1	25.1	24.5	25.4	26.4
Unemployment benefits.....	1.8	1.9	3.9	4.6	3.5	3.9
Other retirement and social insurance benefits.....	1.8	2.1	2.4	2.5	2.6	2.8
Subtotal, retirement and social insurance benefits.....	27.5	29.1	31.3	31.6	31.4	33.0
<b>Other services and current operating expenses:</b>						
Repair, maintenance and operation of physical assets (excluding special services).....	.6	.6	.4	.4	.5	.3
Regulation and control.....	.9	1.1	1.2	1.2	1.2	1.2
Other operation and administration.....	4.6	4.4	3.8	3.7	4.1	3.7
Net interest.....	7.1	8.0	7.2	7.2	7.8	8.4
Subtotal, other services and current operating expenses..	13.2	14.1	12.5	12.4	13.7	13.6
Total current outlays.....	58.8	60.8	61.0	61.7	60.7	62.4
<b>Total civil investments and current operating outlays.....</b>	<b>73.3</b>	<b>75.4</b>	<b>76.2</b>	<b>77.9</b>	<b>76.7</b>	<b>77.5</b>
<b>Civil other.....</b>	<b>-3.8</b>	<b>-4.7</b>	<b>-2.9</b>	<b>-2.8</b>	<b>-2.3</b>	<b>-3.1</b>
<b>Net civil outlays.....</b>	<b>69.5</b>	<b>70.7</b>	<b>73.3</b>	<b>75.2</b>	<b>74.5</b>	<b>74.3</b>

\*Less than 0.5%.

## 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) development outlays. Civil investment outlays will be \$59.4 billion, 15.1% of total outlays, while defense investment outlays will be \$35.2 billion, 8.9% of the 1977 total.

**Additions to Federal assets.**—This category comprises additions to both financial and physical assets of the Federal Government. Investment in Federal civil assets in 1977 is projected to be \$10.7 billion, decreasing by \$2.0 billion, or 15.8% from such investment in 1976. Investment in defense assets in 1977 will be \$23.7 billion, an increase of \$3.7 billion, or 18.4%, over investment in 1976. Financial assets are primarily direct loans; for example, loans to finance private housing construction and encourage homeownership, to help small businesses, and to promote economic development abroad. Federal financial assets include both loans and other financial investments. Other financial investments include the capital provided for certain international organizations such as the World Bank.



Civil loans and financial investments are estimated to be \$3.9 billion, a decrease of \$2.5 billion from 1976. Civil loans are expected to decrease by \$2.4 billion. Special Analysis E discusses financial investments in greater detail.

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

Additions to civil physical assets will be \$6.8 billion in 1977, as compared to additions of \$6.3 billion in 1976. Public works investments, the largest part of this total will be \$5.5 billion in 1977 as compared to \$4.8 billion in 1976.

**Additions to State, local, and private assets.**—Federal outlays in this category add to State, local, and private assets. Grants that add to 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 plants, watershed protection projects, schools in federally affected areas, and public facilities under economic development programs for depressed regions.

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

Civil additions to State, local, and private assets in 1977 will be \$14.5 billion, an increase of \$2.2 billion more than in 1976. The major area of increased spending is in the Federal highway trust fund.

**Developmental outlays.**—Federal outlays of this type are principally for research and development, education and health, and other programs that improve the knowledge, technical skills, and physical vigor of America. The Federal outlays shown in this category do not fully reflect the Government's contribution to the productivity of the economy. Certain other programs that further this end are classified in accordance with their principal purpose; thus, veterans educational benefits are listed as current expenses for veterans aid rather than as developmental outlays. Similarly, the training of military personnel and other Government employees is treated as an operating expense and not as part of the Government's education and training programs.

Civil research and developmental outlays will be \$34.3 billion, a decrease of \$1.4 billion from 1976. This includes increases for the financial assistance for health care, Energy Research and Development Administration (ERDA), the Airport and airway trust fund, and the National Aeronautics and Space Administration (NASA).

Civil developmental outlays for education, training, and health are \$22.9 billion in 1977, or 5.8% of total outlays.

Civil outlays for research and development will be \$11.0 billion in 1977, an increase of \$0.8 billion from 1976. The bulk of this increase is: \$0.5 billion for energy research, \$0.1 billion for health research and \$0.1 billion for NASA.

## 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 civil functions will be \$246.0 billion in 1977, an increase of \$15.6 billion from 1976. The rate of increase will drop from 16% in 1976 to 7% in 1977. Current outlays for defense functions will be \$74.5 billion, an increase of \$4.8 billion from 1976.

**Current expenses 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 outlays for the farm programs of the Commodity Credit Corporation, 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 that 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 increases its holdings of assets for 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 because they either are not reflected in outlays or cannot be readily measured. Examples of such indirect benefits are loan guarantees, a subject discussed in Special Analysis E, "Federal Credit Programs."

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 several community development purposes.

Aids to agriculture are expected to increase slightly, reaching \$1.8 billion in 1977, an increase of \$0.3 billion from 1976. Federal aid to labor will decline \$0.4 billion reaching \$2.8 billion in 1977, almost entirely because lower unemployment benefit payments will be required as economic conditions improve. Aid to homeowners and tenants is expected to be \$3.3 billion in 1977, an increase of almost \$150 million over 1976.

**Retirement and social insurance benefits.**—This category applies only to trust funds. It covers benefit programs that are financed from special taxes or contributions and 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 programs, which are in the form of premium payments to approved companies and are included with "other services and current operating outlays".

The growth in retirement and social insurance benefits is the result of both a growing number of recipients and recently legislated increases. Outlays for these benefits are expected to increase 10.2% in 1977, to \$130.2 billion and will be 33.0% of total outlays in 1977. A large part of this increase, \$12.0 billion, will come from the increase in social security, railroad retirement, and medicare payments.

***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; interest on the public debt; and operation and administration of other direct Federal programs not elsewhere classified.

These outlays are expected to increase by \$10.3 billion and to be \$118.6 billion in 1977. Net interest accounts for \$6.1 billion of this increase and defense accounts for \$3.2 billion. Defense costs will rise primarily due to pay and price increases, while net interest outlays will increase because of the large deficits in 1976 and 1977.

#### OTHER OUTLAYS

Certain outlay estimates cannot be classified precisely into any of the categories described above and allowances are provided for them. These include allowances for contingencies and for future pay increases of government workers.

Intragovernmental receipts arise as a result of transactions between Government agencies or funds. These transactions occur entirely within Government accounts and are deducted from outlays to avoid double counting. In order to provide a measure of outlays by category, most intragovernmental receipts are allocated to a particular category whenever possible. Government agency contributions for employee retirement, which help to finance retirement benefits, cannot be and are deducted a lump-sum amount.

Proprietary receipts from the public, arising from business-type activities of the Government, are also offset against total outlays.

#### 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. They exclude most or all such expenditures from the computation of budget totals, except for annual charges to amortize these capital outlays over a number of years. The U.S. Government does not.

While this analysis does not provide a precise measure of the difference between capital and current items, it does indicate useful general

magnitudes. 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. 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, this analysis does not estimate 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 receipts 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 receipts. However, this analysis does not attempt to measure the degree of recoverability of developmental outlays, the potential gain in public receipts that will be forthcoming, or the duration of future benefits and their discounted present value.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Investment-type outlays</b>				
<b>ADDITIONS TO FEDERAL ASSETS</b>				
<b>Loans:</b>				
Civil:				
To domestic and private borrowers:				
Department of Agriculture:				
Commodity Credit Corporation: Price support and related programs.....	-446	608	235	-71
Farmers Home Administration:				
Rural housing insurance fund.....	-944	132	158	-796
Agricultural credit insurance fund.....	-269	75	-39	-476
Rural development insurance fund.....	-177	-18	-10	-62
Other.....	-6	-4	-1	-3
Other <sup>1</sup> .....	*	*	-----	-----
Department of Health, Education, and Welfare:				
Office of Education:				
Higher education.....	336	282	-----	-----
Student loan insurance.....	108	102	28	88
Other.....	-2	-3	-1	-6
Other.....	50	37	29	-3

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Investment-type outlays—Continued</b>				
<b>ADDITIONS TO FEDERAL ASSETS—Continued</b>				
<b>Loans—Continued</b>				
Civil—Continued				
To domestic and private borrowers—Continued				
Department of Housing and Urban Development:				
Housing programs: Federal Housing				
Administration.....	643	454	107	349
Government National Mortgage Association:				
Special assistance functions fund.....	2,054	-206	-54	-142
Management and liquidating functions				
fund.....	-51	-33	-6	-20
Community planning and development and				
other.....	4	46	-4	-44
Veterans Administration:				
Loan guaranty revolving fund.....	49	-30	41	-201
Direct loans.....	-31	-86	-14	-219
Other <sup>1</sup> .....	41	36	9	28
Federal Deposit Insurance Corporation fund				
(trust revolving fund).....	100	-----	-----	-----
Federal Home Loan Bank Board:				
Federal Home Loan Bank Board revolving				
fund.....	1,247	303	-15	-52
Federal Savings and Loan Insurance Corpora-				
tion fund.....	18	-8	6	21
Small Business Administration:				
Business loans and investments.....	187	133	62	123
Disaster loans.....	18	87	29	-34
United States Railway Association: Payment for				
the purchase of ConRail securities.....	-----	400	200	540
Other agencies.....	40	68	19	14
Total to domestic and private borrowers.....	2,970	2,374	778	-966
To State and local governments:				
Department of Housing and Urban Develop-				
ment: Community planning and development				
and housing programs.....	-101	22	-3	-68
Department of Transportation: Federal High-				
way Administration and other <sup>1</sup> .....	37	137	30	46
District of Columbia.....	233	242	82	226
Other agencies.....	20	34	10	7
Total to State and local governments.....	189	436	118	211
To foreign borrowers:				
Funds appropriated to the President:				
International security assistance.....	39	314	51	710
International development assistance.....	453	1,446	301	911
Contingencies.....	-----	38	7	12
Department of Agriculture: Public Law 480				
credit sales.....	515	868	112	741
Export-Import Bank of the United States.....	-----	-----	-----	1,423
Other agencies.....	-10	-8	-3	-10
Total to foreign borrowers.....	997	2,658	468	3,787

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Investment-type outlays—Continued</b>				
<b>ADDITIONS TO FEDERAL ASSETS—Continued</b>				
<b>Loans—Continued</b>				
National defense:				
To domestic and private borrowers: Other agencies.....	2	*	*	*
To foreign borrowers:				
Funds appropriated to the President: International security assistance.....	467	457	121	175
Total loans.....	4, 626	5, 924	1, 486	3, 207
<b>Other financial investments—civil:</b>				
Investments in quasi-public institutions, trust funds, and international institutions: Funds appropriated to the President: International financial institutions.....	569	966	277	902
<b>Public works—sites and direct construction:</b>				
Civil:				
Funds appropriated to the President: Naval petroleum reserve/strategic petroleum storage.....		11	20	164
Department of Agriculture:				
Agricultural Research Service.....	4	10	5	8
Forest Service:				
Forest roads and trails.....	68	95		156
Other <sup>1</sup> .....	52	40	49	17
Department of Defense—Civil:				
Corps of Engineers:				
Construction, general.....	1, 135	1, 204	436	1, 258
Flood control, Mississippi River and tributaries.....	161	136	48	142
Trust funds.....	29	27	10	24
Other <sup>1</sup> .....	17	20	4	14
Department of Health, Education, and Welfare:				
Health Services Administration: Indian health facilities and other health services.....	48	80	17	56
National Institutes of Health: Biomedical research and buildings and facilities.....	82	46	8	38
Other <sup>1</sup> .....	13	36	15	44
Department of the Interior:				
Bureau of Reclamation:				
Construction and rehabilitation.....	262	293	89	353
Colorado River Basin project.....	44	57	8	80
Other <sup>1</sup> .....	14	60	18	74
National Park Service.....	82	88	28	76
Bonneville Power Administration.....	133	135	12	150
Bureau of Indian Affairs: Construction of schools and roads.....	127	144	42	142
Other.....	31	41	13	34
Department of Transportation:				
Coast Guard: Acquisition, construction, and improvements.....	54	78	7	63
Federal Aviation Administration: Airway system investment and development (Airport and airway trust fund) and other.....	211	231	54	236
Other <sup>1</sup> .....	14	23	1	8

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Investment-type outlays—Continued</b>				
<b>ADDITIONS TO FEDERAL ASSETS—Continued</b>				
<b>Public works—sites and direct construction—Continued</b>				
Civil—Continued				
Energy Research and Development Administration:				
Plant and capital equipment.....	292	407	118	632
Other <sup>1</sup> .....	39	32	10	40
National Aeronautics and Space Administration:				
Plant and capital equipment.....	85	115	31	126
Veterans Administration: Hospitals and other.....	119	186	73	303
Tennessee Valley Authority.....	913	1,038	250	1,137
Other agencies.....	85	121	30	135
National defense:				
Department of Defense—Military:				
Military construction.....	1,371	1,713	455	1,710
Family housing.....	299	320	75	287
Energy Research and Development Administration:				
Plant and capital equipment.....	179	204	55	215
Total public works—sites and direct construction.....	5,962	6,991	1,982	7,722
<b>Major commodity inventories:</b>				
Civil:				
Department of Agriculture: Commodity Credit Corporation: Agricultural commodities.....	302	235	34	—91
Other agencies.....	4	2	*	36
National defense:				
General Services Administration.....	—1	*	*	*
Intragovernmental transactions(—).....	—9	—	—	—
Total major commodity inventories.....	297	236	34	—55
<b>Major equipment:</b>				
Civil:				
Department of Transportation: Coast Guard and other.....	69	71	15	68
Energy Research and Development Administration.....	102	119	49	150
Other agencies <sup>1</sup> .....	38	93	23	73
National defense:				
Department of Defense—Military: Procurement.....	16,042	16,486	4,975	20,354
Energy Research and Development Administration.....	108	91	23	96
Total major equipment.....	16,358	16,861	5,084	20,741
<b>Other physical assets—acquisition and improvement:</b>				
Civil:				
Department of Agriculture: Reforestation, range improvements, and other.....	192	173	60	141
Department of Housing and Urban Development: Federal Housing Administration and other.....	506	548	139	383
Department of the Interior:				
Land and water conservation.....	121	134	21	164
Other.....	39	40	13	42

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Investment-type outlays—Continued</b>				
<b>ADDITIONS TO FEDERAL ASSETS—Continued</b>				
Other physical assets—Acquisition and improvement—Continued				
Civil—Continued				
Energy Research and Development Administration	—159	29	70	191
Tennessee Valley Authority	14	91	24	92
Other agencies	—42	—1	8	15
National defense: Energy Research and Development Administration	734	767	209	886
Total other physical assets—acquisition and improvement	1,405	1,781	546	1,914
Total additions to Federal assets	29,217	32,759	9,409	34,431
<b>ADDITIONS TO STATE, LOCAL, AND PRIVATE ASSETS</b>				
<b>State and local assets:</b>				
Civil:				
Funds appropriated to the President: Appalachian regional development programs and other	236	248	71	242
Department of Agriculture:				
Rural water and waste disposal grants and other rural development	44	79	20	95
Watershed and flood prevention operations and other conservation	103	119	39	95
Department of Commerce: Economic development assistance programs and other	202	183	30	154
Department of Health, Education, and Welfare:				
Health resources	306	213	47	184
Education	77	47	10	34
Human development	9	4	1	2
Department of Housing and Urban Development:				
Housing programs revolving fund	66	238	23	110
New communities assistance	3	3	2	5
Department of the Interior:				
Land and water conservation	157	160	40	158
United States Fish and Wildlife Service	69	77	20	79
Other	21	37	8	38
Department of Justice: Law enforcement assistance	93	86	23	89
Department of Transportation:				
Grants-in-aid for airports (Airport and airway trust fund)	292	375	95	355
Federal Highway Administration:				
Federal-aid highways (trust fund)	4,561	6,152	1,811	6,552
Other <sup>1</sup>	29	50	11	159
Urban mass transportation	529	573	248	1,179
National Highway Traffic Safety Administration				3
Environmental Protection Agency: Construction grants	1,938	2,350	600	3,770
Washington Metropolitan Area Transit Authority	175	182	40	185
Other agencies <sup>1</sup>	4	8	2	9
National defense: Department of Defense—Military	45	48	12	41
Total State and local assets	8,957	11,230	3,151	13,538

See footnotes at end of table.



Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Investment-type outlays—Continued</b>				
<b>ADDITIONS TO STATE, LOCAL, AND PRIVATE ASSETS—Continued</b>				
<b>Private assets—Civil:</b>				
Department of Agriculture:				
Agricultural conservation program.....	245	170	60	132
Cropland adjustment and other.....	51	72	5	40
Conservation operations.....	187	211	57	209
Watershed and flood prevention operations.....	49	60	22	71
Other conservation programs.....	26	38	11	31
Conservation loans and mutual and self-help housing.....	-22	30	-23	2
Department of Commerce: Ship construction.....	241	242	59	258
Department of Health, Education, and Welfare:				
Health resources.....	146	153	27	116
Other.....	60	51	8	27
Federal Energy Administration.....	-----	50	-----	60
Other agencies <sup>1</sup> .....	23	23	7	27
Total private assets.....	1,007	1,099	232	972
Total additions to State, local and private assets.....	9,964	12,329	3,382	14,510
<b>OTHER DEVELOPMENTAL EXPENDITURES</b>				
<b>Education, training, and health:</b>				
<b>Civil:</b>				
Funds appropriated to the President: Appalachian regional development programs.....	55	58	15	46
Department of Agriculture: Extension Service and other.....	229	243	69	237
Department of Commerce:				
Job opportunities program.....	22	175	80	222
Other.....	11	13	4	16
Department of Health, Education, and Welfare:				
Health services.....	651	668	154	297
Indian health services.....	236	267	84	301
Preventive health services.....	111	110	30	87
Biomedical research.....	177	173	28	151
Alcohol, drug abuse, and mental health.....	786	685	119	492
Health resources.....	505	567	79	387
Financial assistance for health care.....	-----	-----	-----	9,001
Other health services <sup>1</sup> .....	22	26	6	23
Financial assistance for elementary and secondary education.....	-----	-----	-----	294
Elementary and secondary education.....	2,277	2,283	521	1,927
School assistance in federally affected areas.....	598	461	42	379
Emergency school aid.....	216	235	59	221
Education for the handicapped.....	143	188	49	166
Occupational, vocational, and adult education.....	612	633	97	591
Higher education.....	1,431	2,121	356	2,023
Library resources.....	217	132	41	95
Educational development.....	160	25	1	2
Salaries and expenses and other education.....	160	176	44	210
Public assistance.....	6,931	8,292	2,247	-110

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Investment-type outlays—Continued</b>				
<b>OTHER DEVELOPMENTAL EXPENDITURES—Continued</b>				
<b>Education, training, and health—Continued</b>				
Civil—Continued				
Department of Health, Education, and Welfare— Continued				
Other social and rehabilitation services .....	17	40	3	12
Supplemental security income program .....	35	57	1 <sup>1</sup>	53
Federal old-age survivors insurance trust fund ..	8	8	3	7
Federal disability insurance trust fund .....	71	91	33	84
Howard University .....	71	77	19	68
Other special institutions .....	27	33	9	41
Human development .....	455	472	125	452
Other <sup>1</sup> .....	13	24	4	32
Department of the Interior: Operation of Indian programs .....	219	240	70	244
Department of Justice:				
Law enforcement assistance .....	59	83	24	90
Other .....	43	47	13	42
Department of Labor:				
Employment and training assistance .....	2,764	3,308	993	2,752
Temporary employment assistance .....	319	2,331	485	1,065
Program administration .....	55	56	16	68
Community service employment for older Americans .....	9	43	-----	-----
Emergency employment assistance .....	53	4	-----	-----
Veterans Administration: Medical care and other ACTION .....	185	237	61	255
Corporation for Public Broadcasting .....	92	112	26	93
National Foundation on the Arts and the Human- ities <sup>1</sup> .....	62	70	18	70
National Science Foundation .....	128	183	57	191
Smithsonian Institution .....	60	69	5	54
Other agencies <sup>1</sup> .....	57	67	23	69
National defense: Department of Health, Education, and Welfare .....	96	80	20	81
	1	*	-----	-----
Total education, training, and health .....	20,446	25,262	6,144	22,883
<b>Research and development:</b>				
Civil:				
Department of Agriculture:				
Agricultural Research Service <sup>1</sup> .....	229	260	67	275
Cooperative State Research Service <sup>1</sup> .....	96	112	29	124
Forest Service <sup>1</sup> .....	69	86	23	83
Other <sup>1</sup> .....	27	27	7	30
Department of Commerce:				
National Oceanic and Atmospheric Administra- tion .....	120	132	38	137
Scienc and Technical Research .....	47	48	12	51
Other .....	47	52	12	37
Department of Health, Education, and Welfare:				
Biomedical research and other National Insti- tutes of Health .....	1,631	1,875	441	2,000
Alcohol, drug abuse, and mental health .....	114	133	29	127
Health resources .....	59	41	21	28

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Investment-type outlays—Continued</b>				
<b>OTHER DEVELOPMENTAL EXPENDITURES—Continued</b>				
<b>Research and development—Continued</b>				
Civil—Continued				
Department of Health, Education, and Welfare— Continued				
Occupational, vocational, and adult and other education.....	54	56	16	85
National Institute of Education.....	83	70	13	88
Human development.....	52	62	15	60
Other <sup>1</sup> .....	110	156	48	156
Department of Housing and Urban Development: Policy development and research and other.....	54	63	19	67
Department of the Interior: Geological surveys, mines and minerals and other <sup>1</sup> .....	272	344	89	349
Department of Justice: Law enforcement assist- ance.....	44	50	14	44
Department of Transportation: Federal Aviation Administration.....	103	109	23	105
Federal Highway Administration.....	25	54	14	44
Urban Mass Transportation Administration.....	58	51	9	63
Other <sup>1</sup> .....	121	136	32	102
Energy Research and Development Administra- tion <sup>1</sup> .....	1,243	1,716	443	2,260
Environmental Protection Agency.....	186	306	79	282
National Aeronautics and Space Administra- tion <sup>1</sup> .....	3,185	3,405	878	3,552
Veterans Administration.....	97	99	26	100
National Science Foundation <sup>1</sup> .....	571	602	206	645
Other agencies <sup>1</sup> .....	123	139	33	136
National defense:				
Department of Defense—Military:				
Military personnel.....	411	419	107	420
Research, development, test, and evaluation.....	8,866	9,107	2,471	10,435
Other.....	7	6	1	5
Energy Research and Development Administration	431	489	137	544
Total research and development.....	18,536	20,207	5,351	22,432
<b>Engineering and natural resources surveys—civil:</b>				
Funds appropriated to the President: Naval petro- leum reserve/strategic petroleum storage.....			2	79
Department of Defense—Civil:				
Corps of Engineers.....	60	58	15	55
The Panama Canal.....	1	1	*	1
Department of the Interior:				
Geological Survey.....	90	115	31	120
Other.....	51	65	17	67
Other agencies <sup>1</sup> .....	54	66	18	61
Intragovernmental transactions (—).....	—33	—63	—11	—31
Total engineering and natural resources sur- veys—civil.....	223	241	72	352
Total other developmental expenditures.....	39,206	45,710	11,567	45,667
Total investment-type outlays.....	78,387	90,798	24,359	94,607

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Current outlays</b>				
<b>CURRENT EXPENSES FOR AIDS AND SPECIAL SERVICES</b>				
<b>Agriculture—civil:</b>				
Department of Agriculture:				
Departmental administration.....	46	50	13	51
Agricultural Stabilization and Conservation Service:				
Salaries and expenses.....	158	148	37	154
Sugar Act program.....	77	12	-----	-----
Dairy and beekeeper indemnity program.....	3	7	1	4
Commodity Credit Corporation:				
Price support and related programs.....	746	521	172	567
Other.....	35	45	1	36
Farmers Home Administration:				
Salaries and expenses.....	134	154	40	161
Rural housing insurance.....	45	135	-71	328
Agricultural credit insurance.....	136	117	41	132
Rural development insurance.....	8	61	36	110
Other.....	3	3	1	3
Agricultural Marketing Service <sup>1</sup> .....	76	86	23	89
Other <sup>1</sup> .....	117	106	29	122
Other agencies.....	9	12	4	11
Total agriculture.....	1,595	1,459	327	1,769
<b>Business—civil:</b>				
Department of Commerce:				
Bureau of the Census.....	56	62	14	57
Domestic and international business.....	56	61	15	59
Minority business development.....	48	57	12	53
Patent and Trademark Office.....	71	84	21	86
Maritime operating-differential subsidies and other <sup>1</sup> .....	249	336	89	406
Other <sup>1</sup> .....	66	83	29	90
Department of Defense—Civil:				
Corps of Engineers.....	334	359	115	309
The Panama Canal.....	-16	-19	-6	-26
Department of Transportation:				
Office of the Secretary.....	-2	*	-----	-----
Coast Guard: Navigation aids and other <sup>1</sup> .....	594	658	192	723
Federal Aviation Administration: Operations and other <sup>1</sup> .....	1,288	1,441	389	1,533
Federal Railroad Administration.....	471	679	134	549
Civil Aeronautics Board: Payments to air carriers.....	64	72	18	73
Small Business Administration:				
Business loans and investments and other.....	264	188	18	203
Disaster loan fund.....	160	104	1	124
Other agencies.....	53	63	16	54
Intragovernmental transactions (-).....	-21	-22	-8	-26
Total business.....	3,735	4,206	1,049	4,266

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Current outlays—Continued</b>				
<b>CURRENT EXPENSES FOR AIDS AND SPECIAL SERVICES—Continued</b>				
<b>Labor—civil:</b>				
Department of Health, Education, and Welfare:				
Work incentives .....	223	220	55	185
Department of the Interior: Mining Enforcement and Safety Administration <sup>1</sup> .....	61	79	22	86
Department of Labor:				
Employment and Training Administration:				
Federal unemployment benefits and allowances .....	196	860	280	420
Grants to States for unemployment insurance and employment services .....	-19	94	18	82
Unemployment trust fund .....	1,185	1,458	371	1,491
Other <sup>1</sup> .....	24	39	8	33
Employment standards <sup>1</sup> .....	80	108	27	120
Occupational safety and health .....	91	119	31	125
Labor statistics <sup>1</sup> .....	50	63	16	71
Departmental management .....	27	35	9	49
Equal Employment Opportunity Commission .....	56	63	18	68
Occupational Safety and Health Review Commission .....	5	6	2	6
Railroad Retirement Board .....	4	288	10	290
Intragovernmental transactions (-) .....	1	-250		-250
Total labor .....	1,985	3,181	868	2,776
<b>Homeowners and tenants—civil:</b>				
Department of Housing and Urban Development:				
Housing programs:				
Housing payments .....	2,072	2,295	559	2,551
Payments for operation of low-income housing projects .....		162	130	462
Federal Housing Administration .....	-61	159	-42	98
Other .....	-66	-19	-1	-8
Government National Mortgage Association:				
Special assistance functions and other .....	110	707	243	315
Federal Insurance Administration .....	42	125	38	199
Other .....	-3	-1	*	-1
Federal Home Loan Bank Board .....	-304	-309	-100	-353
Other agencies .....	1	4	*	8
Total homeowners and tenants .....	1,792	3,123	828	3,272
<b>Veterans—civil:</b>				
Department of Health, Education, and Welfare:				
Payments to social security trust funds .....	240	295		622
Veterans Administration:				
Compensation and pensions .....	7,581	8,201	2,125	8,087
Readjustment benefits .....	4,591	6,020	1,074	4,242
Medical care .....	3,227	3,575	855	3,820
General operating expenses .....	445	484	113	512
Supply fund .....	-18	79	1	9
National service life insurance fund .....	698	629	109	663
U.S. Government life insurance fund .....	89	77	15	72
Veterans special life insurance fund .....	-46	-47	-14	-50
Other <sup>1</sup> .....	26	33	7	59

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Current outlays—Continued</b>				
<b>CURRENT EXPENSES FOR AIDS AND SPECIAL SERVICES—Continued</b>				
<b>Veterans—Civil—Continued</b>				
Other agencies <sup>1</sup> .....	12	12	2	10
Intragovernmental transactions (—).....	—246	—297	—1	—624
Total veterans.....	16,599	19,061	4,287	17,425
<b>International aids:</b>				
Civil:				
Funds appropriated to the President:				
International security assistance.....	357	739	79	679
Indochina postwar reconstruction assistance.....	496	86	10	6
International development assistance <sup>1</sup> .....	609	—139	4	320
Contingencies.....	4	77	19	34
Other.....	15	51	13	48
Department of Agriculture: Foreign assistance programs and special export programs Public Law 480 donations of agricultural commodities.....	263	222	34	428
Department of State.....	76	56	4	13
ACTION <sup>1</sup> .....	87	78	24	65
Export-Import Bank of the United States.....	—	—	—	—117
Other agencies <sup>1</sup> .....	43	43	12	41
Intragovernmental transactions (—).....	—50	—50	—	—50
National defense:				
Funds appropriated to the President: International security assistance <sup>1</sup> .....	5,118	7,740	1,765	7,929
Department of Defense—Military: Military construction.....	56	92	20	85
Total international aids.....	7,075	8,996	1,984	9,480
<b>Welfare aids—civil:</b>				
Funds appropriated to the President: Disaster relief.....	206	250	55	250
Department of Agriculture:				
Commodity Credit Corporation: Price support and related programs.....	128	199	23	251
Funds for strengthening markets, income, and supply (sec. 32) and other marketing services.....	465	301	61	—1
Food stamp program.....	4,599	5,625	1,169	4,708
Special milk program.....	123	129	—	—
Child nutrition programs.....	1,452	2,110	392	291
Child nutrition reform.....	—	—	—	2,000
Other food and nutrition services.....	—	18	4	80
Department of Health, Education, and Welfare:				
Public assistance.....	7,077	8,156	2,156	8,615
Work incentives.....	91	130	25	75
Program administration.....	64	58	20	37
Refugee assistance.....	74	112	32	141
Special benefits for disabled coal miners.....	943	958	225	906
Supplemental security income program.....	4,590	5,118	1,392	5,800
Human development.....	1,082	1,053	228	1,046
Departmental management and other.....	—	2	1	5

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Current outlays—Continued</b>				
<b>CURRENT EXPENSES FOR AIDS AND SPECIAL SERVICES—Continued</b>				
<b>Welfare aids—civil—Continued</b>				
Department of the Interior: Operation of Indian programs.....	63	66	27	72
Department of State: Special assistance to refugees from Cambodia and Vietnam.....	3	271	5	-----
Department of the Treasury: Payment where credit exceeds liability for tax; refunding internal revenue collections.....	-----	1,200	-----	600
Total welfare aids.....	20,961	25,756	5,816	24,876
<b>Other aids and special services—civil:</b>				
Department of Commerce: Economic development and other <sup>1</sup> .....	97	189	41	175
Department of Health, Education, and Welfare:				
Health services.....	85	174	47	165
Alcohol, drug abuse, and mental health.....	45	56	18	52
Health resources.....	40	54	18	55
Social Security Administration:				
Payments to social security trust funds.....	3,119	3,818	878	5,949
Federal old-age and survivors insurance trust fund.....	839	902	238	953
Federal disability insurance trust fund.....	250	270	68	322
Federal hospital insurance trust fund.....	256	324	86	318
Federal supplementary medical insurance trust fund.....	400	543	129	552
Other.....	26	28	5	8
Other <sup>1</sup> .....	61	96	24	104
Department of Housing and Urban Development:				
Community planning and development:				
Comprehensive planning grants.....	96	107	25	75
Miscellaneous expired accounts.....	536	207	-----	-----
Urban renewal fund—capital grants.....	1,376	1,375	300	1,000
Departmental management and other.....	151	182	46	231
Department of the Interior:				
Bureau of Indian Affairs:				
Operation of Indian programs.....	157	221	52	241
Miscellaneous appropriations.....	72	72	41	32
Miscellaneous trust funds.....	148	260	78	259
Other <sup>1</sup> .....	45	59	10	42
Other <sup>1</sup> .....	15	6	1	6
Department of Transportation:				
Federal Highway Administration: Federal-aid highways and other.....	138	184	46	182
National Highway Traffic Safety Administration <sup>1</sup> .....	108	125	34	143
Urban Mass Transportation Administration.....	164	713	112	340
Other.....	47	42	9	42
Community Services Administration.....	525	506	130	365
Federal Deposit Insurance Corporation (trust revolving fund).....	-508	-608	-74	-767
Legal Services Corporation.....	-----	85	24	83

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Current outlays—Continued</b>				
<b>CURRENT EXPENSES FOR AIDS AND SPECIAL SERVICES—Continued</b>				
<b>Other aids and special services—civil—Continued</b>				
Postal Service.....	1,877	1,690	431	1,459
Other agencies.....	118	138	41	136
Intergovernmental transactions (—).....	-3,293	-4,115	-960	-6,239
Total other aids and special services.....	6,992	7,704	1,900	6,281
Total current expenses and aids and special services.....	60,734	73,486	17,059	70,146
<b>RETIREMENT AND SOCIAL INSURANCE BENEFITS</b>				
<b>Insurance benefits—civil:</b>				
Department of Health, Education, and Welfare:				
Federal old-age and survivors insurance trust fund.....	54,839	62,245	17,023	70,572
Federal disability insurance trust fund.....	7,630	9,141	2,546	10,768
Federal hospital insurance trust fund.....	10,353	11,869	2,964	12,960
Federal supplementary medical insurance trust fund.....	3,765	4,687	1,380	5,804
Department of Labor: Unemployment trust fund.....	67	164	44	176
Department of the Treasury: Special payment to recipients of certain retirement and survivor benefits.....	1,678	72	-----	-----
Railroad Retirement Board.....	3,051	3,444	895	3,644
Total insurance benefits.....	81,383	91,622	24,852	103,924
<b>Unemployment benefits—civil:</b>				
Department of Labor:				
Employment and Training Administration:				
Federal unemployment benefits and allowances..	553	473	120	440
Unemployment trust fund.....	11,959	16,878	3,285	14,833
Total unemployment benefits.....	12,512	17,352	3,405	15,273
<b>Other retirement and social insurance benefits:</b>				
Civil:				
Department of Labor: Special benefits.....	184	247	75	288
Department of State: Foreign Service retirement and disability fund.....	84	105	30	127
Department of Transportation: Coast Guard: Retired pay.....	105	124	33	146
Civil Service Commission:				
Government payment for annuitants, employees health benefits.....	251	348	99	452
Civil service retirement and disability fund.....	10,863	13,160	2,312	17,175
Other agencies <sup>1</sup> .....	42	44	8	50
Intragovernmental transactions (—).....	-3,865	-4,783	-15	-7,222
National defense: Central Intelligence Agency.....	-----	-----	-----	28
Total other retirement and social insurance benefits.....	7,664	9,246	2,542	11,045
Total retirement and social insurance benefits..	101,559	118,219	30,799	130,241

See footnotes at end of table.



Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Current outlays—Continued</b>				
<b>OTHER SERVICES AND CURRENT OPERATING EXPENSES</b>				
<b>Repair, maintenance, and operation of physical assets:</b>				
Civil:				
Legislative branch: Architect of the Capitol.....	37	50	12	54
Department of Agriculture: Forest Service <sup>1</sup> .....	438	496	194	374
Department of Defense—Civil:				
Corps of Engineers.....	285	263	49	306
Miscellaneous accounts.....	1	1	*	1
Department of the Interior:				
Bureau of Land Management <sup>1</sup> .....	151	202	46	191
Bureau of Reclamation.....	124	153	40	170
National Park Service <sup>1</sup> .....	226	242	77	273
Bonneville Power Administration.....	16	-213	-16	-171
Other.....	44	41	12	47
Energy Research and Development Administration.....	148	151	55	204
Tennessee Valley Authority.....	-235	-107	-56	-298
Other agencies <sup>1</sup> .....	98	128	39	138
National defense:				
Department of Defense—Military:				
Operation and maintenance.....	26,266	28,181	7,614	30,589
Family housing.....	768	920	236	1,033
Energy Research and Development Administration.....	54	69	19	92
General Services Administration.....	*	*		
Total repair, maintenance, and operation of physical assets.....	28,422	30,579	8,322	33,001
<b>Regulation and control—civil:</b>				
The Judiciary <sup>1</sup> .....	283	342	94	391
Department of Agriculture: Animal and plant health inspection service and other <sup>1</sup> .....	362	409	109	413
Department of Health, Education, and Welfare: Food and Drug Administration and other.....	174	193	50	195
Department of Justice:				
General administration.....	21	21	5	21
Legal activities.....	223	241	62	269
Federal Bureau of Investigation.....	426	457	123	454
Immigration and Naturalization Service.....	179	211	54	222
Federal Prison System <sup>1</sup> .....	162	182	49	200
Law Enforcement Assistance Administration.....	625	688	184	640
Drug Enforcement Administration.....	127	148	42	153
Department of Transportation:				
Coast Guard.....	96	115	33	131
Federal Aviation Administration.....	85	95	25	97
Other.....	15	25	9	27
Department of the Treasury:				
Bureau of Alcohol, Tobacco and Firearms.....	95	108	26	123
Customs Service.....	71	89	20	78
Internal Revenue Service.....	58	51	13	50
Secret Service.....	82	107	31	108
Other <sup>1</sup> .....	11	28	-7	12

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Current outlays—Continued</b>				
<b>OTHER SERVICES AND CURRENT OPERATING EXPENSES—Continued</b>				
<b>Regulation and control—civil—Continued</b>				
Environmental Protection Agency <sup>1</sup> .....	261	387	127	306
Federal Communications Commission.....	47	49	12	50
Federal Trade Commission.....	39	47	13	53
Interstate Commerce Commission.....	46	51	13	61
National Labor Relations Board.....	61	72	16	77
Nuclear Regulatory Commission.....	86	200	52	236
Securities and Exchange Commission.....	44	52	12	52
Other agencies <sup>1</sup> .....	154	207	54	210
Total regulation and control.....	3,834	4,575	1,219	4,629
<b>Other operation and administration:</b>				
Civil:				
International activities:				
Department of State:				
Administration of Foreign Affairs <sup>1</sup> .....	391	438	122	519
International organizations and conferences <sup>1</sup> .....	226	304	208	325
Educational exchange <sup>1</sup> .....	58	63	19	61
Other.....	2	2	-----	2
Board for International Broadcasting.....	50	63	18	54
United States Information Agency <sup>1</sup> .....	240	269	69	270
Other agencies.....	13	11	3	11
Total international activities.....	980	1,151	440	1,243
Federal financial activities:				
Legislative branch: General Accounting Office and other.....	135	144	35	159
Department of Health, Education, and Welfare:				
Supplemental security income program.....	155	60	-----	57
Department of the Treasury:				
Bureau of Government Financial Operations.....	127	135	36	150
Customs Service.....	239	259	63	257
Bureau of the Public Debt.....	100	105	28	115
Internal Revenue Service.....	1,544	1,636	412	1,610
Other.....	58	70	18	75
Other agencies.....	*	2	18	-1
Total Federal financial activities.....	2,357	2,412	609	2,422
Other direct Federal programs:				
Legislative branch <sup>1</sup> .....	534	679	170	697
Executive Office of the President.....	81	81	18	71
Department of Commerce: National Oceanic and Atmospheric Administration and other <sup>1</sup> .....	270	292	79	335
Department of Defense—Civil:				
Corps of Engineers.....	42	44	12	46
The Panama Canal.....	64	60	16	66
Department of Health, Education, and Welfare:				
Departmental management.....	97	91	19	91

See footnotes at end of table.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Current outlays—Continued</b>				
<b>OTHER SERVICES AND CURRENT OPERATING EXPENSES—Continued</b>				
<b>Other operation and administration—Continued</b>				
Civil—Continued				
Other direct Federal programs—Continued				
Department of the Interior.....	104	136	41	137
Department of the Treasury: Bureau of Govern- ment Financial Operations and other <sup>1</sup> .....	185	307	113	249
Environmental Protection Agency.....	122	134	30	133
General Services Administration <sup>1</sup> .....	398	310	64	261
Civil Service Commission:				
Salaries and expenses.....	87	102	25	102
Employees health benefits fund.....	-63	-9	-16	-76
Employees life insurance fund.....	-304	-412	-93	-399
Other <sup>1</sup> .....	7	7	2	9
Federal Energy Administration.....	118	143	14	120
Other agencies <sup>1</sup> .....	33	66	16	83
Total other direct Federal programs.....	1,774	2,032	511	1,926
Shared revenues and grants-in-aid:				
Department of Agriculture: Forest Service.....	121	91	118	37
Department of Housing and Urban Develop- ment: Community development grants.....	38	750	400	1,600
Department of the Interior: Land management, territorial affairs, and other.....	269	293	171	222
Department of the Treasury:				
Customs Service.....	172	216	54	220
Internal Revenue Service.....	122	114	24	114
State and local government fiscal assistance trust fund.....	6,130	6,272	1,627	6,549
District of Columbia.....	226	254	64	280
Tennessee Valley Authority.....	37	48	17	68
Other agencies.....	34	64	26	55
Total shared revenues and grants-in-aid.....	7,147	8,104	2,500	9,145
Total, other operation and administration, civil.....	12,259	13,699	4,059	14,735
National defense:				
Department of Defense—Military:				
Military personnel.....	24,556	25,076	6,586	24,769
Retired military personnel.....	6,242	7,325	1,977	8,388
Operation and maintenance.....	63	73	17	81
Family housing.....	57	57	13	52
Civil defense.....	73	73	14	58
Revolving and management funds.....	64	-61	-121	-144
Other.....	12	13	-1	10
Other agencies.....	63	65	12	41
Intragovernmental transactions (-).....	-7	-6	-2	-7
Total other operation and administration, national defense.....	31,123	32,615	8,495	33,248
Total other operation and administration.....	43,382	46,314	12,554	47,983

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS  
(In millions of dollars)—Continued

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Current outlays—Continued</b>				
<b>OTHER SERVICES AND CURRENT OPERATING EXPENSES—Continued</b>				
<b>Interest:</b>				
On the public debt.....	32,665	37,700	10,400	45,000
Other interest:				
On refunds: Department of the Treasury.....	236	334	62	396
On uninvested funds: Department of the Treasury..	8	8	2	8
Intragovernmental transactions (—).....	*	*	*	*
Total other interest.....	244	342	63	404
Intragovernmental transactions (—):				
Interest on Government capital in enterprises (—).....	-1,234	-1,563	-261	-1,425
Interest received by trust funds (—).....	-7,667	-8,015	-2,110	-8,373
Receipts from off-budget Federal agencies: Interest on Government capital in enterprises (—).....	-455	-1,254	-360	-2,252
Proprietary receipts from the public (—).....	-249	-388	-73	-430
Total net interest.....	23,304	26,822	7,659	32,924
<b>Total other services and current operating expenses.....</b>	<b>98,942</b>	<b>108,290</b>	<b>29,754</b>	<b>118,537</b>
<b>National defense allowances:</b>				
Department of Defense—Military: Allowances:				
Civilian and military pay raises.....				1,390
Other legislation.....		51	29	163
Total national defense allowances.....		51	29	1,553
<b>Total current outlays.....</b>	<b>261,234</b>	<b>300,046</b>	<b>77,641</b>	<b>320,477</b>
<b>Other</b>				
Allowances for:				
Civilian agency pay raises.....				760
Contingencies.....		200	175	1,500
Employer share, employee retirement:				
Interfund transactions (—).....	-3,014	-3,205	-826	-3,396
Receipts from off-budget Federal agencies (—).....	-967	-988	-153	-1,072
Proprietary receipts from the public (—):				
Civil.....	-5,283	-6,300	-1,434	-10,044
National defense.....	-5,757	-7,016	-1,790	-8,596
<b>Total budget outlays.....</b>	<b>324,601</b>	<b>373,535</b>	<b>97,971</b>	<b>394,237</b>

\*Less than \$0.5 million.

†Includes both Federal and trust funds.

## SPECIAL ANALYSIS E

### FEDERAL CREDIT PROGRAMS

Federal credit programs play a significant role in reallocating our Nation's economic resources. These programs have one important objective: To encourage certain types of economic activity by providing individuals, businesses and government bodies with credit at more favorable terms than would otherwise be available in the private market. Frequently such credit assistance is designed to counteract rationing in private credit markets and to provide loans at longer maturities and higher loan-to-value ratios, but most often it reallocates resources with a lending rate that is lower than that available on comparable private loans.

Federal credit assistance is provided to borrowers in a number of ways. Direct loans are made by Federal agencies and by Government-sponsored, privately owned credit enterprises. Federal Government agencies also guarantee or insure private loans. And, serving as intermediaries, Government-sponsored credit enterprises improve access to credit markets for certain borrowers. Because of the complex institutional arrangements that have evolved, several of these forms of credit assistance are frequently combined in a single program; and sometimes a single transaction is aided by two or more programs.

When a credit program is directly aimed at lowering interest rates to specific borrowers, the interest subsidy may be explicit, as in the case of direct loans where legislation provides for interest rates that are less than market rates; or it may be implicit, as in the case of guaranteed loans where the Government assumes the lender's risk. Another implicit interest rate subsidy results from the tax exempt status of interest on the securities of State and local governments.<sup>1</sup> Occasionally, a lower interest rate is achieved by providing a particular financial asset with greater liquidity as a result of Government assistance in the development of secondary markets. Government guarantees of some residential mortgages and the direct and indirect lines of credit to institutions such as the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation have contributed to the operation of a well organized secondary market for residential mortgages.

The following analysis is intended to be a basic factual resource rather than an evaluation of programs and policies. The chapter highlights major trends in the credit activity of the Federal Government and its sponsored agencies over the last 10 years, and presents the details of direct loans and loan guarantees by major program category from 1975 to 1977. Because interest rate subsidies are an important element in Federal credit assistance, a special section is devoted to measuring the value of this support for each program. The chapter concludes with a summary of proposed and recently enacted legislation that will affect the future course of Federal credit activities.

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<sup>1</sup> The credit subsidy effects of the tax-exempt status of State and local borrowing is not considered in this analysis. However, see Special Analysis F, Tax Expenditures, p. 132.

Questions of great analytical difficulty remain unanswered about the impact and the distribution of benefits resulting from credit assistance. One of the most important unanswered questions is the degree to which federally assisted credit is substituted for private credit transactions that would take place without government assistance.

Constraints on space require consolidation of information relating to budget accounts and programs in this analysis. Additional detail is available elsewhere. The *Treasury Bulletin* provides data on outstanding direct and guaranteed loans in the most recently completed year or quarter for both accounts and programs within accounts.<sup>2</sup> Part IV of the Budget Appendix contains an expanded table displaying disbursements, repayments and net outlays for each budget account containing direct loan transactions.

### TRENDS AND DIRECTIONS

The total amount of credit provided under Federal auspices has risen rapidly during the past decade, both from the expansion of existing programs and from the initiation of new ones. Table E-1 summarizes data on Federal participation in domestic credit markets over the last decade.

The volume of credit advanced under Federal auspices (direct and guaranteed loans) increased in absolute value each year from 1966 to the present. However, with the exception of 1967 and 1970, Federal Government advances held steady in the narrow range of 13 to 16% of all funds advanced in U.S. credit markets. In 1975, the Federal participation rate increased to 15.1% as a result of reduced private credit demands and expanded Federal mortgage credit programs implemented to increase the rate of housing production. The components of Federal participation caused by mortgage credit programs are expected to be lower in 1976, but to increase again in 1977 as a result of large increases in mortgage purchases and advances to savings institutions.

Changes in housing support have had similar impacts in the past: The decline in the proportion of funds advanced under Federal auspices in 1967 was due largely to the repayment of funds advanced by the Federal Home Loan Bank System during 1966 in support of the mortgage market. Similarly, the dramatic increase in the Federal proportion during 1970 reflected greater support of the mortgage market by the Federal Home Loan Bank System and the Federal National Mortgage Association. Federal support of mortgage credit also increased in 1973 and 1974 but was not readily apparent in the Federal participation rate because of the significant increase in all lending that occurred during those two years.

On the borrowing side, the Federal participation rate has been higher and more variable than it has been for lending, fluctuating in a range of 2 to 36% of funds raised in U.S. credit markets. The difference between the Federal proportion of borrowing and lending is a result of the surplus or deficit in the Federal budget. The budget deficit in 1975 increased Federal borrowing significantly as taxes were cut and expenditures increased in response to the weakening economy. The 1976 deficit, which is now expected to be \$76 billion, will produce a similar effect on 1976 credit demands.

<sup>2</sup> See table GA 11-2, *Treasury Bulletin*.

Table E-1. FEDERAL PARTICIPATION IN DOMESTIC CREDIT MARKETS (dollars in billions)

	Actual										Estimates		
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	TQ	1977
Total funds advanced in U.S. credit markets <sup>1</sup>													
(includes equities).....	74.4	59.1	95.2	95.9	90.5	120.6	155.2	193.8	181.2	177.9	(3)	(3)	(3)
Advanced under Federal auspices <sup>2</sup> .....	10.1	5.8	14.9	15.0	17.4	16.5	22.8	26.7	26.6	26.9	34.4	9.2	31.2
Direct loans:													
On-budget.....	4.4	5.3	8.0	2.9	4.5	3.0	2.7	.3	2.2	4.3	4.3	1.1	2.1
Off-budget.....							.2	.7	2.2	8.5	7.9	3.4	10.0
Guaranteed loans.....	3.8	2.1	5.6	7.8	2.3	12.2	15.6	14.0	6.2	5.7	13.1	.4	2.4
Sponsored agency loans.....	1.9	-1.9	1.3	4.3	10.6	1.3	4.3	11.6	16.3	8.5	9.0	4.3	16.7
Federal participation rate (percent).....	13.6	9.8	15.6	15.7	19.2	13.7	14.7	13.8	14.7	15.1			
Total funds raised in U.S. credit markets <sup>1</sup> .....	74.4	59.1	95.2	95.9	90.5	120.6	155.2	193.8	181.2	177.9		(3)	(3)
Raised under Federal auspices <sup>2</sup> .....	8.7	1.1	31.3	11.3	16.4	32.3	39.7	46.4	24.1	64.7	108.7	24.6	70.5
Federal borrowing from public.....	3.1	2.8	23.1	-1.0	3.8	19.4	19.4	19.3	3.0	50.9	87.5	20.0	53.5
Guaranteed borrowing.....	3.8	2.1	5.6	7.8	2.3	12.2	15.6	14.0	6.2	5.7	13.1	.4	2.4
Sponsored agency borrowing.....	1.8	-3.8	2.6	4.5	10.3	.6	4.7	13.2	14.8	8.2	8.0	4.2	14.6
Federal participation rate (percent).....	11.7	1.8	32.9	11.8	18.1	26.8	25.6	23.9	13.3	36.4			

<sup>1</sup> Nonfinancial sectors. Source: Federal Reserve Board Flow of Funds Accounts.<sup>2</sup> Estimates from table E-10.<sup>3</sup> Not estimated.

The credit component of the budget has become a less useful indicator of Federal credit activities because of the substitution of loan guarantee programs for direct loan programs; sales of direct loan assets; the creation of enterprises which are privately owned, but Government-sponsored; and the legislated removal of some Government programs and agencies from the budget.

The Federal Financing Bank, established in late 1974, continues to represent the most significant organizational development in the area of Federal credit. The bank, an adjunct of the U.S. Treasury, was created to provide more efficient financing for obligations issued, sold, or guaranteed by Federal agencies, thereby reducing unnecessary costs to the Government and to the borrower. Treasury may require Federal agencies authorized to borrow in private capital markets to borrow from the FFB instead. Similarly, Treasury may direct agency sales of direct loan assets to FFB. The FFB's preferential status in capital markets and its authority to borrow from the Treasury at the Treasury's own borrowing rate permit it to charge lower interest rates than those usually available to the borrowing agency if that agency were to borrow directly from capital markets. The FFB is also authorized to purchase the securities and loans of private borrowers and Government corporations where Federal agencies guarantee the loan. Although this support involves no direct cost to the Government, the assisted borrowers receive substantial implicit subsidies in the form of lower interest rates. Because of its off-budget status, loans originated by the Federal agencies and sold to the FFB are not considered as budget outlays. Transactions of the FFB are summarized in table E-2. As the table indicates, the FFB now holds a large volume of the federally sponsored debt incurred by private individuals, Government corporations and Federal agencies.

Table E-2. FFB NET ACQUISITIONS OF OBLIGATIONS (in millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
Loans and loan purchases: <sup>1</sup>				
Student Loan Marketing Association.....	140	165	60	335
Farmers Home Administration.....	5,000	3,978	1,222	5,926
Military assistance loans.....	112	412	150	650
Rural Electrification Administration.....	255	614	170	632
New York City seasonal financing.....	-----	-----	1,100	-100
Other <sup>2</sup> .....	673	432	81	831
Total loans.....	6,180	5,601	2,783	8,275
Agency debt:				
On-budget:				
Tennessee Valley Authority.....	1,435	1,100	300	1,000
Export-Import Bank.....	-----	-----	-----	2,028
Off-budget:				
U.S. Postal Service.....	1,000	1,280	500	1,398
United States Railway Association.....	34	-5	-1	-2
Export-Import Bank.....	4,049	1,437	393	-----
Total net purchases of obligations.....	12,698	9,414	3,975	12,698

<sup>1</sup> FFB purchases may vary, depending on credit conditions and program levels.

<sup>2</sup> GSA, HEW, HUD, OPIC, SBA, WMATA, and Amtrak.



Another significant credit development during 1974 and 1975 was the dramatic increase in Federal support of the residential mortgage market. Shortages of mortgage credit, high interest rates, overbuilding, depressed real income and inflation led to a severe decline in housing production. The Federal Government supported the depressed housing industry through four special programs designed to provide a source of financing for individual mortgage loans and to reduce monthly payments required of a new home buyer or apartment owner. From January 1974 to May 1975, the Government National Mortgage Association (GNMA) committed itself to purchase \$9.9 billion of FHA/VA mortgages at subsidized interest rates under its tandem plan. The Federal Home Loan Mortgage Corporation made commitments to purchase \$3 billion of conventional mortgages with below-market interest rates during 1974, and was authorized to finance the purchase of these mortgages with Treasury borrowing. The Federal Home Loan Bank System (FHLBS) advanced \$3.5 billion at subsidized interest rates to savings and loan associations in the last half of 1974. From October 1974 to August 1975, GNMA offered commitments to purchase \$7.75 billion in conventional and FHA/VA mortgages at below-market interest rates. Finally, beginning in January 1976, \$3 billion in mortgage purchase assistance will be provided by GNMA to encourage construction of multifamily projects. These programs could finance \$27 billion in mortgages over and above the volume of credit made available through the existing Federal housing credit programs. Because some portion of the subsidized mortgage funds go to home buyers who would have purchased homes at unsubsidized mortgage rates, and because Government lending tends to squeeze some private lending out of the market, the net addition to housing will undoubtedly be much less than the \$27 billion provided by these programs.

With the exception of the \$3 billion released in January 1976, funds provided by these programs have been committed. Because savings inflows to thrift institutions have been proceeding at record rates this year, no new initiatives are being planned. However, in response to continued depressed conditions in the housing sector, the Department of Housing and Urban Development has reactivated the section 235 single-family housing program for middle-income families to begin in January 1976. Although the loans will be provided by private lenders, annual payments of up to \$264 million have been authorized to reduce the interest rate on these mortgages down to as low as 5%, depending upon income of the beneficiary household. It is expected that this authorization will be sufficient to provide assistance to 250,000 housing units.

#### DIRECT LOANS

Direct loans are made by both on- and off-budget Federal agencies, and are financed by Treasury or agency borrowing. The major Federal programs that provide direct loans are identified in tables E-3 and E-4.

Loan outlays of on-budget Federal agencies (which are defined net of repayments) are reflected in budget outlays, and are accounted for in the budget surplus or deficit. However, in recent years legislation has been enacted which places a number of direct-lending agencies or programs outside of the budget. Because their economic effects are identical to those of direct loan programs included in the budget, they are also presented in this analysis.

Repayments of outstanding loans are not classified as receipts in the budget, but are offset against new loan disbursements for loan revolving accounts and against general outlays in the case of non-revolving accounts. For this reason, outlays for loan programs are net of repayments and may understate significantly the level of new lending activity. Gross loan disbursements, which are shown in table E-3, provide a more comprehensive measure of program activity levels.<sup>3</sup>

Tables E-3 and E-4 provide data on direct loan activity by major agency and program.<sup>4</sup> Table E-3 reports loan commitments and disbursements for 1975-77. Commitments to make direct loans tend to forecast future financial flows because commitments are often made in advance of the time when funds are actually disbursed. An apparent anomaly occurs in the relationship between commitments and disbursements for low-rent public housing and urban renewal notes. Disbursements are higher than commitments because they include short-term interim construction financing notes which are "rolled over" several times, while commitments are counted only once.

Table E-4 shows net changes in direct loan programs and outstanding loan levels for 1975-76. Increased direct lending activity in Fiscal Years 1975 and 1976 represent part of the Federal effort to achieve economic recovery. A large portion of the total is focused on housing, with the Farmer's Home Administration, Housing and Urban Development, and Veterans Administration housing programs making up more than 60 percent of all direct lending in 1975 and 1976. The anticipated recovery will permit a reduction in direct lending to housing programs by 1977.

Loan repayments and net loan disbursements reflect sales of direct loan assets as well as actual loan repayments and prepayments. Table E-5 identifies the major loan sales within the repayment totals. Prior to 1974 a large portion of loan sales were to private investors or to the FNMA. Most sales are now being directed to the FFB.

### GUARANTEED LOANS

Guaranteed loans<sup>5</sup> are loans made to private borrowers and Government corporations for which the Federal Government assumes part or all of the customary credit risks. Prior to 1974, these loans were typically held by private lenders; however, the FFB has since become a major purchaser of guaranteed loans. The major agencies and programs making loan guarantees are shown in tables E-6 and E-7. Also considered as guaranteed loans are loans on which the Government

<sup>3</sup> Some guaranteed loans are ultimately supported by direct loans as a result of claims paid under guarantee programs when the Government receives either the original loan or the collateral.

<sup>4</sup> Because loan disbursements and repayments in foreign currencies are not included in the budget, the tables in this analysis include only data on loans that are both disbursed and repayable in dollars. Government agency direct loan transactions disbursed or repayable in foreign currencies (in millions of dollars) are:

	1975	1976	TQ	1977
Outstanding, start of year .....	2,794	2,587	2,453	2,421
Disbursements (dollar equivalents) .....	4	4	---	---
Repayments—dollars (—) .....	—2	—4	—1	---
Repayments—local currencies (—) .....	—194	—134	—32	—4
Net disbursements .....	—192	—134	—33	—129
Adjustments .....	—114	---	---	—133
Outstanding, end of year .....	2,587	2,453	2,421	2,288

<sup>5</sup> As used here, guaranteed loans include those designated as "insured."

Table E-3. DIRECT LOAN COMMITMENTS AND GROSS DISBURSEMENTS (in millions of dollars)

Agency or program	Commitments				Gross disbursements <sup>1</sup>			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Funds appropriated to the President:								
International security assistance .....	437	1,689	27	1,886	624	829	206	937
International development assistance .....	478	553	122	532	530	581	138	471
Agriculture:								
Farmers Home Administration .....	4,481	4,960	1,243	4,526	5,579	5,322	1,568	6,099
Commodity Credit Corporation .....	1,101	2,264	480	1,719	1,101	2,264	480	1,719
Public Law 480 long-term export credits .....	747	956	118	838	747	956	118	838
Commerce: Economic Development Administration .....	15	61	15	42	23	38	9	38
Health, Education, and Welfare:								
Health programs .....	97	159	29	28	113	137	47	89
Claims on insured student loans .....	130	125	33	135	119	124	35	124
Other education programs .....	316	324	-----	1	344	293	15	312
Housing and Urban Development:								
Low-rent public housing—interim financing .....	82	130	7	51	645	650	162	650
Federal Housing Administration—insurance claims .....	-----	-----	-----	-----	914	779	189	646
Government National Mortgage Association:								
FHA/VA tandem plan .....	6,843	3,610	-----	-----	3,217	3,045	103	687
Conventional tandem plan .....	4,936	2,000	-----	-----	422	2,480	1,600	-----
Other .....	-----	-----	-----	-----	25	-----	-----	-----
Community development loans .....	508	154	-----	-----	627	731	152	700
Other mortgage credit .....	-----	3	1	4	12	47	16	19
Interior .....	22	52	9	33	21	57	19	29
Justice: LEAA loans .....	40	43	20	20	40	44	21	20
Transportation .....	37	137	30	47	39	138	30	47
Treasury:								
New York City seasonal financing .....	-----	1,300	1,500	2,100	-----	1,300	1,500	2,100
Liquidation programs .....	-----	-----	-----	-----	-----	-----	-----	-----

Veterans Administration:								
Housing loans and guarantee claims.....	370	434	115	457	370	437	115	457
Insurance policy loans.....	154	157	40	160	154	157	40	160
District of Columbia.....	232	241	42	225	233	242	82	226
Export-Import Bank <sup>2</sup> .....				5,075				2,800
Federal Deposit Insurance Corporation <sup>3</sup> .....	100				100			
Federal Home Loan Bank Board.....	1,305	338	9	38	1,305	338	9	38
Small Business Administration:								
Business and investment loans.....	279	250	59	235	463	462	106	456
Disaster loans.....	241	240	40	140	221	240	65	114
United States Railway Association <sup>4</sup> .....		400	200	540		400	200	540
Other agencies and programs.....	95	9	2	7	7	43	9	18
<b>Total budget agencies.....</b>	<b>23,044</b>	<b>20,586</b>	<b>4,142</b>	<b>18,838</b>	<b>17,995</b>	<b>22,134</b>	<b>7,035</b>	<b>20,324</b>
<b>Off-budget direct loans:</b>								
Rural electrification and telephone revolving fund.....	900	1,061	250	1,000	855	925	231	1,022
Rural Telephone Bank.....	160	180	45	180	130	160	40	178
Export-Import Bank.....	3,813	4,450	1,105		2,817	2,772	646	
HUD: Housing for the elderly or handicapped <sup>5</sup> .....		250	125	375	*	5	3	126
United States Railway Association.....	34	525			34	525		
Federal Financing Bank.....	6,958	6,506	2,878	9,800	6,958	6,506	2,878	9,800
Energy Independence Authority.....				3,000				650
<b>Total off-budget agencies.....</b>	<b>11,865</b>	<b>12,972</b>	<b>4,403</b>	<b>14,355</b>	<b>10,794</b>	<b>10,894</b>	<b>3,798</b>	<b>11,775</b>
<b>Grand total.....</b>	<b>34,909</b>	<b>33,558</b>	<b>8,546</b>	<b>33,193</b>	<b>28,783</b>	<b>33,027</b>	<b>10,833</b>	<b>32,100</b>

\*Less than \$0.5 million.

<sup>1</sup> Gross disbursements in this year's analysis are defined to include actual disbursements for primary loans, disbursements for guarantee claims, and extension of sales credits. In previous analyses these were included net of writeoffs, forgiveness credits and other accounting adjustments.

<sup>2</sup> Returned to on-budget status by statute effective Oct. 1, 1976, with outstanding loans of \$11,247 million. In addition, securities previously sold by Eximbank, representing an estimated \$340 million in loans, have been reclassified from loan sales to agency debt issues, thus restoring these loans to portfolio. Repayments during 1977 are expected to reduce the net effect of these reflected in 1977 year-end outstandings to \$251 million.

<sup>3</sup> Represents a special loan to the new owners of the Franklin National Bank. Note: loan assets acquired from banks in liquidation have not been reported for the credit analysis.

<sup>4</sup> Includes both debentures and repayable preferred stock of ConRail.

<sup>5</sup> Transferred off-budget effective Aug. 31, 1974, with outstanding loan balance of \$519 million.

Table E-4. NET DIRECT LOAN OUTLAYS AND LOANS OUTSTANDING (in millions of dollars)

Agency or program	Net loan outlays				Outstanding			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Funds appropriated to the President:								
International security assistance.....	401	499	70	490	2,387	2,886	2,956	3,446
International development assistance.....	407	376	84	238	10,830	11,205	11,289	11,527
Agriculture:								
Farmers Home Administration.....	-1,395	184	108	-1,323	1,822	2,006	2,114	791
Commodity Credit Corporation.....	-446	608	235	-71	1,262	1,870	2,104	2,033
Public Law 480 long-term export credits.....	515	868	112	741	3,954	4,821	4,934	5,675
Commerce: Economic Development Administration.....	4	13	3	12	491	504	507	519
Health, Education, and Welfare:								
Health programs.....	55	47	22	-17	474	520	542	526
Claims on insured student loans.....	108	102	28	88	280	382	410	498
Other education programs.....	331	278	11	296	3,102	3,380	3,391	3,687
Housing and Urban Development:								
Low-rent public housing—interim financing.....	-41	-----	-----	-----	29	29	29	29
Federal Housing Administration—insurance claims.....	643	454	107	349	2,328	2,782	2,890	3,239
Government National Mortgage Association:								
FHA/VA tandem plan.....	1,906	-1,819	-7	-17	2,189	370	363	346
Conventional tandem plan.....	421	1,784	-5	-19	421	2,206	2,201	2,181
Other.....	-324	-204	-48	-126	2,875	2,671	2,623	2,497
Community development loans.....	21	109	-2	-25	301	409	111	86
Other mortgage credit.....	-67	-40	-6	-87	3,734	3,693	3,984	3,897
Interior.....	17	50	17	20	267	317	334	354
Justice: LEAA loans.....	35	17	11	-17	140	157	168	152
Transportation.....	39	138	30	-79	187	325	355	277
Treasury:								
New York City seasonal financing.....	-----	-----	-----	-----	-----	-----	-----	-----
Liquidating programs.....	-169	-169	-----	-116	3,743	3,574	3,574	3,458

<b>Veterans Administration:</b>								
Housing loans and guarantee claims <sup>1</sup>	17	—116	27	—420	1,792	1,676	1,704	1,284
Insurance policy loans	41	36	9	28	1,131	1,167	1,175	1,203
District of Columbia	198	170	42	150	1,014	1,183	1,225	1,375
Export-Import Bank <sup>2</sup>				1,423				12,921
Federal Deposit Insurance Corporation <sup>3</sup>	100				100	100	100	100
Federal Home Loan Bank Board	1,266	295	—10	—31	1,369	1,664	1,654	1,624
<b>Small Business Administration:</b>								
Business and investment loans	187	133	62	123	1,718	1,851	1,913	2,036
Disaster loans	18	87	29	—34	1,357	1,444	1,473	1,439
United States Railway Association <sup>4</sup>		400	200	540		400	600	1,140
Other agencies and programs	—36	3	—2	—24	482	484	482	458
<b>Total budget agencies</b>	<b>4,251</b>	<b>4,301</b>	<b>1,129</b>	<b>2,092</b>	<b>49,777</b>	<b>54,079</b>	<b>55,207</b>	<b>68,798</b>
<b>OFF-BUDGET DIRECT LOANS</b>								
Rural electrification and telephone revolving fund	651	696	170	759	7,847	8,543	8,713	9,472
Rural Telephone Bank	129	158	39	174	273	432	471	645
Export-Import Bank	1,504	1,458	374		9,415	10,873	11,247	
HUD: Housing for the elderly or handicapped <sup>5</sup>	—5	—1	2	120	514	513	514	634
United States Railway Association	34	—5	—1	—2	34	29	28	26
Federal Financing Bank	6,180	5,601	2,783	8,275	6,282	11,883	14,667	22,941
Energy Independence Authority				650				650
<b>Total off-budget agencies</b>	<b>8,493</b>	<b>7,908</b>	<b>3,367</b>	<b>9,975</b>	<b>24,364</b>	<b>32,272</b>	<b>35,640</b>	<b>34,367</b>
<b>Grand total</b>	<b>12,744</b>	<b>12,210</b>	<b>4,496</b>	<b>12,067</b>	<b>74,142</b>	<b>86,351</b>	<b>90,847</b>	<b>103,165</b>

<sup>1</sup> Claims paid under insurance and guarantee programs become classified as direct loans until acquired loans or collateral are paid off or liquidated. Proceeds of liquidations are classified as repayments and realized losses then become writeoffs.

<sup>2</sup> See footnote 2, table E-3.

<sup>3</sup> See footnote 3, table E-3.

<sup>4</sup> See footnote 4, table E-3.

<sup>5</sup> See footnote 5, table E-3.

Table E-5.—DIRECT LOAN ASSET SALES AND REPAYMENTS

(In millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Loan sales:</b>				
Agriculture, Farmers Home Administration:				
Agricultural credit insurance fund.....	1,863	813	329	1,154
Rural housing insurance fund.....	3,868	3,184	634	4,423
Rural development insurance fund.....	677	746	259	721
Health, Education, and Welfare:				
Health maintenance organization loans.....	-----	30	-----	30
Medical facilities loans.....	55	56	25	59
Treasury: New York City seasonal financing loans.....	-----	-----	1,100	1,000
Veterans Administration:				
Direct loan revolving fund.....	-----	60	10	201
Loan guaranty revolving fund.....	163	318	32	504
Small Business Administration.....	-----	150	-----	150
Subtotal, budget agency loan sales excluding Tandem plans.....	6,626	5,356	2,389	8,242
Housing and Urban Development (GNMA special assistance fund):				
FHA/VA tandem plan.....	1,296	2,625	103	687
Conventional tandem plan.....	-----	2,900	1,600	-----
Subtotal, budget agency loan sales.....	7,922	10,881	4,092	8,928
Scheduled repayments and prepayments.....	5,383	6,564	1,715	8,816
Total repayment credits.....	13,305	17,445	5,807	17,744
<b>Memos:</b>				
Farmers Home repurchases.....	1,281	945	339	1,675
Off-budget loan sales: Export-Import Bank.....	20	25	6	-----
Sales to FFB included above:				
Farmers Home Administration.....	5,000	3,978	1,222	5,926
Health, Education, and Welfare.....	55	86	25	89
Treasury.....	-----	-----	1,100	1,000
Small Business Administration.....	-----	150	-----	150
Total sales to FFB.....	5,055	4,739	2,357	7,165
Sales to public (includes off-budget).....	2,887	6,667	1,741	1,763

pays a significant share of the interest, even though principal repayments are not assured. Federal long-term direct leases and guarantees of private leases are also classed as guarantees of the underlying credit. Tables E-6 and E-7 measure the full principal amount of the loan, although in some cases the Government guarantees less than 100% of the principal amount of the loan.

Data on loan guarantees in tables E-6 and E-7 are comparable to tables E-3 and E-4 for direct loans.<sup>6</sup> As with direct loans, the data in table E-6 on commitments permits some forecasting of future guarantee activity. It also gives an insight into program-by-program variations in the rates at which commitments are converted into guarantees.

<sup>6</sup> Adjustments to eliminate double counting have been made in the data shown in tables E-6 and E-7 to make possible the aggregation of guaranteed loans with other forms of Federal credit assistance. Adjustments are required when the same credit extension is guaranteed twice, and when guaranteed loans are converted to direct loans. Additional adjustments are made for double counting in tables E-8 and E-9 for Government-sponsored credit enterprises.

Guaranteed loans, like off-budget direct loans, are not reflected in the budget at the time credit is extended. Budget impacts from loan guarantee programs, excepting additional subsidies and administrative costs, occur only when defaults require the Federal Government to pay lenders' claims. Losses for older guaranteed loan programs have been relatively low because most older programs involved guarantees with liens on property. However, loans made under some housing subsidy programs have experienced very high default loss rates in spite of the security of real property. Other recent programs generate higher risks because there has been a tendency to move toward the guarantee of loans which require little or no collateral in connection with the guarantee, and, as a result, these programs are experiencing much higher loss rates.

Table E-7 summarizes the net changes in guaranteed loans and the total dollar value of guaranteed loans outstanding at the end of 1975-77 by agency and program. Outstanding guaranteed loans are expected to grow at a rapid pace, up to almost \$275 billion in 1977. However, the growth is less spectacular after certain necessary adjustments have been made. In some cases a single loan may be guaranteed more than once, resulting in double counting. For example, HEW guarantees SLMA obligations and GNMA guarantees securities backed by FHA and VA guaranteed mortgages. In addition, the Federal Financing Bank is purchasing an increasing share of guaranteed loans, converting them to off-budget, direct loans funded from Treasury borrowing. Thus, while the gross amounts of net guaranteed loans have increased at an average annual rate of 11% over the period reported, the annual growth rate is reduced to 4% after these adjustments.

#### GOVERNMENT-SPONSORED CREDIT ENTERPRISES OUTSIDE THE BUDGET

Several major Government-sponsored credit enterprises, created to facilitate the financing of selected programs, are privately owned and managed. All, however, are subject to some form of Federal supervision and consult the Treasury Department in planning the marketing of their debt obligations. The enterprises included in this category are the Federal Home Loan Bank System, the three components of the Farm Credit System, the Federal National Mortgage Association, and the Student Loan Marketing Association.

These enterprises differ from other private institutions in that they have been given special preferences, including rights to assess their constituents, certain tax exemptions and preferences, and preferential eligibility for investment in their securities by federally regulated institutions and other fiduciaries. These, plus the enterprises' implied Federal backing, give their security obligations a preferred position in the securities market. This enables them to borrow at interest rates well below the rates charged on the best grade corporate securities, and only moderately above the Government's own rates.



Table E-6. LOAN GUARANTEE COMMITMENTS AND LOANS GUARANTEED (in millions of dollars)

Agency or program	Commitments				Loans guaranteed			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Funds appropriated to the President:								
International security assistance.....	616	1,445	28	1,355	858	1,223	240	650
International development assistance.....	26	43	-----	54	72	121	25	219
Agriculture:								
Farmers Home Administration.....	7,171	5,331	1,406	6,927	6,884	5,386	1,471	6,813
Rural Electrification Administration.....	1,406	1,536	385	1,506	255	945	234	1,182
Commerce: Maritime Administration.....	699	1,087	180	1,471	799	716	185	609
Defense.....	-----	4	1	1	-----	184	1	1
Health, Education, and Welfare:								
Health programs.....	89	413	-----	30	377	30	-----	30
Student loan insurance fund.....	1,299	1,551	688	1,639	1,182	1,406	642	1,485
Guarantees of SLMA obligations.....	-----	165	60	335	-----	165	60	335
College facilities: Subsidized loans.....	-----	-----	-----	-----	422	194	8	36
Housing and Urban Development:								
Low-rent public housing.....	741	1,171	64	458	7,341	8,500	2,200	10,300
Federal Housing Administration.....	11,221	12,056	4,548	15,161	6,130	6,436	1,168	4,905
Community development loans.....	493	100	-----	-----	690	727	72	400
New communities fund.....	18	43	-----	-----	21	62	-----	17
College housing: Subsidized loans.....	-----	-----	-----	-----	-----	-----	-----	-----
GNMA mortgage-backed securities.....	5,905	10,000	2,600	10,000	5,905	10,000	2,600	10,000
Other mortgage credit.....	-----	-----	-----	-----	-----	-----	-----	-----
Interior: Indian programs.....	-----	109	-----	52	-----	109	-----	52
Transportation:								
Rail programs.....	-----	2,002	-----	-----	161	1,231	529	626
WMATA bonds.....	177	-----	-----	-----	177	-----	-----	-----
Aircraft loans.....	-----	-----	-----	-----	-----	17	56	-----
General Services Administration.....	72	134	14	144	72	134	14	144
Energy Research and Development Administration.....	-----	2,000	-----	200	-----	2,000	-----	200
Veterans Administration: Housing loans.....	8,436	10,850	2,811	10,982	8,254	10,444	2,708	10,882

Emergency Loan Guarantee Board.....				6,000				1,200
Energy Independence Authority.....								
Export-Import Bank.....	8,708	14,575	3,601	14,725	4,428	6,045	1,351	5,347
Federal Deposit Insurance Corporation <sup>1</sup> .....	1,723				1,723			
Small Business Administration.....	1,365	2,041	514	2,644	1,365	2,041	514	2,644
Other agencies and programs <sup>2</sup> .....	6	6	2	6	78	32	3	33
<b>Total (gross).....</b>	<b>50,172</b>	<b>66,672</b>	<b>16,902</b>	<b>73,691</b>	<b>47,195</b>	<b>58,148</b>	<b>14,081</b>	<b>58,011</b>
Less secondary guarantees: <sup>3</sup>								
GNMA guarantees of FHA/VA pools.....	5,905	10,000	2,600	10,000	5,905	10,000	2,600	10,000
HEW guarantees of SLMA insured student loan interests.....		165	60	335		165	60	335
<b>Total primary guarantees.....</b>	<b>44,267</b>	<b>56,507</b>	<b>14,242</b>	<b>63,356</b>	<b>41,290</b>	<b>47,983</b>	<b>11,421</b>	<b>47,674</b>
Less guaranteed loans acquired for direct loan portfolios:								
By budget agencies: GNMA.....	6,842	3,610			3,242	3,045	103	687
By off-budget Federal agencies: Federal Financing Bank.....	6,958	6,506	2,878	9,800	6,958	6,506	2,878	9,800
By federally sponsored enterprises:								
Federal National Mortgage Association.....	4,239	3,090	945	4,403	4,239	3,090	945	4,403
Federal home loan banks.....	30		2	5	30		2	5
Federal Home Loan Mortgage Corporation.....	153	150	40	150	160	150	40	150
Student Loan Marketing Association.....	144	287	116	586	144	287	116	586
<b>Total primary guaranteed loans (adjusted).....</b>	<b>25,901</b>	<b>42,864</b>	<b>10,261</b>	<b>48,412</b>	<b>26,517</b>	<b>34,905</b>	<b>7,337</b>	<b>32,043</b>

<sup>1</sup> FDIC assumed liability for the New York Federal Reserve Bank's loan to Franklin National Bank in connection with its receivership.

<sup>2</sup> Includes less active or expiring small programs (EDA, NOAA, DPA, TVA, ICC, D.C. stadium bonds).

<sup>3</sup> Secondary guarantees are defined in this table to cover securities representing loans assets which are also guaranteed. Secondary guarantees by Export-Import Bank of the debt of the Private Export Finance Corporation have not been estimated and are excluded from both sections of the table.

Table E-7. NET GUARANTEED AND INSURED LOANS OUTSTANDING (in millions of dollars)

Agency or program	Net loans guaranteed				Outstanding			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Funds appropriated to the President:								
International security assistance.....	755	1,053	200	300	1,047	2,100	2,300	2,600
International development assistance.....	66	114	24	205	585	700	723	929
Agriculture:								
Farmers Home Administration.....	5,108	3,925	1,055	4,592	14,867	18,792	19,847	24,439
Rural Electrification Administration.....	255	945	234	1,182	255	1,199	1,434	2,616
Commerce: Maritime Administration.....	700	584	150	450	2,366	2,950	3,100	3,550
Defense.....	-3	183	1	-1	-----	183	184	183
Health Education and Welfare:								
Health programs.....	355	-18	-15	-153	930	912	897	744
Student loan insurance fund.....	209	888	427	848	5,356	6,244	6,671	7,519
Guarantees of SLMA obligations.....	-10	165	60	335	240	405	465	800
College facilities: Subsidized loans.....	409	178	4	18	1,146	1,323	1,327	1,345
Housing and Urban Development:								
Low-rent public housing.....	712	936	165	947	13,153	14,089	14,254	15,201
Federal Housing Administration.....	111	-1,981	-877	-3,891	85,424	83,443	82,566	78,675
Community development loans.....	-326	-336	-178	-695	3,513	3,176	2,998	2,303
New communities fund.....	21	62	-----	17	274	336	336	353
GNMA: Mortgage-backed securities.....	4,844	9,277	2,000	8,500	17,723	27,000	29,000	37,500
College housing: Subsidized loans.....	-76	*	-----	-----	579	579	579	579
Interior: Indian programs.....	-----	102	-3	35	-----	102	99	134
Transportation:								
Rail programs.....	161	1,231	529	626	484	1,715	2,244	2,870
WMATA bonds.....	177	-----	-----	-----	997	997	997	997
Aircraft loans.....	-3	14	53	-11	26	40	93	82
Energy Research and Development Administration.....	-----	2,000	-----	197	-----	2,000	2,000	2,197
General Services Administration.....	68	130	13	135	830	960	973	1,108
Veterans Administration: Housing loans.....	5,088	4,653	1,200	4,995	57,983	62,636	63,836	68,831

Emergency Loan Guarantee Board.....	-25	-25	-----	-----	195	170	170	170
Energy Independence Authority.....	-----	-----	-----	1,200	-----	-----	-----	1,200
Export-Import Bank.....	1,021	2,285	411	1,235	4,464	6,749	7,160	8,395
Federal Deposit Insurance Corporation <sup>1</sup> .....	1,464	-80	-----	-700	1,464	1,384	1,384	684
Small Business Administration.....	93	1,118	272	1,671	4,112	5,229	5,501	7,172
Other agencies and programs <sup>2</sup> .....	67	11	*	1	262	274	273	271
<b>Total (gross).....</b>	<b>21,240</b>	<b>27,414</b>	<b>5,725</b>	<b>22,037</b>	<b>218,273</b>	<b>245,687</b>	<b>251,412</b>	<b>273,448</b>
Less secondary guarantees: <sup>3</sup>								
GNMA guarantees of FHA/VA pools.....	4,844	9,277	2,000	8,500	17,723	27,000	29,000	37,500
HEW guarantees of SLMA insured student loan interests.....	-10	165	60	335	240	405	465	800
<b>Total, primary guarantees.....</b>	<b>16,406</b>	<b>17,972</b>	<b>3,665</b>	<b>13,201</b>	<b>200,310</b>	<b>218,282</b>	<b>221,947</b>	<b>235,148</b>
Less guaranteed loans acquired for direct loan portfolios:								
By budget agencies, GNMA.....	1,584	-2,022	-55	-142	5,062	3,040	2,985	2,843
By off-budget Federal agencies: Federal Financing Bank.....	6,180	5,601	2,783	8,275	6,282	11,883	14,667	22,941
By federally sponsored enterprises:								
Federal National Mortgage Association.....	2,649	1,241	454	2,424	27,900	29,141	29,595	32,019
Federal Home Loan Banks.....	182	-50	2	1	244	195	197	198
Federal Home Loan Mortgage Corporation.....	65	-121	-23	-89	1,934	1,813	1,790	1,701
Student Loan Marketing Association.....	81	176	62	336	225	401	463	799
<b>Total primary guaranteed loans (adjusted).....</b>	<b>5,665</b>	<b>13,147</b>	<b>442</b>	<b>2,396</b>	<b>158,663</b>	<b>171,809</b>	<b>172,250</b>	<b>174,647</b>

\*Less than \$0.5 million.

<sup>1</sup> FDIC assumed liability for the New York Federal Reserve Bank's loan to Franklin National Bank in connection with its receivership.

<sup>2</sup> Includes less active or expiring small programs (EDA, NOAA, DPA, TVA, ICC, D.C. stadium bonds).

<sup>3</sup> Secondary guarantees are defined in this table to cover securities representing loan assets which are also guaranteed. Secondary guarantees by Export-Import Bank of the debt of the Private Export Finance Corporation have not been estimated and are excluded from both sections of the table.

Table E-8. LOAN COMMITMENTS AND GROSS DISBURSEMENTS OF FEDERALLY SPONSORED CREDIT INTERMEDIARIES  
(In millions of dollars)

	Commitments				Gross disbursements			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Student Loan Marketing Association.....	144	287	116	586	144	287	116	586
Federal National Mortgage Association <sup>1</sup> .....	4,434	6,950	2,075	9,350	4,794	4,055	1,335	5,960
Farm Credit System:								
Banks for cooperatives.....	8,896	10,152	2,572	11,617	8,895	10,152	2,572	11,617
Federal intermediate credit banks.....	7,410	8,621	2,505	10,135	7,410	8,621	2,505	10,135
Federal land banks.....	4,604	4,709	1,111	5,032	4,604	4,709	1,111	5,032
Federal Home Loan Bank System:								
Federal home loan banks.....	10,860	7,262	8,197	15,205	10,860	7,262	8,197	15,205
Federal Home Loan Mortgage Corporation: <sup>1</sup>								
Corporation accounts.....	1,834	5,000	1,500	5,000	2,455	2,646	750	3,751
Participation certificate pool <sup>2</sup> .....					(508)	(2,300)	(725)	(4,175)
<b>Total</b> .....	<b>38,182</b>	<b>42,981</b>	<b>18,076</b>	<b>56,925</b>	<b>39,162</b>	<b>37,732</b>	<b>16,586</b>	<b>52,286</b>
Less secondary funds advanced from Federal sources:								
SLMA from FFB.....	140	165	60	335	140	165	60	335
FHLMC from FHLBB.....					2,028	303		
<b>Total primary lending</b> .....	<b>38,042</b>	<b>42,816</b>	<b>18,016</b>	<b>56,590</b>	<b>36,994</b>	<b>37,264</b>	<b>16,526</b>	<b>51,951</b>

<sup>1</sup> Loans purchased at discount are recorded at acquisition cost.

<sup>2</sup> Participation certificates (pass-through type) sold against mortgage pools are counted as sales of loan assets and are therefore not reflected on the Corporation's balance sheet. Loan purchases in parentheses ( ) are excluded from totals (interfund transfers).

All Government-sponsored credit enterprises are essentially financial intermediaries, channeling funds from one sector of the capital market to another. They borrow mainly in the "agency sector" of the bond markets and disburse these funds for specifically authorized purposes, either directly to lenders or by purchasing loans originated by them.<sup>7</sup> Some of the agencies also serve as reserve facilities or provide secondary marketing functions, furnishing liquidity for constituent lenders by making temporary advances or buying portfolio loans for resale.

Funds lent by Government-sponsored credit enterprises are obtained mostly from borrowing in the capital markets. Sale of capital stock and retained earnings also provide a small portion of resources used for lending. The timing of borrowing and lending varies from year to year. For example, the lending activity of FNMA and FHLBS largely depends on conditions in the mortgage credit market and is thus highly volatile. Tables E-8 and E-9 show both the lending and borrowing sides of these credit institutions.

#### FUNCTIONAL AREAS SUPPORTED BY FEDERAL CREDIT ASSISTANCE

Table E-10 presents a functional distribution of direct loan disbursements and the face-value of federally guaranteed loans. From this distribution, it is clear that the most significant Federal credit programs are in support of the housing industry and international affairs (primarily the Export-Import Bank). Credit assistance to the energy area in 1975-76 is accounted for almost exclusively by the program of the Rural Electrification Administration. However, recent legislation to encourage development of domestic energy sources relies heavily upon direct loans and loan guarantees to private industry. As a result of these new programs, credit assistance in this area is expected to increase rapidly in future years, with the first significant increment in 1977.

#### SUMMARY OF FEDERAL AND FEDERALLY ASSISTED CREDIT TRANSACTIONS

Table E-11 summarizes the components of Federal financial activity. Components within aggregates vary widely from year-to-year for many reasons. For example, recent Federal Financing Bank purchases of large amounts of guaranteed loans have shifted them to off-budget direct loans; and recent legislation will shift the Export-Import Bank from off-budget to on-budget status in 1977. FFB lending has similar effects on the borrowing side. In addition, Federal borrowing from the public varies to reflect budget deficit financing in addition to borrowing to finance Federal credit activities.

<sup>7</sup> The program of the Government National Mortgage Association (a budget agency in HUD) to guarantee mortgage-backed securities achieves a very similar "intermediation" result. GNMA guarantees securities issued against privately held pools of federally guaranteed or insured mortgages. The FRB flow-of-funds data, for example, include this GNMA program within the definition of Government-sponsored credit enterprises. GNMA data appear in memorandum entries of tables E-6 and E-7.

Table E-9. NET CREDIT ADVANCED AND NET CREDIT RAISED BY FEDERALLY SPONSORED CREDIT INTERMEDIARIES  
(In millions of dollars)

	Net change				Outstanding			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>LENDING (Funds advanced)</b>								
Student Loan Marketing Association.....	81	176	62	336	225	401	463	799
Federal National Mortgage Association <sup>1</sup> .....	3,264	2,212	834	3,972	29,092	31,304	32,138	36,110
Farm Credit System:								
Banks for cooperatives.....	638	682	287	614	3,371	4,053	4,340	4,954
Federal intermediate credit banks.....	1,540	1,670	445	1,869	10,021	11,691	12,136	14,005
Federal land banks.....	3,037	2,777	705	2,966	15,437	18,213	18,918	21,885
Federal Home Loan Bank System:								
Federal home loan banks.....	1,157	-113	1,485	3,248	20,462	20,350	21,834	25,083
Federal Home Loan Mortgage Corporation: <sup>1</sup>								
Corporation accounts.....	1,723	193	-15	-577	4,814	5,007	4,992	4,415
Participation certificate pool <sup>2</sup> .....	433	2,113	525	3,775	1,213	3,326	3,851	7,626
Total lending (unadjusted).....	11,873	9,710	4,328	16,203	84,635	94,345	98,672	114,877
Less loans to Federal agencies: FHL banks to FHLBB.....	-10							
Less loans between sponsored agencies:								
FHL banks to FHLMC.....	2,028	213	-15	-752	3,537	3,750	3,735	2,983
FHLB interbank loans.....	-37	-5			45	40	40	40
Less loans from Federal agencies:								
FFB to SLMA.....	140	165	60	335	240	405	465	800
FHLBB to FHL banks.....	1,247	303	-15	-51	1,247	1,550	1,535	1,483
<b>Total primary lending.....</b>	<b>8,505</b>	<b>9,034</b>	<b>4,293</b>	<b>16,671</b>	<b>79,566</b>	<b>88,600</b>	<b>92,897</b>	<b>109,571</b>
Memo: Federal Reserve banks <sup>3</sup> .....	-2,272	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	1,242	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )

## BORROWING (Funds raised)

Student Loan Marketing Association.....	-10	165	60	335	240	405	465	800
Federal National Mortgage Association.....	3,004	1,801	750	3,710	28,236	30,037	30,787	34,497
Farm Credit System:								
Banks for cooperatives.....	612	496	389	450	3,168	3,663	4,052	4,502
Federal intermediate credit banks.....	1,500	1,553	408	1,758	9,580	11,113	11,541	13,299
Federal land banks.....	3,000	2,399	695	2,618	14,164	16,563	17,258	19,876
Federal Home Loan Bank System:								
Federal home loan banks.....	3,963	-754	1,545	2,048	20,644	19,890	21,435	23,483
Federal Home Loan Mortgage Corporation:								
Corporation accounts.....	1,795	167	-34	-620	5,087	5,254	5,220	4,600
Participation certificates <sup>2</sup> .....	433	2,113	525	3,775	1,213	3,326	3,851	7,626
Total borrowing (unadjusted).....	14,298	7,940	4,337	14,076	82,332	90,271	94,608	108,684
Less: Borrowing from other sponsored agencies:								
FHLB loans to FHLMC.....	2,028	213	-15	-752	3,537	3,750	3,735	2,983
Other.....	350	-251	109	-102	536	285	394	292
Less: Borrowing from Federal agencies:								
FFB loans to SLMA.....	140	165	60	335	240	405	465	800
FHLBB loan to FHL banks.....	1,247	303	-15	-52	1,247	1,550	1,535	1,483
Less: Loans to Federal agencies:								
Investments in Federal securities.....	2,312	-522	1	37	2,965	2,443	2,444	2,481
FHL bank loans to FHLBB.....	-10							
Total borrowing (adjusted).....	8,230	8,033	4,196	14,609	73,806	81,839	86,035	100,645

\*Less than \$0.5 million.

<sup>1</sup> See footnote 1, table E-8.<sup>2</sup> See footnote 2, table E-8.<sup>3</sup> Federal Reserve bank's loans to member banks are excluded from totals since these are not estimated for fiscal years not yet completed. Data shown exclude a loan to Franklin National Bank, which has been assumed by FDIC (shown as FDIC guaranteed loan in tables E-6 and E-7).<sup>4</sup> Not estimated.



Table E-10. DIRECT LOAN DISBURSEMENTS AND NEW LOANS GUARANTEED BY FUNCTION (in millions of dollars)

Function	Direct loan disbursements <sup>1</sup>				New loans guaranteed			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
National defense:								
Department of Defense—Military.....	2	1	*	1	-----	184	1	1
Military assistance.....	569	515	154	227	858	1,223	240	650
Total.....	570	516	155	229	858	1,407	241	651
International affairs:								
Foreign economic and financial assistance.....	1,332	1,889	315	2,031	72	121	25	219
International financial programs.....	2,817	2,772	646	2,800	4,428	6,045	1,351	5,347
Total.....	4,150	4,661	961	4,832	4,501	6,166	1,376	5,566
Natural resources, environment, and energy: Energy.....	855	925	231	1,672	255	2,945	234	2,582
Agriculture: Farm income stabilization.....	3,096	3,718	911	3,062	2,254	1,605	464	1,478
Commerce and transportation:								
Mortgage credit and thrift insurance.....	9,057	9,758	2,761	5,573	8,482	6,074	1,699	8,641
Advancement of commerce.....	469	468	108	462	1,364	2,056	513	2,649
Ground transportation.....	73	1,064	230	587	338	1,231	529	626
Air transportation.....						17	56	
Water transportation.....	3	4	1	4	799	716	185	609
Total.....	9,601	11,294	3,100	6,625	10,983	10,094	2,982	12,525

Community development.....	822	960	224	902	711	789	72	417
Area and regional development.....	667	965	305	903	834	1,220	376	987
Disaster relief and insurance.....	221	240	65	114	4	5	1	5
<b>Total.....</b>	<b>1,710</b>	<b>2,165</b>	<b>594</b>	<b>1,919</b>	<b>1,549</b>	<b>2,014</b>	<b>449</b>	<b>1,409</b>
Education, training, employment, and social services: Higher education.....	473	452	60	436	1,604	1,600	650	1,521
Health:								
Health.....	50	37	29	8				
Health care services.....	2	38		21		30		30
Health planning and construction.....	61	63	18	50	377			
<b>Total.....</b>	<b>113</b>	<b>137</b>	<b>47</b>	<b>78</b>	<b>377</b>	<b>30</b>		<b>30</b>
Income security: Public assistance (public housing project notes).....	646	653	164	654	7,341	8,500	2,200	10,300
Veterans benefits and services:								
Income security for veterans.....	152	153	39	156				
Veterans housing.....	370	437	115	457	8,254	10,444	2,708	10,882
<b>Total.....</b>	<b>522</b>	<b>590</b>	<b>154</b>	<b>613</b>	<b>8,254</b>	<b>10,444</b>	<b>2,708</b>	<b>10,882</b>
General government: General property management.....					72	134	14	144
Revenue sharing and general purpose assistance: General purpose fiscal assistance.....	40	1,340	1,540	2,140				
Other programs.....	56	73	39	40				
<b>Grand total <sup>2</sup>.....</b>	<b>21,832</b>	<b>26,523</b>	<b>7,955</b>	<b>22,300</b>	<b>38,048</b>	<b>44,938</b>	<b>11,318</b>	<b>47,089</b>

\* Less than \$0.5 million.

<sup>1</sup> See footnote 1, table E-3 for definition.

<sup>2</sup> Off-budget accounts are included (except sponsored agencies); double counting is eliminated by excluding FFB from direct loans, and certain GNMA and SLMA items from guarantees.

Table E-11. SUMMARY OF CREDIT ADVANCED AND CREDIT RAISED UNDER FEDERAL AUSPICES (in billions of dollars)

	Net change				Outstanding			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>LENDING (Credit advanced)</b>								
Direct loans (from table E-4):								
On-budget agencies.....	4.3	4.3	1.1	2.1	49.8	54.1	55.2	68.8
Off-budget agencies.....	8.5	7.9	3.4	10.0	24.4	32.3	35.6	34.4
Guaranteed loans (primary, adjusted, from table E-7).....	5.7	13.1	.4	2.4	158.5	171.8	172.2	174.6
Loans by federally sponsored credit intermediaries (from E-9).....	8.5	9.0	4.3	16.7	79.6	88.6	92.9	109.6
<b>Total, credit advanced to the public under Federal auspices <sup>1</sup>.....</b>	<b>26.9</b>	<b>34.4</b>	<b>9.2</b>	<b>31.2</b>	<b>312.4</b>	<b>346.8</b>	<b>356.0</b>	<b>387.4</b>
<b>Outside the budget.....</b>	<b>22.7</b>	<b>30.0</b>	<b>8.2</b>	<b>29.0</b>	<b>262.6</b>	<b>292.7</b>	<b>300.8</b>	<b>318.6</b>
<b>BORROWING (Credit raised)</b>								
Federal borrowing from the public (from table C-1).....	50.9	87.5	20.0	<sup>2</sup> 53.5	396.9	484.4	504.4	558.2
Guaranteed borrowing (same as guaranteed loans, above).....	5.7	13.1	.4	2.4	158.6	171.8	172.2	174.6
Borrowing by federally sponsored credit intermediaries (net, from table E-9)...	8.2	8.0	4.2	14.6	73.8	81.8	86.0	100.6
<b>Total, credit raised from the public under Federal auspices <sup>1</sup>.....</b>	<b>64.7</b>	<b>108.7</b>	<b>24.6</b>	<b><sup>2</sup> 70.5</b>	<b>629.3</b>	<b>738.0</b>	<b>762.6</b>	<b>833.5</b>
<b>Net credit advanced.....</b>	<b>-37.8</b>	<b>-74.3</b>	<b>-15.4</b>	<b>-39.3</b>				

<sup>1</sup> Excludes Federal Reserve credit.<sup>2</sup> Debt held by the public is projected to increase by \$53,840 million; but \$340 million of this is from the reclassification of Export-Import Bank certificates and is not new borrowing. See footnote 2, Table E-3.

## INTEREST SUBSIDIES

To achieve the objective of reallocating resources to specific sectors of the economy, most Federal credit programs, by using guarantees or direct interest subsidies, offer private borrowers and Government corporations credit on terms that are more favorable than those available in private markets. Most frequently the improved terms take the form of an interest rate that is lower than the rate charged to private borrowers, although the length of the loan and the loan-to-value ratio may also be affected. Other subsidies, not treated here, result from fees or premiums inadequate to cover costs of administration and losses on credit guarantees and insurance programs, waivers of such fees or premiums, or forgiveness of part or all of the loan principal.

This section attempts to measure the value of the interest rate subsidy that accrues to federally assisted borrowers. The interest subsidy is defined as the value of the difference between the interest rate that the borrower pays under Government assistance and the rate that he would have to pay for a comparable private loan. These interest differentials come about for many reasons. In some direct loan programs the interest rate established by statute may be at rates below those of the private market. In other direct loan programs the laws provide for interest rates to be set to recover the costs of borrowing by the Treasury, thereby providing private borrowers loans at rates otherwise available only to the U.S. Government. In guaranteed loan programs, the guarantee itself provides an implicit subsidy because, by eliminating the risk of loss through default, it allows the borrower to obtain an interest rate less than that available on riskier unguaranteed loans for comparable purposes. Additional subsidies in the form of explicit interest subsidy payments to the borrower or lender are often added to guaranteed loans.

To evaluate the implicit subsidies in loan programs, it is necessary to estimate the interest rate that the borrower would have had to pay in private credit markets. For some loans, particularly those for housing, private-credit market rates are readily available for use in measuring the subsidy. But for other programs—student loans and public housing, for example—no comparable private loans exist. Because of the difficulty of determining what private, unassisted rates would have been on a program-by-program basis, a 10% rate has been adopted as a reasonable estimate of the average private sector cost of borrowing for all activities and loan terms presented. Because interest subsidies occur throughout the life of the loan, the measurement of interest subsidies requires the conversion of a stream of payments into a single “present-value.” This capitalization is accomplished by discounting future subsidies before accumulating them into a single amount. A discount rate of 10% per annum has been used in this analysis.

Using this method of measurement, table E-12 presents the estimated value of Federal subsidies provided by new direct and guaranteed loan commitments made in each of the years being considered.

Table E-12. ESTIMATED INTEREST SUBSIDY VALUES FOR MAJOR DIRECT AND GUARANTEED LOAN COMMITMENTS

(Dollars in millions)

Agency and program	Borrower loan terms <sup>1</sup>		Annual subsidy per \$100 million <sup>2</sup>	Commitments				Subsidy—Present value at 10% discount			
	Percent	Years		1975	1976	TQ	1977	1975	1976	TQ	1977
DIRECT LOANS											
Funds appropriated to the President:											
International security assistance.....	6.0	10.0	2.5	437	1,689	27	1,885	69	267	4	298
International development assistance.....	4.0	40.0	5.2	478	553	122	532	243	281	62	270
Agriculture:											
Price support.....	7.1	2.1	1.6	1,101	2,264	480	1,719	33	68	14	52
CCC: Public Law 480.....	2.3	33.0	6.1	747	956	118	838	436	558	69	489
Farmers Home Administration.....	5.2	33.7	4.1	4,481	4,960	1,243	4,526	1,758	1,946	488	1,776
Rural Electrification Administration.....	5.5	35.0	3.9	1,060	1,241	295	2,800	398	466	111	1,052
Health, Education, and Welfare:											
Education and health education.....	3.0	15.0	4.6	380	342	29	8	133	120	10	3
Medical facilities.....	6.7	25.0	2.7	30	94	29	17	7	23	7	4
Housing and Urban Development:											
Urban renewal.....	6.8	.7	1.8	493	100	-----	-----	6	1	-----	-----
Low-rent public housing.....	-----	1.5	8.4	82	130	7	51	9	15	1	6
Federal Housing Administration.....	9.5	40.0	.5	842	728	175	577	39	34	8	27
Government National Mortgage Association.....	8.5	27.0	1.2	11,779	5,610	-----	-----	1,371	653	-----	-----
Housing for elderly.....	9.8	40.0	.2	-----	250	125	375	-----	6	3	9
Veterans Administration:											
Insurance policy loans.....	5.0	15.0	3.4	152	153	39	156	40	40	10	41
Education loans.....	6.5	6.0	2.1	1	3	1	2	*	*	*	*
Housing.....	9.0	29.4	.9	369	434	114	457	30	36	9	38
District of Columbia.....	8.0	30.0	1.7	232	241	42	225	38	40	7	37
Export-Import Bank.....	8.1	6.0	1.1	3,813	4,450	1,105	5,075	191	223	55	255
Federal Financing Bank purchases of unsubsidized loans.....	7.8	5.0	1.3	1,125	862	426	1,115	57	44	22	57
Federal Home Loan Bank Board.....	8.0	30.0	1.8	1,305	338	9	38	219	57	2	6

Small Business Administration:											
Business and investment loans.....	6.9	8.7	1.9	279	250	59	235	31	28	7	26
Disaster loan fund.....	5.3	11.0	3.0	241	240	40	140	48	48	8	28
United States Railway Association.....	7.5	20.0	2.5		400	200	540		85	43	115
<b>Total—Major subsidized direct loans.....</b>								<b>5,156</b>	<b>5,039</b>	<b>940</b>	<b>4,589</b>
<b>GUARANTEED LOANS</b>											
Health, Education, and Welfare:											
Health maintenance organizations.....	7.0	20.0	2.3		30		30		6		6
Medical facilities.....	6.7	25.0	2.7	89	283			22	69		
Student loan insurance.....	4.4	13.0	3.7	1,299	1,551	688	1,639	345	412	183	435
Housing and Urban Development:											
Urban renewal.....	4.6	.7	6.5	493	100			21	4		
Low-rent public housing.....		41.5	7.8	741	1,171	64	458	566	894	49	350
Mortgage insurance (subsidized).....	5.0	40.0	4.4	476	1,397	867	2,684	206	604	375	1,160
Interior: Indian loans.....	8.0	20.0	1.5		109		52		15		7
Department of Transportation: WMATA guaran- tees.....	6.3	40.0	3.3	177				58			
<b>Total—Major subsidized guaranteed loans.....</b>								<b>1,217</b>	<b>2,003</b>	<b>606</b>	<b>1,958</b>
<b>AGENCY DEBT ISSUES FINANCED BY FEDERAL FINANCING BANK</b>											
Tennessee Valley Authority.....	8.0	3.0	1.1	1,435	1,100	300	1,000	41	32	9	29
U.S. Postal Service.....	8.0	3.0	1.1	1,000	1,280	500	1,398	29	37	14	40
<b>Total debt issue subsidies <sup>3</sup>.....</b>								<b>70</b>	<b>69</b>	<b>23</b>	<b>69</b>
<b>Grand total.....</b>								<b>6,443</b>	<b>7,111</b>	<b>1,569</b>	<b>6,616</b>

\*Less than \$0.5 million.

<sup>1</sup> If terms vary, these are estimated averages.

<sup>2</sup> Based on 10% value of funds.

<sup>3</sup> Interest savings are passed through to private users.

## PROPOSED LEGISLATION

The administration has proposed legislation to create new credit programs or substantially change existing ones. These proposals are summarized below.

Legislation has been introduced in Congress to establish an Energy Independence Authority (EIA) to provide up to \$100 billion in loans and loan guarantees to selected private sector energy projects during the next decade. The administration also supports legislation to amend the existing authorities of the Energy Research and Development Administration (ERDA) to provide \$2 billion in loan guarantees during 1976 for the commercial demonstration of synthetic fuel production from coal, oil shale, and other domestic resources. With the enactment of EIA legislation in 1977 these ERDA projects will be transferred to EIA. In addition, Federal cooperative arrangements and temporary financial assurances for privately owned uranium enrichment facilities have been proposed. In the unlikely event that a commercial uranium enrichment venture fails, Treasury funds would be used to repay domestic investors.

In another energy-related credit initiative, the administration has proposed creation of a multinational financing facility to assist industrialized nations in meeting financial commitments resulting from high oil prices. The U.S. contingent commitment to the fund is expected to be \$7 billion.

In transportation, the administration has proposed legislation that would provide, over a period of 6 years, \$2 billion in loan guarantees to rehabilitate nationwide rail facilities. There has also been proposed legislation authorizing the purchase of over \$2 billion of debt and debt-like securities in ConRail, the successor corporation to several Northeast-Midwest railroads.

Other proposals include: Removal of the 5% interest rate ceilings on certain agriculture credit programs, coupled with a requirement that these loans carry interest rates comparable to rates prevailing in the private market on similar loans; amendment of the Rural Electrification Act so that the interest rates on loans to rural electric and telephone systems more nearly reflect the utilities' ability to pay; and amendment of the guaranteed student loan program by making student loans nondischargeable in bankruptcy during the 5-year period after a student's first payment is due and by making any student who defaults on a guaranteed student loan ineligible to receive certain other types of student assistance.

## NEWLY ENACTED CREDIT LEGISLATION

This list summarizes legislation enacted during the last session of Congress that authorizes new Federal credit programs or revises existing programs in major respects. It excludes simple extensions of expiring laws and changes in funds for continuing programs.

*Geothermal Energy Research, Development, and Demonstration Act of 1974—Public Law 93-410*

Provides loan guarantee authority of \$50 million annually to encourage and assist industry in the commercial development of useful energy from geothermal resources.

*Regional Rail Reorganization Act Amendments of 1975*—Public Law 94-5

Provides a \$150 million increase in loan guarantee authority to permit Penn Central and other Northeast railroads to continue transportation services until ConRail assumes operation in 1976.

*Emergency Livestock Credit Act Amendments*—Public Law 94-35

Extends until December 31, 1976, the FMHA guarantee loan program for cattlemen in an amount not to exceed \$1,500 million at any time. In addition, amendments to the act broaden program eligibility and liberalize certain loan benefits.

*Emergency Cooperation and Special Unemployment Assistance Act of 1975*—Public Law 94-45

Authorizes general revenue loans to the Virgin Islands and its unemployment compensation program.

*Emergency Housing Act of 1975*—Public Law 94-50

Authorizes the Secretary of HUD to insure or make loans on behalf of homeowners to avoid foreclosure. Extends and revises HUD's authority to purchase residential mortgages and authorizes an additional \$10 billion for such purchases.

*Consolidated Farm and Rural Development Act*—Public Law 94-68

Amends the FMHA emergency disaster loan program to (a) broaden program eligibility and simplify program administration; (b) require a "credit elsewhere test"; and (c) provide additional credit assistance. It also increases the interest rate charged for certain Small Business Administration disaster loans.

*Rehabilitation and Betterment Act*—Public Law 94-102

Expands existing statutory eligibility for loans to rehabilitate and improve certain federally constructed systems and for certain other federally constructed water resource development projects.

*New York City Seasonal Financing Act*—Public Law 94-143

Authorizes direct loans up to \$2.3 billion outstanding at any one time to New York City, each loan to mature before the end of the New York City fiscal year (June 30) in which the loan is made. Authority terminates June 30, 1978.

*Arts and Artifacts Indemnity Act*—Public Law 94-158

Authorizes the Federal Council on the Arts and Humanities, under certain conditions, to provide Federal indemnities against loss or damage of certain exhibits of art, artifacts and other objects. Limits Federal contingent liability at any one time to \$250 million.

*Energy Policy and Conservation Act*—Public Law 94-163

Authorizes the Federal Energy Administration, under certain conditions, to guarantee loans for developing new underground coal mines. Limits total amount of loan guarantee to \$750 million and guarantees to any one person to \$30 million.



## SPECIAL ANALYSIS F

### TAX EXPENDITURES

The Congressional Budget Act of 1974 requires a listing of tax expenditures in the budget. Tax expenditures are defined by that act as "revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability." Tax expenditures are one means by which public policy objectives are pursued by the Federal Government and, in most cases, can be viewed as alternatives to budget outlays, credit assistance, or other instruments of public policy.

Tax expenditures have varied objectives. Most tax expenditures are meant either to encourage certain economic activities or to reduce income tax liabilities for taxpayers in special circumstances. Among the economic activities encouraged by tax expenditures are investment, exporting, petroleum exploration and development, spending by State and local governments, and support of charitable institutions. The deductibility of medical expenses, casualty losses, and personal exemptions for the aged and blind are examples of adjustments of tax liabilities to meet special circumstances.

The benefits of tax expenditures designed to encourage certain types of economic activity typically do not rest fully or even mostly with the corporations or individuals whose taxes are initially affected. An initial reduction in taxes tends to attract more resources to the preferred activity thereby competing away some or all of the short-run advantage conferred to particular taxpayers by the tax expenditures. Thus benefits often accrue to others in the form of lower prices for particular goods or services, or in other ways become widely diffused. For example, the deductibility of charitable contributions does not merely lower individual or corporate liabilities; the institutions that receive the contributions also benefit as do individual beneficiaries of charitable institutions.

This Special Analysis only provides measures of the quantitative importance of various tax expenditures and does not attempt to evaluate their effectiveness. It should be emphasized that the listing of specific tax expenditure items does not imply either approval or disapproval of specific sections of the Internal Revenue Code any more than the listing of outlay items in the budget implies approval or disapproval.

### DEFINING TAX EXPENDITURES

Income tax provisions resulting in tax expenditures are further defined in the legislative history of the Congressional Budget Act as exceptions to the "normal structure" of the individual and corporate income tax. They reduce tax liabilities for particular groups of tax-

payers. Excluded from this analysis, by definition, are negative tax expenditures or tax penalties, that is, exceptions to the normal structure of income taxes that result in increased tax liabilities for certain groups of taxpayers. There are only a few such exceptions: one example is the nondeductibility of gambling losses in excess of gambling gains where gambling is engaged in for profit; another is limitations on the deductibility of capital losses.

The "normal structure" is not defined in the tax code. The concept has evolved in recent years from various congressional and public reviews of the U.S. tax system focusing on the definition of the income tax base and the rates applied to that base. Conceptually, it would be more appealing to begin with a theoretically pure tax structure as a standard. Tax rates under such a tax structure would be applied to all "economic income," which could be defined as receipts available to support consumption or additions to net wealth, plus the imputed value of in-kind consumption and imputed changes in net wealth. Tax expenditures could then be defined to result from any departures from a theoretically pure income tax. However, this is not possible. The concept of the normal structure recognizes that it is impractical to make the necessary imputations. Furthermore, the normal structure includes the separate taxation of individuals and corporations whereas a theoretically pure tax structure would integrate these two income taxes. Theoretically pure tax structures could be specified for other types of taxes such as a tax on income used for consumption spending rather than on all income.

Sections of the tax code that specify the structure of progressive rates and that exclude low-income persons from tax liability are deemed a part of the normal tax structure. Existing rates are accepted even though there is no theoretical foundation upon which to support any particular degree of progressivity in the individual income tax rate structure or any particular corporate income tax rate. If a set of tax rates could be agreed to on normative grounds, it would be conceptually possible to identify and measure both positive and negative tax expenditures against such a norm. For example, if a single tax rate were taken as the norm, lower actual rates would result in tax expenditures and higher rates in negative tax expenditures or tax penalties.

When the rate structure is changed, for whatever reason, the new rates become part of the new normal structure according to the definition used in the analysis of tax expenditures. The Tax Reduction Act of 1975 and the Revenue Adjustment Act of 1975 increased the low income allowance (minimum standard deduction) and introduced a tax credit for each personal exemption claimed by a taxpayer, thus altering the normal tax structure. Those alterations reduced the estimated revenue losses associated with many tax expenditure items primarily because fewer taxpayers will itemize their deductions. The President's tax proposals will have a similar impact on tax expenditures.

The existing rate structure for individuals, ranging from 14% to 70%, and the 48% corporate tax rate cannot be presumed to exist independently from current tax expenditures. If major tax expenditure items were deleted and budget outlays remained constant, tax rates would undoubtedly be set at lower levels so as to maintain an appropriate fiscal policy. Moreover, because tax expenditures tend to

reduce the effective progressivity of the tax structure, it is quite likely that a less progressive set of tax rates would be established if tax expenditures were eliminated.

In several areas of the tax code the concept of a normal tax structure becomes quite ambiguous and some arbitrary decisions have to be made in arriving at an operational definition of tax expenditures. The following paragraphs highlight some of these areas.

- *The progressive rate schedules for the individual income tax.* No tax expenditure results because some income is taxed at lower rates than other income when progressive rate schedules are applied to all taxable income. The income averaging provision of the tax code is a part of the normal structure since it limits the impact of progressive rates when income increases significantly. The maximum tax of 50% on earned income could be viewed as part of the normal structure of the individual income tax, and higher marginal rates on unearned income considered as resulting in negative tax expenditures, but is treated as a tax expenditure in this analysis because it fits the definitional term "preferential rate of tax."
- *Personal exemptions and the low income allowance.* These set levels of income, depending upon family size, that are not taxed by the individual income tax. However, deductions for additional personal exemptions for those over 65 and for the blind do result in tax expenditures because they depend upon more special circumstances. The percentage standard deduction, to the extent it exceeds the low income allowance, also results in a tax expenditure because it substitutes for itemized deductions that are tax expenditure items.
- *Separate rate schedules for single and married taxpayers, married taxpayers filing separately, and heads of households.* Existing provisions regarding the definition of taxpaying units are accepted as part of the normal tax structure.
- *Deduction of business expenses.* The deduction of business expenses is necessary to determine taxable income. Tax expenditures do not ordinarily result from applying the definitions of business expenses prescribed by the Internal Revenue Code and Internal Revenue Service interpretative regulations. Tax expenditures do occur when the tax code permits business or investment expenditures that are capital outlays in economic terms to be treated as current expenses. A case in point is expensing research and development costs whether or not they result in substantial future benefits. Another example is the expensing of interest and taxes during the construction of a building. In the case of depreciation the Internal Revenue Code allows as a deduction "a reasonable allowance for the exhaustion, wear and tear (including a reasonable allowance for obsolescence)" on property used in a trade or business or for the production of income. To avoid judging every taxpayer's depreciation deductions against a standard of reasonableness, the code permits standard depreciation techniques and useful lives to be used. In some cases, such as accelerated depreciation on buildings, tax expenditures result because the permitted technique clearly results in excess depreciation being claimed. In other cases, such as 5-year amortization of railroad rolling stock, tax expendi-

- tures result because the useful life is artificially short. With respect to machinery and equipment, the asset depreciation range (ADR) system, which became effective in 1971, defines a band within which estimates of useful life are deemed to be "reasonable." That band is determined by reference to broad classes of property and ranges 20% up and 20% down from a published figure designated as the "asset guideline period." This analysis treats the ADR system as a mechanism to arrive at a "reasonable allowance" and hence no tax expenditure is listed in table F-1. The ADR system has been included as a tax expenditure item in lists published by congressional committees with estimates of \$1,270 million and \$140 million in 1975 and \$1,440 million and \$150 million in 1976 for corporations and individuals, respectively.
- *Capital gains and losses.* Although the base of a theoretically pure income tax would include net capital gains on an accrual basis, practical problems prevent identifying and taxing unrealized capital gains for many types of assets, and the normal structure taxes only wealth accruals which are "realized." For this reason the failure to tax unrealized gains during the holder's lifetime is not listed as a tax expenditure. The exclusion from taxable income of one-half of realized capital gains, and the option of having up to \$50,000 of realized capital gains taxed at a 25% rate, clearly results in a tax expenditure. At death, an individual may hold assets which have appreciated or depreciated in value. As the assets pass to an heir or other beneficiary, that new holder takes the market value of the assets at the date the estate is valued as the basis against which to measure any future appreciation or loss. No gain or loss is realized as income during the last year of the decedent's life. The failure to impute any such gain or loss is not considered for purposes of this analysis to result in a tax expenditure, since it is not clear how such gains would be taxed, if at all, under a normal tax structure. A wide range of alternatives can be conceived. At the extreme, such gains could be taxed as ordinary income to the decedent in the last year of life, that is, taxed less favorably than realized capital gains. Under such a tax law, revenues would have been about \$4.8 billion greater in 1975, \$5.0 billion in 1976, and \$5.4 billion in 1977, after accounting for reduced estate tax collections. This is the assumption on which estimates published by congressional committees have been based. Another option would be to tax such gains like other capital gains during the last year of life. The revenue gain would have been about \$2.4 billion in 1975, \$2.5 billion in 1976, and \$2.7 billion in 1977, again accounting for reduced estate tax collections. Still another technique would be to require beneficiaries to take the same basis for inherited assets as the decedent's. Under such a tax law revenues would have increased about \$0.6 billion in each year. Under all alternatives the revenue gain would be even smaller if the appreciation on assets transferred to a surviving spouse were exempted in a manner similar to the estate tax exemption for surviving spouses. Moreover, these estimates are all based on the unrealistic assumptions that any new tax law would not be phased in and that asset-holding behavior would not change.

- *Imputed income from owner-occupied housing and other sources.* A theoretically pure income tax could include in its base an imputation for the income received in kind from the occupancy of a home owned by the taxpayer and imputations for in-kind income from the ownership of other durable assets including art collections, furniture, and books. Because such imputations are difficult to make and are foreign to usual concepts of income, they are not considered in the computation of tax expenditures even though such exclusions of imputed income affect the allocation of the economy's resources, particularly by providing a stimulus to owner-occupied housing.
- *Gifts and bequests.* The tax system subjects gifts and bequests, which are usually made within a family, to taxes separate from the income tax and therefore their exclusion from taxable income under the individual income tax does not result in a tax expenditure. Tax expenditures could be defined to include departures from "normal" gift and estate taxes, though to do so would be beyond the scope of this analysis.
- *The value of Government services received by individuals.* The exclusion from gross income of direct cash payments to individuals by the Government, such as social security payments, does result in a tax expenditure. Other Government programs extend benefits in kind to individuals. Examples are medicare and public education. Since these benefits are received in kind they cannot be used, like cash, for purposes fully consistent with the recipient's preferences. The exclusion of such imputed values from income subject to tax does not result in tax expenditures. The dividing line between nontaxable Government benefits that do result in tax expenditures and those that do not is essentially arbitrary. The most ambiguous case is that of the bonus value of food stamps. They are so nearly the equivalent of cash that their exclusion from income subject to tax might be considered to result in a tax expenditure. If the exclusion of the bonus value of food stamps were deemed to be a tax expenditure, the estimate (about \$135 million for 1975, \$185 million in 1976, and \$220 million in 1977) would be small relative to program outlays, since only a few participants have income large enough to be taxable. Exclusion of the bonus value of food stamps is not listed as a tax expenditure in table F-1.
- *Treatment of individuals and corporations as separate taxpaying entities.* A theoretically pure income tax would integrate the taxation of individual and corporate income so as to avoid multiple taxation of any particular type of income. Only individuals would be taxed; corporate income would be taxed as dividends are paid and retained earnings would be imputed to shareholders. However, for practical reasons, separate taxation is accepted as part of the normal tax structure for purposes of this analysis.
- *Foreign tax credits.* To avoid the double taxation of income earned abroad, and thus accommodate the U.S. tax system to international norms, the normal structure of income taxes includes tax credits for foreign taxes paid.
- *Forms of business organization.* The tax law recognizes different forms of business organization including corporations, partner-

ships, small corporations treated like partnerships, cooperatives, mutual insurance companies, and individual proprietorships. The provisions of the tax law that accommodate different forms of business organization do not generally result in tax expenditures so long as income is subject to tax at either the corporate or individual level. The dividing line is, however, by no means clear. For example, cooperatives may deduct cash and noncash patronage dividends based on net income earned on business done with patrons as long as 20% of the total dividend is paid in cash and the patron has agreed to take the entire dividend into his income. Per-unit retains, that is, amounts retained from the value of products marketed for patrons, may be deducted by the cooperative if patrons agree to take the face amounts into current income. Agricultural cooperatives meeting certain requirements are permitted to deduct dividends on capital stock and payments to patrons from nonpatronage income. Rural electric and telephone cooperatives may deduct noncash patronage dividends and patrons generally need not take such dividends into income. If noncash patronage dividends, retains, dividends on capital stock, and payments to patrons out of nonpatronage income were not deductible, corporate taxes would have been about \$395 million higher in 1975 and individual taxes about \$160 million lower, since noncash patronage dividends and retains would no longer be taken into current income by patrons. The comparable estimates for 1976 and 1977 would be \$410 million and \$455 million, respectively, for the gain in corporate taxes and \$155 million and \$160 million, respectively, for the offsetting reduction in individual taxes. This tax treatment of cooperatives is considered to be a function of their status as a particular form of business organization and is not listed as a tax expenditure in table F-1.

- *Income of controlled foreign corporations.* The income of foreign corporations controlled by U.S. corporations or citizens is generally not subject to U.S. tax until that income is repatriated. This feature of the normal tax structure has the effect of allowing such corporations to be taxed like other corporations doing business in particular foreign countries and is in accord with international norms of taxation. Consequently, this is not considered to be a tax expenditure in table F-1. There are certain exceptions to this general feature of the tax law in order to avoid abuse in tax-haven countries. The scope of these exceptions was expanded by the Tax Reduction Act of 1975, and this makes the concept of normal tax treatment somewhat ambiguous. If the general treatment of controlled foreign corporations were defined as a tax expenditure, the estimates would be \$590 million in 1975, \$525 million in 1976, and \$365 million in 1977.

The above discussion does not exhaust the definitional complexities inherent in the tax expenditure concept nor does this analysis consider all special tax provisions. Some items have not been considered because the issues have not been fully studied or because there is insufficient information available on which to base a sound estimate. Some items are omitted because of their relatively small quantitative importance. As the concept is sharpened, additional provisions of the tax law examined, and estimating techniques improved, further changes are bound to be made in the list of tax expenditures.

The distinction between the normal tax structure and those exceptions leading to tax expenditures does not imply that the features of the normal tax system should be exempt from periodic analysis and review. Like tax expenditures, many features of the normal tax structure have major effects upon the level and composition of economic activity and the distribution of income; some features affect the everyday activities of corporations, trusts, and partnerships. Budget outlays, or other policy instruments, are alternative means to achieve the objectives of some of the features of the normal tax structure just as they are often a potential substitute for tax expenditures.

### MEASURING TAX EXPENDITURES

The tax expenditure estimates reported below in table F-1 have been prepared by the Treasury Department. The Congressional Budget Act requires that tax expenditures be estimated "under existing law." The impact of the President's proposals on tax expenditures is discussed separately beginning on page 135. In recognition of the temporary nature of some of the provisions of the Revenue Adjustment Act of 1975, "current law" has been interpreted, for estimating purposes, to mean that the same number of individuals will itemize their deductions as they file returns for 1976 and 1977 as would be the case if the provisions of the Revenue Adjustment Act regarding standard deductions for individuals were annualized. Several of the estimates for itemized deductions are sensitive to the proportion of returns claiming itemized deductions. For fiscal years the estimates show the loss of budget receipts resulting from each of these particular features of the tax system. No separate estimates can reasonably be made for the transition quarter.

Each estimate is based upon two major assumptions. The first is that only the tax provision in question is deleted and all other features of the tax system, including the structure of rates, remain unchanged. The hypothetical deletion of the special tax provision increases the estimated taxable income for corporations or individuals; the existing marginal tax rates are then applied to the change in taxable income, giving the estimated tax expenditure. If, however, major tax expenditures were in fact deleted, as was noted earlier, some features of the normal income tax, such as rate structures or personal exemptions, would probably be changed so that the marginal rates used in making the estimates would no longer apply. Outlay or credit programs might also be altered or new tax expenditure items added. Such actions cannot, of course, be anticipated when individual tax expenditure estimates are made. For each itemized nonbusiness deduction for individuals the estimated revenue loss is based upon the amount by which the standard deduction is exceeded.

The second major assumption used to make the estimates is that taxpayer behavior and general economic conditions remain unchanged in response to the hypothetical change in the tax laws. This assumption is required to estimate tax expenditures but it is, in most cases, unrealistic. In particular, to the extent that tax expenditures designed to encourage certain economic activities have been successful, their elimination would presumably change taxpayer behavior. Thus, if the tax credit for investment were deleted, both taxpayer behavior and general economic conditions would be expected to change with a resulting impact on budget receipts generally.

Whenever possible, sample data from tax returns are used to estimate tax expenditures. These data are not, however, available for the years presented in this analysis, as these returns have not yet been filed or tabulated. Consequently, the estimates must be made by extrapolating sample tax return data from past years by means of other, more current information including the economic forecast used in estimating budget receipts and outlays (see Part 3 of the Budget). Moreover, many tax expenditures result from excluded income, not reported on tax returns. In these cases estimates must be based upon other data sources. Any changes scheduled by existing law, such as the phasing in or out of specific provisions, are accounted for in the estimates.

The estimates of tax expenditures presented in this analysis are reduced by any minimum tax liabilities associated with particular items. The 10% minimum tax for tax preferences was introduced by the Tax Reform Act of 1969 in an attempt to insure that individuals and corporations receiving such tax preferences do not escape paying a share of the tax burden. Among the tax expenditure items included in the base of the minimum tax are accelerated depreciation on real property, excess reserves of financial institutions for losses on bad debts, percentage depletion in excess of cost depletion, and one-half of net long term capital gains. The minimum tax is, in general, applied to the sum of preference items reduced by a \$30,000 exemption and the affected taxpayer's regular income tax liability for the year.

Some tax expenditure items affect the timing of deductions or the receipt of taxable income. Examples are depreciation in excess of straight line for buildings and rental housing and the deferral of income by domestic international sales corporations (DISC's). These provisions create a permanent tax expenditure even though for a particular taxpayer, transaction, or asset, the special provision may defer a tax rather than eliminate it. However, for a stable or growing business with an indefinite life, the deferral of taxes continues forever under most of these provisions. Furthermore, as the economy grows, these amounts increase over time. Estimates for these items attempt to show the difference between budget receipts under the current law and budget receipts if a different law had always been in effect. These figures therefore show more than the revenue that could be obtained in the first years of a transition from one tax law to another. They are long-run estimates at the levels of economic activity assumed for the years in question.

Tax expenditure estimates cannot be simply added together to form totals for functional areas or a grand total. In some cases the revenue gain resulting from the deletion of two tax expenditure items would be greater than the sum of the individual estimates. For example, if interest income from State and local government securities were made taxable and capital gains were taxed at ordinary rates, many individuals would be pushed into higher tax brackets than if just one of these sources of income became fully taxable; the combined effect on revenue would be greater than the sum of the two separate estimates. In other cases, the revenue gain from the deletion of two items would be smaller than the sum of the individual estimates. For example, if the deductibility of mortgage interest payments and homeowner property taxes were both repealed, and the standard deduction unchanged, many individuals who now itemize their deductions would



opt for the standard deduction, thus limiting the revenue gain. In general, elimination of multiple items that are personal deductions would increase revenue by less than the simple sum of the revenue gains from eliminating each item measured separately since many taxpayers would switch to using the standard deduction. Conversely, elimination of multiple items that are exclusions from adjusted gross income would increase revenue by more than the sum of the individual gains as taxpayers would be pushed into higher tax brackets. Moreover, if several major tax expenditure items were eliminated, the assumptions of no changes in economic behavior and conditions or in other features of the tax system would have little validity.

A few aggregations of related tax expenditure items are presented and discussed in the next section. These aggregates have been specially estimated so as to account for the interactions referred to above but do not consider the effect of changes in behavior. Where tax expenditures for both individuals and corporations result from the same tax code provision, such as the investment tax credit, the two estimates may appropriately be added together.

#### TAX EXPENDITURES BY FUNCTION

Estimates of tax expenditures are grouped together by functional category and presented in table F-1. The estimates are shown separately for individuals and corporations. Whenever possible, particular tax expenditures have been classified according to the functional categories used for budget outlays. Many tax expenditures do not, however, fit into these categories and for this reason three special functional categories have been added: business investment, personal investment, and other tax expenditures.

A brief description of each of the special tax provisions for which a tax expenditure estimate is shown in table F-1 follows.

*National defense.*—The supplements to salaries of military personnel, including provision of quarters and meals on military bases and quarters allowances for military families, and virtually all salary payments and reenlistment bonuses to military personnel serving in combat zones, are excluded from tax. Disability-related military pensions are largely excluded from taxable income.

*International affairs.*—For citizens of the United States who are not employees of the Federal Government, income earned abroad up to \$20,000 for each complete tax year is exempted from taxation if the taxpayer is a bona fide resident of a foreign country for an uninterrupted period that includes 1 full tax year or if he or she is present there 510 days during a period of 18 consecutive months. After 3 years, foreign resident taxpayers can exclude up to \$25,000 a tax year. Certain allowances received by Federal employees working abroad are also tax exempt.

When a foreign subsidiary of a U.S. corporation operating in a less developed country (LDC) repatriates dividends to its parent corporation, that income may be reported net of foreign income taxes paid. U.S. tax liability is then calculated on that net amount and the foreign tax is taken as a credit. For non-LDC corporations income must be reported gross of foreign taxes paid. The failure to "gross up" dividends by the amount of the foreign taxes paid to LDC's results in a tax expenditure.

Table F-1. TAX EXPENDITURE ESTIMATES BY FUNCTION\*  
(in millions of dollars)

Description	Corporations			Individuals		
	1975	1976	1977	1975	1976	1977
<b>National defense:</b>						
Exclusion of benefits and allowances to Armed Forces personnel.....	-----	-----	-----	650	650	650
Exclusion of military disability pensions.....	-----	-----	-----	70	80	90
<b>International affairs:</b>						
Exclusion of income earned abroad by U.S. citizens.....	-----	-----	-----	130	145	160
Exclusion of gross-up on dividends of LDC corporations.....	55	55	55	-----	-----	-----
Deferral of income of domestic international sales corporations (DISC).....	1,130	1,360	1,560	-----	-----	-----
Special rate for Western Hemisphere trade corporations.....	50	50	50	-----	-----	-----
<b>Agriculture:</b>						
Expensing of certain capital outlays.....	135	105	115	475	355	360
Capital gain treatment of certain income.....	30	30	40	455	490	565
<b>Natural resources, environment and energy:</b>						
Exclusion of interest on State and local government pollution control bonds.....	75	110	170	35	50	75
Expensing of exploration and development costs.....	500	650	840	120	155	195
Excess of percentage over cost depletion.....	2,010	1,080	1,020	465	500	575
Pollution control: 5-year amortization.....	30	20	15	-----	-----	-----
Capital gain treatment of royalties on coal and iron ore.....	10	15	20	40	45	50
Capital gain treatment of certain timber income.....	145	155	165	60	60	65
<b>Commerce and transportation:</b>						
Exemption of credit unions.....	115	125	135	-----	-----	-----
Corporate surtax exemption.....	3,345	5,020	4,180	-----	-----	-----
Deferral of tax on shipping companies.....	70	105	130	-----	-----	-----
Railroad rolling stock: 5-year amortization.....	55	30	10	-----	-----	-----
Financial institutions: excess bad debt reserves.....	880	815	570	-----	-----	-----
Deductibility of nonbusiness State gasoline taxes.....	-----	-----	-----	820	575	600
<b>Community and regional development:</b>						
Housing rehabilitation: 5-year amortization.....	40	35	25	65	55	40
<b>Education, training, employment, and social services:</b>						
Exclusion of scholarships and fellowships.....	-----	-----	-----	200	210	220
Parental personal exemptions for student age 19 and over.....	-----	-----	-----	670	690	715
Deductibility of contributions to educational institutions.....	205	215	280	440	450	500
Deductibility of child and dependent care expenses.....	-----	-----	-----	295	330	420
Child care facilities: 5-year amortization.....	5	5	5	-----	-----	-----
Credit for employing AFDC recipients and public assistance recipients under work incentive program.....	10	10	10	-----	-----	-----
<b>Health:</b>						
Exclusion of employer contributions to medical insurance premiums and medical care.....	-----	-----	-----	3,275	3,665	4,225
Deductibility of medical expenses.....	-----	-----	-----	2,315	2,020	2,095

See footnote at end of table.

Table F-1. TAX EXPENDITURE ESTIMATES BY FUNCTION\*—Continued  
(in millions of dollars)

Description	Corporations			Individuals		
	1975	1976	1977	1975	1976	1977
<b>Income security:</b>						
Exclusion of social security benefits:						
Disability insurance benefits.....	-----	-----	-----	275	315	370
OASI benefits for aged.....	-----	-----	-----	2,740	3,045	3,525
Benefits for dependents and survivors.....	-----	-----	-----	450	495	565
Exclusion of railroad retirement system benefits.....	-----	-----	-----	170	185	200
Exclusion of unemployment insurance benefits.....	-----	-----	-----	2,300	3,305	2,855
Exclusion of workmen's compensation benefits.....	-----	-----	-----	505	555	640
Exclusion of public assistance benefits.....	-----	-----	-----	105	115	130
Exclusion of special benefits for disabled coal miners.....	-----	-----	-----	50	50	50
Exclusion of sick pay.....	-----	-----	-----	315	330	350
Net exclusion of pension contributions and earnings:						
Employer plans.....	-----	-----	-----	5,225	5,745	6,475
Plans for self-employed and others.....	-----	-----	-----	390	770	965
Exclusion of other employee benefits:						
Premiums on group term life insurance.....	-----	-----	-----	740	805	895
Premiums on accident and accidental death insurance.....	-----	-----	-----	50	55	60
Income of trusts to finance supplementary unemployment benefits.....	-----	-----	-----	5	5	5
Meals and lodging.....	-----	-----	-----	265	285	305
Exclusion of capital gain on home sales if over 65.....	-----	-----	-----	40	45	50
Excess of percentage standard deduction over low income allowance.....	-----	-----	-----	1,385	1,465	1,560
Additional exemption for the blind.....	-----	-----	-----	20	20	25
Additional exemption for over 65.....	-----	-----	-----	1,100	1,155	1,220
Retirement income credit.....	-----	-----	-----	130	120	110
Earned income credit.....	-----	-----	-----	-----	290	140
<b>Veterans benefits and services:</b>						
Exclusion of veterans disability compensation.....	-----	-----	-----	540	590	595
Exclusion of veterans pensions.....	-----	-----	-----	25	30	30
Exclusion of GI bill benefits.....	-----	-----	-----	255	330	280
<b>General government: Credits and deductions for political contributions.....</b>						
	-----	-----	-----	40	40	65
<b>Revenue sharing and general purpose fiscal assistance:</b>						
Exclusion of interest on general purpose State and local debt.....	2,675	2,890	3,150	1,130	1,280	1,390
Exclusion of income earned in U.S. possessions.....	245	240	285	-----	-----	-----
Deductibility of nonbusiness State and local taxes (other than on owner-occupied homes and gasoline).....	-----	-----	-----	8,490	6,505	6,680
Interest: Deferral of interest on savings bonds.....	-----	-----	-----	525	605	685

See footnote at end of table.

Table F-1. TAX EXPENDITURE ESTIMATES BY FUNCTION\*—Continued  
(in millions of dollars)

Description	Corporations			Individuals		
	1975	1976	1977	1975	1976	1977
<b>Business investment:</b>						
Exclusion of interest on State and local industrial development bonds.....	120	150	195	55	75	90
Excess first-year depreciation.....	175	145	165	100	80	85
Depreciation on rental housing in excess of straight line.....	115	120	125	405	430	455
Depreciation on buildings (other than rental housing) in excess of straight line.....	220	275	280	220	215	215
Expensing of research and development expenditures.....	635	660	695	-----	-----	-----
Expensing of construction period interest and taxes.....	985	1,020	1,065	525	545	570
Capital gain: corporate (other than farming and timber).....	695	760	900	-----	-----	-----
Investment credit.....	4,860	6,850	6,550	950	1,410	1,445
<b>Personal investment:</b>						
Dividend exclusion.....	-----	-----	-----	315	335	350
Capital gain: individual (other than farming and timber).....	-----	-----	-----	5,090	5,455	6,225
Exclusion of interest on life insurance savings.....	-----	-----	-----	1,545	1,695	1,855
Deferral of capital gain on home sales.....	-----	-----	-----	805	845	890
Deductibility of mortgage interest on owner-occupied homes.....	-----	-----	-----	5,405	4,545	4,710
Deductibility of property taxes on owner-occupied homes.....	-----	-----	-----	4,510	3,690	3,825
Deductibility of casualty losses.....	-----	-----	-----	280	300	330
Credit for purchase of new home.....	-----	-----	-----	-----	625	100
<b>Other tax expenditures:</b>						
Deductibility of charitable contributions (other than education).....	385	395	525	4,385	3,820	3,955
Deductibility of interest on consumer credit.....	-----	-----	-----	1,185	1,040	1,075
Maximum tax on earned income.....	-----	-----	-----	160	175	190

\* All estimates are based on the tax code as of Dec. 31, 1975, with the exception that the provisions of the Revenue Adjustment Act of 1975 regarding the standard deduction for individual income taxpayers are treated as if they were permanent.

The profits of a domestic international sales corporation (DISC) are not taxed to the DISC but instead are taxed to the shareholders when distributed to them. This deferral is available for 50% of the export income of a DISC. To qualify as a DISC at least 95% of a corporation's gross receipts must arise from export activities. The resulting tax expenditure is expected to increase from \$1.1 billion in 1975 to \$1.6 billion in 1977 as additional DISC's are created and a larger volume of export income is deferred. The Tax Reduction Act of 1975 denied DISC benefits to exporters of energy products.

Domestic corporations qualifying as Western Hemisphere trade corporations are entitled to a special deduction which reduces their tax rate from 48% to 34%.

*Agriculture.*—Farmers, including corporations engaged in agriculture, may deduct certain costs as current expenses even though these expenditures were for inventories on hand at the end of the year or capital improvements.

Capital gains treatment generally applies to the sale of livestock, orchards, vineyards, and comparable agricultural activities.

*Natural resources, environment, and energy.*—State and local governments issue bonds, the interest income from which is exempt from Federal tax, to finance pollution control facilities used by private firms. The total volume of tax-exempt bonds issued for this purpose has grown rapidly in recent years.

Certain capital costs necessary to bring a mineral deposit into production may be deducted as current expenses rather than spread over the useful life of the property. Included in this category are the intangible drilling costs of oil and gas wells, such as the wages of drilling crews, and the cost of developing other mineral deposits, such as expenditures for mine shafts, tunnels, and stripping.

Extractive industries may generally choose between two methods of recovering capital costs invested in the development of natural resources. Under one method, actual outlays, to the extent not immediately expensible, may be deducted as "cost depletion" over the productive life of the property, much as other businesses may take deductions for the depreciation of capital goods. Alternatively, businesses in the extractive industries may deduct a prescribed percentage of gross income (at rates ranging from 22% for oil and gas to 5% for certain minerals, but not more than 50% of net income or 65% of net income in the case of oil and gas) where "percentage depletion" exceeds "cost depletion." Percentage depletion is not limited to the cost of the investment as is cost depletion. The basis for "cost depletion" is reduced to the extent certain costs are recovered through expensing of exploration and discovery costs and intangible drilling costs. There is no comparable reduction in "percentage depletion" to allow for costs which are allowed as expenses. A tax expenditure estimated on the assumption that both were eliminated would be significantly smaller than the sum of the two separate items because percentage depletion would exceed cost depletion by a lesser amount if the basis for cost depletion were increased by depreciating exploration, discovery, and intangible drilling costs that are currently expensed. The Tax Reduction Act of 1975 significantly reduced the tax expenditure resulting from the application of percentage depletion to producers of oil and gas by limiting application of the provision to independent producers and royalty owners and to specific quantities of output. For those still eligible, the Act phases the percentage rate down from 22% through 1980 to 15% in 1984 and thereafter.

Royalties from coal or iron ore deposits are treated as capital gains, rather than ordinary income.

The gain on the cutting of timber is taxed at rates applicable to long-term capital gains, rather than at ordinary income rates.

Taxpayers may elect to amortize a certified pollution control facility over a 5-year period rather than its longer expected useful life. If they so elect they may not claim the investment tax credit on the capital cost of the facility. This provision applies only to facilities placed in service before 1976.

*Commerce and transportation.*—Credit unions are exempt from Federal income tax.

Corporations under the permanent tax code, pay income tax at the rate of 22% on all taxable income plus a surtax of 26% on taxable income in excess of \$25,000. Each corporation therefore enjoys a surtax exemption of \$25,000. This exemption is intended to encourage small or new business. For 1975 only, the Tax Reduction Act of 1975 provided that the tax rate on the first \$25,000 of taxable income be reduced to 20% and that the surtax exemption apply to the second \$25,000 of taxable income. This temporary provision was extended for 6 months by the Revenue Adjustment Act of 1975.

Certain companies which operate U.S.-flag vessels on foreign trade routes receive an indefinite deferral of income taxes on that portion of their net income which is used for shipping purposes, primarily construction, modernization, and major repairs of ships.

Specified classes of railroad rolling stock are eligible for amortization over a 5-year period whether owned by railroad companies or by lessors, rather than their longer, expected useful life. If 5-year amortization is elected the investment tax credit cannot be claimed. This provision applies only to rolling stock placed in service before 1976.

Commercial banks, mutual savings banks, and savings and loan associations are permitted to deduct and set aside additions to bad debt reserves in excess of actual loss experience and reasonable expectations as to future losses. Commercial banks may maintain a reserve of 1.2% of uninsured loans. The ratio will phase down to 0.6% in calendar year 1981. Mutual savings banks and savings and loan associations may deduct 43% of income in calendar year 1976, provided they maintain stipulated fractions of their assets in "qualifying assets," primarily residential mortgages. Under current law their maximum deduction will phase down to 40% in 1979 and thereafter.

Individuals who itemize their deductions may deduct State and local gasoline excise taxes paid. The deduction of excise taxes on gasoline used for business purposes does not result in a tax expenditure since they would in any case be deductible as a business expense.

*Community and regional development.*—Taxpayers may, under certain conditions, elect to compute depreciation on rehabilitation expenditures for low- and moderate-income rental housing over a 5-year period. Qualified rehabilitation expenditures may not exceed \$15,000 per dwelling unit and must exceed \$3,000. This provision expired on December 31, 1975.

*Education, training, employment, and social services.*—Taxpayers may elect to amortize over a 5-year period expenditures incurred in acquiring, constructing, reconstructing, or rehabilitating child care or on-the-job training facilities. This provision expires at the end of 1976.

Recipients of scholarships and fellowships may exclude such amounts from taxable income, subject to certain limitations. The exclusion of educational benefits under the GI bill are included in Veterans Benefits and Services.

Taxpayers may claim personal exemptions for dependent children 19 or over who receive income of \$750 or more per year only if the children are full-time students. The student may also claim an exemp-

tion on his or her own tax return, in effect providing a double exemption, one on the parents' return and one on the student's.

Contributions to nonprofit educational institutions are allowed as a deduction for individuals and corporations. (See the discussion of other charitable contributions under "Other Tax Expenditures.")

Child and dependent care expenses incurred to permit the taxpayer and his spouse to work may be taken as an itemized deduction up to a maximum of \$400 per month. The deduction is reduced by 50 cents for each dollar of adjusted gross income in excess of a limit that was increased from \$18,000 to \$35,000 per year by the Tax Reduction Act of 1975.

A credit is allowed against income tax liability equal to 20% of first-year wages and salaries of employees placed in employment under the work incentive program. The credit for a taxable year cannot exceed \$25,000 plus 50% of the excess over that amount. A similar credit, on a temporary basis, was provided for employment of AFDC recipients by the Tax Reduction Act of 1975.

*Health.*—Payments by employers for health insurance premiums and other medical expenses are deducted as business expenses by employers and excluded from income by employees. The exclusion from employees' income gives rise to the tax expenditure.

Medical expenses in excess of 3% of adjusted gross income, including expenditures for prescribed drugs and medicines in excess of 1% of adjusted gross income, may be deducted by individuals as itemized nonbusiness deductions. Individuals may also deduct half of the premiums they pay for medical care insurance up to a maximum deduction of \$150 per year, without regard to the 3% limitation.

*Income security.*—Most forms of government transfer payments to individuals, such as social security and unemployment benefits, are excluded from taxable income. If the taxpayer had no other source of income, these payments, even if taxable, would not generally be sufficient to result in any tax liability, given personal exemptions and minimum standard deductions. Since some recipients have property income, receive earnings (perhaps for only part of a year), or may file jointly with working spouses, tax expenditures result from these exclusions. The estimates include the effect of excluding from tax the \$50 payment made to recipients of social security and certain other Federal programs provided by the Tax Reduction Act of 1975.

Certain payments, up to \$100 per week, financed by an employer in lieu of wages during periods of employee injury or sickness are excluded from the employee's taxable income.

Certain contributions to pension plans paid by employers, and amounts set aside by the self-employed and employees not covered by an employer's plan, are excluded from current individual gross income. The investment income earned by pension funds is not taxable currently. The resulting tax expenditures are composed of two elements: lower effective tax rates after retirement, due to lower incomes and special tax provisions enjoyed by the aged; and the excess of aggregate current contributions and investment earnings over aggregate amounts paid out in benefits. The self-employed can make deductible contributions to their own retirement plans equal to

15% of their income, up to a maximum of \$7,500 per year. Employees not covered by an employer's plan may deduct annual contributions of 15% of compensation, up to a maximum of \$1,500.

In addition to pension plans, many employers provide other employee benefits that are excluded from employee income. The employer's share of these benefits are deductible business expenses. Included in the meals and lodging item is the exclusion from the taxable income of ministers of the rental value of parsonages and housing allowances.

A taxpayer 65 or older may exclude from gross income any capital gain allocated to the first \$20,000 of the adjusted sales price on a sale of a personal residence. This is a once-in-a-lifetime exclusion.

The percentage standard deduction—15% of adjusted gross income up to a limit of \$2,000—sets an upper limit on the tax liability for many taxpayers, predominately in the lower and middle-income range, and for that reason is classified under income security. For calendar year 1975 only, the Tax Reduction Act of 1975 provided a percentage standard deduction of 16% up to a limit of \$2,600 for married persons filing joint returns and \$2,300 for single persons. The Revenue Adjustment Act of 1975 maintained the 16% rate and made additional upward revisions in the limits for the percentage standard deduction for the first 6 months of calendar year 1976. The percentage standard deduction is a substitute for itemizing deductions; the estimates shown are for the amount by which the percentage standard deduction exceeds the low income allowance or the itemized deductions that would be taken in the absence of this provision, whichever is greater. This provision also encourages taxpayers to use the simplified short form 1040A.

Additional personal exemptions of \$750 may be deducted by taxpayers who are over 65 or who are blind. These additional exemptions may not be claimed for the taxpayer's dependents.

A retirement income tax credit may be claimed by individuals who are retired, or over age 65, of up to \$228.60 (15% of \$1,524) for a single person, or \$342.90 (15% of \$2,286) for a married couple, based on retirement income from all sources except social security, railroad retirement, and other tax-exempt benefits. The provision was designed to permit taxpayers with taxable retirement income a tax benefit approximately comparable to that accorded recipients of social security and similar tax-exempt benefit payments.

The aggregate effect of excluding social security and railroad retirement benefits for retirees, the additional exemption for persons over 65, and the retirement income credit are revenue losses of \$4,590 million in 1975, \$4,970 million in 1976, and \$5,530 million in 1977. These aggregates are greater than the sum of the individual estimates because more elderly persons would be pushed to taxpaying levels of income or into higher tax brackets if all of these items were deleted from the tax code.

The Tax Reduction Act of 1975 established, for calendar year 1975 only, an earned income credit for low-income workers with families. The maximum credit is 10% of a worker's first \$4,000 of earned income and phases out at \$8,000 of earned income or adjusted gross income, whichever is greater. To the extent that the credit reduces or eliminates tax liabilities it results in a tax expenditure.



Credits in excess of tax liabilities are rebated to individuals. These rebates are treated as budget outlays and are estimated to be \$1.2 billion in 1976. The Revenue Adjustment Act of 1975 extended the earned income credit through calendar year 1976 at a 5% rate in order to make it equivalent to a 6-month extension.

*Veteran benefits and services.*—All compensation due to death or disability and pensions paid by the Veterans Administration are excluded from taxable income. GI bill benefits are also excluded.

*General government.*—Political contributions up to a maximum of \$100 (\$200 in the case of joint returns) may be deducted, or tax credits may be taken up to one-half of contributions but limited to \$25 (\$50 on joint returns).

*Revenue sharing and general purpose fiscal assistance.*—The interest on State and local government debt is excluded from Federal taxation. Both corporations, mainly commercial banks, and individuals receive this tax-exempt income. As a result, these governments are able to sell debt obligations at a lower interest cost than would be possible if such interest were subject to tax. The exclusion of interest on State and local government industrial development bonds and securities issued to finance pollution control facilities are classified elsewhere; only the effect of excluding interest on general purpose obligations and revenue bonds for public purposes such as toll roads is estimated for this function.

U.S. citizens and corporations receiving income from sources in a U.S. possession may, under certain conditions, exclude such income from tax.

The deductibility of nonbusiness State and local taxes provides indirect assistance to these governments. The deductibility of property taxes on owner-occupied homes and excise taxes on gasoline are classified elsewhere. The estimates shown here are primarily for the deductibility of State and local income and sales taxes.

*Interest.*—Holders of U.S. savings bonds are not required to include the interest on these securities in their taxable income until the bonds are redeemed, thereby deferring tax liabilities.

*Business investment.*—The interest on industrial development bonds issued by State and local governments is excluded from taxable income. The proceeds of these bonds are used to finance private investment in manufacturing plants and other facilities. For that reason this item is classified as business investment rather than under revenue sharing and general purpose fiscal assistance to State and local governments.

To the extent that allowable depreciation for tax purposes exceeds the rate at which assets actually depreciate, business tax liabilities are deferred. Businesses may employ a variety of depreciation schedules for tax purposes, some of which cause a much larger part of asset values to be written off in early years of the asset's useful life than do others. An extra first-year depreciation deduction of 20% may be claimed for \$10,000 of tangible personal property (\$20,000 on a joint return) having a useful life of at least 6 years. The revenue costs of allowing buildings and rental housing to be depreciated for

tax purposes by methods that reduce asset value more rapidly than straight-line depreciation (the method typically used in financial statements) are shown.

Research and development expenditures typically result in new products or processes, cost reductions, or other outcomes the benefits from which will, in nearly all cases, accrue on into the future. For tax purposes businesses may deduct all research and development expenditures in the year during which they are incurred rather than amortizing them over a number of years. The tax expenditure is estimated as if such expenditures were amortized over a 5-year period.

Taxpayers may deduct on a current basis interest and property tax payments made during the period when a building is under construction rather than include such costs of construction, along with other costs, in the value of the completed structure which would then be depreciated over its useful life.

Corporations may elect a 30% alternative tax rate on capital gains. The tax expenditure is estimated on the assumption that these gains would otherwise be taxed at 48%.

The investment tax credit was substantially modified by the Tax Reduction Act of 1975. For calendar years 1975 and 1976 the rate of the credit was increased from 7% to 10% (from 4% to 10% in the case of public utilities). The percentage is applied to the cost of qualifying property (generally, tangible personal property used in a trade or business) having a useful life of over 7 years. The investment tax credit cannot be claimed for investments in land or buildings or for property used abroad. Lower rates apply to property with useful lives of 3 to 7 years. The maximum credit which may be offset directly against income tax liability in a taxable year is limited to \$25,000 plus one-half of the excess of tax liability over \$25,000. Excess credits may generally be carried back 3 taxable years and forward 7 taxable years, after which they expire if still unused. The Act provides a temporary increase in maximum credits that can be claimed by public utilities. The amount of used equipment on which the credit may be claimed was temporarily increased from \$50,000 to \$100,000. An extra 1% credit may be claimed for 1975 and 1976 by corporations which elect to contribute that amount to an employee stock ownership plan funded by transfers of employer shares. As a permanent change, the Act allows investment tax credit to be claimed as progress payments are made on property that takes 2 or more years to construct.

*Personal investment.*—Grouped together in this category are a number of tax expenditure items that affect individuals as investors and holders of real and financial assets.

The first \$100 (\$100 per taxpayer on a joint return) of dividend income may be excluded from taxable income.

Half of the gains from the sale of capital assets held more than 6 months is excluded from income and up to \$25,000 of included gains may be taxed at a rate of 50%. Capital losses may be deducted from gains but no more than \$1,000 of long-term losses may be deducted in any one year from ordinary income. No special recognition is made

of the effect of inflation on the value of assets. The estimates are computed on the assumption that the half of the long-term gains currently excluded would be taxed at ordinary rates.

Life insurance policies, other than term policies, generally have a saving element in them. Savings in the form of policyholder reserves are accumulated from premium payments, and interest is earned on the e reserves. Such interest income is taxable neither as it accrues nor as an element of death benefits.

Capital gains on the sale of a home are recognized only to the extent that the "adjusted sales price" exceeds the cost of a new home purchased and occupied within 18 months before or after the sale (if a new house is constructed it must be occupied within 2 years after the sale). The "adjusted sales price" is the amount realized (gross proceeds less selling expenses) minus qualified "fixing up" expenses. A loss on a sale of a home is not deductible.

Owner-occupants of homes may deduct mortgage interest and property taxes (but not maintenance outlays or depreciation because the in-kind income from home ownership is not recognized) as itemized nonbusiness deductions. The tax expenditure from these two items combined would be \$7.7 billion for 1977. This is less than the sum of the two separately because if both were deleted more taxpayers would save by using the standard deduction.

Taxpayers may deduct as an itemized nonbusiness deduction the amount in excess of \$100 for each loss due to fire, theft, or other casualty to the extent not compensated by insurance or other payments.

The Tax Reduction Act of 1975 provided, for part of calendar year 1975 only and subject to certain conditions, a tax credit equal to 5% of the purchase price of a new home, up to a maximum credit of \$2,000. In a few cases taxpayers will not be able to claim the credit until they file their 1976 returns during fiscal year 1977.

*Other tax expenditures.*—Interest paid on consumer credit for any purpose is allowed as an itemized nonbusiness deduction for individuals.

Contributions to charitable, religious, or certain other nonprofit organizations are allowed as an itemized deduction for individuals, generally up to 50% of adjusted gross income. Taxpayers whose contributions to charitable or educational organizations are in the form of capital assets, usually securities, which have appreciated in value above their cost, obtain a deduction for the contribution at the appreciated value of the asset without taxation on the appreciation in value. Contributions to educational institutions are reported under Education, Training, and Employment, and Social Services.

Corporations may deduct charitable contributions (including those made to educational institutions, which are separately reported) up to 5% of their income. In the absence of this provision of the tax code some of these contributions might be deductible as business expenses. The estimates are based on all reported contributions.

The Tax Reform Act of 1969 introduced a maximum tax rate of 50% on earned income.

## PROPOSED CHANGES IN TAX EXPENDITURES

The tax proposals that are a part of the 1977 budget would reduce somewhat nearly every estimated tax expenditure for 1977 presented in table F-1. The proposed increase in personal exemptions from \$750 to \$1,000, change in the standard deduction to \$2,500 for a married couple filing jointly and to \$1,800 for a single taxpayer, elimination of the percentage standard, and changes in rate schedules would become fully effective on January 1, 1977; temporary provisions are proposed for calendar year 1976 that take into account the provisions of the Revenue Adjustment Act of 1975 affecting tax liabilities for 1976. These proposed changes in the normal structure of the individual income tax would reduce the number of taxpayers who itemize their deductions and would alter marginal tax rates in many instances. The proposed reduction in the basic corporate tax rate from 48% to 46% beginning on July 1, 1976, would reduce the tax expenditures associated with the corporate income tax. Reestimates reflecting the impact of these proposals have not been made for every item.

Several proposals do affect particular tax expenditures more specifically and these will be briefly discussed. The estimates for these specific changes are shown in table F-2. The impact on revenues in 1978 and subsequent years through 1981 would be greater and are reflected in the long-range receipt estimates shown in Part 3 of the budget.

Table F-2. ESTIMATES OF PROPOSED CHANGES IN TAX EXPENDITURES, 1977 (in millions of dollars)

Description	Corporate	Individual
Excess of percentage standard deduction over low income allowance.....	-----	-1,560
Additional exemption for the blind.....	-----	5
Additional exemption for over 65.....	-----	235
Investment credit.....	1,215	100
Corporate surtax exemption.....	1,675	-----
Financial institutions: excess bad debt reserves.....	-215	-----
Mortgage interest income tax credit.....	470	10
Electric utilities:		
Investment credit (excess of 12% over 10% credit and progress payment basis).....	105	-----
Pollution control: 5-year amortization.....	( <sup>1</sup> )	-----
Conversion facilities: 5-year amortization.....	( <sup>1</sup> )	-----
Depreciation of progress payments.....	320	-----
Deferral of tax on reinvested dividends.....	-----	350
Broaden stock ownership plan.....	-----	300
Accelerated depreciation in areas of high unemployment.....	250	40

<sup>1</sup> No significant revenue effect in first year.

*Excess of percentage standard deduction over low income allowance.*—The percentage standard deduction would be eliminated and hence the tax expenditure associated with the excess of the percentage standard deduction over the low income allowance would disappear. Elimination of the percentage standard deduction would simplify tax returns; the resulting revenue gain would be more than offset by other proposed changes. Elimination of the percentage standard deduction is not proposed apart from the other proposed changes in personal exemptions, low income allowances, and rate schedules.

*Additional personal exemptions.*—The additional personal exemption for taxpayers who are blind or over 65 would be increased from \$750 to \$1,000.

*Investment tax credit.*—The increase in the investment tax credit from 7% to 10%, which was enacted for calendar years 1975 and 1976 only by the Tax Reduction Act of 1975, is proposed to be made permanent.

*Corporate surtax exemption.*—The features of the Tax Reduction Act of 1975 which, for calendar year 1975 only, reduced taxes on the first \$50,000 of corporate income are proposed to be made permanent beginning July 1, 1976.

*Financial institutions.*—The 1977 budget anticipates enactment of legislation that would reform the operation of the Nation's financial institutions. A part of that reform would be to adopt uniform tax rules for all types of banks. Special provisions currently allowing the deduction of excess bad debt allowances in order to determine taxable income for savings and loan associations and mutual savings banks would be eliminated. In order to encourage financial institutions to hold residential mortgages a new tax credit would be introduced. The credit would be a percentage of interest income received on residential mortgages and would range from 1.5% to 3.8% depending upon the fraction of the institution's assets held in the form of residential mortgages. Individuals holding residential mortgages would be eligible for the credit at the 1.5% rate. The estimates shown in table F-2 assume that these tax changes become effective January 1, 1977.

*Electric utilities.*—The 1977 budget proposals include tax relief for the electric utility industry in order to stimulate construction of additional facilities and insure that long-run economic growth is not limited by capacity shortages in the production of electricity. The proposal would:

- Increase the investment tax credit permanently to 12% on all electric utility property except generating facilities fueled by petroleum products.
- Give electric utilities full, immediate investment tax credits on progress payments for construction of property that takes 2 years or more to build, except generating facilities fueled by petroleum products.
- Extend to January 1, 1981, the period during which pollution control facilities installed in a pre-1969 plant or facility may qualify for 5-year straight-line amortization in lieu of normal depreciation and the investment credit.
- Permit 5-year amortization of the costs of either converting a generating facility fueled by petroleum products into a facility not fueled by petroleum products or replacing a petroleum-fueled facility with one not fueled by petroleum.

- Permit a utility to elect to begin depreciation of accumulated construction progress expenditures during the construction period.
- Permit a shareholder of a regulated public electric utility to postpone tax on dividends paid by the utility on its common stock by electing to take additional common stock of the utility in lieu of cash dividends.

The estimates shown in table F-2 assume that these tax changes become effective July 1, 1976. The provisions regarding the investment tax credit and depreciation would apply only if the tax benefits are "normalized" for ratemaking purposes.

*Tax incentives for broadened stock ownership.*—Tax incentives are proposed to induce broader ownership of common stock. This plan will provide a tax deferral for funds invested in stock-purchase plans established by employers or directly by individuals. Funds must remain invested for at least 7 years, and are subject to tax at the time of withdrawal. This proposal will become effective July 1, 1976, and the full deduction will be allowed for calendar year 1976. There will be a limit on the maximum annual amount on which taxes can be deferred and the maximum will be phased out at higher income levels.

*Accelerated depreciation for investment in areas of high unemployment.*—A tax incentive is also proposed to encourage construction of new facilities or expansion of old facilities in areas experiencing unemployment in excess of 7%. This will be accomplished by allowing very rapid amortization for nonresidential buildings and capital equipment. Buildings will be amortized over a period equal to one-half their useful life. Capital equipment put in place in new or expanded facilities will be amortized over 5 years; the full investment tax credit can be claimed on such capital equipment. This incentive will apply to projects begun after January 19, 1976, and before January 20, 1977, and that are completed within 36 months.

## SPECIAL ANALYSIS G

### PRINCIPAL FEDERAL STATISTICAL PROGRAMS

This special analysis presents an overview of the major statistical programs of the Federal Government, as reflected in the 1977 budget. As noted below for many specific programs, the recommended funding levels of the principal Federal statistical programs were developed within the Presidential objective of holding down the rate of growth in Federal spending. As a result, total obligations for current statistical programs will increase by only \$5.8 million, or 1.2% over 1976. Periodic programs will increase by \$7.9 million, or 16.9% over 1976, primarily because of accelerated planning activity for the 1980 decennial census. Total obligations for all principal Federal statistical programs will increase by \$13.7 million, or 2.5% over 1976.

A limited number of program increases are recommended in 1977 to permit improvements in the statistical data base that are essential to more effective Federal policymaking and program management. In most statistical agencies it will be necessary to reduce the resources applied to lower priority statistical programs in order to provide for quality improvement and to offset the rising costs of maintaining many of the basic continuing programs.

In addition to assuring more effective use of dollar resources within the statistical agencies, the Administration, in combination with the Commission on Federal Paperwork, will continue to seek ways to reduce the burden on the American public of completing Federal report forms, including those that are the basis for statistical programs covered in this special analysis. The cost of such reporting is an important factor to many respondents, and the willingness of many individuals and businesses to provide information voluntarily is limited. It is imperative that the reporting burden be kept to the minimum possible, given the need for information.

The Federal statistical system continually strives to increase the accessibility of data series to the public. In response to the President's directive, a new monthly statistical chartbook, focusing on social and economic developments of domestic importance, will be developed for publication prior to 1977. This publication, which will emphasize graphic presentation of statistical series in order to enhance public usefulness, will draw upon the statistical output of all Federal agencies. The purpose of this publication will be to increase public access to and awareness of the vast output of the Federal statistical system and to provide a framework for monitoring important domestic developments to which the statistics relate.

The quality, timeliness, and integrity of Federal statistics are the product of the professional staff engaged in production and analysis of these series. Information on full-time permanent staff for major statistical agencies is presented in table G-1. In addition to these

professional resources directly employed by major statistical agencies, there are many statisticians working in smaller statistical units in other agencies and departments. Their work is complemented by statistical analyses and other professional reviews of the data series as they apply to specific program areas. The staff figures do not cover part-time or temporary employment. The full-time permanent numbers are presented because they are the only consistently defined numbers that are currently available.

The variations in staff levels relative to the program sizes are partially explained by the different natures of the various agency programs. For example, the Bureau of the Census does a great deal of work for other agencies on a reimbursable basis for which no funds are included in the Census Bureau's budget. The National Center for Education Statistics, on the other hand, has proportionately more work done under contract than some of the other major statistical agencies.

Table G-1. PERMANENT POSITIONS BY AGENCY

	1975 actual	1976 estimate	1977 estimate
Department of Agriculture:			
Statistical Reporting Service.....	1, 128	1, 235	1, 279
Department of Commerce:			
Bureau of the Census.....	4, 436	4, 385	4, 444
Bureau of Economic Analysis.....	500	517	539
Department of Health, Education, and Welfare:			
National Center for Education Statistics.....	171	1 191	1 179
National Center for Health Statistics.....	522	1 522	1 522
Department of Labor:			
Bureau of Labor Statistics.....	1, 658	1, 774	1, 864
<b>Total for six agencies reporting.....</b>	<b>8, 415</b>	<b>8, 624</b>	<b>8, 827</b>

<sup>1</sup> These estimated figures are subject to further Departmental review.

In summary, the combination of dollar resources represented in the budget, the cooperation of businesses and individuals in supplying statistical information, and the creativity and analytical ability of professionals in statistical services are all essential to the maintenance and dissemination of high quality statistics which are vital to informed public and private decisionmaking.

Program funding by major subject area is summarized in table G-2 and program improvements within each area are discussed in some detail below.



Table G-2. OBLIGATIONS FOR PRINCIPAL CURRENT STATISTICAL PROGRAMS, BY BROAD SUBJECT AREAS<sup>1</sup> (in millions of dollars)

	1975 actual	1976 estimate	1977 estimate
Prices and price indexes.....	15.1	18.4	24.7
Labor statistics.....	66.0	84.5	83.2
Production and distribution statistics.....	86.3	104.2	110.4
Housing and construction statistics.....	15.8	19.0	19.6
Economic and business financial accounts.....	35.2	40.5	41.0
Energy statistics.....	14.3	18.9	17.6
Environmental statistics.....	30.9	26.2	26.8
Health statistics.....	76.5	89.2	91.2
Education statistics.....	16.6	27.4	21.4
Income maintenance and welfare statistics.....	19.9	21.2	22.9
Population statistics.....	6.3	6.5	7.4
Criminal justice statistics.....	45.2	42.4	38.0
<b>Total, principal current programs.....</b>	<b>428.1</b>	<b>498.4</b>	<b>504.2</b>

<sup>1</sup> Classifications are based on primary use of statistics.

## CURRENT PROGRAMS

### PRICES AND PRICE INDEXES

*Consumer Price Index (\$3.4 million).*—The increase in 1977 for the Bureau of Labor Statistics (BLS) provides for a number of improvements in the Consumer Price Index (CPI). The first is the publication of a new CPI covering the entire urban population, as well as a revised index covering only urban wage earners and clerical workers. More than 50% of the value of the items in each index will be priced monthly with virtually all of the rest being priced bimonthly. Thus, the new index will provide a more accurate description of current price movements than is now the case. Publication of these indexes is scheduled to start in 1977. In addition, the funds will provide for a continuing point-of-purchase survey to determine where consumers purchase items priced in the CPI. This survey will provide the basis for updating the sample of outlets from which prices are collected. Further, the increase will provide for the development of a continuing consumer expenditure survey that will reflect more current expenditure patterns of consumers when the CPI weights are revised. The consumer expenditure survey will also provide a continuous body of consumption and income data, classified by characteristics of the population, for use in analyzing changing patterns of consumption.

*International price program (\$0.4 million).*—Because of the increasing importance of foreign trade and the policy implications of changing world prices, the expansion of the BLS international price program is being continued, adding approximately 15% of the value of U.S. exports and 20% of the value of U.S. imports to the existing coverage. Thus, by the end of 1977, 70% of total exports and 60% of total imports will be covered by the indexes.

*Prices received by farmers (\$0.3 million).*—Additional funds are provided for the price statistics program of the Statistical Reporting Service of the Department of Agriculture to institute improvements in the estimates of prices received by farmers for grains. Improvements in these statistics are needed because of the increased volatility of today's agricultural prices and changes in domestic and foreign marketing patterns.

#### LABOR STATISTICS

*Employment cost index (\$0.2 million).*—The 1977 budget provides an increase to continue expansion of the employment cost index by adding the government sector so that, starting in calendar 1978, the index will reflect changes in employer expenditures for total compensation of labor in all sectors of the economy except private households.

#### PRODUCTION AND DISTRIBUTION STATISTICS

*Agricultural list sampling frame (\$1.9 million).*—The Statistical Reporting Service (SRS) of the Department of Agriculture collects a large amount of information on agricultural production and distribution. The sampling methodology that has been developed to enhance the precision of agricultural estimates relies on a multiple-frame approach combining area samples for direct enumeration and list samples for mail surveys. In 1976, SRS obtained funds to initiate the development of a general purpose list sampling frame. An increase in funds provided in 1977 will enable SRS to continue the project of compiling a complete and unduplicated list of potential respondents throughout the United States, including data on size and type of farm operation.

#### ECONOMIC AND BUSINESS FINANCIAL ACCOUNTS

The economic accounts of the United States, prepared by the Bureau of Economic Analysis (BEA), center around the national income and product accounts, summarized by the gross national product (GNP), and also include wealth accounts, interindustry accounts, regional accounts, and balance-of-payments accounts. The Economic Policy Board's Subcommittee on Economic Statistics has expressed a strong interest in strengthening the quality of the estimates. Strategies to raise quality involve improving the basic data, which are collected largely by other agencies and used by BEA in constructing the estimates, and strengthening BEA's capability to analyze the data.

*Inventory statistics (\$0.5 million).*—Changes in the business inventories component of GNP are particularly difficult to estimate. In 1977, funds are provided to improve the basic data collected by the Bureau of Census. The Bureau will conduct an annual benchmark survey of inventories held by wholesalers (\$0.2 million). This survey will improve the accuracy of the monthly inventory reports used by BEA in its quarterly GNP estimates. An increase is also provided for a study of the composition and turnover rate of manufacturers' inventories (\$0.3 million). Further improvements in basic data on inventories will require substantial research continuing through 1977.

*Local area income estimates (\$0.3 million).*—To improve BEA's analytical capability, funds are provided for revising and strengthening the estimates of personal income for States, metropolitan areas, and counties. A major improvement in this series will be the incorporation of new data on dividends, interest, and on nonfarm proprietors' income by county, and the accelerated incorporation of farm income and expenditures information.

*Input-output statistics (\$0.2 million).*—BEA will also substantially expand the detail in the national input-output tables to provide better information on the production and consumption of different types of energy and other potentially scarce resources. This additional information will be used to evaluate the impact of changes in the level and composition of GNP on requirements for these resources.

*Commodity classifications (\$0.4 million).*—The 1977 budget includes funds for the Bureau of the Census to improve the comparability of commodity classifications used in collecting data on imports, exports, and domestic production and to carry out other responsibilities mandated by the Trade Act of 1974.

#### ENERGY STATISTICS

The Federal Energy Administration (FEA), which conducts statistical activities in energy supply, distribution, and consumption to support analytical, policymaking, and regulatory activities, will improve many of its existing data systems in 1977. The estimates presented in this analysis do not reflect the full impact of the recently signed Energy Policy and Conservation Act, which extends many of FEA's regulatory activities and authorizes several new programs in energy conservation. Any funds that may be necessary for activities or programs authorized by this act are covered by the allowance for contingencies.

Other agencies are active in the collection and analysis of energy information. FEA and the Bureau of Mines have recently entered into an agreement, which will be implemented in 1976 and 1977, to pursue cooperative arrangements for monthly petroleum data collection and processing with a minimum of duplication. The Federal Interagency Council on Energy Information, comprised of some 12 departments and agencies, was recently established to enhance coordination and development of energy data systems. The Council will work to achieve better integration of existing data sources throughout 1977.

#### HEALTH STATISTICS

The 1977 funding level of \$24.0 million for the National Center for Health Statistics is a \$1.6 million decrease from the expected 1976 level. One of the major programs of the National Center continues to be its Federal-State-local cooperative health statistics system (CHSS). The Department of Health, Education, and Welfare's first health statistics plan, developed by the Health Data Policy Committee, emphasized the importance CHSS will play in future collection of health statistics. During 1977, major efforts will be undertaken to

develop standard classifications and concepts to provide for further improvements in health statistics.

Increases in health statistics activities are limited to areas in which Federal programs or responsibilities have been expanding:

*Drug abuse statistics (\$3.0 million).*—The Alcohol, Drug Abuse, and Mental Health Administration has an increase for a longitudinal followup of clients in federally funded drug treatment centers.

*Consumer product safety statistics (\$0.3 million).*—The Consumer Product Safety Commission (CPSC) is provided an increase for assessing the impact of proposed standards and regulations on industry and the consumer (\$0.2 million). In total, however, the 1977 CPSC statistical budget shows a \$1.0 million decrease from the 1975 level.

*Biomedical research statistics (\$3.9 million).*—Within the National Institutes of Health, the National Cancer Institute is provided an increase for statistical programs supporting continued operation of population-based cancer epidemiology research centers, conducting environmental carcinogen studies, and completing the third national cancer survey (\$0.7 million). In addition, an increase is provided for studying high-risk groups and for examining the relationship between cancers, congenital defects, and other diseases (\$1.8 million). The National Heart and Lung Institute has an increase for research on the origins of heart disease and for statistical support of its three major clinical trials (\$0.5 million). The National Institute of Environmental Health Sciences has an increase for data collection to improve the description and prediction of the biological effects of environmental hazards (\$0.8 million).

*Medicare statistics (\$0.4 million).*—The Social Security Administration will undertake increased analysis of medicare program data from health insurance and related research.

#### EDUCATION STATISTICS

The 1977 budget for the National Center for Education Statistics is \$13.0 million, unchanged from the 1976 level. The Center will continue to develop its Federal-State cooperative statistical program. In addition, the Center will undertake several surveys including a third followup of the participants in the national longitudinal study of the high school class of 1972. The design of a second longitudinal survey of high school seniors will be undertaken. Work will begin on the development of a study to assess the educational needs of young children. Work will continue on the characteristics of institutions of both collegiate and noncollegiate postsecondary education. The Center has begun to increase its emphasis on analysis, an effort which will intensify in 1977. Areas of especial attention will include the cost of education and the prevalence of handicapping conditions. The Center will continue to make adaptations in Federal analytical models for use by State and local education agencies.

The Office of Education shows a \$6.0 million decrease in 1977, because of the completion of a large-scale survey that estimates the number of children living in poverty households.

## INCOME MAINTENANCE AND WELFARE STATISTICS

The total for income maintenance statistics will grow to provide for further strengthening of program evaluation, maintenance of program data bases, and the development of improved capabilities for estimating the population eligible to participate in agency programs.

*New income survey (\$1.9 million).*—The largest increase is provided to the Department of Health, Education, and Welfare for developmental work for a new income survey that will focus on population groups that are the object of income maintenance programs. This survey, which is expected to be fully operational at the end of the decade, will include data on annual income and assets, as well as income for periods shorter than a year. Data from administrative records will be used to improve estimates of income that is poorly reported in household surveys. Measurement of income of the same family for several quarters will add a crucial dimension to our understanding of the resources available to families over the course of a year.

*Retirement history project (\$0.7 million).*—Additional funds will provide for the fifth wave of data collection in the retirement history project, which will supply information on the actual changes in the lives of workers as a result of retirement and aging.

*Social security statistics (\$1.3 million).*—Analysis of the impact of social security and the development of aggregate measures of social welfare expenditures will be intensified (\$0.4 million). Additional funding will also be provided for evaluation of the effectiveness of the social security program through review of beneficiary rolls (\$0.4 million). The social security program data base will be improved through the addition of \$0.4 million. An increase is provided for continued research on disability, using data collected through the operation of the disability insurance program (\$0.5 million). Commitments for special supplements to Census Bureau surveys will decrease by \$0.4 million, because of the completion in 1976 of field work on the congressionally mandated survey of income and education.

*Veterans statistics (\$0.5 million).*—The Veterans Administration is provided funding for a pretest of a survey on veterans and their widows in 1977 to be undertaken by the Bureau of the Census as part of the current population survey.

## CRIMINAL JUSTICE STATISTICS

The largest single activity within the criminal justice statistics area is the comprehensive data system (CDS), a Federal-State cooperative program of the Law Enforcement Assistance Administration (LEAA). Funding for this program has shown a gradual decline from a 1975 high of \$24.2 million to \$18.0 million in 1977. Once activities under the CDS program are implemented, the States assume the responsibility for maintenance funding. Much of the 1977 funding will be expended to implement new privacy regulations promulgated in 1975. These regulations require improvements in the recordkeeping practices of a

significant number of the 46,000 criminal justice agencies in the United States. LEAA also projects expenditures of approximately \$3.1 million to maintain grant management information systems both for the agency and for the State Criminal Justice Planning Agencies.

Altogether, the LEAA program level is \$35.1 million, which is a \$4.1 million decrease from the 1976 level. In addition to a decrease in the CDS program, the basic statistics program of LEAA shows a \$0.7 million decrease in 1977 from the 1976 level.

The Federal Bureau of Investigation (FBI) is provided \$2.6 million in 1977, a reduction of \$0.3 million from 1976. These funds will be used to support the uniform crime reporting program. The FBI and LEAA have been cooperating in the development of a program to transfer the primary responsibility for the collection of data from local police agencies to the States under the CDS program.

### PERIODIC PROGRAMS

*1977 Census of Governments.*—The Bureau of the Census collects information from State and local governments every fifth year on receipts and expenditures, indebtedness, employees, and tax base. The 1977 budget includes funds for expanded data collection on taxable property values, planning for finance and employment data collection, and completion of the governmental organization information base.

*1977 economic censuses.*—The quinquennial economic censuses provide a comprehensive data base on production, trade, inventories, and economic structure for the Nation's manufacturing, mining, distribution, and selected service industries. These data are widely used for analysis, as inputs to the gross national product and interindustry accounts, and for calculation of industrial production indexes. Funds in the 1977 budget will provide for design and printing of forms and preparation for data collection and tabulation.

*1974 Census of Agriculture.*—Funds provided in 1977, the final year of this program, will allow for completion of data tabulations and publication of the remaining special, subject matter, and State reports. The data will be tabulated according to both the new and old definitions of a farm to provide a linkage of prior statistics with those to be produced under the new definition.

*1978 Census of Agriculture.*—Legislation is pending which would accelerate the taking of the next two censuses of agriculture and result in a common base year with the economic censuses in 1982. A common base year will enable more complete analysis of the total U.S. economy and the relationship between the agricultural and nonagricultural sectors. The 1977 funding will permit developing and testing of forms, obtaining lists of respondents, initiating studies on linking with data from nonagricultural sources, and expanding the use of administrative records.

*Preparation for the 1980 decennial census.*—The major planning and development activities for the 1980 decennial census begin in 1977. A total of \$17.5 million is provided in 1977 for census development, an increase of \$12.5 million over 1976. The expansion and maintenance of the geographic base file and other geographical activities pertaining to the 1980 census will require \$8.0 million. These funds will also be used to conduct boundary and annexation surveys in places with a population of less than 2,500 persons and to develop guides to permit the coding of addresses in places of 25,000 to 50,000 population, places which are not now included in the automated geographic base file.

Funds are also included to continue user education through a program of conferences, workshops, and seminars concerning the access and use of decennial census data; to develop recommendations for 1980 user tape documentation standards; and to design public use samples and public use computer programs to increase the utility of the census results. The 1977 funds will also be used to prepare for the "dress rehearsal" for the 1980 census which will be held in April 1978. Because of the leadtime required, all questionnaires, instructions, and data processing procedures must be virtually completed in 1977. Finally, funds are provided to upgrade the Census Bureau's data processing center in preparation for the heavy workload of the decennial census.

*Intercensal demographic estimates.*—The intercensal demographic estimates program provides for biennial estimates of the population and per capita income of approximately 39,000 general purpose governmental units. The 1977 budget includes \$1.9 million for this program, a decrease of \$5.0 million from 1976 because of the completion of the coding and processing of place of residence information collected on the 1975 tax forms.

*Registration and voting survey.*—The Voting Rights Act of 1965, as amended in 1975, mandates biennial surveys of registration and voting in areas with characteristics specified in the act. The 1977 budget provides \$2.7 million for completing the work to be started in 1976 relating to the November 1976 elections.

Table G-3. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)

Agency	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>CURRENT PROGRAMS</b>				
Department of Agriculture:				
• Agricultural Research Service.....	0.5	1.9	0.5	1.9
• Economic Research Service.....	5.6	7.2	1.8	7.2
• Foreign Agricultural Service.....	.3	.6	.2	.6
Statistical Reporting Service.....	28.8	36.4	9.2	38.7
Department of Commerce:				
Bureau of the Census.....	39.5	41.9	11.0	44.5
Bureau of Economic Analysis.....	10.0	11.8	3.1	12.5
• Domestic and International Business Adminis- tration.....	5.2	5.8	1.5	5.8
• Economic Development Administration.....	.6	.6	.2	.6
• National Bureau of Fire Prevention.....	.3	.8	.2	.8
• National Marine Fisheries Service.....	3.1	3.5	.9	3.5
Department of Defense:				
• Corps of Engineers.....	1.7	1.8	.4	2.0
Department of Health, Education, and Welfare:				
• Alcohol, Drug Abuse, and Mental Health Adminis- tration.....	7.7	6.6	.3	9.7
• Center for Disease Control.....	5.4	4.3	1.0	4.1
• Food and Drug Administration.....	2.1	1.9	.5	2.1
Health Resources Administration:				
• National Center for Health Statistics.....	20.3	25.6	6.5	24.0
• Other Health Resources Administration.....	1.0	1.4	.1	1.4
• Health Services Administration.....	2.8	3.2	.8	3.2
• National Center for Education Statistics.....	7.7	13.0	3.2	13.0
• National Institutes of Health.....	19.4	22.5	5.2	26.4
• Office of Assistant Secretary for Human Develop- ment.....	2.6	4.4	1.3	3.0
• Office of Assistant Secretary for Planning and Evaluation.....	2.8	6.3	1.1	5.0
• Office of Education.....	8.9	14.3	-----	8.3
• Social and Rehabilitation Service.....	4.9	5.2	1.3	5.4
• Social Security Administration.....	22.6	25.0	6.7	27.0
• Department of Housing and Urban Development.....	8.8	11.0	2.3	11.3
Department of the Interior:				
• Bureau of Mines.....	10.3	12.2	3.2	12.6
• Fish and Wildlife Service.....	4.3	4.5	1.2	4.7
• Mining Enforcement and Safety Administration.....	1.6	1.2	.3	1.2
Department of Justice:				
• Drug Enforcement Administration.....	1.1	1.1	.3	1.1
• Federal Bureau of Investigation.....	2.2	2.8	.7	2.6
• Law Enforcement Assistance Administration.....	42.7	39.3	9.2	35.1
Department of Labor:				
Bureau of Labor Statistics.....	47.8	57.8	14.5	67.0
• Employment Standards Administration.....	.5	.6	.1	.5
• Employment and Training Administration.....	16.4	27.9	5.5	22.6
• Occupational Safety and Health Administration.....	5.6	6.0	1.5	6.2
Department of Transportation:				
• Office of the Secretary.....	2.5	3.1	.8	2.9
• Federal Highway Administration.....	4.9	5.1	1.2	4.5
• Federal Railroad Administration.....	.8	1.0	.2	.9
• National Highway Traffic Safety Adminis- tration.....	7.1	10.2	2.6	13.2
• Urban Mass Transportation Administration.....	.4	1.4	.3	1.6

See footnotes at end of table.



Table G-3. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)—Continued

Agency	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>CURRENT PROGRAMS—Continued</b>				
Department of the Treasury:				
• Office of the Secretary.....	0.6	0.1	-----	0.1
• Internal Revenue Service.....	11.8	13.6	3.4	12.5
• U.S. Customs Service.....	3.2	3.2	.8	3.2
• Civil Aeronautics Board.....	1.8	2.0	.5	2.2
• Consumer Product Safety Commission.....	2.7	1.5	.2	1.8
• Environmental Protection Agency.....	26.0	21.0	5.5	21.4
• Federal Energy Administration.....	9.3	12.1	2.8	10.4
• Federal Home Loan Bank Board.....	2.3	2.7	.7	2.8
• Federal Power Commission.....	1.9	2.5	.6	2.9
• Federal Trade Commission.....	1.2	1.6	.4	1.6
• Interstate Commerce Commission.....	1.2	1.2	.3	1.2
• National Science Foundation.....	3.3	3.0	.6	3.7
• Securities and Exchange Commission.....	.5	.6	.2	.6
• Special Action Office for Drug Abuse Prevention <sup>1</sup> .....	1.0	-----	-----	-----
• Veterans Administration.....	.5	2.1	.2	1.1
Total, current programs.....	428.1	498.4	117.1	504.2
<b>PERIODIC PROGRAMS</b>				
Department of Commerce: Bureau of the Census:				
1972 Census of Governments.....	.2	-----	-----	-----
1977 Census of Governments.....	.3	.7	.3	3.4
1972 economic censuses.....	5.8	.7	-----	-----
1977 economic censuses.....	-----	3.6	1.5	6.1
1974 Census of Agriculture.....	8.8	9.7	1.5	2.0
1978 Census of Agriculture.....	-----	-----	-----	3.3
1980 decennial census.....	2.0	5.0	2.4	17.5
Intercensal demographic estimates.....	1.4	6.9	.6	1.9
Registration and voting survey.....	-----	1.0	1.0	2.7
Periodic programs geographic support.....	1.9	3.0	.8	2.8
Data processing equipment <sup>2</sup> .....	1.9	5.8	1.0	6.1
General administration and other <sup>3</sup> .....	.4	1.5	.4	1.6
Department of Labor: Bureau of Labor Statistics:				
Revision of Consumer Price Index.....	6.6	7.3	1.8	5.7
Standard industrial classification revision program.....	.4	1.5	.4	1.5
Total, periodic programs.....	29.7	46.7	11.7	54.6
Total, principal statistical programs.....	457.8	545.1	128.8	558.8

<sup>1</sup> The legislative authority for the Special Action Office for Drug Abuse Prevention expired June 30, 1975.

<sup>2</sup> Includes capital outlays for large-scale data processing equipment acquisitions.

<sup>3</sup> Includes depreciation, other capital outlays, and changes in selected resources.

• = Covers only funds for agency's statistical activities.

## SPECIAL ANALYSIS H

### CIVILIAN EMPLOYMENT IN THE EXECUTIVE BRANCH

Total Federal civilian employment in the executive branch was 2,848,022 as of June 30, 1975. Excluding Postal Service employment, which by law is not subject to Presidential control, and excluding other employment exempted from ceilings, the total was 2,106,374. Total employment for the executive branch, excluding the Postal Service, is estimated to increase by about 10,300 between June 30, 1975, and June 30, 1976. From June 30, 1976, to September 30, 1977, it will decrease by 26,200 or 15,900 below the June 30, 1975, level. A portion of this decrease stems from seasonal differences between employment in June and September, since, generally, temporary employment is higher in June than in September.

Except for 1973, executive branch civilian employment on September 30, 1977 is estimated to reach its lowest level since 1966.

### FULL-TIME PERMANENT CIVILIAN EMPLOYMENT

Full-time permanent employment as of June 30, 1975, was 2,475,663. Excluding the Postal Service, executive branch full-time permanent employment was 1,917,352.

While recognizing that increases are necessary in some special areas, the President has asked all agency heads to hold agencywide employment to the minimum necessary to accomplish agency missions. The results of the President's instructions are reflected in the 1977 column of table H-1. Full-time permanent employment will decrease by 12,500 between 1976 and 1977, with the largest decreases occurring in the Departments of Defense; Health, Education, and Welfare; and Treasury.

Table H-1 displays, by major agency, the yearend full-time permanent employment in the executive branch and planned changes between June 30, 1976, and September 30, 1977.

Table H-1. SUMMARY OF FULL-TIME PERMANENT CIVILIAN EMPLOYMENT IN THE EXECUTIVE BRANCH <sup>1</sup>

Agency	As of June 30		As of Sept. 30, 1977 estimate	Change 1976-77
	1975 actual	1976 estimate		
Agriculture.....	79,133	80,400	80,400	-----
Commerce.....	28,711	28,900	28,700	-200
Defense—military functions.....	954,721	930,700	924,000	-6,700
Defense—civil functions.....	29,069	29,100	29,100	-----
Health, Education, and Welfare.....	129,285	135,000	128,900	-6,100
Housing and Urban Development.....	15,142	15,000	15,700	700
Interior.....	58,088	59,200	59,300	100
Justice.....	49,032	51,600	51,700	100
Labor.....	13,427	14,600	14,900	300
State.....	22,324	22,900	22,900	-----
Transportation.....	70,345	72,400	72,600	200
Treasury.....	108,138	113,500	110,000	-3,500
Energy Research and Development Administra- tion.....	7,457	8,300	8,400	100
Environmental Protection Agency.....	9,160	9,600	9,600	-----
General Services Administration.....	36,400	36,800	36,000	-800
National Aeronautics and Space Administration.....	24,333	24,300	23,800	-500
Veterans Administration.....	184,502	196,600	198,100	1,500
Other:				
Agency for International Development.....	6,185	6,200	6,200	-----
Civil Service Commission.....	6,670	6,800	6,900	100
Federal Energy Administration.....	2,978	3,200	<sup>2</sup> 1,800	-1,400
Nuclear Regulatory Commission.....	2,006	2,300	2,500	200
Panama Canal.....	13,768	13,800	13,800	-----
Selective Service System.....	2,121	200	100	-100
Small Business Administration.....	4,127	4,300	4,400	100
Tennessee Valley Authority.....	14,084	15,100	15,500	400
United States Information Agency.....	8,662	8,800	8,800	-----
Miscellaneous.....	37,484	40,200	40,200	-----
Subtotal.....	1,917,352	1,929,800	1,914,300	-15,500
Contingencies <sup>3</sup> .....		2,000	5,000	3,000
Subtotal.....	1,917,352	1,931,800	1,919,300	-12,500
Postal Service.....	558,311	542,600	543,600	1,000
Total.....	2,475,663	2,474,400	2,462,900	-11,500

<sup>1</sup> Excludes developmental positions under the worker-trainee opportunity program and certain disadvantaged youth programs.

<sup>2</sup> Excludes the impact of the Energy Policy and Conservation Act of 1975. Allowance for any necessary additional staff is included in contingencies.

<sup>3</sup> Subject to later distribution.

While executive branch full-time permanent employment, excluding the Postal Service, is planned to remain nearly level between June 30, 1975, and September 30, 1977, significant reallocations within agencies are planned. For example:

- In the Department of Agriculture, 700 administrative positions will be eliminated. In addition, under proposed legislation to consolidate child-feeding programs 320 positions in the Food and Nutrition Service will become available for reallocation. These positions will be used to permit additional staffing for meat and poultry inspection and for programs administered by the Farmers Home Administration.

- In the Commerce Department, reductions due to productivity improvements will result in a decrease of 360 positions, mainly in the Patent Office, the National Bureau of Standards, and NOAA. However, these reductions will be partially offset by an increase of 300 positions required primarily for new energy, fire, and Census programs.
- The Department of Health, Education, and Welfare will seek legislation to discontinue Federal operation of the Public Health Service hospital system and provide for beneficiary care on a contract basis, thereby reducing Federal employment by 4,000. The consolidation of narrow categorical health and education programs into two block grants will permit a further reduction of about 2,400 positions. These reductions are offset in part by increases of 4,600 positions for the Social Security Administration, mainly for the supplemental security income program, but also for improved claims processing. Another 400 positions for the Office of Education are primarily to help prevent fraud and abuse in student assistance and other programs.
- The increase in the Department of Housing and Urban Development staffing is necessary to accommodate a substantial increase in workload associated with mortgage insurance and housing subsidy programs. The reactivation of the section 235 homeownership assistance program will require an estimated 700 additional positions in 1977. An increase in the disposition of HUD-owned properties and the number of flood insurance studies in 1977 over 1976 will also require additional staff. The 1977 estimates include continued reductions in certain categorical programs, which have been replaced by the more staff-efficient community development grant program. Productivity improvements will free small numbers of personnel to move to the areas of increasing workload.
- Most of the increase within the Department of Justice will occur in 1976. There will be significant shifts in personnel, reflecting the President's emphasis on law enforcement and speedier processing of court cases. Employment in administration, support units, and routine activities will decline or be held constant, making room for growth in the enforcement arms of the several bureaus and agencies. An effort is being made to bring investigative capabilities into balance with prosecutorial and judicial resources. To illustrate:
  - Legal activities will increase by more than 700 positions, nearly all in the field offices of the U.S. attorneys and marshals and in the Antitrust Division.
  - Federal Prison System will increase by more than 900 or 11% over the 2-year period, reflecting the activation of new correctional facilities.
  - Drug Enforcement Administration will grow by 164; emphasis will be placed on conspiracy investigations and implementation of recommendations contained in the Domestic Council's White Paper on Drug Abuse.
- The Treasury Department is making significant reallocations, both within and among bureaus, in light of new or revised requirements, changing priorities, and anticipated productivity increases. An unexpected decline in travelers and import entries

in the past year and efficiencies in tax administration have reduced personnel levels by 500 positions in the U.S. Customs Service and the Internal Revenue Service. Increases in the number of check and debt issuances, bank examinations, Secret Service protective assignments, and firearms investigations have increased personnel levels by 2,300 positions in other Treasury Bureaus.

- The General Services Administration will reduce cleaning, maintenance and other real property operations by approximately 1,500 positions. Some of the effect of these reductions may be offset by contracting with private firms. These reductions will be partially offset by increases of about 1,100 positions required by the transfer of transportation audit responsibilities from the General Accounting Office and workload increases in records and administrative support activities.

In some areas expanding programs require net staffing increases in 1977, for example:

- The Department of Labor is increasing by 300 positions, primarily to improve the enforcement of occupational safety and health laws, to continue implementation of the responsibilities of the Pension Benefit Guarantee Corporation under the Employee Retirement Income Security Act, and for improved labor statistics.
- In the Department of Transportation, increases of 200 positions are planned for additional air traffic controllers and support of the U.S.-Iranian joint commission agreement.
- The Veterans Administration is increasing by 1,500 positions to remedy the remaining medical care staffing deficiencies identified in the 1974 "Quality Care" survey.
- The Tennessee Valley Authority plans a 400 position increase for expanded operations in its power program.

#### TOTAL FEDERAL GOVERNMENT EMPLOYMENT

In 1977, full-time permanent employment will comprise about 88% of all civilian employees in the executive branch (including the Postal Service). The remaining 12% is made up of part-time employees, intermittent employees (those employed on an irregular basis), and full-time temporary employees (those in positions occupied for less than one year). As presented in table H-2, "Total Federal Government Employment," includes civilian employees of the executive branch (as described above), employees of the legislative and judicial branches, and military personnel. A separate entry is also included to cover those categories of employees specifically exempted from employment controls, for example, certain employees under the worker-trainee opportunity program and disadvantaged summer and part-time workers under such Civil Service Commission programs as summer aides, stay-in-school, and junior fellowship.

The Department of Defense portion of total executive branch (civilian and military) employment has declined from 74% in 1968 to 62% in 1977. The Postal Service accounts for 14% of the total work force, the Veterans Administration for 5%, and the balance of the executive branch (all other departments and agencies) makes up the remaining 19%.

Table H-2. TOTAL FEDERAL EMPLOYMENT

Description	As of June 30		As of Sept. 30, 1977 estimate
	1975 actual	1976 estimate	
<b>Civilian employment in the executive branch:</b>			
Full-time permanent.....	1,917,352	1,931,800	1,919,300
Other than full-time permanent.....	189,022	184,900	171,200
Subtotal.....	2,106,374	2,116,700	2,090,500
<b>Postal Service:</b>			
Full-time permanent.....	558,311	542,600	543,600
Other than full-time permanent.....	134,965	136,900	135,800
Subtotal.....	693,276	679,500	679,400
Exempt from ceilings <sup>1</sup> .....	48,372	54,000	27,000
Subtotal, executive branch civilian employment.....	2,848,022	2,850,200	2,796,900
<b>Military personnel on active duty: <sup>2</sup></b>			
Department of Defense.....	2,127,293	2,086,700	2,101,000
Department of Transportation (Coast Guard).....	36,788	37,900	38,000
Subtotal, military personnel.....	2,164,081	2,124,600	2,139,000
<b>Total, executive branch employment.....</b>	<b>5,012,103</b>	<b>4,974,800</b>	<b>4,935,900</b>
<b>Legislative and judicial personnel: <sup>3</sup></b>			
Full-time permanent.....	29,571		
Other than full-time permanent.....	19,348		
Subtotal, legislative and judicial branches.....	48,919		
<b>Grand total.....</b>	<b>5,061,022</b>		

<sup>1</sup> Developmental positions under the worker-trainee opportunity program and disadvantaged summer and part-time workers under such Civil Service Commission programs as summer aides, stay-in-school, and junior fellowship. Decrease from 1976 to 1977 reflects seasonal differences.

<sup>2</sup> Excludes reserve components.

<sup>3</sup> 1976 and 1977 estimates are not available.

## PERSONNEL COMPENSATION AND BENEFITS

Direct compensation of the Federal work force includes regular pay, Sunday and holiday pay, premium pay for overtime, differentials for night work and overseas duty, and flight and other hazardous duty pay. Related compensation in the form of personnel benefits consists primarily of the Government's share (as employer) of health insurance; term life insurance; and Federal retirement and old-age survivors' disability insurance. Retirement costs include the Government's payment to cover interest on the unfunded retirement liability—the excess of the present value of the anticipated benefits payable from the retirement fund over the present value of fund assets and anticipated receipts. Some additional benefits are uniform allowances (when paid in cash), cost-of-living and overseas quarters allowances, and, in the case of uniformed military personnel, reenlistment bonuses.

Table H-3. PERSONNEL COMPENSATION AND BENEFITS  
(in millions of dollars)

Description	1975 actual	1976 estimate	TQ estimate	1977 estimate
Civilian personnel costs:				
Executive branch: <sup>1</sup>				
Direct compensation.....	29,008	31,530	8,130	32,320
Personnel benefits.....	6,702	7,720	840	<sup>2</sup> 10,520
Unfunded retirement liability interest.....	(2,465)	(3,200)	(.....)	(4,280)
Subtotal.....	35,710	39,250	8,970	42,840
Legislative and judiciary: <sup>3</sup>				
Direct compensation.....	464	550	140	610
Personnel benefits.....	41	50	10	60
Subtotal.....	505	600	150	670
Allowance for civilian pay raise.....				1,320
<b>Total, civilian personnel costs.....</b>	<b>36,215</b>	<b>39,850</b>	<b>9,120</b>	<b>44,830</b>
Military personnel costs: <sup>4</sup>				
Direct compensation.....	21,302	21,760	5,520	21,670
Personnel benefits <sup>5</sup> .....	1,82	1,870	500	1,870
Subtotal.....	23,114	23,630	6,020	23,540
Allowance for military pay raise.....				1,040
<b>Total, military pay costs.....</b>	<b>23,114</b>	<b>23,630</b>	<b>6,020</b>	<b>24,580</b>
<b>Grand total, personnel costs.....</b>	<b>59,329</b>	<b>63,480</b>	<b>15,140</b>	<b><sup>6</sup> 69,410</b>

<sup>1</sup> Excludes Postal Service, reflecting conversion to independent status, consistent with the Postal Service Reorganization Act of 1970.

<sup>2</sup> A one-time payment of \$1,364 million is included in 1977 to restore unfunded retirement liability interest lost due to the change of the fiscal year.

<sup>3</sup> Excludes members and officers of Congress.

<sup>4</sup> Excludes Reserve components.

<sup>5</sup> Excludes payments to current military retirees which amounted to \$6,356 million in 1975, and are estimated to be \$7,001 million in 1976, \$1,805 million in the transition quarter, and \$8,640 million in 1977.

<sup>6</sup> Includes effects of restraints reflected in table H-1, and in the narrative material following this table.

Obligations for civilian personnel compensation and benefits in 1977 are projected to be \$44.8 billion, excluding the Postal Service. The increase in obligations is due to pay adjustments and the increase in the Government's contribution for Federal employee health benefits. In addition, the need for a one-time payment to restore interest lost due to the change of the fiscal year adds significantly to the estimate for civilian personnel benefits for 1977. The estimated costs for civilian and military pay increases for 1977 are covered by lump sum allowances in the 1977 Budget.

Under the Federal Pay Comparability Act, salary rates for Federal employees under the "General Schedule" and most other statutory pay systems are adjusted periodically so as to be related to rates paid for the same work levels in the private sector. The bases for these adjustments are annual surveys conducted on a nationwide basis by the Bureau of Labor Statistics. Under the act, the President may propose an alternative pay plan if he considers the required pay adjustments inappropriate because of national emergency or economic conditions affecting the general welfare. The pay raise estimates in the budget and in table H-3 assume that pay increases for October 1976 will be limited to 5% (with a minimum of 3%).

Current law provides that pay scales for blue-collar workers under the Federal wage-board system are to be adjusted annually so as to achieve rates corresponding to the prevailing area rates in private industry. Legislation will be proposed to reform certain aspects of the law governing wage board pay rates in accordance with the recommendations of the President's "Panel on Federal Compensation." The pay raise estimates in the budget and in table H-3 include the effect of this legislation.

The panel also made policy recommendations on how the Federal Government can best determine the appropriate level of total compensation for its employees under the principle of comparability with the private work force. The budget assumes implementation of those recommendations that can be effected through administrative action. A number of recommendations refining the comparability principle will require changes in law. These include splitting the present General Schedule into two schedules, and setting salaries in the clerical and technical schedule on a locality basis. Appropriate legislation will be submitted to the Congress.

#### GOVERNMENT EMPLOYMENT AND POPULATION COMPARISONS

Federal civilian employment as a percentage of the total employed labor force is projected at 3% for 1977—the lowest it has been since World War II.

Employment for all governmental units as a percentage of the total employed labor force has been steadily rising due to significant increases in State and local government employment.



The proportion of Federal civilian employment relative to total employment of all governmental units (Federal, State and local) is projected at 18.4% for 1977. As the accompanying chart and table H-4 illustrate, the Federal segment of all governmental employment has declined significantly over the last three decades—from more than one-third to less than one-fifth.

### Government Civilian Employment

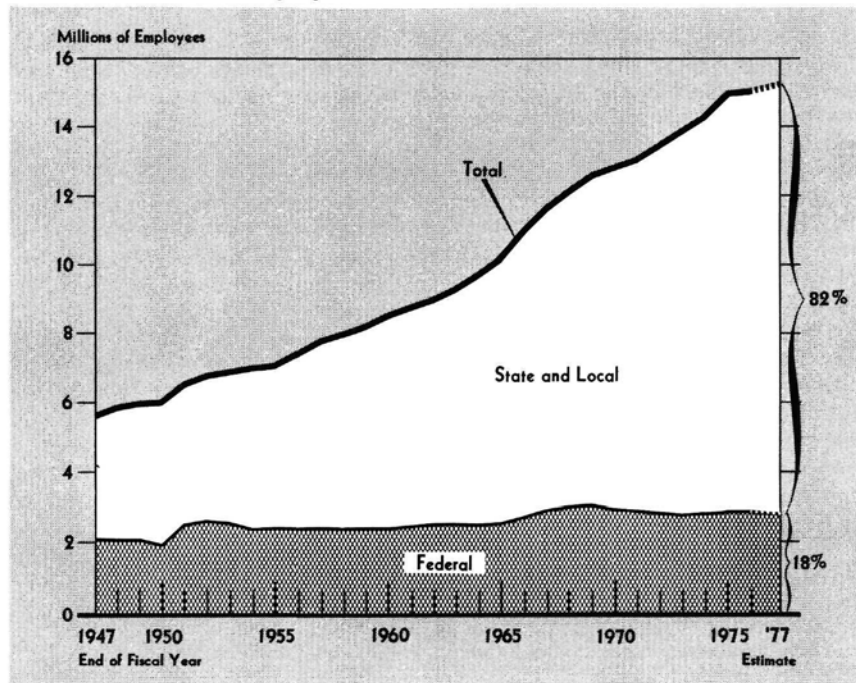


Table H-4. GOVERNMENT EMPLOYMENT AND POPULATION, 1947-77

Fiscal year	Government employment				Population	
	Federal executive branch <sup>1</sup> (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
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	28.8	177,830	13.2
1960 <sup>2</sup> -----	2,371	6,073	8,444	28.1	180,671	13.1
1961 <sup>2</sup> -----	2,407	6,295	8,702	27.7	183,691	13.1
1962-----	2,485	6,533	9,018	27.6	186,538	13.3
1963 <sup>3</sup> -----	2,490	6,834	9,324	26.7	189,242	13.2
1964 <sup>3</sup> -----	2,469	7,236	9,705	25.4	191,889	12.9
1965-----	2,496	7,683	10,179	24.5	194,303	12.8
1966-----	2,664	8,259	10,923	24.4	196,560	13.6
1967-----	2,877	8,730	11,607	24.8	198,712	14.5
1968-----	2,951	9,141	12,092	24.4	200,706	14.7
1969 <sup>4</sup> -----	2,980	9,496	12,476	23.9	202,677	14.7
1970 <sup>2</sup> -----	2,944	9,869	12,813	23.0	204,875	14.4
1971 <sup>2</sup> -----	2,883	10,257	13,140	21.9	207,045	13.9
1972-----	2,823	10,640	13,463	21.0	208,842	13.5
1973-----	2,775	11,065	13,840	20.0	210,396	13.2
1974-----	2,847	11,463	14,310	19.9	211,909	13.4
1975-----	2,848	12,025	14,873	19.1	213,450	13.3
1976 (est.)--	2,850	( <sup>5</sup> )	-----	18.9	215,074	13.2
1977 (est.)--	2,797	( <sup>5</sup> )	-----	18.4	216,814	12.9

<sup>1</sup> Covers total end-of-year employment in full-time permanent, temporary, part-time, and intermittent positions in the executive branch, including the Postal Service, and, beginning in 1970, includes various disadvantaged worker-trainee programs.

<sup>2</sup> Includes temporary employees for the decennial census.

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

<sup>4</sup> On Jan. 1, 1969, 42,000 civilian technicians of the Army and Air Force National Guard converted by law from State to Federal employment status. They are included in the Federal employment figures in this table after and including 1969.

<sup>5</sup> An official projection of State and local government employment is not available. The percentages shown for these years are consistent with a range of reasonable estimates based on recent trends in population and State and local government activity.

When compared to the Nation's population, the ratio of Federal civilian employment is estimated to be 12.9 per thousand in 1977—a ratio that is lower than all but three of the 30 years displayed in table H-4.



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PART 2

FEDERAL SOCIAL PROGRAMS

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## INTRODUCTION

*Part 2* furnishes Government-wide program and financial information in six social program areas—education, training and employment, health, income security, civil rights, and crime reduction. It includes the special analyses designated I through N.

The figures used in these analyses differ from the data shown under somewhat similarly titled categories of the functional classification used in Part 5 of the Budget and elsewhere. In the functional classification, each activity is categorized according to its major purpose; thus all the military spending of the Department of Defense falls into the functional category, *National defense*. In these special analyses, however, all spending for education, health, etc., is included, even if the activity has a different primary purpose. Thus the tabulations here are more comprehensive with regard to these particular types of social programs.

*Special Analysis I* discusses education-related programs, including direct Federal activities, and programs that provide aid to States and localities, to institutions of higher education, and to individuals.

*Special Analysis J* identifies the Federal programs designed to increase the skills and employment opportunities of persons already in the work force and of persons who desire to join the work force but lack vocational preparation or face other employment barriers.

*Special Analysis K* summarizes Federal spending for health and health-related activities.

*Special Analysis L* discusses Federal benefits to maintain or supplement income of persons and families whose capacity for self-support is reduced by old age, disability, illness, unemployment, poverty, or death of the primary wage earner.

*Special Analysis M* summarizes Federal spending for civil rights activities, concentrating on enforcement efforts.

*Special Analysis N* discusses the Federal crime reduction program which complements activities of State and local governments. Federal assistance in the form of grants-in-aid, training, and technical assistance contributes to the effectiveness of State and local crime reduction programs.

## SPECIAL ANALYSIS I

### FEDERAL EDUCATION PROGRAMS

Federal expenditures for education-related programs are estimated at \$18.2 billion in 1977. These consist of programs that provide aid to State and local educational agencies, to institutions of higher education, to individuals, and direct Federal activities.

The criteria for inclusion in the analysis are the purposes of the program: support of student-teacher relationships for the transmission of organized knowledge, or the provision of services to the community-at-large aimed at expanding individuals' opportunities for professional or career advancement. The analysis is further organized by level of education and type of support. As in previous years, all Federal programs directly supporting educational activities or involving the use of educational resources to achieve other purposes are included. Amounts for noneducational research conducted at academic institutions not falling within the above purposes are excluded. For comparability with the analyses that accompanied the 1973 and earlier budgets, these amounts are shown at the bottom of table I-1.

#### OVERVIEW: 1977

Total Federal education outlays are estimated at \$18.2 billion in 1977.

Outlays are estimated to be:

- \$9.2 billion for programs whose primary purpose is education;
- \$4.6 billion for elementary and secondary education;
- \$3.6 billion for higher education; and
- \$1.0 billion for adult, continuing, and other education.

In addition, four tax expenditures ranging in size from \$0.2 billion to \$0.8 billion each will also support higher education in 1977.

Substantial Federal educationally related expenditures are directed toward activities whose purposes are not primarily educational. The Federal Government invests in specialized education for many activities, the largest of which is defense related and the second largest of which is in the health field. An estimated \$8.7 billion in outlays will be provided in 1977 which are beneficial to the interests of education but directed toward other ancillary purposes.

Table I-1. FEDERAL OUTLAYS FOR EDUCATION

Purpose and program	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Financial Assistance for Elementary and Secondary Education Act.....				294
Educationally deprived children.....	1,960	1,818	400	1,628
Support innovation consolidation.....		80	39	152
Emergency school aid.....	216	235	59	221
Federally affected areas.....	619	485	47	395
Other ESEA.....	317	303	69	119
Salaries and expenses.....	96	109	33	113
Basic opportunity grants.....	342	796	122	1,016
Other higher education student support (OE).....	1,175	1,355	186	804
Other higher education (OE).....	321	281	54	230
Student loan insurance fund and HEFLIF.....	127	118	24	104
Occupational, vocational, adult.....	653	674	108	663
Educational development.....	175	31	1	4
Education for the handicapped.....	151	199	52	175
Library instructional resources consolidation.....		82	39	79
Library resources.....	226	139	16	47
Other Office of Education.....	42	49	14	75
National Institute of Education.....	83	70	13	88
Special institutions.....	124	146	34	128
Student grants (OASDI).....	1,120	1,255	356	1,460
Office of Human Development.....	441	478	130	472
Other HEW.....	294	297	92	304
Other.....	524	649	170	656
Subtotal, programs which are primarily educational.....	9,006	9,649	2,058	9,227
Federal outlays—education support for other basic purposes:				
Health professions education.....	662	552	155	519
Veterans readjustment.....	4,228	5,654	987	3,938
Defense.....	963	1,034	288	1,106
Child nutrition.....	1,832	2,333	499	2,000
Other.....	1,266	1,611	449	1,097
Subtotal, education support for other purposes.....	8,951	11,184	2,378	8,660
Federal outlays—salary supplements.....	259	284	66	305
Total, education outlays.....	18,216	21,117	4,502	18,192
Amounts previously carried for academic research not directed toward educational objectives.....	2,228	2,389	565	2,599

## RENEWAL AND REFORM

The provision of basic educational services in the United States is essentially the responsibility of State and local educational authorities. The Federal role is one that strives to stimulate and encourage improvements in the educational process through reform, innovation,

capacity building and research, and assuring equal access to educational opportunity.

Federal initiatives in 1977 are directed toward:

- Consolidation of some 27 categorical programs under the Financial Assistance for Elementary and Secondary Education Act (see below).
- Providing aid to school districts facing problems in eliminating discrimination.
- Reform of the impact aid program.
- Full funding of basic educational opportunity grants for all eligible undergraduate postsecondary students.

*Financial Assistance for Elementary and Secondary Education Act.*—Legislation will be proposed totaling \$3,300,000 and includes the following programs: Education of the disadvantaged; support and innovation; education for the handicapped; occupational, vocational, and adult education; and library resources.

This initiative is aimed at providing States with maximum flexibility and responsibility in determining their own educational priorities and funding needs.

*Impact aid.*—Legislation will be proposed, in 1977, that would provide for a major reform of this program. Specifically, it would target funds toward those districts that have enrollments of "A" category children (those whose parents both live and work on Federal property). It would also provide support for the special provisions and payments to other Federal agencies for the education of Federal employees' dependents. This proposal is rooted in the policy of only providing support for those districts that are adversely impacted by Federal activities.

*Emergency school aid.*—In 1977, support for this activity will be provided to continue assistance to those school districts that are in the process of eliminating discrimination. Increased support will be provided for title IV of the Civil Rights Act of 1964 which will provide greater advisory support and technical assistance to help educational institutions move toward equality of educational opportunity.

*Basic opportunity grants.*—The \$1,100 million requested for basic grants is expected to provide full entitlement awards averaging \$850 for 1,270,000 full- and part-time undergraduate students in academic year 1977-78. At full funding, grants will range from \$200 to a maximum of \$1,400. The size of the grant is determined on the basis of the expected family and student contribution, specified by the needs analysis system approved annually by Congress, up to a maximum of one-half of the student's need.



*Education and work.*—Improving the connections between education and the world of work will continue to be addressed by the Office of Career Education, the Fund for the Improvement of Postsecondary Education, and the National Institute of Education. These agencies provide educators with information and technical assistance concerning the transition from school to work.

*National Institute of Education.*—The Institute (NIE) will continue as the focal point for the conduct of educational research and development. Emphasis will be placed on career education, school finance, productivity, local educational agency problem solving, the dissemination of research products, educational technology, and basic skills. The 1977 outlays for the NIE will total \$88 million.

#### OTHER PROGRAM DEVELOPMENTS

*Health professions education.*—Legislation submitted by the Administration emphasizes support to medical and dental schools that agree to address speciality and geographic maldistribution of health professionals in the Nation today. Categorical student assistance programs will continue to be phased out in favor of scholarships which require service commitments.

*Veterans benefits.*—In 1977, 2.2 million GI bill beneficiaries are expected to enroll in education courses covered by this special analysis at an average cost of \$1,816, up from \$1,739 in 1976.

*Child nutrition.*—The Administration is proposing a Child Nutrition Reform Act to help States feed needy children. The new program will provide greater funds to feed needy children than now available under existing law while permitting substantial Federal savings by the elimination of subsidies for the nonpoor.

#### PROGRAMS WHICH ARE PRIMARILY EDUCATIONAL

Programs whose primary purpose is education are estimated to account for \$9.2 billion of educational expenditures in 1977. Elementary and secondary levels will receive \$4.6 billion of this amount. Higher education will draw an estimated \$3.6 billion and the remaining \$1,023 million directed toward adult and continuing education, libraries, research, and cultural activities. Approximately 75% of elementary and secondary school levels are administered by the Education Division of the Department of Health, Education, and Welfare. In 1977, the U.S. Office of Education will provide \$3.4 billion. Other HEW programs account for another \$985 million.

The Office of Child Development will provide \$463 million in 1977 for elementary and secondary education, principally in the Head Start program. Under the social security system (OASDI), survivors of insured workers between the ages of 18 and 22 who are still in school receive benefits, while those not in school do not. In 1977, an estimated \$277 million of social security payments will be made to high school students. Legislation is proposed to eliminate this educational benefit for those becoming eligible in the future.

Table I-2. FEDERAL OUTLAYS FOR PROGRAMS WHICH ARE  
PRIMARY EDUCATIONAL BY LEVELS

Purpose and program	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Elementary and secondary:</b>				
Financial Assistance for Elementary and Secondary Education Act.....				294
Educationally deprived children (ESEA).....	1,960	1,818	400	1,628
Support—innovation consolidation.....		80	39	152
Other ESEA.....	316	281	61	102
Federally affected areas.....	619	485	47	395
Emergency school aid.....	216	235	59	221
Educational development.....	160	25	1	2
Library resources/consolidation.....	127	146	44	93
Education for the handicapped.....	151	198	51	175
Occupational and vocational education.....	375	403	60	365
Office of Child Development.....	426	468	127	463
Student grants (OASDI).....	213	238	68	277
Other HEW.....	219	222	60	245
Bureau of Indian Affairs.....	164	184	56	186
Other.....	55	55	15	52
Subtotal, elementary and secondary.....	5,001	4,838	1,088	4,650
<b>Higher education:</b>				
Basic opportunity grants.....	342	796	122	1,016
Work-study, supplementary grants and student supplementary incentive grants.....	499	650	65	326
Guaranteed student loans.....	254	309	84	349
Direct student loans.....	345	293	12	12
Vocational education.....	137	137	20	136
Student loan insurance fund and HEFLIF.....	81	73	12	66
Disadvantaged students and developing institutions.....	230	200	44	193
Other Office of Education.....	117	96	17	53
Special institutions.....	89	105	25	88
Student grants (OASDI).....	840	941	267	1,095
Other HEW.....	118	110	32	108
National Science Foundation.....	36	44	6	50
Other.....	51	64	12	62
Subtotal, higher education.....	3,139	3,818	718	3,554
<b>Adult and continuing education:</b>				
Occupational and adult education (OE).....	101	95	21	97
Public libraries (OE).....	62	55	10	27
Social Security Administration.....	67	75	21	88
Library of Congress.....	101	118	32	142
Other.....	15	20	5	21
Subtotal, adult and continuing education.....	346	363	89	375
<b>Other:</b>				
Office of Education, salaries and expenses.....	96	109	33	113
Student loan insurance fund.....	46	45	12	38
National Institute of Education.....	42	36	7	52
Smithsonian Institution.....	47	55	20	54
Corporation for Public Broadcasting.....	62	70	18	70
National Foundation on the Arts and the Humanities.....	32	53	17	63
Other.....	195	262	56	258
Subtotal, other.....	520	630	163	648
<b>Total.....</b>	<b>9,006</b>	<b>9,649</b>	<b>2,058</b>	<b>9,227</b>

The Federal Government additionally aids or directly provides education for certain groups including Indians, Cuban refugees, and residents of Pacific territories. The National Science Foundation and National Foundation on the Arts and the Humanities also provide some support to elementary and secondary school levels.

An estimated \$3.5 billion will be spent in 1977 for higher education, an increase of \$415 million over the 1975 level. Expenditures for higher education are 39% of total expenditures for educational goals. The Office of Education will provide \$2.2 billion of the \$3.6 billion total.

The majority of the funds for educational purposes at the higher education level is for student support. In 1972, the year in which Congress enacted higher education amendments, \$933 million for Office of Education student support programs (work-study, supplementary grants, guaranteed student loans and direct student loans) constituted 43% of the total. In 1977, under Administration proposals, Office of Education student aid expenditures will reach \$1,703 million, nearly twice the 1972 level. Social security benefits to students at institutions of higher education will provide an additional \$1,095 million of student support in 1977, an increase of \$154 million over the 1976 level and \$255 million above the 1975 level. As noted above, this benefit would be eliminated for future students by proposed legislation. The focus of higher education aid will continue to shift from institutional support to direct student support with the full funding of basic opportunity grants.

Adult and continuing education will be provided \$1,023 million in 1977, a 3% increase over 1976. The Library of Congress and the Smithsonian Institution are among the activities included in this category.

#### EDUCATION SUPPORT FOR OTHER PURPOSES

Almost half the expenditures for education are in programs directed toward multiple purposes.

The largest single program in this category is veterans readjustment benefits (the GI bill). Veterans readjustment is designed primarily to compensate veterans for opportunities lost while they were in the service. Expenditures reflect estimated use of program benefits by veterans, active duty personnel and other beneficiaries. Outlays for those education activities covered by this analysis are estimated to peak in 1976 at \$5.7 billion, an increase of \$1,425 million over the 1975 level. The 1977 expenditures reflect a decreasing number of persons eligible to receive benefits. School lunch, breakfast, milk, and other feeding programs provided \$2.3 billion in benefits for nutrition in 1976. The Administration's Child Nutrition Reform Act will replace the existing fragmented, overlapping, and administratively complex programs for needy children. The Administration's initiative will provide \$2.0 billion in 1977 for needy children including nearly 700,000 needy children who are not currently receiving benefits.

The GI bill and child nutrition programs will comprise 61% of the educational outlays from noneducational programs in 1977. The largest training program is for defense personnel. The Department of Defense trains inservice personnel and educates future service personnel through the service academies and Reserve Officer Training Corps. Outlays for training will total \$371 million in 1977, a 14% increase over 1976.

Table I-3. FEDERAL OUTLAYS FOR OTHER BASIC PURPOSES BY LEVEL

Level and program	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Elementary and secondary:</b>				
Child nutrition.....	1,832	2,333	499	2,000
District of Columbia capital improvements.....	45	61	10	34
Community planning and development.....	52	41	5	24
Veterans readjustment.....	114	152	18	80
Other.....	207	182	144	116
Subtotal, elementary and secondary.....	2,250	2,769	676	2,254
<b>Higher education:</b>				
Veterans readjustment.....	3,479	4,652	820	3,291
Military service academies.....	239	266	67	276
Reserve Officers Training Corps.....	165	179	57	184
Other DOD.....	199	199	56	206
Health Resources Administration.....	662	553	155	519
Research training (NIH).....	177	173	28	151
Alcohol, Drug, and Mental Health Administration.....	121	93	11	55
Other.....	117	144	54	126
Subtotal, higher education.....	5,159	6,259	1,248	4,808
<b>Adult and continuing education:</b>				
Agriculture Extension Service.....	219	228	57	219
Veterans readjustment.....	636	850	149	568
Other.....	82	84	21	77
Subtotal adult and continuing education.....	937	1,162	227	864
<b>Training of Federal military employees:</b>				
Defense.....	304	326	87	371
Coast Guard.....	22	23	6	24
Subtotal, training of Federal military employees.....	326	349	93	395
<b>Other:</b>				
Department of State.....	32	34	6	36
Public service jobs.....	126	456	86	175
International development assistance.....	60	82	25	85
Other.....	61	73	17	43
Subtotal, other.....	279	645	134	339
<b>Total.....</b>	<b>8,951</b>	<b>11,184</b>	<b>2,378</b>	<b>8,660</b>

## SALARY SUPPLEMENTS

Salary supplements in the form of educational allowances or direct provision of education for Federal employees or for their dependents will reach an estimated \$305 million in 1977, a 7% increase over 1976. These supplements consist almost entirely of Defense Department expenditures for overseas dependents education and for off-duty education of military personnel. The two programs account for \$302 million in 1977.

Table I-4. FEDERAL EDUCATION OUTLAYS FOR SALARY SUPPLEMENTS

Level and program	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Total, salary supplements.....	259	284	66	305
Elementary and secondary.....	229	245	55	261
Higher education.....				
Adult education.....	26	34	10	39
Other.....	4	5	1	5
Defense:				
Overseas dependents education.....	229	248	54	264
Off-duty military personnel.....	26	33	9	38
Other.....	4	3	3	3

## EDUCATIONAL PERSONNEL TRAINING AND RESEARCH

Educational personnel training and research is funded under many programs already identified as directed toward education goals. They account for \$624 million in 1977 or 3% of total educational expenditures. Training funds (\$192 million) increase in 1977 by \$18 million over 1976 levels. Educational research, estimated at \$432 million in 1977 remains essentially at the level in previous years (\$16 million above the 1975 and \$10 million above the 1976 levels).

The largest contributors to these categories are the Office of Education (80% of training funds) and the National Institute of Education (24% of research funds).

Table I-5. FEDERAL OUTLAYS FOR PERSONNEL TRAINING AND RESEARCH IN EDUCATION

Program	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Education personnel training:				
Educational development.....	98	15	-----	1
Occupational, adult and vocational.....	34	65	11	82
Emergency school assistance.....	15	12	4	14
Education for the handicapped.....	36	37	11	42
Elementary and secondary education.....	9	14	3	13
National Science Foundation.....	13	9	3	6
Other.....	17	22	5	34
Subtotal, education personnel training.....	222	174	37	192
Education research:				
Educational development.....	77	16	1	2
Elementary and secondary education.....	78	103	34	90
Education for the handicapped.....	38	46	13	56
Occupational, vocational, and adult education.....	45	48	10	34
Special projects and training.....	-----	4	4	19
Assistant Secretary for Education.....	10	11	-----	10
National Institute of Education.....	83	70	13	88
National Foundation on the Arts and Humanities.....	46	80	20	88
National Science Foundation.....	30	32	10	36
Other.....	9	12	1	9
Subtotal, educational research.....	416	422	106	432
<b>Total</b> .....	638	596	143	624

## EDUCATIONAL SPENDING BY PURPOSE AND LEVEL

The table that follows (I-6) displays educational support funding by purpose and level.

Table I-6. FEDERAL OUTLAYS FOR EDUCATION BY PURPOSE AND LEVEL

	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Elementary and secondary:</b>				
Education.....	5,001	4,838	1,088	4,650
Other basic purposes.....	2,250	2,769	676	2,254
Salary supplements.....	229	245	55	261
<b>Total, elementary and secondary.....</b>	<b>7,480</b>	<b>7,852</b>	<b>1,819</b>	<b>7,165</b>
<b>Higher education:</b>				
Education.....	3,139	3,818	718	3,554
Other basic purposes.....	5,159	6,259	1,248	4,808
Salary supplements.....				
<b>Total, higher education.....</b>	<b>8,298</b>	<b>10,077</b>	<b>1,966</b>	<b>8,362</b>
<b>Adult and continuing education:</b>				
Education.....	346	363	89	375
Other basic purposes.....	937	1,162	227	864
Salary supplements.....	26	34	10	39
<b>Total, adult and continuing education.....</b>	<b>1,309</b>	<b>1,559</b>	<b>326</b>	<b>1,278</b>
<b>Other:</b>				
Education.....	520	630	163	648
Other basic purposes.....	605	994	227	734
Salary supplements.....	4	5	1	5
<b>Total, other.....</b>	<b>1,129</b>	<b>1,629</b>	<b>391</b>	<b>1,387</b>
<b>Total, outlays for education.....</b>	<b>18,216</b>	<b>21,117</b>	<b>4,502</b>	<b>18,192</b>

Table I-7. FEDERAL OUTLAYS FOR ELEMENTARY AND SECONDARY EDUCATION BY SUBLEVEL AND TYPE OF SUPPORT

Sublevel and type of support	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Total, elementary and secondary.....</b>	<b>7,480</b>	<b>7,852</b>	<b>1,819</b>	<b>7,165</b>
Early childhood.....	566	592	157	577
Elementary and secondary.....	6,588	7,025	1,602	6,366
Supporting services.....	326	235	60	222
<b>Current operations.....</b>	<b>6,412</b>	<b>6,813</b>	<b>1,580</b>	<b>6,286</b>
Facilities and equipment.....	289	261	44	150
Student support.....	354	426	102	392
Education personnel training.....	191	138	31	129
Educational research.....	234	214	62	208

Elementary and secondary education support is provided primarily through grants to State and local educational agencies. Higher education support is not channeled generally through State and local government. Grants or loans are provided to an educational institution or to a student who then selects an institution to attend. Federal support for higher education continues to shift from institutional to student assistance. In 1977 an estimated \$6,710 million or 81% of total higher education outlays will be direct grants or subsidies via loans to students. Another \$1,570 million will go to institutions for current operations or facilities and equipment. This amount is essentially the same as the 1976 level.

The Federal Government also aids education through four tax expenditures whose benefits are predominantly at the higher education level. The exclusion from taxable income of veterans readjustment benefits (the GI bill) is estimated to reduce Federal revenues by \$0.3 billion in 1977. The similar exclusion for other scholarships and fellowships results in a revenue loss of \$0.2 billion in 1977. Parents may claim a personal exemption for full-time students over 18, even if the students have an income of their own. This tax expenditure of \$0.7 billion in 1977 aids families with older children in school. Finally, the deductibility of contributions to educational institutions is estimated to reduce Federal receipts by \$0.8 billion in 1977.

Table I-8. **FEDERAL OUTLAYS FOR HIGHER EDUCATION BY TYPE OF INSTITUTION AND TYPE OF SUPPORT**

	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Total, higher education.....	8,298	10,077	1,966	8,362
2-year institutions.....	2,730	3,576	638	2,850
Other undergraduate.....	4,060	4,899	977	4,156
Graduate and professional.....	1,508	1,602	351	1,356
Current operations.....	1,286	1,334	299	1,208
Facilities and equipment.....	375	244	61	362
Student support.....	6,558	8,406	1,592	6,710
Education personnel training.....	23	27	4	18
Educational research.....	56	66	10	64



The reduction in student support in 1977 (approximately \$1.7 billion below the 1976 level) is attributable principally to the decline in total veterans benefits as the eligible veterans population declines. Student support continues to be the predominant higher education expenditure. Outlays for 2- and 4-year institutions in 1977 decrease by approximately 18% below the 1976 level.

#### STUDENT SUPPORT

An estimated \$7.1 billion will be available for student support in 1977, 83% of which is for undergraduate student assistance. The GI bill will provide 41% of the total for all student assistance. The Office of Education will spend another 26% or about \$1.9 billion to support various grant and loan programs.

The Office of Education estimates that about 3.7 million student grants and loans will be made in 1977 under its programs. Students receiving aid under more than one program account for at least one-third of this total. The number of students aided is estimated to increase about 8% from 1976 to 1977 after allowances for program overlap are taken into account.

Table I-9. STUDENT SUPPORT BY AGENCY: FEDERAL OUTLAYS AND NUMBER OF STUDENTS

Agency	Outlays (millions)				Students (thousands)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Undergraduate:</b>								
Health, Education, and Welfare:								
Office of Education.....	1,466	2,060	294	1,695	2,403	3,677	1,118	2,872
Social Security Administration.....	818	916	260	1,067	496	515	507	577
Health agencies and other.....	43	30	15	8	30	17	17	2
Veterans Administration.....	3,079	4,121	726	2,912	1,569	1,952	894	1,329
Defense.....	192	189	60	185	54	55	58	57
Justice.....	35	38	18	18	89	88	47	39
Other.....	41	47	9	45	35	24	8	28
Subtotal, undergraduate.....	5,674	7,401	1,382	5,930	-----	-----	-----	-----
<b>Graduate:</b>								
Health, Education, and Welfare:								
National Institutes of Health.....	125	116	26	105	12	9	10	9
Office of Education.....	165	193	44	183	1,059	977	413	858
Other HEW.....	184	147	45	92	106	59	23	28
Veterans Administration.....	400	535	94	379	204	254	116	173
National Science Foundation.....	11	15	1	17	2	2	-----	2
Defense.....	340	367	101	405	418	475	143	534
Other.....	14	20	6	12	14	15	8	12
Subtotal, graduate.....	1,239	1,393	317	1,193	-----	-----	-----	-----
<b>Total <sup>1</sup>.....</b>	<b>6,913</b>	<b>8,794</b>	<b>1,699</b>	<b>7,123</b>	-----	-----	-----	-----

<sup>1</sup> Student totals not shown because some students receive awards under more than one program.

## OUTLAYS BY EDUCATIONAL SUBLEVEL

In order to provide data in a form comparable with earlier education special analyses, the following tables are provided which display program and agency outlays by education sublevels in 1975, 1976, the transition quarter, and 1977.

Table I-10. **FEDERAL OUTLAYS FOR ELEMENTARY AND SECONDARY EDUCATION BY AGENCY**

Sublevel, agency and program	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Early childhood:</b>				
Elementary and secondary.....	71	49	9	39
Education for the handicapped.....	28	33	10	39
Appalachian regional development.....	24	25	7	18
Child development.....	426	468	127	463
Other.....	17	17	4	18
Subtotal, early childhood.....	566	592	157	577
<b>Elementary and secondary:</b>				
Food and Nutrition Service.....	1,832	2,333	499	2,000
Defense.....	252	274	63	290
Office of Education:				
Financial Assistance for Elementary and Secondary Education Act.....				294
Educationally deprived children.....	1,932	1,790	395	1,598
Other ESEA.....	232	273	77	190
Federally affected areas.....	619	485	47	395
Emergency school aid.....	216	235	59	221
Education for the handicapped.....	60	92	22	51
Occupational and vocational education.....	374	399	60	364
Library resources and library consolidation.....	127	146	44	93
Other, Office of Education.....	32	28	7	39
Student grants (OASDI).....	213	238	68	277
Other HEW.....	148	150	43	148
Bureau of Indian Affairs.....	157	176	54	178
Community planning and development.....	45	30	2	9
Veterans readjustment.....	114	152	18	80
Other.....	235	224	144	139
Subtotal, elementary and secondary.....	6,588	7,025	1,602	6,366
<b>Supporting services:</b>				
Office of Education:				
Elementary and secondary education.....	42	70	20	58
Educational development.....	153	24	1	2
Education for the handicapped.....	63	73	19	84
National Institute of Education.....	34	29	5	31
National Science Foundation.....	20	17	7	14
Other.....	14	22	8	33
Subtotal supporting services.....	326	235	60	222
<b>Total.....</b>	<b>7,480</b>	<b>7,852</b>	<b>1,819</b>	<b>7,165</b>

Table I-11. FEDERAL OUTLAYS FOR HIGHER EDUCATION BY AGENCY

Sublevel, agency and program	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
2-year institutions:				
Office of Education:				
Basic opportunity grants.....	171	398	61	503
Other higher education.....	286	318	40	186
Occupational and vocational education.....	137	134	19	136
Student grants (OASDI).....	179	201	57	234
Health Resources Administration.....	71	65	18	45
Veterans readjustment.....	1,759	2,351	415	1,663
Other.....	127	109	28	83
Subtotal, 2-year institutions.....	2,730	3,576	638	2,850
Other undergraduate:				
Military service academies.....	239	266	67	276
Reserve Officers Training Corps.....	187	205	66	210
Research training (NIH).....	109	85	22	79
Office of Education:				
Basic opportunity grants.....	171	398	61	508
Work-study and supplementary grants.....	351	459	40	199
Guaranteed student loans.....	209	248	69	279
Other higher education.....	120	100	19	98
Disadvantaged students and developing institu- tions.....	182	160	35	152
Direct student loans.....	255	216	8	8
Student grants (OASDI).....	638	715	203	832
Special institutions.....	52	67	15	52
Office of the Secretary.....	61	59	20	59
Other Office of Education and HEW.....	38	24	3	11
Bureau of Indian Affairs.....	26	27	5	29
Veterans readjustment.....	1,320	1,766	311	1,249
National Science Foundation.....	21	24	3	25
Other.....	81	80	30	90
Subtotal, other undergraduate.....	4,060	4,899	977	4,156
Graduate and professional:				
Health Services Administration.....	11	17	5	14
Research training (NIH).....	177	173	28	151
ADAMHA.....	109	85	9	55
Health Resources Administration.....	482	402	115	395
Higher education.....	66	76	12	49
Student grants (OASDI).....	22	25	7	29
Special institutions.....	37	39	10	35
Veterans readjustment.....	400	535	94	378
Department of Defense.....	135	153	47	173
National Science Foundation.....	15	19	3	23
Other.....	54	78	21	54
Subtotal, graduate and professional.....	1,508	1,602	351	1,356
<b>Total.....</b>	<b>8,298</b>	<b>10,077</b>	<b>1,966</b>	<b>8,362</b>

Table I-12. FEDERAL OUTLAYS FOR ADULT EDUCATION AND OTHER ACTIVITIES BY AGENCY

Sublevel, agency and program	Outlays (millions)			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Adult basic and extension:</b>				
Agriculture extension service.....	219	228	57	219
Office of Education.....	106	105	24	109
Social Security Administration.....	67	75	21	88
Veterans readjustment.....	636	850	149	568
Department of Defense.....	59	72	20	81
Other.....	31	22	4	10
Subtotal, adult basic and extension.....	1,118	1,352	275	1,075
<b>Public and national library services:</b>				
Library of Congress.....	101	118	32	142
Library resources (Office of Education).....	62	55	10	27
Other.....	16	18	4	18
Subtotal, public and national library services.....	179	191	46	187
<b>Training of Federal, State, and local civilian employees:</b>				
Justice.....	12	10	3	4
Federal Aviation Administration.....	12	16	4	16
Commerce Department.....	9	10	3	15
Department of the Treasury.....	3	15	6	17
Other.....	23	23	5	21
Subtotal, training of public civilian employees.....	59	74	21	73
<b>Training of Federal military employees:</b>				
Defense.....	304	326	87	371
Coast Guard.....	22	23	6	24
Subtotal, training of Federal military employees.....	326	349	93	395
<b>Foreign educational activities:</b>				
State.....	31	33	6	34
International development assistance.....	58	80	25	84
Subtotal, foreign educational activities.....	89	113	31	118
<b>Other:</b>				
Office of Education, salaries and expenses.....	96	109	33	113
Other Office of Education.....	187	214	48	228
National Institute of Education.....	42	36	7	52
Smithsonian Institution.....	47	55	20	54
Corporation for Public Broadcasting.....	62	70	18	70
National Foundation on the Arts and Humanities.....	32	53	17	63
Public service jobs.....	126	456	86	175
Other.....	75	116	22	62
Subtotal, other.....	667	1,109	251	817
<b>Total.....</b>	<b>2,438</b>	<b>3,188</b>	<b>717</b>	<b>2,665</b>

Table I-13. FEDERAL AID FOR EDUCATION BY AGENCY

Agency	Outlays (millions)				Budget authority (million) 1977
	1975 actual	1976 estimate	TQ estimate	1977 estimate	
Legislative branch:					
Library of Congress .....	101	118	32	142	145
Funds appropriated to the President:					
International Development Assistance .....	60	81	25	85	140
Appalachian Regional Commission .....	64	65	16	51	41
Agriculture .....	2,180	2,662	676	2,267	2,264
Commerce .....	13	16	5	19	17
Defense—Military .....	1,217	1,315	351	1,409	1,399
Defense—Civil .....	1	—1	2	—2	17
Health, Education, and Welfare:					
Office of Education .....	6,419	6,753	1,262	6,118	6,794
Other HEW .....	3,086	3,150	839	3,217	2,732
Housing and Urban Development .....	41	48	—4	—15	-----
Interior .....	221	241	68	246	242
Justice .....	60	63	26	32	13
Labor .....	126	456	86	175	60
State .....	39	41	9	44	45
Transportation .....	37	41	10	41	44
Treasury .....	59	88	28	96	81
Energy Research Development Administration ..	6	8	2	6	6
Environmental Protection Agency .....	4	7	2	6	5
General Services Administration .....	13	14	3	14	14
National Aeronautics and Space Administration	5	4	1	4	4
Veterans Administration .....	4,228	5,654	987	3,938	3,861
Other independent agencies:					
ACTION .....	8	7	2	5	4
Corporation for Public Broadcasting .....	62	70	18	70	70
National Foundation on the Arts and Hu- manities .....	56	92	22	98	108
National Science Foundation .....	60	65	13	68	71
Smithsonian Institution .....	47	55	20	54	55
United States Information Agency .....	3	4	1	4	4
<b>Total .....</b>	<b>18,216</b>	<b>21,117</b>	<b>4,502</b>	<b>18,192</b>	<b>18,236</b>

## SPECIAL ANALYSIS J

### FEDERAL TRAINING AND EMPLOYMENT PROGRAMS

#### SCOPE OF THIS ANALYSIS

Federal training and employment programs aim to increase the skills and employment opportunities of individuals already in the work force and of persons who desire to join the work force but lack vocational preparation or face other employment barriers. The programs provide skill training, rehabilitation, transitional employment experience, job placement assistance, and related child care and support services.

These programs are distinguished from regular educational programs by their operating characteristics. Generally, they: (1) operate outside the normal educational process, (2) provide skill training for nonprofessional jobs, (3) provide services for less than 1 year, and (4) target on the disadvantaged or unemployed.

This analysis covers all programs classified as training and employment services in the functional classification of the budget. It also includes some programs directed toward similar objectives from other functional classifications such as income security, and veterans benefits and services.

Outlays in 1977 are expected to be \$7.2 billion, about \$1.8 billion less than 1976. The decline is primarily due to the phaseout of temporary public service jobs as the economy continues to improve, plus the effect in 1976 of start-up delays on 1975 spending.

#### TAX EXPENDITURES

Certain provisions of the personal and corporate income tax that are designed to achieve particular economic and social objectives give rise to revenue losses that are called tax expenditures. This concept, and the elements counted under it for the budget as a whole, are discussed more fully in Special Analysis F. Two tax expenditures are specifically related to employment and training. Since they do not result in obligation, workload and outlay figures comparable to the more traditional programs, amounts for each are noted here but not included in the tables in the body of the special analysis.

*Child and dependent care expenses.*—Child and dependent care expenses incurred to permit the taxpayer and spouse to work may be taken as an itemized deduction up to a maximum of \$400 per month. The deduction is reduced by 50 cents for each dollar of adjusted gross income in excess of a ceiling which has been \$18,000 per year but increases to \$35,000 beginning in calendar 1976.

*WIN/AFDC tax credit.*—Employers may take an income tax credit equal to 20% of the first-year wages and salaries of employees placed in employment under the work incentive program. Beyond \$25,000 a year, the credit is allowable only at half this rate. The Department of Labor estimates that credits for some 26,000 WIN

recipients were taken in 1975. The Tax Reduction Act of 1975 temporarily extended a similar credit to all AFDC recipients and made the credit applicable to private employers of domestics. However, in this case the maximum amount of wages on which credit may be taken is \$5 thousand. Estimates of the tax receipts lost due to these provisions are:

(In millions of dollars)

	1975 <i>estimate</i>	1976 <i>estimate</i>	1977 <i>estimate</i>
Child and dependent care.....	295	330	420
WIN/AFDC.....	10	10	10

## PROGRAM DEVELOPMENTS

### BLOCK GRANTS

The use of block grants for appropriate Federal programs provides needed project design and management flexibility at State and local government levels. It also reduces the reporting burden of those governments so that they collect and maintain the detailed data which is required for responsible program management, but only submit necessary summary data to the national level. In this way Federal field staff retain access to the data but unnecessary paperwork is eliminated. For the purposes of this special analysis, therefore, block grant type program data is more frequently available at the "program" level, than at the "approach" level as in prior years.

### SUPPORTIVE SERVICES

Many programs provide supportive services (for example, health care, child care, transportation, basic or remedial education, family planning, legal services, counseling, testing), allowances, and subsidized wages to participants. While these may form a large part of program outlays, they are intended to facilitate the primary activity (training, placement, public service jobs, etc.). Therefore, these items are not broken out into separate approaches, as child care was, for example, in previous analyses. The applicable costs for support services for selected programs is displayed in table J-8.

## DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

1976 is the final year for outlays for both the model cities multi-purpose categorical grants and the Community development training and urban fellowship (CDTUF) grants. Outlays begin in 1976 for employment and training activities under the Housing and Community Development Act of 1974. This block grant includes funding of the same approaches as the model cities and CDTUF grants (for example, on-the-job training, institutional, and work support). The 1976 and 1977 estimates are derived from a preliminary review of proposed usage of program funds by a limited sample of program recipients.



### FINANCIAL ASSISTANCE FOR COMMUNITY SERVICES

Legislation to provide financial assistance for community services is proposed which will incorporate social services under title XX of the Social Security Act, together with State and local training for public assistance, in a block grant to the State.

### TEMPORARY EMPLOYMENT ASSISTANCE

Temporary employment assistance grants were made in 1975 and 1976 to States, localities and Indian tribes to hire about 260,000 unemployed workers in temporary public service jobs through 1976. Additional funds are proposed in 1976 (to be spent in 1976, the transition quarter, and 1977) to permit continued support of that portion of those jobs which are in the areas with unemployment rates over 6.5%. This program will phase out completely by the end of 1977.

### JOB OPPORTUNITIES PROGRAM

This program was one of several temporary aids to the unemployed enacted as part of the Emergency Jobs and Unemployment Assistance Act of 1974 (Public Law 93-567). Funds were appropriated to the Department of Commerce which reviewed and provided financial assistance for project proposals from other Federal agencies and regional commissions. Projects were new or accelerated activity which were expected to create new jobs rapidly under existing agency authorities. Although a broad range of services, construction and other activity was financed, the principal purpose of all projects was to create employment. For the purposes of this special analysis, therefore, the entire activity is classified under the "public service employment" approach. The projects selected are scheduled to be completed by the end of 1977 in order to provide jobs while they are most needed. However, past experience with similar projects would indicate that a large number of projects may continue into 1978 or later. Some 100,000 job opportunities of varying duration are expected to be financed by the program. Only obligation and outlay data are included in the tables in this Special Analysis.

### WORK INCENTIVES (WIN) PROGRAM

Legislation is proposed for 1977 which will realine the WIN program to focus greater attention on job placement for all employable AFDC applicants. WIN will no longer finance its own training program. WIN participants may utilize work and training opportunities under the Comprehensive Employment and Training Act.

### WORK/STUDY PROGRAM FOR VOCATIONAL EDUCATION STUDENTS

This activity is included in a block grant funding proposal to commence in 1977. The program's 1977 data are therefore based on estimates of State allocation plans for 1977.

### PROGRAM APPROACHES

Training and employment programs are classified into major approaches as follows:

- On-the-job training—provides training for regular job vacancies generally by reimbursing employers for the added costs of hiring and training disadvantaged individuals. Employers are expected to retain the individual once reimbursement ends.
- Institutional training—provides instruction in vocational skills and job related remedial education in a classroom setting.
- Vocational rehabilitation—helps individuals overcome physical and mental handicaps to employment, through skill training, counseling, allowances, and supportive services.
- Work experience—provides temporary employment experience, generally part time, primarily for youth and older workers.
- Public service employment—provides employment, generally intended to be transitional, in public sector jobs for individuals who need to acquire work discipline and skills to compete for nonsubsidized jobs, or who are temporarily unable to find regular employment.
- Labor market services—encompasses services to assist individuals in obtaining employment, including (a) job placement assistance, (b) collection and analysis of labor market information, (c) equal employment opportunity activities (excluding individual agency civil rights activities other than contract compliance—see Special Analysis M), and (d) other miscellaneous activities.
- Federal program support—includes research, development, and evaluation activities as well as planning, technical assistance, and program direction.

Some programs can be classified entirely under one approach. Others, such as the Comprehensive Employment and Training Act programs (Employment and training assistance account—ETA) offer a range of work and training services, and thus are divided among several approaches.

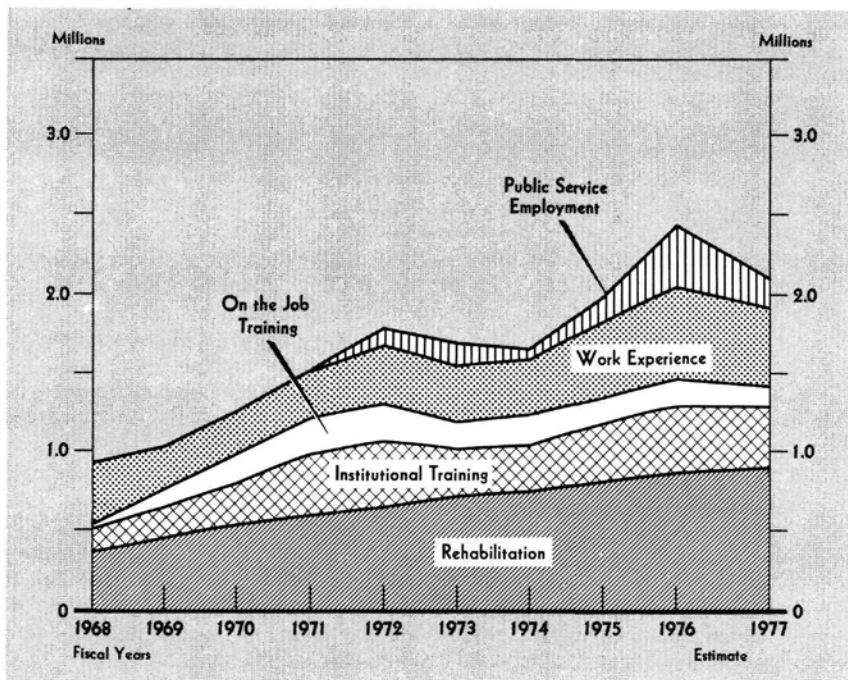
Estimates by approach for State and local programs under ETA are based on projections from program operating plans submitted by prime sponsors.

### PROGRAM MEASURES

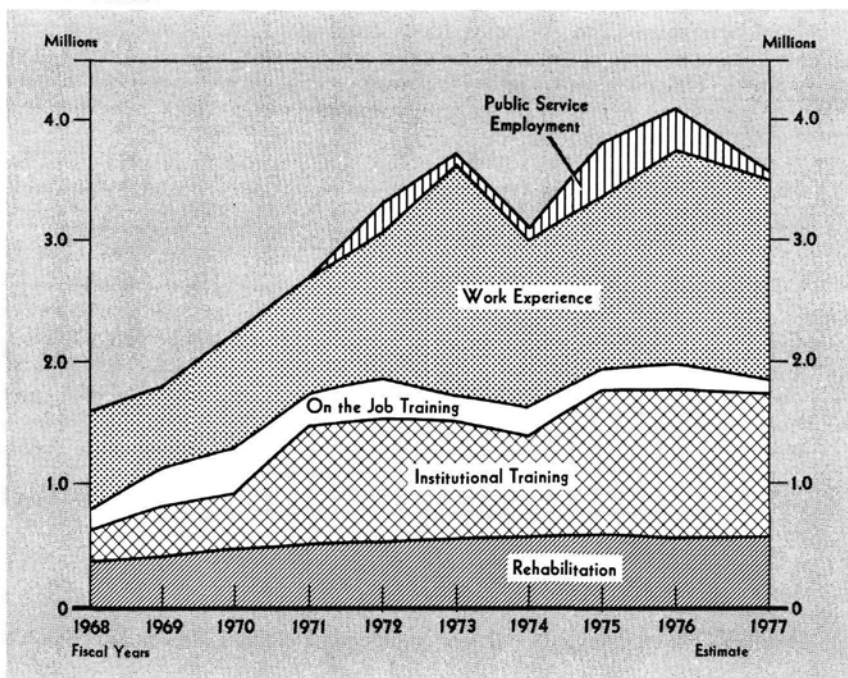
The three principal measures used to summarize the level of program services are:

- Years of service*, which measures the average year-round enrollment;
- New enrollees*, which counts the number of individuals entering the activity during the year; and
- Outlays*, which measures the level of spending during the year.

## Years of Service



## New Enrollees



## Outlays

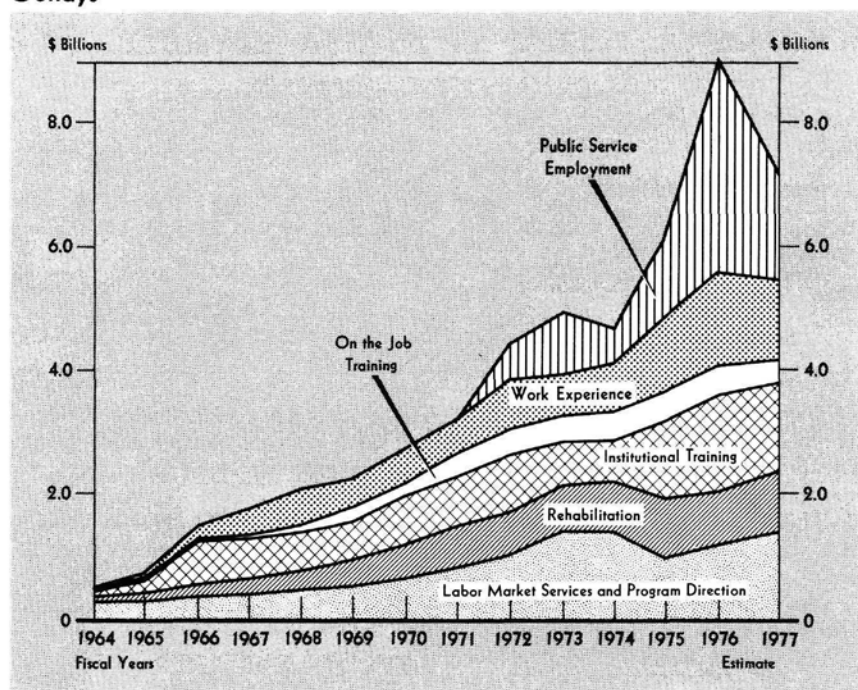


Table J-1. DISTRIBUTION OF APPROACH CATEGORIES (in percent)

	Outlays			Years of service			New enrollees		
	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.
Public service employment	20	38	25	8	15	9	12	8	2
Work experience	20	16	18	25	24	24	37	43	44
On-the-job training	8	6	5	8	7	7	5	5	4
Institutional training	21	17	20	19	18	19	31	30	34
Rehabilitation	16	10	13	40	36	41	15	14	16
Labor market services	15	13	19						

## PROGRAMS BY APPROACH

The following tables show activity of major programs by approach. Narratives with each table reference only significant changes and include brief program descriptions if necessary. More complete program descriptions may be found under the appropriate account title in the Budget Appendix.

**On-the-job training (OJT).**—Estimates for veterans OJT begin to decline in 1977 in proportion to the number of eligible veterans.

Table J-2. ON-THE-JOB TRAINING (outlays in millions, individuals in thousands)

Program	Outlays			Individuals served					
				Years of service			New enrollees		
	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.
Employment and training assistance.....	119	161	145	26	36	32	82	90	89
WIN.....	81	94	0	10	9	0	25	27	0
On-the-job training for veterans.....	263	263	215	119	118	102	66	73	28
Other.....	15	15	9	3	3	2	23	18	3
<b>Total.....</b>	<b>478</b>	<b>532</b>	<b>369</b>	<b>158</b>	<b>165</b>	<b>136</b>	<b>196</b>	<b>208</b>	<b>120</b>

**Institutional training.**—Included in this approach under ETA is the Job Corps, a specialized program conducted in a residential setting, for youth aged 14 to 21 for which an outlay of \$175 million is expected in 1977.

The entry for Social services on this table and hereafter is for programs operated by State agencies for public assistance recipients, but is exclusive of service provided by the WIN program.

Other institutional training includes programs for Indians and individuals in Federal prisons.

Table J-3. INSTITUTIONAL TRAINING (outlays in millions, individuals in thousands)

Program	Outlays			Individuals served					
				Years of service			New enrollees		
	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.
Employment and training assistance.....	635	804	744	127	166	152	360	369	367
WIN.....	55	54	0	15	12	0	44	35	0
Social services training.....	548	632	672	223	239	238	739	794	791
Other.....	37	39	34	9	12	14	24	23	19
<b>Total.....</b>	<b>1,274</b>	<b>1,528</b>	<b>1,450</b>	<b>374</b>	<b>428</b>	<b>404</b>	<b>1,166</b>	<b>1,222</b>	<b>1,178</b>

Table J-4. VOCATIONAL REHABILITATION  
(outlays in millions, individuals in thousands)

Program	Outlays			Individuals served					
				Years of service			New enrollees		
	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.
HEW vocational rehabilitation.....	885	807	853	788	850	860	565	540	543
Veterans vocational rehabilitation.....	82	85	83	14	11	11	14	11	10
<b>Total.....</b>	<b>967</b>	<b>892</b>	<b>936</b>	<b>802</b>	<b>861</b>	<b>871</b>	<b>579</b>	<b>552</b>	<b>554</b>

**Work experience.**—Estimates for ETA include in-school, out-of-school and summer youth, as well as non-youth activity.

Table J-5. **WORK EXPERIENCE** (outlays in millions, individuals in thousands)

Program	Individuals served								
	Outlays			Years of service			New enrollees		
	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.
Employment and training assistance.....	1,097	1,363	1,204	428	514	447	1,321	1,685	1,475
Federal agency youth programs.....	75	70	82	22	18	20	53	36	48
WIN.....	8	10	---	3	3	---	17	16	---
Other.....	25	61	14	43	58	43	25	26	17
<b>Total.....</b>	<b>1,205</b>	<b>1,503</b>	<b>1,301</b>	<b>496</b>	<b>593</b>	<b>511</b>	<b>1,415</b>	<b>1,763</b>	<b>1,540</b>

**Public service employment.**—ETA includes authority for public service employment under regular prime sponsor grants (title I), special grants in areas with an unemployment rate of 6.5% or more for 3 consecutive months (title II) and national programs (title III). The entry for "EEA" is the final spend out of the 1973 appropriation for the expired Emergency Employment Act. Shown separately on the line "ETA/EEA" is the effect of a one-time appropriation enacted at the end of 1974 under CETA transitional authority to extend financing of projects originally funded by the expired Emergency Employment Act.

Table J-6. **PUBLIC SERVICE EMPLOYMENT**  
(Outlays in millions, individuals in thousands)

Program	Individuals Served								
	Outlays			Years of service			New enrollees		
	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.
Employment and Training assistance.....	601	784	507	69	90	58	244	58	79
EEA.....	53	---	---	8	---	---	---	---	---
ETA/EEA.....	202	45	---	28	6	---	53	---	---
Temporary employment assistance.....	319	2,331	1,065	44	274	125	158	271	---
WIN.....	66	83	---	6	5	---	7	12	---
Job Opportunities program.....	22	175	222	---	---	---	---	---	---
<b>Total.....</b>	<b>1,264</b>	<b>3,418</b>	<b>1,794</b>	<b>156</b>	<b>376</b>	<b>184</b>	<b>461</b>	<b>342</b>	<b>79</b>

**Labor market services.**—*Job placement assistance.*—The State Employment Service (ES), is the major federally financed deliverer of job placement assistance for the general labor force, as well as the disadvantaged. In cooperation with welfare agencies, ES also provides placement services to WIN and food stamp recipients. Other specialized placement assistance is provided by the Veterans Administration and the Bureau of Indian Affairs.

*Labor market information.*—Activities are those of the Department of Labor's Employment and Training Administration and Bureau of Labor Statistics.

*Equal employment opportunity.*—Includes the Equal Employment Opportunity Commission, the Employment Standards Administration of the Department of Labor (including the Office of Federal Contract Compliance Programs (OFCCP), and the equal pay and age discrimination programs), and contract compliance activities within other agencies conducted under OFCCP aegis.

**Table J-7. JOB PLACEMENT ASSISTANCE, LABOR MARKET INFORMATION AND EQUAL EMPLOYMENT OPPORTUNITY (in millions of dollars)**

	Outlays		
	1975 actual	1976 esti- mate	1977 esti- mate
Job placement assistance:			
Employment service.....	415	492	527
Work incentive program.....	66	75	243
Food stamp recipient services.....	19	28	29
Other placement assistance.....	46	48	50
Labor market information.....	36	51	57
Equal employment opportunity.....	94	108	116
<b>Total</b> .....	<b>677</b>	<b>801</b>	<b>1,022</b>

**Table J-8. PERCENT OF PROGRAM COSTS USED FOR SUPPORTIVE SERVICES FOR SELECTED PROGRAMS**

	1975 actual	1976 estimate	1977 estimate
CETA Title I.....	12	12	12
CETA Title II.....	1	1	1
Work incentive program.....	33	29	29
HEW Vocational rehabilitation.....	59	59	59
Veterans programs (VA).....	5	5	5
Indian programs (Interior).....	16	16	16

*Federal program support.*—Activities shown are funded primarily by the Department of Labor. Program direction includes costs for national program planning and administration.

**Table J-9. FEDERAL PROGRAM SUPPORT (in millions of dollars)**

Program	Outlays		
	1975 actual	1976 estimate	1977 estimate
Research, development, and evaluation.....	19	19	19
Program direction.....	112	126	123
<b>Total</b> .....	<b>131</b>	<b>145</b>	<b>143</b>

**Unit costs by approach.**—Costs include the various labor market and supportive services usually provided to supplement the indicated training or work program, as well as administrative costs. Cost changes frequently reflect minimum wage increases and other general economic factors rather than substantive program change. All CETA work experience, except summer youth, is reported under “post-school.”

Table J-10. UNITS COSTS BY APPROACH, 1973 AND 1975

	Average duration of enrollment (years)		Year of service unit cost (dollars)		Participant unit cost (dollars)	
	1973	1975	1973	1975	1973	1975
On-the-job training.....	0.72	0.77	2,625	3,102	1,885	2,376
Institutional training.....	.28	.30	2,669	3,934	742	1,161
Vocational rehabilitation.....	1.25	1.32	1,091	1,337	1,364	1,759
In-school work experience.....	.64	.29	1,275	2,003	815	584
Postschool work experience.....	.28	.36	2,290	2,903	645	1,033
Public service employment.....	.92	.70	7,963	8,220	7,332	5,793

#### IMPACT OF EMPLOYMENT AND TRAINING PROGRAMS

There are significant limitations to the ability to discern the impact that employment and training programs exert on national economic conditions, especially since impact on total employment conditions cannot yet be adequately measured or controlled. This constrains assumptions of the value of program change as a means of altering basic economic conditions. For example, the potential impact of one of the largest approaches, public service employment, is diluted by substitution effects. Analysis indicates that a substantial portion of funds for programs financing transitional public service employment do not create new jobs. Instead, sponsors tend to substitute Federal funding for jobs that would otherwise be funded by the States and localities. The degree of substitution tends to increase substantially the longer a public jobs program is in place.

In other programs, services are oriented first toward overcoming individual barriers to employment, not to affecting overall labor market conditions.

In addition, experience has shown that it is extremely difficult from the national level to precisely design programs that can target effects properly on the particular nature of problems for local workers affected by discrete economic factors. The goal of decentralized block grant programs is to enable more direct response to local needs in accord with broad national direction.



Evaluations of training and employment programs have often been flawed by inadequate methodology, insufficient scale, and other problems that have limited their utility for judging national program impact. The Department of Labor is undertaking a large-scale, long-term evaluation of the main training and employment programs, titles I and II of the Comprehensive Employment and Training Act. This study should, for the first time, provide meaningful information on the impact of these programs on individual earnings and employment. It will also systematically evaluate on a national basis the performance of the CETA administrative mechanism. Initial useful data should begin to be available in 1 to 2 years.

**People served.**—Most Federal employment and training programs focus on low-income individuals and others with severe barriers to employment as they are least likely to be able to improve their employment opportunities without assistance. Changes over time in characteristics of participants frequently result from the addition of new programs or changes in the relative amount of resources among programs rather than shifts within the population served by individual programs. For example, a decrease in the proportion of those with less than a high school education is largely reflective of increases in the proportion of program resources for public service jobs programs, which include jobs with relatively high entry standards.

Training and employment programs generally target by statute on the poor, the unemployed, the less educated, members of minorities, youth, and welfare recipients.

Table J-11. CHARACTERISTICS OF UNEMPLOYED WORKERS, ADULT POVERTY POPULATION AND PROGRAM PARTICIPANTS (in percent)

	Unemployed workers civilian noninstitutional			Poverty population (age 14-64) civilian noninstitutional			Manpower program participants (age 14 and above) <sup>1</sup>		
	1973	1974	1975	1973	1974	1975	1973	1974	1975
Age 21 or less.....	39	39	33	31	32	32	31	31	29
Male.....	52	53	56	39	39	39	44	44	42
Less than high school education..	48	47	44	66	NA	64	44	43	38
Poor.....	21	20	16	100	100	100	72	67	71
Welfare recipients.....	NA	NA	NA	27	22	26	45	42	42
Minority <sup>2</sup> .....	21	20	19	32	31	30	35	35	40

<sup>1</sup> Data excludes estimates for in-school and summer student activity.

<sup>2</sup> Data for poverty population does not include Spanish-speaking.

Table J-12. CHARACTERISTICS OF ENROLLEES BY PROGRAM, 1973, 1974, 1975 (in percent)

	Poor			21 or younger			Less than high school education		
	1973	1974	1975	1973	1974	1975	1973	1974	1975
CETA title I.....	NA	93	77	NA	84	62	NA	81	61
CETA title II.....	NA	NA	48	NA	NA	24	NA	NA	28
TEA.....	NA	NA	44	NA	NA	21	NA	NA	27
Job Corps.....	100	100	100	100	100	100	91	90	89
WIN.....	87	90	100	18	16	19	58	60	59
HEW vocational rehabilitation...	60	62	67	25	25	27	45	43	43
Indian OJT.....	100	100	100	10	10	20	65	65	65
Veterans OJT.....	15	15	15	6	6	6	15	15	15

	Male			Minority race			Welfare recipients		
	1973	1974	1975	1973	1974	1975	1973	1974	1975
CETA title I.....	NA	55	54	NA	53	56	NA	31	27
CETA title II.....	NA	NA	66	NA	NA	43	NA	NA	16
TEA.....	NA	NA	70	NA	NA	39	NA	NA	14
Job Corps.....	74	74	75	63	63	71	40	37	35
WIN.....	30	28	25	48	44	46	100	100	100
HEW vocational rehabilitation...	54	54	57	22	22	24	16	17	19
Indian OJT.....	49	49	45	100	100	100	25	25	25
Veterans OJT.....	99	99	99	8	8	8	-----	-----	-----

NA—Not available.

## PROGRAM ACCOMPLISHMENTS IN 1975

- 346,700 individuals placed in jobs through ETA training programs.
- 170,600 WIN participants found jobs.
- Assistance provided to programs serving 373,000 apprentices.
- 2.7 million individuals placed in 4-day or longer jobs by the Employment Services.
- 324,000 persons rehabilitated by HEW vocational rehabilitation programs including 115,700 who were severely disabled.

## FUNDS BY AGENCY

The following table shows obligations and outlays by administering agency and major program or account. Two agencies—the Departments of Labor, and Health, Education, and Welfare will account for about 89% of all outlays in 1976.

Table J-13. FEDERAL FUNDS FOR TRAINING AND EMPLOYMENT PROGRAMS BY ADMINISTERING AGENCY (in millions of dollars)

Agency and program	Obligations				Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Department of Commerce: Job opportunities program.....	125	375	-----	-----	22	175	80	222
Community Services Administration.....	29	29	7	31	28	30	7	31
Department of Health, Education, and Welfare:								
Social services.....	550	632	78	672	548	632	78	672
Vocational rehabilitation.....	842	841	217	871	885	807	165	853
High school work study.....	10	10	3	10	8	9	3	9
CETA support.....	-----	2	-----	2	-----	2	-----	2
Subtotal, HEW.....	1,401	1,485	298	1,554	1,441	1,450	247	1,536
Department of Housing and Urban Development.....	27	20	4	23	34	33	5	19
Department of Justice: Prisoner training.....	5	6	2	6	5	6	2	6
Department of the Interior: Indian programs.....	44	47	14	49	43	47	14	49
Department of Labor:								
Employment and training assistance.....	3,095	2,995	599	2,794	2,803	3,348	1,003	2,795
Emergency employment assistance.....	-----	-----	-----	-----	53	-----	-----	-----
Temporary employment assistance.....	872	3,328	-----	-----	319	2,331	485	1,065

Work incentive program.....	210	400	80	260	314	385	80	260
Food stamp recipient services.....	19	28	7	29	19	28	7	29
Older Americans community service employment.....	12	30			9	43		
Employment service.....	477	510	133	546	429	510	133	546
Labor market information.....	17	25	6	27	17	25	6	27
Equal employment opportunity.....	9	12	3	13	9	12	3	13
Program administration.....	85	88	22	88	88	92	22	92
Subtotal, Labor.....	<u>4,797</u>	<u>7,415</u>	<u>850</u>	<u>3,758</u>	<u>4,060</u>	<u>6,773</u>	<u>1,740</u>	<u>4,826</u>
Veterans Administration:								
On-the-job training for veterans.....	257	272	62	211	263	263	61	215
Veterans vocational rehabilitation.....	80	88	25	82	82	85	24	83
Veterans assistance centers.....	7	8	2	8	7	8	2	7
Subtotal, VA.....	<u>345</u>	<u>367</u>	<u>88</u>	<u>300</u>	<u>352</u>	<u>355</u>	<u>87</u>	<u>305</u>
Equal Employment Opportunity Commission: Equal employment opportunity..	55	65	19	70	56	63	18	68
Other Federal agencies:								
Disadvantaged youth programs.....	75	70	52	82	75	70	52	82
Federal contract compliance.....	29	33	8	36	28	32	8	35
Total.....	<u>6,931</u>	<u>9,911</u>	<u>1,343</u>	<u>5,909</u>	<u>6,144</u>	<u>9,034</u>	<u>2,258</u>	<u>7,180</u>

**SPECIAL ANALYSIS K**  
**HEALTH SPECIAL ANALYSIS**  
**FEDERAL HEALTH PROGRAMS**

**Overview.**—Federal spending for health programs will total almost \$46 billion in 1977, an increase of \$3.5 billion or 8.1% over 1976. Federal health outlays continue to assume a growing share of the Federal budget, as shown in Table K-1.

Table K-1. **FEDERAL OUTLAYS FOR HEALTH COMPARED TO THE TOTAL FEDERAL BUDGET** (dollars in billions)

	Actual					Estimated		
	1971	1972	1973	1974	1975	1976	TQ	1977
Total Federal outlays.....	\$211.4	\$231.9	\$246.5	\$268.4	\$324.6	\$373.5	\$98.0	\$394.2
Federal health outlays.....	\$20.2	\$24.5	\$26.0	\$29.2	\$36.8	\$42.5	\$10.9	\$45.9
Health as percent of total outlays.....	9.6	10.6	10.6	10.9	11.3	11.4	11.1	11.7

Table K-2 summarizes and distributes Federal health outlays by major category for 1975 through 1977. Expenditures for financing or providing health services, primarily through medicare and the proposed Financial Assistance for Health Care program, account for \$38.8 billion in 1977.

Table K-2. **FEDERAL OUTLAYS FOR MEDICAL AND HEALTH-RELATED ACTIVITIES BY CATEGORY** (in millions of dollars)

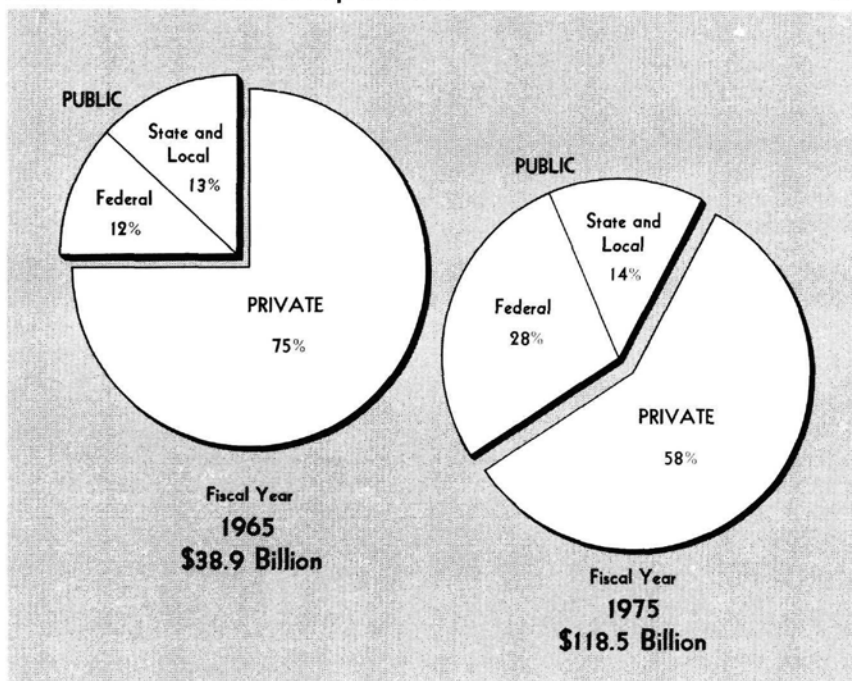
	Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Development of health resources, total.....	5, 108	5, 721	1, 356	5, 983
Health research.....	2, 459	2, 826	711	3, 048
Training and education.....	1, 384	1, 477	322	1, 217
Construction.....	949	1, 082	240	1, 309
Health planning and statistics.....	316	336	83	409
Provision of hospital and medical services, total.....	30, 450	35, 416	9, 169	38, 681
Direct Federal services.....	5, 567	6, 046	1, 490	6, 285
Indirect services.....	24, 883	29, 370	7, 679	32, 396
Prevention and control of health problems, total.....	1, 232	1, 349	337	1, 270
<b>Total, health programs.....</b>	<b>36, 790</b>	<b>42, 486</b>	<b>10, 862</b>	<b>45, 935</b>

## NATIONAL HEALTH CARE TRENDS

Over the last quarter century, one of the most prominent trends in the health sector has been the increase in both private and public spending for health. Total expenditures for health have grown from \$12 billion in 1950 to \$119 billion in 1975, or from \$78 to \$547 per capita. Spending by Federal, State, and local governments has also increased dramatically during this period—from \$3 billion to \$50 billion, or from 26% to 42% of the total—primarily due to the enactment of the medicare and medicaid programs in 1965. Figure K-3 illustrates both the increase in public financing and the increase in total expenditures from 1965 to 1975.

## Public and Private Health Expenditures

K-3

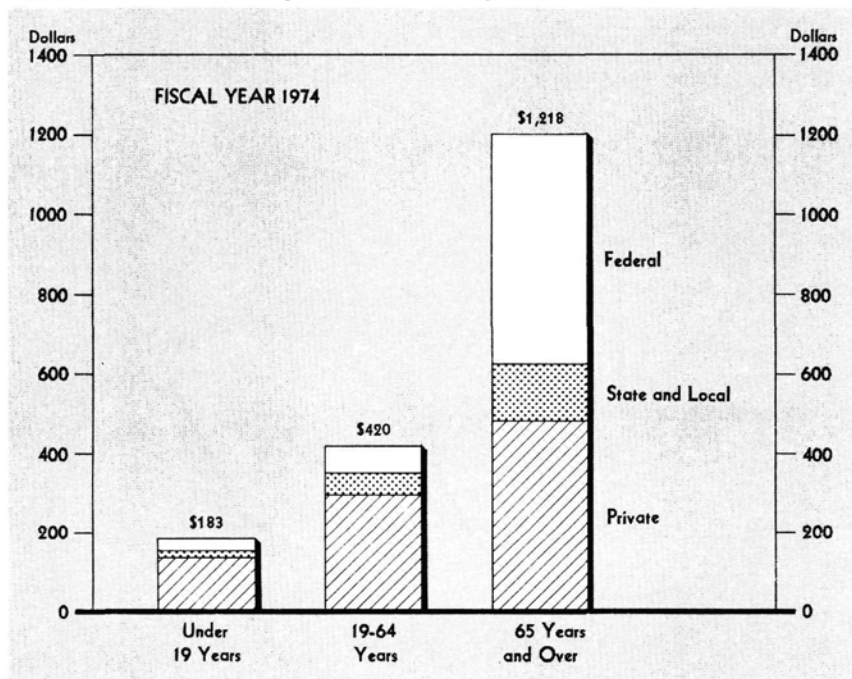


In the 5 years from 1970 to 1975, spending for health services and supplies has grown from \$64 billion—6.7% of the gross national product (GNP)—to \$111 billion—7.8% of the GNP. Per capita health services expenditures rose from \$309 to \$514 during the same period. Annually these sums purchase over 1 billion physician visits by the U.S. civilian population, approximately 33 million hospital stays averaging over 7 days, 2.5 billion drug prescriptions, and other health services.

Factors which contribute to this growth in spending include an increased demand for health services by the public, payment mechanisms that reduce out-of-pocket expenditures by individual consumers, changes in medical therapies, and expansion of health resources. Figure K-4 depicts health care expenditures per capita for different age groups and financing sources in 1974.

Personal Health Care Expenditures Per Capita

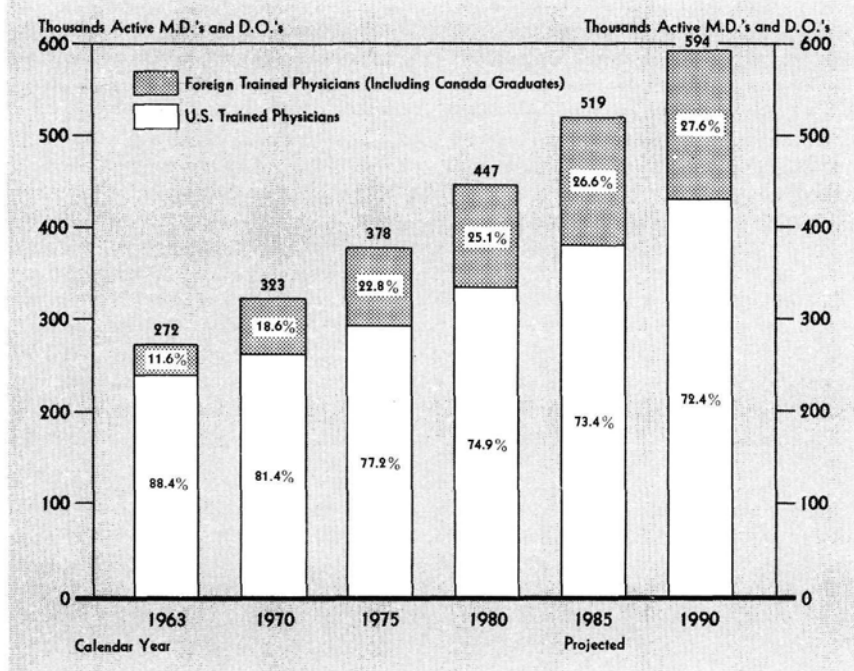
K-4



A second significant trend in the health sector is the rapid growth in health resources, such as the supply of health professionals, biomedical researchers, hospitals, and other health facilities. The Nation's supply of hospital beds, for example, has expanded from 730,000 in 1963 to 912,000 in 1974, or from 3.9 per 1,000 population to 5.0 per 1,000 population. In addition, the number of active physicians has risen from 272,000 in 1963 to an estimated 378,000 in 1975 (Chart K-5). During the same time, the number of active registered nurses has grown from 582,000 to about 906,000. Presently, more than 4.4 million persons are employed in health-related careers—about 4% of the civilian labor force. Health workers comprise the third largest occupational grouping in the United States.

## Active Physicians, Domestic and Foreign Trained

K-5

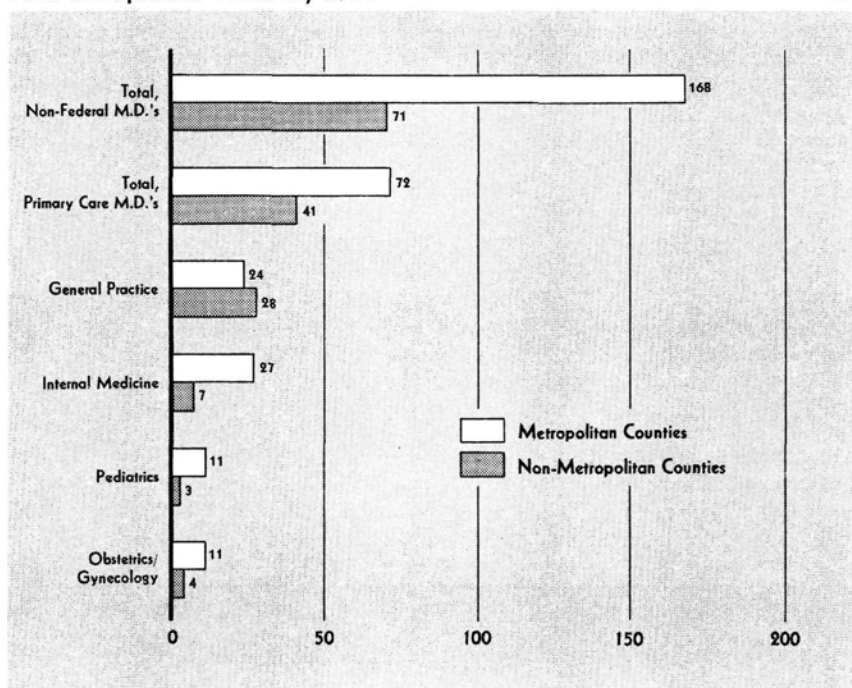


Physicians and other health professionals in the United States are not evenly distributed geographically. Among the States, the number of active, non-Federal physicians per 100,000 population in 1973 ranged from 218 in New York and 201 in Massachusetts, to 79 in Mississippi and 73 in South Dakota. Chart K-6 shows the tendency for physicians to locate in metropolitan rather than rural areas. Approximately one quarter of the Nation's 25,000 psychiatrists, for example, practice in the New York, Boston, and Washington, D.C., metropolitan areas. General practitioners are found in somewhat larger proportions in nonmetropolitan counties.



### Active M.D.'s Per 100,000 Population in Metropolitan and Non-metropolitan Counties, 1973

K-6



### HEALTH STATUS

There has been a significant decrease in the death rate in the United States since the beginning of the twentieth century. This decrease has taken place during a period of significant economic and social change, as well as advances in health research and medical practice. Knowledge about the causes, prevention, and treatment of certain infectious diseases has led to their virtual elimination. These advances have lengthened life for many persons. On the other hand, the degenerative processes of aging have resulted in the increased prevalence of chronic diseases, which are generally more difficult and costly to treat than acute and infectious diseases.

Table K-7. SELECTED HEALTH STATUS INDICATORS (annual rates)

	1950	1960	1970	1974
Birth rate (per 1,000 population).....	24.1	23.7	18.4	15.0
Death rate (per 1,000 population).....	9.6	9.5	9.5	9.1
Average life expectancy at birth in years.....	68.2	69.7	70.9	72.0
Infant mortality rate (deaths under 1 year of age per 1,000 live births).....	29.2	26.0	20.0	16.5
Leading causes of death (per 100,000 population):				
Diseases of the heart.....	355.5	369.0	362.0	353.1
Cancer.....	139.8	149.2	162.8	169.5
Cerebrovascular disease.....	104.0	108.0	101.9	97.2
Accidents.....	60.6	52.3	56.4	48.9
Tuberculosis, all forms.....	22.5	6.1	2.6	1.8
Kidney diseases, all forms.....	20.8	11.9	8.4	6.4
Diabetes.....	16.2	16.7	18.9	17.4
Cirrhosis of liver.....	9.2	11.3	15.5	16.0

Despite the decline in the U.S. death rate in the twentieth century, the recent growth in U.S. health resources, and the highest per capita health expenditures in the world, the health status of Americans, as measured by conventional standards, does not appear to be much different from that of other advanced industrialized nations. Average U.S. life expectancy rates, for example, are not significantly better than those of a number of Western European countries and Canada.

Table K-8. LIFE EXPECTANCY BY SEX AT SELECTED AGES, BY SELECTED COUNTRIES: 1970

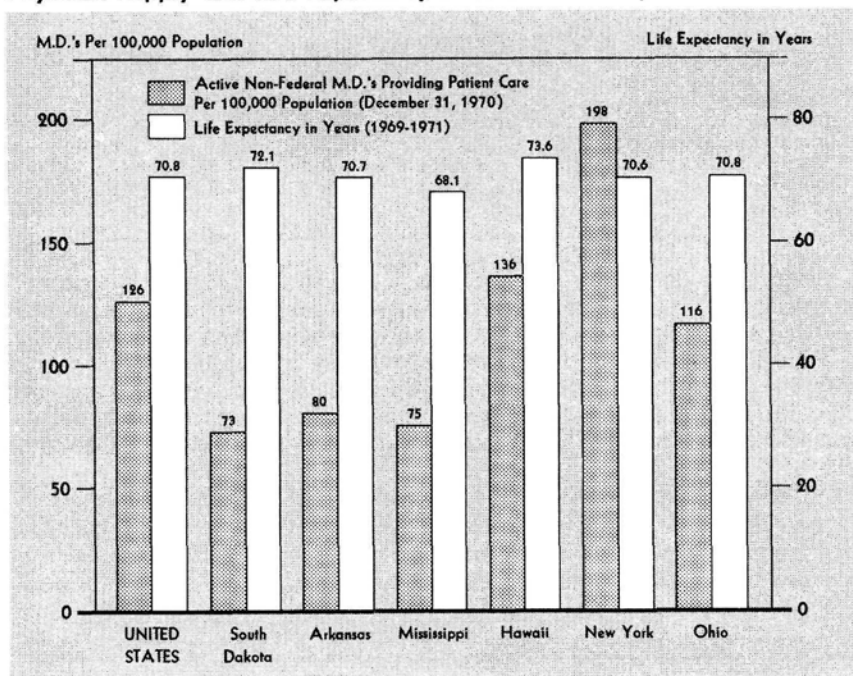
Country	Age in years					
	35		55		65	
	Male	Female	Male	Female	Male	Female
Sweden.....	40	44	22	26	14	17
Canada.....	38	44	21	25	14	17
France.....	37	44	20	26	13	17
Italy.....	38	43	20	24	13	16
United Kingdom: England and Wales.....	37	42	19	24	12	16
Germany: Federal Republic.....	36	41	19	23	12	15
United States:						
Total.....	36	42	20	25	13	17
White.....	37	43	20	25	13	17
Other.....	33	39	19	23	13	16

The uneven distribution of health personnel is frequently cited as a reason that this country's health status is not better in relation to other countries. The relationship between the availability of physicians and life expectancy—a common indicator of health status—is, however, ambiguous. Life expectancy rates are generally no higher in States with more physicians per capita than in States with fewer physicians per capita (Chart K-9). For example, the life expectancy rate is virtually the same in Arkansas, Ohio, and New York, even though the number of physicians varies from 80 per 100,000 population in Arkansas to 116 in Ohio and 198 in New York.

The availability of health care is only one factor among many that bear upon health status. Other important determinants of health status are heredity, the quality of the natural environment, social and economic well-being, working conditions, housing, sanitation, nutrition, and personal lifestyle.

### Physician Supply and Life Expectancy in Selected States, 1970

K-9



### THE FEDERAL ROLE IN THE HEALTH SECTOR

Federal health programs attempt to improve the health status of Americans by adding to the knowledge of human disease, translating research findings into accepted medical practice, regulating known health hazards, improving financial and physical access to health professionals and facilities, and reforming the existing health care service system.

**Health resources.**—Federal programs for the development of health resources encompass support for health research, health professions training and education, construction of health care facilities, and health planning and statistics. The combined outlays for these programs, as shown in Table K-10, will be \$5,975 million in 1977, an increase of \$254 million from 1976.

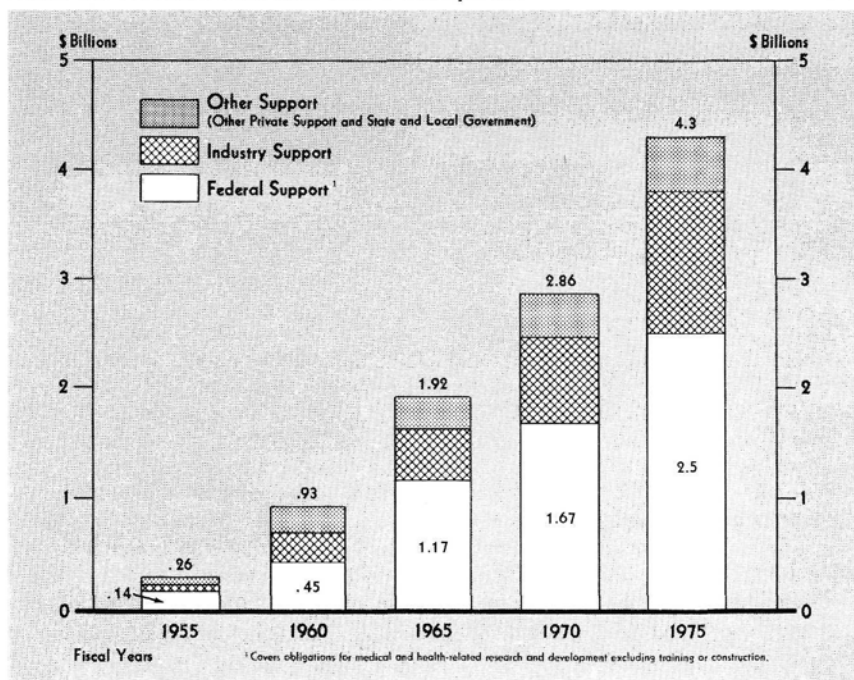
Table K-10. FEDERAL OUTLAYS FOR THE DEVELOPMENT OF HEALTH RESOURCES (in millions of dollars)

	Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Health research (excluding research facilities) -----	2,459	2,826	711	3,048
Training and education -----	1,384	1,477	322	1,217
Construction -----	949	1,082	240	1,309
Health planning -----	316	336	83	409
<b>Total</b> -----	<b>5,108</b>	<b>5,721</b>	<b>1,356</b>	<b>5,983</b>

**Health research.**—Through the support of both basic and applied research, Federal biomedical and behavioral research programs attempt to provide new knowledge for use in the prevention, diagnosis, and treatment of disease. Paralleling the increasing incidence of chronic diseases in the United States, Federal research support places emphasis upon degenerative illnesses, such as cancer and cardiovascular disease, and upon environmentally induced health problems. Table K-12 indicates the allocation of Federal funds among research fields and includes funding for construction of research facilities.

### Funds for Medical Research and Development

K-11



Federal outlays for health research have risen over the past decade, from \$1,369 million in 1967 to \$3,074 million in 1977. The Federal Government currently funds almost 60% of all biomedical research in this country.

The National Institutes of Health (NIH), within the Department of Health, Education, and Welfare, is the largest Federal biomedical research agency, and will administer 64% of the total Federal health research funds in 1977. NIH conducts an extensive research program in its own laboratories and clinical facilities, in addition to its research grant and contract activities. The Department of Health, Education, and Welfare also conducts and sponsors substance abuse and health services research to improve the organization, delivery, quality, and financing of health care.

Table K-12. **FEDERAL OUTLAYS FOR HEALTH RESEARCH AND RESEARCH FACILITIES**

(In millions of dollars)

	Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Cancer.....	499	572	128	666
Cardiovascular.....	266	286	62	311
Mental health.....	110	127	26	113
Neurological and visual.....	155	174	50	188
Population and family planning.....	58	73	18	65
Environmental health.....	300	408	122	528
Aging.....	53	49	13	63
Metabolic diseases.....	137	197	32	188
Child health.....	72	105	25	96
Infectious diseases.....	130	153	57	160
Pulmonary.....	48	53	12	56
Dental.....	42	46	10	57
Health services research and development.....	79	65	32	51
Other research and development.....	507	519	123	507
Research facilities.....	80	36	5	26
<b>Total.....</b>	<b>2, 539</b>	<b>2, 862</b>	<b>716</b>	<b>3, 074</b>

Other Federal agencies support and conduct health research in support of their program missions. The three largest are the Energy Research and Development Administration, the Department of Defense, and the Veterans Administration. Together, these agencies account for 15% of all Federal biomedical research expenditures.

**Training and education.**—Over 40% of the revenues of the Nation's medical schools are derived from Federal grants or contracts. Table K-13 shows the Federal funds provided to medical schools from selected agencies. These outlays do not include payments for medical services from medicare and medicaid.

Table K-13. **FEDERAL FUNDS TO MEDICAL SCHOOLS**  
(In millions of dollars)

Agency	Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Department of Health, Education, and Welfare.....</b>	1,191	1,213	216	1,242
Research and development.....	(808)	(884)	(125)	(909)
Education and training.....	(283)	(263)	(73)	(234)
Construction.....	(100)	(66)	(18)	(99)
<b>Department of Defense.....</b>	13	23	9	58
Education and training.....	(11)	(16)	(8)	(19)
<b>Veterans Administration:</b>				
Education and training.....	4	37	8	35
<b>National Aeronautics and Space Administration:</b>				
Research and development.....	4	4	1	4
<b>Energy Research and Development Administration:</b>				
Research and development.....	13	14	3	16
<b>Other agencies:</b>				
Research and development.....	10	12	2	11
<b>Total.....</b>	<b>1,235</b>	<b>1,304</b>	<b>239</b>	<b>1,365</b>
Research and development.....	(837)	(915)	(131)	(941)
Education and training.....	(298)	(316)	(89)	(288)
Construction.....	(100)	(72)	(18)	(137)

The Federal Government will spend a total of \$1,217 million in 1977 for health training and education, as shown in table K-14. The principal programs of direct support for health professions schools, which are administered by HEW, include:

- institutional operating cost support grants tied to conditions designed to improve geographic and specialty distribution of health professionals;
- special projects to demonstrate educational reforms and innovations in such areas as improving access to health professions education for the disadvantaged, developing new types of health workers, stimulating the practice of family medicine, and integrating medical education with health care delivery in medical scarcity areas.

Table K-14. **FEDERALLY AIDED HEALTH TRAINING AND EDUCATION**  
(In millions of dollars)

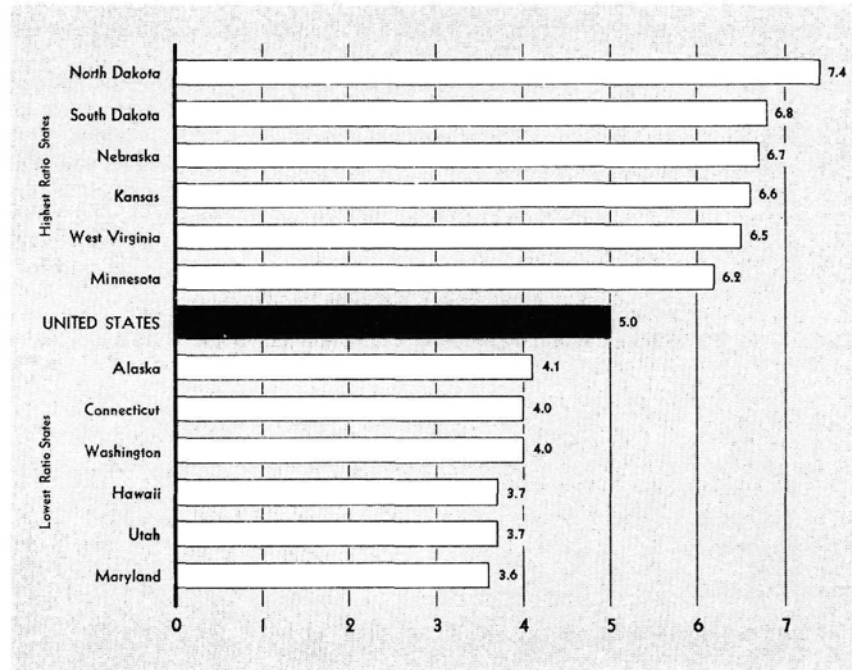
	Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Degree or certificate training.....</b>	1,186	1,278	272	1,035
Research personnel.....	(114)	(112)	(14)	(90)
Physicians.....	(491)	(560)	(127)	(485)
Dentists.....	(86)	(96)	(25)	(74)
Nurses.....	(155)	(144)	(38)	(104)
Mental health professionals.....	(51)	(44)	(7)	(24)
Other health professionals.....	(145)	(161)	(26)	(114)
Paramedical personnel.....	(144)	(161)	(35)	(144)
<b>All other training.....</b>	197	199	50	182
<b>Total.....</b>	<b>1,384</b>	<b>1,477</b>	<b>322</b>	<b>1,217</b>

A program of national health service scholarships—funded at a level of \$35 million in 1977—will support approximately 4,600 medical, osteopathic, and dental students in return for periods of service to meet public needs. This program helps to meet student financial needs, as well as Federal requirements for health professionals to staff programs such as the Indian Health Service. It also addresses the problem of geographic maldistribution of health personnel by placing physicians and dentists as private practitioners in provider scarcity areas or through such Federal programs as the National Health Service Corps.

The National Health Service Corps seeks to demonstrate the ability of health care provider shortage areas to support health personnel. The program will locate 676 health professionals in underserved areas in 1977.

**Construction of health care facilities.**—The Nation is well supplied in the aggregate with medical facilities. Chart K-15 suggests that the less populous States are relatively well endowed with hospital beds in contrast to the distribution of health professionals. This geographic distribution of hospital beds reflects in part the impact of over 30 years of Federal hospital construction assistance through the Hill-Burton program. Under its statutory formula, which favored the less populous and poorer areas, the Hill-Burton program allocated more than \$4.4 billion in grants to the States.

**General Hospital Beds Per 1,000 Population in Selected States, 1974** K-15



The basic goal of the Hill-Burton program—to improve the supply of health facilities in shortage areas—has been largely accomplished. Hill-Burton program expenditures have declined from 13% of the total \$1.5 billion national medical facility construction expenditures in 1963 to 2.4% of the total estimated \$4.6 billion construction expenditures in 1975. The vast majority of medical facility construction is now financed through long-term debt service of loans from the private capital markets.

Depreciation costs and debt servicing are legitimate expenses included in reimbursements from health insurance. In the 6 years from 1969 to 1975, for instance, the percentage of private nonprofit hospital construction being financed by debt service increased from 40% to 60%. This trend offsets reductions in the share of construction costs borne by government, philanthropy, and the hospitals themselves through depreciation funds.

Federal programs for the construction of health care facilities include the support of both community facilities to serve the general public, and facilities operated by Federal agencies for special beneficiary groups. In 1977, Federal outlays for the construction of health care facilities, including environmental health facilities, are estimated at \$1,300 million.

Table K-16. HOSPITAL AND HEALTH FACILITY CONSTRUCTION

(In millions of dollars)

	Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Federally supported construction:</b>				
Hospitals, new .....	55	60	12	21
Hospitals, modernized and replaced .....	91	109	11	85
Long-term care facilities .....	23	21	7	15
Research facilities .....	80	36	5	26
Environmental health facilities .....	159	159	50	244
Ambulatory care facilities .....	53	52	13	34
Health professions educational facilities .....	174	129	5	111
Other facilities .....	34	49	11	47
<b>Total, federally supported .....</b>	<b>669</b>	<b>615</b>	<b>115</b>	<b>582</b>
<b>Federal hospitals and health facilities:</b>				
Hospitals, new .....	51	95	3	34
Hospitals, modernized and replaced .....	159	267	80	529
Long-term care facilities .....	8	8	2	11
Research facilities .....	15	29	8	37
Environmental health facilities .....	39	46	11	36
Ambulatory care facilities .....	6	5	17	22
Other facilities .....	3	16	2	57
<b>Total, Federal .....</b>	<b>281</b>	<b>467</b>	<b>125</b>	<b>727</b>
<b>Total, construction .....</b>	<b>949</b>	<b>1,082</b>	<b>240</b>	<b>1,309</b>



In 1977, States will be able to use a portion of their Financial Assistance for Health Care block grant funds for construction of health care facilities. Federal assistance for the construction of community health facilities will also continue to be provided through the Department of Housing and Urban Development, which funds mortgage insurance for construction of hospitals, nursing homes, and group practice facilities.

**Health planning.**—Funding for health planning will be incorporated into the new Financial Assistance for Health Care program in 1977. Inclusion of health planning reflects the traditional State and local responsibility for planning.

Other agencies besides HEW will spend a total of \$196 million in 1977 on health planning activities, including statistical programs. Nearly \$160 million of these funds are for health planning activities in other countries supported by the State Department and the Agency for International Development.

Table K-17. **FEDERAL OUTLAYS FOR HEALTH PLANNING AND STATISTICS**

(In millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
Financing of health planning, total.....	245	253	63	329
State-wide health planning.....	(46)	(29)	(8)	(43)
Substate health planning.....	(86)	(68)	(13)	(83)
Other health planning.....	(113)	(155)	(42)	(203)
Direct planning of Federal health activities.....	30	34	8	30
Health statistical activities, total.....	41	49	12	50
General purpose statistics.....	(20)	(26)	(7)	(26)
Federal program management statistics.....	(21)	(23)	(5)	(24)
<b>Total, health planning activities.....</b>	<b>316</b>	<b>336</b>	<b>83</b>	<b>409</b>

#### FINANCING AND PROVIDING MEDICAL SERVICES

Since enactment of the medicare and medicaid programs in 1965, public funds have become a major source of financing for most health services, particularly hospital and nursing home care. Chart K-18 indicates the relative importance of public funds, which account for over 42% of national health expenditures.

The impact of increased public spending for health care for the low-income population is reflected in changing utilization patterns for health services. The number of physician visits and hospitalizations per capita has increased across the board in the past decade. In addition, the low-income population is now using these health resources at higher rates than the nonpoor population (see Table K-19). This development stems largely from increased Government financing of medical services through the medicare and medicaid programs for the aged, disabled, and low-income.

## Sources of Health Expenditures

K-18

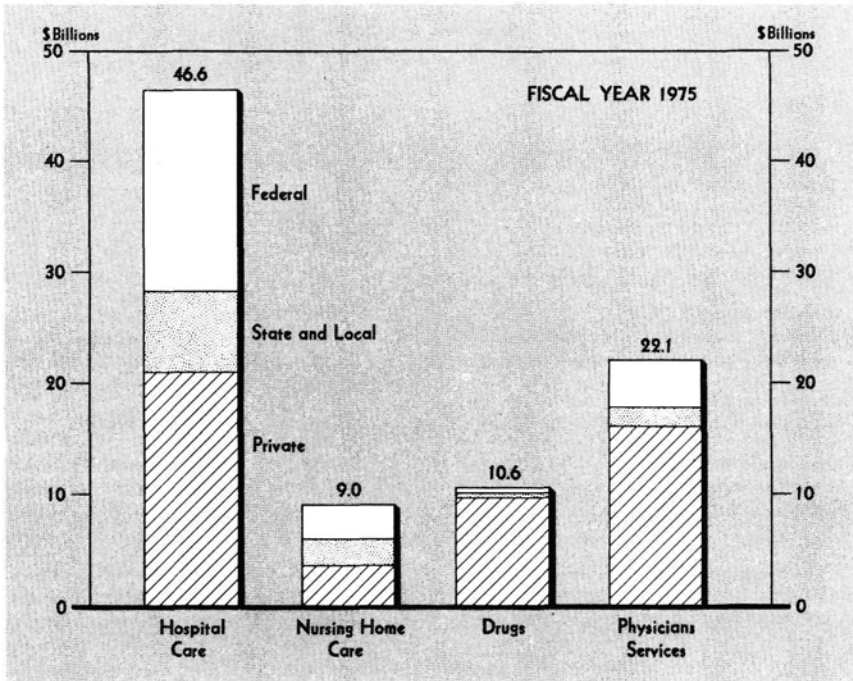


Table K-19. ANNUAL U.S. DOCTOR VISITS PER PERSON, 1964 AND 1974

	1964		1974	
	Poor	Not poor	Poor	Not poor
All ages.....	4.3	4.6	5.4	4.9
Under 17 years.....	2.3	4.0	3.6	4.3
17 to 44 years.....	4.1	4.7	5.5	4.7
45 to 64 years.....	5.1	5.1	6.3	5.4
65 years and over.....	6.0	7.3	6.4	7.3

Federal programs to finance or provide hospital and medical services include medicare and the proposed Financial Assistance for Health Care program—which account for 74% of outlays for these purposes—as well as programs for health services directly administered by the Department of Defense, the Veterans Administration, and HEW. Table K-20 shows Federal expenditures for financing and providing hospital and medical services.

Table K-20. FEDERAL FINANCING AND PROVISION OF HEALTH SERVICES

(In millions of dollars)

	Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Financing of indirect hospital and medical services:				
General hospital inpatients.....	15,792	18,386	4,667	20,107
Psychiatric hospital inpatients.....	360	393	107	452
Long-term care inpatients.....	2,833	3,321	904	3,473
Outpatient mental health services.....	521	444	81	399
Outpatient services.....	3,887	4,817	1,305	5,382
Other services.....	1,490	2,009	616	2,584
<b>Total, financing of indirect services.....</b>	<b>24,883</b>	<b>29,370</b>	<b>7,679</b>	<b>32,396</b>
Provision of direct hospital and medical services:				
General hospital inpatients.....	3,045	3,285	796	3,367
Psychiatric hospital inpatients.....	652	796	176	761
Long-term care inpatients.....	177	194	48	210
Outpatient mental health services.....	37	44	11	50
Outpatient services.....	1,444	1,579	393	1,645
Other services.....	212	245	66	251
<b>Total, provision of direct services.....</b>	<b>5,567</b>	<b>6,046</b>	<b>1,490</b>	<b>6,285</b>
<b>Total, financing and provision of services.....</b>	<b>30,450</b>	<b>35,416</b>	<b>9,169</b>	<b>38,681</b>

Medicare and the proposed Financial Assistance for Health Care block grant are the Federal Government's largest health activities. In 1977, they will account for \$28.6 billion, or 62%, of Federal health outlays.

**Medicare.**—Medicare finances health care for the aged, disabled, and persons suffering from chronic kidney disease. It includes both hospital insurance (HI)—which pays for inpatient care, posthospitalization skilled nursing home care, and home health benefits—and supplementary medical insurance (SMI)—which pays for physician and other outpatient services.

HI is financed largely through social security taxes on earnings, while SMI is financed by premiums from enrollees—currently \$6.70 per month—and contributions from general tax revenues. Both insurance components are administered primarily through private insurance companies under contract with the Social Security Administration.

Medicare has increased rapidly in cost in recent years—rising 123% from 1972 to 1977, even excluding proposed savings of \$2.2 billion in 1977. Estimated outlays of \$19.6 billion in 1977 will provide average benefits of nearly \$2,200 for the 5.9 million persons receiving HI benefits, and over \$400 for the 14.2 million persons receiving SMI benefits.

Proposed legislation, the Medicare Improvements of 1976, will provide protection against catastrophic health care costs and make other reforms in medicare cost-sharing provisions. The catastrophic health insurance proposals would establish a limitation on beneficiary cost-sharing of \$500 per year for HI benefits and \$250 per year for SMI benefits. These limits will reduce cost-sharing by a total of \$538 million for over 3 million persons with high medical expenses. Cost-sharing proposals include coinsurance equal to 10% of charges above the deductible for all HI-covered services, and an SMI deductible adjusted with increases in social security cash benefits. These provisions will improve patient incentives for economical use of health services.

The 1977 budget also proposes legislation to limit increases in medicare reimbursement rates. The legislation sets upper limits of 7% on annual increases in hospital per diem payments and 4% on annual increases in physician charges for 1977 and 1978. These limits are designed to slow health cost inflation and restrain the growth of program outlays.

The HI trust fund is currently underfinanced. The proposed legislation will improve the balance of trust fund income and outlays, as well as permit funding of catastrophic insurance. The following table shows the budgetary impact of the proposed legislation in 1976-78.

Table K-21. **MEDICARE IMPROVEMENTS OF 1976** (in millions of dollars)

	Outlays		
	1976 est.	1977 est.	1978 est.
<b>Catastrophic insurance:</b>			
Hospital insurance (\$500 limit) .....	+15	+330	+420
Supplementary medical insurance (\$250 limit) .....		+208	+634
Subtotal .....	+15	+538	+1,054
<b>Cost-sharing reforms:</b>			
Hospital insurance (10% coinsurance) .....	-330	-1,730	-2,020
Supplementary medical insurance:			
Dynamic deductible (\$77 on January 1, 1977) .....		-111	-255
Coinsurance on hospital-based services .....		-19	-38
Subtotal .....	-330	-1,860	-2,313
<b>Reimbursement limits:</b>			
Hospital insurance (7% per diem) .....		-730	-1,905
Supplementary medical insurance (4% charges) .....		-179	-301
Subtotal .....		-909	-2,206
<b>Total</b> .....	<b>-315</b>	<b>-2,231</b>	<b>-3,465</b>

The following table displays basic data concerning the medicare program coverage, benefits, and administration.

Table K-22. MEDICARE COVERAGE, BENEFITS, AND ADMINISTRATION

(Dollars in millions)

	1975 actual	1976 estimate	1977 estimate
<b>Hospital insurance (HI):</b>			
Persons with protection (millions).....	23.7	24.3	24.9
Beneficiaries receiving services (millions).....	5.5	5.7	5.9
Benefit payments.....	\$10,353	\$11,869	\$12,960
Administrative expenses.....	\$259	\$327	\$321
Claims received (millions).....	10.3	11.9	12.7
<b>Supplementary medical insurance (SMI):</b>			
Persons with protection (millions).....	23.3	23.9	24.6
Beneficiaries receiving services (millions).....	12.6	13.2	14.2
Benefit payments.....	\$3,765	\$4,687	\$5,804
Administrative expenses.....	\$405	\$550	\$561
Claims received (millions).....	97.5	107.8	121.1

Although medicare offers identical benefits to all enrollees, its reimbursements differ substantially in various regions of the country. These differences reflect variations in resource availability, utilization practices, and service costs. Table K-23 summarizes information on these patterns for 1974.

Table K-23. MEDICARE UTILIZATION AND REIMBURSEMENT BY GEOGRAPHIC REGION

	North- east	North Central	South	West
<b>Hospital insurance (HI):</b>				
Hospital beds per 1,000 population <sup>1</sup> .....	4.4	4.8	4.3	3.9
Hospital admissions per 1,000 enrollees <sup>1</sup> .....	290	350	360	330
Average length of hospital stay (days) <sup>1</sup> .....	13.9	11.9	10.7	9.2
HI reimbursement per enrollee.....	\$400	\$350	\$290	\$360
<b>Supplementary medical insurance (SMI):</b>				
Physicians per 100,000 population.....	161	112	109	148
SMI reimbursement per enrollee.....	\$150	\$110	\$120	\$170

<sup>1</sup> Excludes specialty hospitals.

**Financial Assistance for Health Care.**—The proposed Financial Assistance for Health Care program will consolidate 16 categorical health programs, including medicaid, into a new block grant to the States. The \$9 billion in outlays in 1977 will be used primarily to help provide health services to the low-income. Up to 10% of the funds will be available for other health-related purposes.

**Other support for health services.**—The Federal Government assists in the provision of health services through a variety of activities in addition to medicare and the proposed Financial Assistance for Health Care program.

Limited support is provided to health maintenance organizations (HMOs) in order to help demonstrate the HMO concept in the delivery and organization of health services. Health maintenance organizations deliver comprehensive medical care and disease prevention services on a prepaid basis.

A total of \$482 million will be provided for drug abuse treatment, rehabilitation, prevention, and research activities in 1977, an increase of \$27 million over 1976 (Table K-24). Most of the federally supported drug abuse activities are funded by HEW through the Social and Rehabilitation Service and the National Institute on Drug Abuse (NIDA) within the Alcohol, Drug Abuse, and Mental Health Administration. NIDA funding will increase from \$222 million in 1976 to \$248 million in 1977. Drug abuse treatment capacity will be expanded in 1977 and priority given to treating that drug abuse most costly to society. Defense and VA will continue efforts to remedy drug problems among military personnel and veterans. Within the Department of Justice, the Bureau of Prisons administers drug abuse treatment and rehabilitation services for Federal prisoners, the Drug Enforcement Administration conducts education and research programs, and the Law Enforcement Assistance Administration supports a broad range of community efforts to prevent the abuse of drugs. Drug abuse law enforcement activities are discussed in Special Analysis N.

The Federal Government also finances or provides medical services for certain special categories of beneficiaries, particularly American Indians and Alaska Natives; armed forces personnel, dependents, retirees, and veterans; and Federal Government employees.

*Indian health services.*—The funding level for Indian health services and facilities will rise to \$355 million in 1977, a \$24 million increase over 1976. These funds are used to provide comprehensive health care, with an emphasis on ambulatory care, as well as to construct hospitals, clinics, personal quarters, and sanitation facilities.

Over the last quarter century, the health status of Indians and Alaska Natives has greatly improved. Since 1950, for example, there has been an increase in Indian average life expectancy of 4.6 years or 8%, a 78% decline in infant mortality, and a 72% decline in deaths due to diseases such as influenza and pneumonia. In recent years, the overall health status of Indians and Alaska Natives has come closer to that of the general U.S. population, as indicated in Table K-25. Differences in health status remain, however, especially in connection with causes of death associated with reservation social conditions. Efforts to further improve the health status of American Indians will continue in the coming years.

Based on an eligible federally recognized Indian population of 518,000 in 1977, spending by the Indian Health Service in 1977 will result in over \$685 per beneficiary, or over \$2,740 per Indian family of four. This includes over \$40 million for the construction of Indian hospitals, clinics, sanitation projects, and staff housing for Indian Health Service personnel, but does not include spending from other Federal sources for the same beneficiary group.

Table K-24. ESTIMATED OBLIGATIONS FOR DRUG ABUSE PREVENTION PROGRAMS (in millions of dollars)

	Obligations			
	1975	1976	TQ	1977
<b>Treatment and rehabilitation (total)</b> .....	<b>320.4</b>	<b>344.7</b>	<b>65.9</b>	<b>372.8</b>
Department of Health, Education, and Welfare:				
Alcohol, Drug Abuse, and Mental Health Administration.....	122.4	139.9	13.9	162.8
Social and Rehabilitation Service <sup>1</sup> .....	79.0	88.0	23.0	94.0
Office of Human Development.....	8.8	8.8	2.2	9.4
Department of Defense.....	48.2	47.4	11.5	46.0
Veterans Administration.....	33.2	35.1	9.1	36.4
Department of Housing and Urban Development.....	2.8	4.0	.9	4.7
Department of Justice.....	21.9	20.4	5.1	18.6
Department of Transportation.....	.1	.1	-----	.1
Other <sup>2</sup> .....	3.9	.9	.2	.8
<b>Prevention, education, and information (total)</b> .....	<b>69.6</b>	<b>52.4</b>	<b>4.5</b>	<b>50.5</b>
Department of Health, Education, and Welfare:				
Alcohol, Drug Abuse, and Mental Health Administration.....	48.7	36.0	1.0	36.2
Office of Education.....	4.0	2.0	-----	-----
Department of Defense.....	9.9	8.9	2.2	9.1
Veterans Administration.....	.4	.4	.1	.4
Department of Housing and Urban Development.....	.1	.1	-----	.1
Department of Justice.....	2.3	2.6	.7	2.5
Department of Transportation.....	.1	.1	-----	.1
Other <sup>2</sup> .....	4.2	2.3	.5	2.1
<b>Research (total)</b> .....	<b>43.8</b>	<b>39.7</b>	<b>5.0</b>	<b>40.1</b>
Department of Health, Education, and Welfare:				
Alcohol, Drug Abuse, and Mental Health Administration.....	34.0	31.6	3.6	34.0
Department of Defense.....	3.7	2.4	-----	.2
Veterans Administration.....	1.0	1.0	.2	1.0
Department of Justice.....	1.6	2.7	.7	2.6
Department of Transportation.....	.6	.5	.1	.8
Other <sup>2</sup> .....	2.9	1.5	.4	1.5
<b>Planning, Evaluation, and Coordination (total)</b> .....	<b>24.3</b>	<b>18.3</b>	<b>3.7</b>	<b>18.9</b>
Department of Health, Education, and Welfare:				
Alcohol, Drug Abuse, and Mental Health Administration.....	14.7	14.5	2.8	15.2
Department of Defense.....	2.2	2.6	.6	2.5
Veterans Administration.....	.2	.2	-----	.2
Department of Justice.....	.8	.7	.2	.6
Other <sup>2</sup> .....	6.4	.3	.1	.4
<b>Total</b> .....	<b>458.1</b>	<b>455.1</b>	<b>79.1</b>	<b>482.2</b>

<sup>1</sup> In 1977, drug abuse treatment funds in this agency would be included in the proposed Financial Assistance for Health Care program.

<sup>2</sup> Includes drug abuse prevention activities within the Departments of Labor, State, and Agriculture; the terminated Special Action Office for Drug Abuse Prevention; and other agencies.

Table K-25. **SELECTED INDICATORS OF HEALTH STATUS OF AMERICAN INDIANS AND THE GENERAL U.S. POPULATION (annual rates)**

	Indians and Alaska Natives				General population	
	1950	1960	1970	1974	1970	1974
Birth rate (per 1,000 population).....	36.2	42.7	32.6	30.8	18.4	15.0
Death rate (per 1,000 population).....	12.9	9.1	7.7	7.2	9.5	9.1
Average life expectancy at birth (years).....	60.0	61.7	64.0	64.6	70.9	72.0
Infant mortality rate (deaths under 1 year of age per 1,000 live births) <sup>1</sup> .....	85.8	50.3	23.8	18.7	20.0	16.5
Leading causes of death (per 100,000 population):						
Heart.....	148.8	135.5	142.0	133.4	362.0	353.1
Accidents.....	125.9	155.2	157.1	140.5	56.4	48.9
Influenza and pneumonia.....	108.0	95.0	38.6	29.7	30.9	25.7
Certain diseases of early infancy.....	77.3	66.7	29.6	21.0	21.3	13.2
Cancer.....	60.3	65.2	62.6	66.6	162.8	169.5
Cirrhosis of liver.....	7.7	20.7	45.5	46.2	15.5	16.0

<sup>1</sup> Excludes Alaska Natives.

*Medical care to active and retired military personnel and their dependents.*—In 1977, DOD will operate 180 hospitals directly and will contract with community facilities to provide additional care for its beneficiaries. Outlays for these services will be \$3.8 billion in 1977, or \$326 million more than in 1976.

*Medical care to veterans.*—The Veterans Administration (VA) will operate 172 hospitals, 107 long-term care facilities, and 229 outpatient clinics. It will provide VA inpatient care for 1.3 million veterans and will fund over 15.7 million outpatient medical and dental visits to VA facilities. It also will finance care for 92,000 inpatients, and 2.4 million outpatient medical visits in non-VA facilities. Total VA outlays for health activities, including construction of health care facilities, will be \$4.5 billion in 1977—an increase of \$379 million over 1976.

*Health insurance for Federal employees.*—Health benefits are provided to 3.1 million Federal civilian employees and annuitants and their 6.2 million dependents under the Federal employees health benefits programs managed by the Civil Service Commission. In 1977, Federal payments to finance these programs will increase by \$40 million to a total of \$383 million.

*Tax expenditures.*—After the proposed Financial Assistance for Health Care block grant and medicare, the largest Federal support for health care results from special provisions of the tax laws. The exclusion of employer health insurance contributions from the taxable income of employees is estimated to result in a \$4.2 billion tax subsidy for employees in 1977. An additional \$2.1 billion in revenue loss will result from itemized deductions that individuals take in their income tax computations for certain health expenditures and insurance premiums.

*Distribution of health care outlays by age group and economic status.*—Table K-26 distributes Federal outlays for the financing and direct provision of hospital and medical services among three major age groups and between indigent and nonindigent persons.



Federal funds for the development of health resources and for prevention and control of health problems are excluded from the table, since they are not normally distributed by population group or income. Unlike other tables in this special analysis, Table K-26 does not include funds for health care provided to foreign nationals, since poverty levels in other countries differ from the U.S. poverty level.

The Financial Assistance for Health Care program will require that 90% of the funds be used by States to provide personal health services. Table K-26 and other tables in this special analysis assume that Financial Assistance for Health Care funds will initially be spent along the same general lines as the grant funds they replace.

Table K-26. ESTIMATED FEDERAL HEALTH CARE OUTLAYS BY POPULATION AND INCOME GROUPS (in millions of dollars)

	Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Total, all recipients</b> .....	<b>30,425</b>	<b>35,364</b>	<b>9,154</b>	<b>38,611</b>
Aged (65 and over).....	16,888	19,660	5,111	21,759
Other adults (19-64).....	10,722	12,411	3,179	13,331
Children and youth (0-18).....	2,816	3,292	864	3,521
<b>Indigent persons, total</b> .....	<b>9,002</b>	<b>10,531</b>	<b>2,632</b>	<b>11,038</b>
Aged (65 and over).....	3,851	4,663	1,161	4,856
Other adults (19-64).....	4,122	4,696	1,162	4,996
Children and youth (0-18).....	1,029	1,172	308	1,187
<b>Nonindigent persons, total</b> .....	<b>21,423</b>	<b>24,833</b>	<b>6,522</b>	<b>27,573</b>
Aged (65 and over).....	13,036	14,998	3,949	16,903
Other adults (19-64).....	6,600	7,715	2,017	8,335
Children and youth (0-18).....	1,787	2,120	556	2,334

#### PREVENTION AND CONTROL OF HEALTH PROBLEMS

The Federal Government supports programs to prevent and control health problems, mainly in the areas of communicable disease control, occupational health, consumer safety, environmental control, accident prevention, and foreign health assistance. Table K-27 shows Federal outlays for the prevention and control of health problems, which are estimated at \$1,270 million in 1977.

Table K-27. FEDERAL OUTLAYS FOR THE PREVENTION AND CONTROL OF HEALTH PROBLEMS (in millions of dollars)

	Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Disease prevention and control.....	460	462	98	366
Mental illness prevention and control.....	124	135	32	98
Environmental control.....	51	70	22	79
Consumer safety.....	424	471	126	477
Occupational safety and health.....	173	211	58	251
<b>Total, prevention and control</b> .....	<b>1,232</b>	<b>1,349</b>	<b>337</b>	<b>1,270</b>

***Disease prevention and control.***—The Federal Government supports various programs to prevent diseases and injuries through research, regulatory activities, provision of preventive services, and public education. Categorical Federal grants for State and local activities in disease prevention and control will be consolidated into the new Financial Assistance for Health Care program.

The 1977 budget places priority on efforts to detect and eliminate hazards in the workplace. Outlays for these activities will increase by \$40 million to \$251 million in 1977. An increased number of occupational safety and health standards will be developed and promulgated by HEW and the Departments of Labor and the Interior.

The Alcohol, Drug Abuse, and Mental Health Administration will continue to support clearinghouses, media campaigns, and other activities to help reduce mental illness in 1977. These efforts assist States and localities in developing mental health programs and provide the public with accurate information about mental health and substance abuse problems.

***Consumer safety.***—In 1976, outlays of \$477 million will be spent on efforts to protect the public from unsafe foods, drugs, and other products, and to reduce injuries from automobile accidents.

The Food and Drug Administration (FDA) in HEW will expand its efforts to help assure the quality and safety of drugs, medical devices, and foods. FDA and the Environmental Protection Agency will continue support of long-term studies of the effects of low concentrations of chemicals in the environment and foods.

In 1977, the Consumer Product Safety Commission will continue research, information dissemination, and regulatory measures to protect consumers from unreasonable risks from certain consumer products. The Department of Transportation will also work to prevent automobile accidents and reduce injuries from accidents through various motor vehicle and highway design safety standards. In 1974, about 46,000 deaths resulted from motor vehicle accidents, a 17% reduction from the 56,000 deaths in 1973. Much of the decline is thought to be related to lower speed limits on highways.

***Environmental control.***—The major Federal effort in environmental control is administered by the Environmental Protection Agency, which maintains surveillance of the effects of environmental pollution on the health of the American people, promulgates environmental standards, and monitors compliance.

#### FOREIGN HEALTH ASSISTANCE

In 1977, the United States will provide \$291 million for health assistance to other nations. These funds will support efforts by the Agency for International Development, the Peace Corps, and international agencies to which the United States contributes financially, such as the World Health Organization and the Pan American Health Organization. The funds are distributed across all categories of health activities.

## EXPENDITURES FOR HEALTH ACTIVITIES BY AGENCY

The following tables distribute the health-related outlays of Federal agencies by the categories used in this analysis. Health activities of HEW, the Consumer Product Safety Commission, and parts of the Civil Service Commission and the Departments of Agriculture, Housing and Urban Development, Interior, and Labor are included under the health function (550) in Part 5 of the budget document. Health-related outlays of all other agencies are, because of their major missions, assigned to other functions. The following tables, therefore, indicate the predominant budget functional code for each agency. Other special analyses such as those on research and development, education, and work force also include some of the same outlays in their tabulations.

Table K-28. FEDERAL OUTLAYS FOR MEDICAL AND HEALTH-RELATED ACTIVITIES BY AGENCY, 1975 (in millions of dollars)

	Functional code	Health research	Training and education	Construc- tion	Health planning activities	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 (total).....	550	1,867	928	542	162	255	23,002	639	27,396
Health Services Administration.....	551	9	28	48	11	208	578	153	1,035
Health Resources Administration.....	550	58	528	369	126	-----	6	12	1,099
Alcohol, Drug Abuse, and Mental Health Administration.....	550	114	152	31	-----	43	515	96	950
Center for Disease Control.....	553	42	2	-----	-----	-----	-----	111	154
National Institutes of Health.....	550	1,598	177	82	-----	-----	-----	33	1,889
Food and Drug Administration.....	553	27	-----	1	-----	-----	-----	172	201
Assistant Secretary for Health.....	550	4	-----	2	21	4	11	2	45
Social Security Administration.....	551	-----	-----	-----	-----	-----	14,781	-----	14,781
Social and Rehabilitation Service.....	551	2	-----	-----	1	1	6,876	-----	6,879
Other HEW.....	550	13	42	9	3	-----	235	59	361
Department of Defense.....	051	104	231	96	-----	2,261	567	26	3,285
Veterans Administration.....	703	93	198	122	22	3,018	211	-----	3,665
Department of Housing and Urban Development.....	451	-----	-----	164	38	-----	1	-----	203
Department of Agriculture.....	350	47	-----	1	-----	-----	-----	259	307
Environmental Protection Agency.....	304	20	-----	-----	-----	-----	-----	-----	20
National Aeronautics and Space Administration.....	250	59	-----	-----	-----	-----	-----	3	62
Energy Research and Development Administration.....	251	143	-----	6	-----	-----	-----	95	244
Department of Labor.....	553	1	9	-----	-----	-----	-----	81	91
Department of State.....	150	-----	7	-----	12	-----	1	24	44
National Science Foundation.....	250	44	-----	-----	-----	-----	-----	-----	44
Department of the Interior.....	300	35	-----	3	-----	-----	8	2	48
Department of Transportation.....	400	15	2	-----	10	9	-----	23	60
Department of Justice.....	750	-----	-----	3	-----	23	3	3	32
Other agencies.....	-----	31	8	13	71	-----	40	77	239
Agency contributions to employee health funds.....	551	-----	-----	-----	-----	-----	1,050	-----	1,050
<b>Total outlays for health, 1975.....</b>		<b>2,459</b>	<b>1,384</b>	<b>949</b>	<b>316</b>	<b>5,567</b>	<b>24,883</b>	<b>1,232</b>	<b>36,790</b>

Table K-29. FEDERAL OUTLAYS FOR MEDICAL AND HEALTH-RELATED ACTIVITIES BY AGENCY, 1976 (in millions of dollars)

	Functional code	Health research	Training and education	Construc- tion	Health planning activities	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 (total).....	550	2, 109	939	512	160	280	27, 047	664	31, 711
Health Services Administration.....	551	14	32	80	12	222	712	144	1, 217
Health Resources Administration.....	550	33	558	340	116	-----	5	9	1, 062
Alcohol, Drug Abuse, and Mental Health Administration.....	550	134	127	36	-----	53	425	105	880
Center for Disease Control.....	553	43	1	-----	-----	-----	-----	113	157
National Institutes of Health.....	550	1, 837	173	47	-----	-----	-----	39	2, 095
Food and Drug Administration.....	553	28	-----	3	-----	-----	-----	191	222
Assistant Secretary for Health.....	550	7	-----	1	25	5	16	5	59
Social Security Administration.....	551	-----	-----	-----	-----	-----	17, 433	-----	17, 433
Social and Rehabilitation Service.....	551	1	-----	-----	-----	1	8, 220	-----	8, 222
Other HEW.....	550	13	47	5	6	-----	235	59	365
Department of Defense.....	051	114	249	171	-----	2, 404	549	29	3, 517
Veterans Administrations.....	703	97	253	191	23	3, 326	251	-----	4, 142
Department of Housing and Urban Development.....	451	-----	-----	168	23	-----	14	5	209
Department of Agriculture.....	350	59	-----	6	-----	-----	-----	286	351
Environmental Protection Agency.....	304	63	-----	-----	-----	-----	-----	-----	63
National Aeronautics and Space Administration.....	250	67	-----	-----	-----	-----	-----	3	70
Energy Research and Development Administration.....	251	173	-----	10	-----	-----	-----	117	300
Department of Labor.....	553	3	14	-----	-----	-----	-----	103	119
Department of State.....	150	-----	8	-----	13	-----	1	27	49
National Science Foundation.....	250	43	-----	-----	-----	-----	-----	-----	43
Department of the Interior.....	300	39	-----	4	-----	-----	9	2	54
Department of Transportation.....	400	24	2	1	8	10	-----	26	70
Department of Justice.....	750	2	-----	2	-----	24	4	3	36
Other agencies.....	-----	35	13	15	109	-----	46	84	302
Agency contributions to employee health funds.....	551	-----	-----	-----	-----	-----	1, 450	-----	1, 450
<b>Total outlays for health, 1976.....</b>		<b>2, 826</b>	<b>1, 477</b>	<b>1, 082</b>	<b>336</b>	<b>6, 046</b>	<b>29, 370</b>	<b>1, 349</b>	<b>42, 486</b>

Table K-30. FEDERAL OUTLAYS FOR MEDICAL AND HEALTH-RELATED ACTIVITIES BY AGENCY, TRANSITION QUARTER

(In millions of dollars)

	Functional code	Health research	Training and education	Construc- tion	Health planning activities	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 (total).....	550	517	180	74	41	83	7,059	140	8,095
Health Services Administration.....	551	3	9	17	3	65	181	26	306
Health Resources Administration.....	550	25	118	41	31	-----	2	2	218
Alcohol, Drug Abuse, and Mental Health Administration.....	550	30	17	6	-----	17	75	25	170
Center for Disease Control.....	553	16	-----	-----	-----	-----	-----	31	47
National Institutes of Health.....	550	434	28	8	-----	-----	-----	6	476
Food and Drug Administration.....	553	7	-----	1	-----	-----	-----	49	57
Assistant Secretary for Health.....	550	1	-----	-----	6	1	5	1	15
Social Security Administration.....	551	-----	-----	-----	-----	-----	4,562	-----	4,562
Social and Rehabilitation Service.....	551	-----	-----	-----	-----	-----	2,230	-----	2,230
Other HEW.....	550	-----	7	1	1	-----	4	-----	14
Department of Defense.....	051	29	67	26	-----	603	135	8	867
Veterans Administration.....	703	25	65	74	6	795	61	-----	1,026
Department of Housing and Urban Development.....	451	-----	-----	54	-----	-----	6	2	62
Department of Agriculture.....	350	15	-----	3	-----	-----	-----	80	98
Environmental Protection Agency.....	304	16	-----	-----	-----	-----	-----	-----	16
National Aeronautics and Space Administration.....	250	20	-----	-----	-----	-----	-----	1	21
Energy Research and Development Administration.....	251	51	-----	3	-----	-----	-----	31	85
Department of Labor.....	553	1	3	-----	-----	-----	-----	28	31
Department of State.....	150	-----	4	-----	11	-----	-----	22	37
National Science Foundation.....	250	11	-----	-----	-----	-----	-----	-----	11
Department of the Interior.....	300	10	-----	-----	-----	-----	2	-----	13
Department of Transportation.....	400	10	-----	-----	2	2	-----	4	19
Department of Justice.....	750	-----	-----	-----	-----	6	1	1	9
Other agencies.....	-----	6	3	6	23	1	10	20	66
Agency contributions to employee health funds.....	551	-----	-----	-----	-----	-----	405	-----	406
<b>Total outlays for health, transition quarter.....</b>		<b>711</b>	<b>322</b>	<b>240</b>	<b>83</b>	<b>1,490</b>	<b>7,679</b>	<b>337</b>	<b>10,862</b>

Table K-31. FEDERAL OUTLAYS FOR MEDICAL AND HEALTH-RELATED ACTIVITIES BY AGENCY, 1977 (in millions of dollars)

	Functional code	Health research	Training and education	Construc- tion	Health planning activities	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 (total).....	550	2,187	656	360	213	204	29,634	531	33,792
Health Services Administration.....	551	2	23	56	10	143	608	104	946
Health Resources Administration.....	550	26	388	241	151	-----	4	8	819
Alcohol, Drug Abuse, and Mental Health Administration.....	550	128	62	27	-----	55	343	72	687
Center for Disease Control.....	553	38	1	-----	-----	-----	-----	88	127
National Institutes of Health.....	550	1,955	151	38	-----	-----	-----	44	2,188
Food and Drug Administration.....	553	29	-----	4	-----	-----	-----	194	227
Assistant Secretary for Health.....	550	8	1	1	46	5	8,980	20	9,062
Social Security Administration.....	551	-----	-----	-----	-----	-----	19,646	-----	19,646
Social and Rehabilitation Service.....	551	1	-----	-----	1	1	34	-----	37
Other HEW.....	550	-----	30	1	5	-----	18	-----	53
Department of Defense.....	051	125	246	325	-----	2,512	585	47	3,841
Veterans Administration.....	703	97	271	308	23	3,532	301	-----	4,521
Department of Housing and Urban Development.....	451	-----	-----	265	-----	-----	33	11	308
Department of Agriculture.....	350	60	-----	5	-----	-----	-----	307	371
Environmental Protection Agency.....	304	80	-----	-----	-----	-----	-----	-----	80
National Aeronautics and Space Administration.....	250	72	-----	-----	-----	-----	-----	4	76
Energy Research and Development Administration.....	251	253	1	19	-----	-----	-----	142	415
Department of Labor.....	553	6	20	-----	-----	-----	-----	99	125
Department of State.....	150	-----	8	-----	17	-----	1	34	59
National Science Foundation.....	250	49	-----	-----	-----	-----	-----	-----	49
Department of the Interior.....	300	40	-----	2	-----	-----	9	2	53
Department of Transportation.....	400	48	2	1	9	21	-----	20	101
Department of Justice.....	750	2	-----	2	-----	26	4	3	37
Other agencies.....	-----	29	14	15	148	-----	37	70	312
Agency contributions to employee health funds.....	551	-----	-----	-----	-----	-----	1,793	-----	1,793
<b>Total outlays for health, 1977.....</b>		<b>3,048</b>	<b>1,217</b>	<b>1,309</b>	<b>409</b>	<b>6,285</b>	<b>32,396</b>	<b>1,270</b>	<b>45,935</b>

## SPECIAL ANALYSIS L

### FEDERAL INCOME SECURITY PROGRAMS

Federal income security programs provide essential income protection for millions of Americans. A major, although not exclusive, objective of these programs is to increase the income of people at the lower end of the income scale. The programs included in this analysis are divided into two broad categories:

- Cash benefits, such as social security and other income replacement programs.
- In-kind benefits, such as health care and food stamps, which effectively increase real income by providing necessary goods.

In addition, tax expenditures for income security are expected to result in lost revenues of over \$20 billion in 1977.

The projections shown under medicaid for 1977 assume that States will spend 97% of the total spent under the proposed Financial Assistance for Health Care Act for medicaid purposes (the same proportion projected for 1977 under existing law) and distribute it among target groups as estimated for 1976.

#### OVERVIEW

Total Federal income security benefits are estimated to exceed \$177 billion in 1977. This represents an increase of over \$43 billion or about 27%, from the 1975 total of \$139 billion.

Several factors account for this change:

- Increases in the number of beneficiaries;
- Increases in the bases (usually, past earnings) used in computing benefits;
- Adjustments required by law to compensate for cost of living increases; and,
- Higher prices for in-kind benefits (notably, food and medical care) provided under some programs.

Table L-1. **FEDERAL INCOME SECURITY BENEFITS** (in millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Federal outlays for cash benefits:</b>				
Social security (OADS)	62,469	71,386	19,569	81,340
Federal employee benefits	13,986	16,458	4,478	18,922
Veterans benefits	8,140	8,782	2,268	8,679
Public assistance	8,672	9,745	2,713	10,870
Unemployment insurance	12,221	17,902	3,609	15,428
Railroad retirement	3,034	3,422	893	3,624
Other programs	1,063	1,164	285	1,113
Proposed legislation included above	-----	-----	(-33)	(-906)
Subtotal, cash benefit outlays	<u>109,585</u>	<u>128,859</u>	<u>33,815</u>	<u>140,026</u>
<b>Federal outlays for in-kind benefits:</b>				
Food and nutrition	6,468	7,968	1,658	6,334
Health care	21,513	25,341	6,722	28,162
Housing	2,072	2,295	559	2,551
Proposed legislation included above	-----	(-447)	(-701)	(-4,449)
Subtotal, in-kind benefits outlays	<u>30,053</u>	<u>35,604</u>	<u>8,939</u>	<u>37,047</u>
<b>Total benefits</b>	<u>139,638</u>	<u>164,463</u>	<u>42,755</u>	<u>177,073</u>



## TARGET GROUPS

Federal income security programs maintain or supplement income of persons and families whose capacity for self-support is reduced by old age, disability, illness, unemployment, poverty, or death of the primary wage earner.

Where self-support is possible in part or in the future, income security programs provide supplementary or temporary support. Where self-support is not possible, income security programs provide basic support.

The analysis below is organized by target group, i.e., programs are discussed as they provide support to people sharing similar problems and circumstances—the aged (annuitants and others), the unemployed, mothers with small children and no breadwinner, and those low-income persons who do not earn enough to provide for basic needs. Needs-tested benefits are included in this analysis by target group and are presented in a separate summary table (L-9).

Table L-2. INCOME SECURITY BENEFITS BY TARGET GROUPS

(In millions of dollars)

	1975 actual	1976 estimate	1977 estimate	Change 1975-77	Percent change 1975-77
Annuitants.....	39,743	45,921	52,581	12,838	32.3
Other aged.....	41,419	46,797	51,791	10,371	25.0
Disabled.....	21,297	25,045	28,478	7,181	33.7
Mothers and children.....	7,358	8,289	9,113	1,755	23.9
Temporarily unemployed.....	12,774	18,375	15,868	3,094	24.2
Other transitional low income.....	9,720	11,559	11,253	1,533	15.8
Other.....	7,328	8,476	7,989	661	9.0
<b>Total.....</b>	<b>139,638</b>	<b>164,463</b>	<b>177,073</b>	<b>37,435</b>	<b>26.8</b>

## THE AGED

Income security benefits for the elderly consist of wage replacement for workers retired from full-time gainful employment, benefits to survivors who depended on their spouses' incomes as the main source of support, and assistance to those who were needy before they became aged.

In-kind program benefits received by the aged include medical care services, food, and shelter.

Several provisions of the Federal personal income tax are designed to benefit the aged. The largest benefits result from the extra personal exemptions available to persons 65 or over and from the exclusion of all social security benefits (not just the portion representing a return of contributions) from taxable income. These two tax expenditures are expected to result in a loss of receipts of \$1.2 billion and \$3.5 billion, respectively, in 1977. In addition, the retirement income credit and the exclusion from income of railroad retirement benefits are tax expenditures estimated at \$0.1 billion and \$0.2 billion in 1977. The combined loss of tax receipts from the retired and elderly due to these four provisions is an estimated \$5.5 billion in 1977 (larger than their simple sum, due to the compounding, in some cases, of the effects of these tax expenditure provisions in the progressive tax system).

Other tax provisions are directed to the future security of aged persons by encouraging provision for retirement years. The major benefits flow from the exclusion from both the employer's and employee's taxable income of employer contributions to and earnings of qualified pension funds. After allowing for deferred taxes collected from present retirees, the net loss in receipts from this tax expenditure is estimated to be \$6.5 billion in 1977. Similar tax provisions for noncovered or self-employed persons will result in an estimated tax expenditure of \$1.0 billion for these persons in 1977.

Table L-3. **INCOME SECURITY BENEFITS FOR THE AGED**

(In millions of dollars)

	Benefits			Percent increase 1975-77
	1975 actual	1976 estimate	1977 estimate	
Covered employment:				
Social security (OASI) members.....	51,764	58,895	66,888	29.2
Federal civilian employees.....	5,460	6,585	7,826	43.3
Railroad employees.....	2,797	3,158	3,339	19.4
Uniformed services members.....	1,085	1,238	1,340	23.4
Coal miners' widows.....	218	240	260	19.0
Supplemental security income.....	1,817	1,838	1,932	6.3
Income-tested veterans pension.....	1,540	1,639	1,555	0.9
Subtotal, cash benefit outlays.....	64,682	73,594	83,139	28.5
Medicare.....	12,752	14,703	16,384	28.5
Medicaid.....	2,561	3,064	3,259	27.3
Other in-kind.....	1,334	1,582	1,634	22.4
Subtotal, in-kind benefit outlays.....	16,648	19,349	21,227	27.8
<b>Total.....</b>	<b>81,329</b>	<b>92,944</b>	<b>104,416</b>	<b>28.4</b>

**Annuitants.**—In all four federally run contributory retirement systems, the benefit calculations are based upon past earnings and are subsequently increased to reflect cost-of-living increases.

Under old-age and survivors insurance (OASI), 13.5 million retired workers received pensions in 1975. Some 413,000 recipients in 1975 were primary beneficiaries under the railroad retirement system, but about 39% of these retirees were also beneficiaries under the social security system. A total of 745,000 persons were beneficiaries of the civil service retirement system and of the foreign service retirement system. Approximately 43% of the beneficiaries of the two Federal civilian employee systems are also receiving social security.

The probable total number of primary beneficiaries of all the contributory retirement systems is thus 14.2 million persons in 1975 and 15.6 million in 1977.

Table L-4. ANNUITIES TO PRIMARY BENEFICIARIES IN CONTRIBUTORY RETIREMENT SYSTEMS: BENEFITS, BENEFICIARIES, AND AVERAGE PAYMENTS BY SYSTEM

	Benefit outlays (in millions of dollars)			Number of primary beneficiaries (thousands)			Average monthly payments (in dollars)		
	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.
Old-age and survivors insurance.....	33,312	38,367	43,858	13,494	14,056	14,692	206	227	249
Civil Service Commission.....	4,753	5,711	6,781	720	764	810	550	623	698
Railroad Retirement Board.....	1,632	1,787	1,875	413	426	417	329	350	375
Foreign Service retirement.....	46	56	68	3	4	4	1,152	1,330	1,442
<b>Total.....</b>	<b>39,743</b>	<b>45,921</b>	<b>52,851</b>						

**Other aged.**—This category includes income support to the aged in which the benefits are based upon criteria other than past earnings. The criteria of the program may be a work history of some related person, and is not necessarily based on any measure of need. Underlying the purpose of these programs is the presumption that persons past a certain age (for example, 65) are generally not self-supporting through their own current earnings.

**Aged widows.**—Aged widows account for \$16.5 billion in benefit outlays in 1977, or 31% of all benefits to the aged outside of annuities to primary beneficiaries. The increase in benefit outlays to aged widows between 1975 and 1977 is due to increased benefit levels under the social security and the railroad retirement systems. Some 4.9 million aged widows will receive benefits from social security in 1977 with 1.0 million widows covered in other programs. There is considerable overlap of these program beneficiaries with those covered by social security. Tax expenditures again augment the value of these benefits. The exclusion from taxable income of social security benefits for dependents and survivors is estimated to result in a \$0.6 billion revenue loss in 1977.

**Aged wives of retirees.**—The entitlement of wives under OASI and railroad retirement is independent of any contribution history of their own, and requires only that they exceed a particular age. Where a wife has dual entitlement under social security based upon her earnings history, as well as her husband's, she will receive only the larger benefit. In the railroad retirement system, she receives both benefits. In 1977, aged wives of retirees will receive \$5.2 billion in social security benefits. Of these, 650,000 wives will have dual entitlement under social security in which the wife's benefit exceeds the benefit based upon her own earnings.

Table L-5. BENEFITS FOR THE AGED EXCEPT ANNUITIES TO PRIMARY BENEFICIARIES: BENEFITS, BENEFICIARIES, AND AVERAGE PAYMENT

	Benefit outlays (in millions of dollars)			Number of beneficiaries (thousands)			Average monthly payments (in dollars)		
	1975 actual	1976 esti- mate	1977 esti- mate	1975 actual	1976 esti- mate	1977 esti- mate	1975 ac- tual	1976 esti- mate	1977 esti- mate
Civilian covered employ- ment:									
Social security.....	18,452	20,528	23,030	11,474	11,707	11,575	134	146	166
Federal civilian em- ployees.....	494	593	714	194	203	208	212	244	286
Railroad employees....	1,165	1,371	1,464	536	553	554	181	207	220
Coal miners' widows...	218	240	260	96	102	108	189	196	200
Medicare.....	12,752	14,703	16,384	16,100	16,700	17,600	66	73	78
Uniformed services:									
Aged widows.....	497	544	557	238	238	238	174	191	195
Aged retirees.....	589	694	782	87	92	98	562	625	668
Aged veterans and widows: Income tested.....	1,540	1,639	1,555	1,822	1,815	1,751	70	75	74
Supplemental security income <sup>1</sup> .....	1,817	1,838	1,932	2,013	2,110	2,203	75	73	73
Medicaid.....	2,561	3,064	3,259	4,170	4,233	4,296	51	60	63
In-kind benefits to needy aged:									
Food.....	959	1,167	1,181	3,846	4,170	3,939	21	23	25
Housing.....	375	415	453	1,025	1,112	1,348	30	31	28
<b>Total.....</b>	<b>41,419</b>	<b>46,797</b>	<b>51,571</b>						

<sup>1</sup> Federal payment only.

*Payments based on the minimum.*—These are statutory minimum amounts paid to retired workers, to the dependents of such retired workers, and to noninsured beneficiaries age 72 and over. In 1977, these social security payments will be \$1.1 billion.

*Aged retirees of the uniformed services.*—The retirement systems for the uniformed and military services are noncontributory, with benefits based on time in service and the rank achieved at the time of retirement, rather than the overall earnings history of the individual. Because military service is credited for social security coverage, there is substantial overlap between the military retirement systems and OASI.

#### THE DISABLED

*Disabled.*—The disabled constitute the second target group for whom there is a presumption of permanent inability to achieve self-support. Eligibility for an income security benefit for the disabled person may be based on: membership in a contributory retirement system (OASDI or civil service), on military service, on occupation (coal miner), or on indigency (welfare).

Members of the social security system and the railroad retirement system are eligible for disability benefits computed on their earnings history to the date of permanent disability. They are also eligible for medicare benefits. Federal civilian employees receive a disability benefit based on total disability for their previous occupation—paying a minimum benefit of 40% of the average of their highest 3 years of earnings.

Benefits to the disabled in the uniformed services are scaled to the degree of physical impairment rather than previous levels of earnings. Disability retirement from the military, and veterans compensation and indemnities, both are provided for disabilities which are presumptively service-connected. Veterans' pensions are paid to persons with non-service-connected total disability who served in the armed services during wartime and whose income falls below minimum levels.

Under the Federal Coal Mine Health and Safety Act, compensation is paid to black lung victims in amounts related to the workers' compensation law provided for Federal employees (FECA). Eligible persons began registering for benefits in the spring of 1970. Many received a one-time retroactive benefit in 1974.

Beginning in 1974, 1.3 million needy disabled received assistance under the new Federal supplemental security income program enacted in 1972 to replace State administered programs of assistance to the blind and disabled. By 1977, that number will grow to 2.3 million needy disabled.

Approximately 4.6 million persons will receive disability benefits under social security in 1977. Another 302,000 individuals will receive benefits through Federal civilian employee programs. There is a substantial overlap between these two groups and those receiving disability benefits because of prior military service or employment in coal mines.

Table L-6. **BENEFIT OUTLAYS FOR THE DISABLED: BENEFITS, BENEFICIARIES, AND AVERAGE PAYMENT**

	Benefit outlays (in millions of dollars)			Number of beneficiaries (thousands)			Average monthly payments (in dollars)		
	1975 actual	1976 esti- mate	1977 esti- mate	1975 actual	1976 esti- mate	1977 esti- mate	1975 ac- tual	1976 esti- mate	1977 esti- mate
Civilian covered employ- ment:									
Disability insurance....	7, 630	9, 141	10, 768	3, 912	4, 357	4, 573	163	175	196
Federal civilian em- ployees.....	1, 359	1, 658	1, 965	271	290	306	418	477	536
Railroad employees....	206	230	251	45	46	47	381	417	445
Coal miners.....	612	621	557	353	343	321	144	151	145
Medicare.....	1, 368	1, 853	2, 213	2, 025	2, 255	2, 565	56	68	72
Uniformed services:									
Service-connected dis- ability.....	4, 736	5, 198	5, 353	3, 167	3, 177	3, 178	125	136	140
Other: Income-tested..	503	536	505	513	510	488	82	88	86
Public assistance to the disabled:									
Supplemental security income.....	2, 264	2, 707	3, 313	1, 622	1, 950	2, 317	116	116	119
AFDC (disabled male head of family).....	574	650	700	1, 380	1, 440	1, 410	35	38	41
Medicaid.....	1, 740	2, 081	2, 363	2, 497	2, 534	2, 572	58	68	77
In-kind benefits to needy disabled: Food.....	305	370	323	1, 062	1, 141	938	24	27	29
<b>Total.....</b>	<b>21, 297</b>	<b>25, 045</b>	<b>28, 311</b>	-----	-----	-----	-----	-----	-----

It is estimated that in 1977 5.2 million adults and children will be supported by public assistance based on disability. Nearly all of these persons are eligible for medicaid benefits.

Disabled persons benefit from the exclusion from taxable income of social security disability insurance benefits, of workers' compensation benefits, and of payments such as sick pay and private disability payments. These exclusions are estimated to reduce receipts in 1977 by \$0.4 billion, and \$0.6 billion, and \$0.4 billion, respectively. The exclusion from taxable income of veterans service-connected disability compensation is an additional tax expenditure of \$0.6 billion.

**Mothers and dependent children.**—Benefit eligibility varies considerably for this last target group for whom self-support is not assumed to be universally possible. This group includes mothers with dependent children and no male breadwinner. Eligibility is determined either by the work history of a deceased husband or through a means test.

**Table L-7. BENEFITS FOR MOTHERS WITH DEPENDENT CHILDREN AND NO HUSBAND: BENEFITS, BENEFICIARIES, AND AVERAGE PAYMENT**

	Benefit outlays (in millions of dollars)			Number of beneficiaries (thousands)			Average monthly payments (in dollars)		
	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.
Benefits to widows of covered employees:									
Social security (OASDI) members	3,075	3,350	3,684	1,974	1,936	1,767	130	144	174
Federal civilian employees	126	151	182	44	46	48	240	275	319
Railroad employees	31	34	34	11	11	10	235	258	283
Uniformed service members	395	440	457	556	562	559	59	65	68
Coal miners	35	37	35	25	24	22	117	129	133
Public assistance (AFDC) mothers with pre-school children:									
Cash payments	2,248	2,546	2,754	5,450	5,650	5,550	34	38	41
Medicaid	1,447	1,732	1,842	9,006	9,366	9,741	13	15	16
<b>Total</b>	<b>7,358</b>	<b>8,289</b>	<b>8,988</b>						

**Transitional low income.**—The intent of income security outlays for able-bodied persons is to tide them over periods in which they cannot support themselves, until other measures correct the causes of such inability to provide self-support.

The major system of unemployment insurance, constituting 90% of unemployment benefits paid in 1975, is State-administered. As a result, states varied in eligibility requirements, benefit levels, and duration of benefits.

Table L-8. **BENEFITS FOR TRANSITIONAL LOW INCOME AND OTHER: BENEFITS, BENEFICIARIES, AND AVERAGE PAYMENT**

	Benefit outlays (in millions of dollars)			Number of beneficiaries (thousands)			Average monthly payments (in dollars)		
	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.	1975 actual	1976 est.	1977 est.
Temporary unemployment:									
Unemployment insurance system.....	12,141	17,678	15,432	11,461	11,009	9,218	88	134	140
Other unemployment benefits.....	633	697	736	579	575	536	91	101	114
Long-term unemployment:									
Unemployed fathers.....	229	260	280	541	575	565	35	38	41
Mothers with all children in school.....	1,537	1,741	1,887	3,701	3,835	3,775	35	38	42
Other income tested <sup>1</sup> .....	550	625	603	693	722	708	66	72	71
In-kind benefits, low income:									
Food <sup>2</sup> .....	4,564	5,675	4,830	29,714	32,246	25,921	13	15	21
Housing <sup>2</sup> .....	1,697	1,880	2,098	4,927	5,303	6,324	29	30	28
Medicaid.....	1,092	1,307	1,389	6,794	7,066	7,348	13	15	16
Uniformed services retirees under 65.....	4,866	5,735	6,465	792	838	885	512	570	609
Food for non-needy children.....	639	755	-----	26,783	28,133	-----	-----	-----	-----
Other.....	1,823	1,986	2,113	-----	-----	-----	-----	-----	-----
<b>Total, transitional low income.....</b>	<b>29,771</b>	<b>38,339</b>	<b>35,833</b>	-----	-----	-----	-----	-----	-----

<sup>1</sup> Includes all assistance to refugees and Indians.<sup>2</sup> Includes all benefits to AFDC and UF families.

Special unemployment benefit programs are provided for Federal employees and ex-servicemen, railroad employees, and unemployed workers in industries adversely affected by foreign trade. A temporary program enacted in December, 1974 when unemployment was rising, and expiring March 31, 1977, provides compensation for the temporarily unemployed not covered in another system. These programs are federally financed, but except for railroad retirement unemployment insurance, are State-administered.

The exclusion from taxable income of unemployment compensation benefits is a tax expenditure expected to grow from \$2.3 billion in 1975 to \$2.9 billion in 1977.

A second set of programs providing income security benefits to able-bodied men and women are means-tested cash and in-kind programs.

Benefits based neither on need, lack of employment or age, are provided to uniformed services retirees under the age of 65 because of their length of service.

**Needs-tested benefits.**—The foregoing tables have provided displays of benefits for various target groups. Within these target groups, benefits may or may not be based on a needs or means test. Public assistance, veterans and survivors pension, medicaid, and food and

housing programs, on the other hand, are those which provide benefits to individuals based on a test of need. In addition to that test, eligibility for cash assistance may be limited by such considerations as prior military service, age, disability, or absence of a male breadwinner in a family. The following table addresses only those program benefits that are available to each target group on a needs-tested basis.

Table L-9. **NEEDS-TESTED BENEFITS BY TARGET GROUPS AND PROGRAM** (in millions of dollars)

	Benefit outlays		
	1975 actual	1976 estimate	1977 estimate
<b>By target group:</b>			
Benefits to the aged:			
Public assistance.....	1,817	1,838	1,932
Veterans and survivors pension.....	1,540	1,639	1,555
Medicaid.....	2,561	3,064	3,259
Other.....	1,334	1,582	1,634
Subtotal, benefits to the aged.....	7,253	8,124	8,380
Benefits to the disabled:			
Public assistance.....	2,837	3,356	4,013
Veterans and survivors pension.....	503	536	505
Medicaid.....	1,740	2,081	2,213
Other.....	305	370	323
Subtotal, benefits to the disabled.....	5,385	6,343	7,054
Benefits to mothers:			
Public assistance.....	2,248	2,546	2,754
Medicaid.....	1,447	1,732	1,842
Other.....	217	230	222
Subtotal, benefits to mothers.....	3,912	4,508	4,818
Benefits to the unemployed and other low income:			
Public assistance.....	1,766	2,001	2,167
Medicaid.....	1,092	1,307	1,389
Food.....	4,564	5,675	4,830
Housing.....	1,697	1,880	2,098
Other.....	600	696	673
Subtotal, benefits to unemployed.....	9,720	11,559	11,157
<b>Total needs-tested benefits.....</b>	<b>26,270</b>	<b>30,535</b>	<b>31,409</b>
<b>By program:</b>			
Public assistance.....	8,790	9,929	11,050
Veterans and survivors pension.....	2,739	2,914	2,771
Medicaid.....	6,840	8,184	8,703
Food.....	5,828	7,213	6,334
Housing.....	2,072	2,295	2,551
<b>Total needs-tested benefits.....</b>	<b>26,270</b>	<b>30,535</b>	<b>31,409</b>



Table L-10. FEDERAL OUTLAYS FOR INCOME SECURITY BENEFITS, BY DEPARTMENT AND PROGRAM (in millions of dollars)

Department, agency and program	Benefit outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Department of Health, Education, and Welfare:</b>				
Social security:				
Old-age and survivors insurance.....	54,839	62,245	17,023	70,572
Disability insurance.....	7,630	9,141	2,546	10,768
Hospital insurance.....	10,355	11,869	2,964	12,960
Supplementary medical insurance.....	3,765	4,687	1,380	5,804
Supplemental security income.....	4,081	4,545	1,255	5,245
Public assistance:				
Maintenance payments.....	4,592	5,200	1,458	5,625
Medicaid.....	6,840	8,184	2,220	8,703
Special benefits for disabled coal miners.....	939	960	225	906
Assistance to refugees.....	70	135	33	128
Public health service officers retirement.....	21	24	7	28
Medical care for retired commissioned officers.....	5	6	2	7
Proposed legislation included above.....	-----	(-315)	(-413)	(-3,057)
<b>Total Health, Education, and Welfare.....</b>	<b>93,136</b>	<b>106,996</b>	<b>29,113</b>	<b>120,746</b>
<b>Veterans Administration:</b>				
Disability and dependency and indemnity compensa- tion.....	4,680	5,114	1,306	5,220
Veterans and survivors pensions.....	2,739	2,914	783	2,771
Life insurance (net subsidy).....	527	544	137	568
Other veterans benefits.....	193	210	41	120
Proposed legislation included above.....	-----	-----	(-21)	(-85)
<b>Total Veterans Administration.....</b>	<b>8,140</b>	<b>8,782</b>	<b>2,268</b>	<b>8,679</b>
<b>Department of Labor:</b>				
Unemployment insurance (State programs).....	11,958	16,878	3,285	14,832
Special unemployment assistance.....	183	800	250	300
Railroad unemployment.....	67	164	44	176
Unemployment compensation for Federal em- ployees and ex-servicemen.....	553	473	120	440
Trade adjustment activities.....	13	60	30	120
Federal employee worker's compensation.....	186	249	76	291
Special benefits for disabled coal miners.....	6	20	5	27
Proposed legislation included above.....	-----	-----	-----	(300)
<b>Total Labor.....</b>	<b>12,966</b>	<b>18,644</b>	<b>3,810</b>	<b>16,186</b>
<b>Department of Defense—Military:</b>				
Military retirement.....	6,242	7,325	1,977	8,247
Medical care for retirees.....	548	595	156	688
Proposed legislation included above.....	-----	-----	-----	(-225)
<b>Total Defense.....</b>	<b>6,790</b>	<b>7,920</b>	<b>2,133</b>	<b>8,935</b>
<b>Department of Agriculture:</b>				
Food stamps.....	4,357	5,283	1,077	4,307
Child nutrition.....	1,832	2,333	499	2,000
Special milk.....	124	103	-----	-----
Removal of surplus commodities.....	155	249	82	27
Proposed legislation included above.....	-----	(-132)	(-300)	(-2,218)
<b>Total Agriculture.....</b>	<b>6,468</b>	<b>7,968</b>	<b>1,658</b>	<b>6,334</b>

**Table L-10. FEDERAL OUTLAYS FOR INCOME SECURITY BENEFITS, BY DEPARTMENT AND PROGRAM (in millions of dollars)—Continued**

Department, agency and program	Benefit outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate
Civil Service Commission: Civil service retirement.....	6,825	8,198	2,248	9,753
Proposed legislation included above.....				(-69)
Total Civil Service Commission.....	6,825	8,198	2,248	9,753
Railroad Retirement Board: Railroad Retirement.....	3,034	3,322	893	3,624
Total Railroad Retirement Board.....	3,034	3,322	893	3,624
Department of Housing and Urban Development:				
Public housing.....	1,312	1,429	316	1,489
Rent and mortgage interest supplements.....	761	866	243	1,062
Total Housing and Urban Development.....	2,072	2,295	559	2,551
Department of Transportation: Coast Guard retire- ment.....	105	122	32	133
Total Transportation.....	105	122	32	133
Department of State: Foreign Service retirement....	53	65	18	79
Proposed legislation included above.....				(-1)
Total State.....	53	65	18	79
Department of the Interior: General assistance to Indians.....	48	50	22	53
Total Interior.....	48	50	22	53
Department of Commerce: NOAA officers retirement..	2	2	1	2
Total Commerce.....	2	2	1	2
Total Federal outlays.....	139,638	164,463	42,755	177,073

## SPECIAL ANALYSIS M

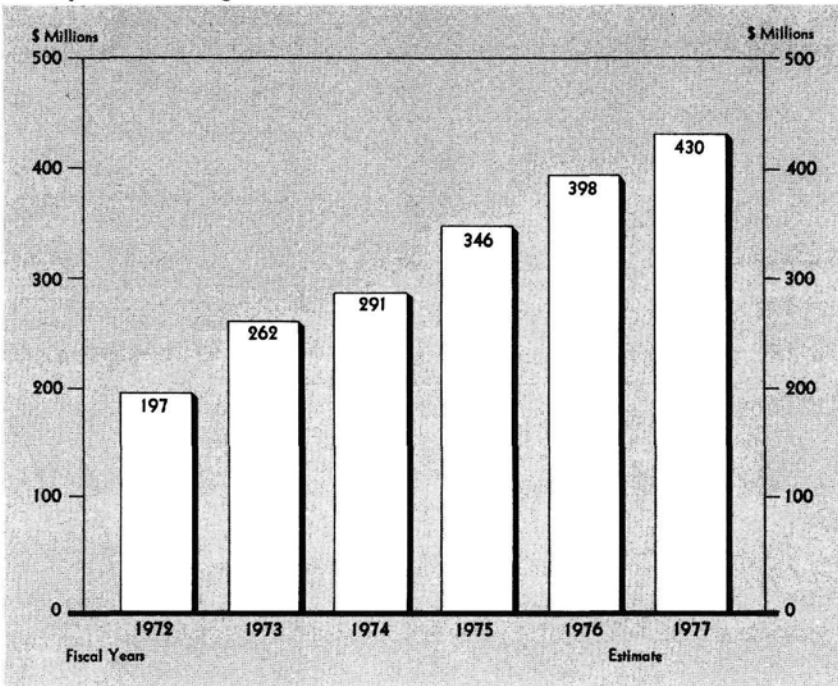
### FEDERAL CIVIL RIGHTS ACTIVITIES

#### COVERAGE AND SCOPE OF THE ANALYSIS

This analysis of Federal civil rights activities comprises more than the traditional programs and policies related to civil rights enforcement. In addition to Federal activities regarding the protection of such rights as voting, public accommodations, fair housing, and equal employment opportunity in the public and private sectors, there are included Federal programs related to civil rights research and information dissemination and to the conciliation and prevention of racial disputes. Outlays to enforce these civil rights have risen from \$346 million in 1975 to \$430 million in 1977.<sup>1</sup>

#### Outlays for Civil Rights Enforcement

M-1



<sup>1</sup> The thrust of this analysis focuses on civil rights enforcement activities. Because of the conceptual difficulties inherent in developing data on minority assistance programs, including duplication and lack of reliability of some data, the discussion of such programs included prior to the 1976 analysis has been deleted. However, for comparative purposes, a table on minority assistance (M-4) appears at the end of this analysis. Outlays under the Emergency School Aid Act as project grants are included in table M-4 rather than under enforcement, table M-1. Postal Service outlays appear in the Annexed Budget and are excluded here.

Programs relating to problems of the economically and socially disadvantaged, whether in employment and training, community development, or bilingual education, will not be treated as civil rights activities, even when they include substantial minority participation, for they are more properly considered in other analyses in this document.<sup>2</sup>

**Federal service equal opportunities.**—The head of each Federal Executive department and agency is charged by Executive Order 11478 and the Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972 (Public Law 92-261), with establishing and maintaining an affirmative program of equal employment opportunity within the agency. Enforcement responsibility for the Government-wide program is assigned to the Civil Service Commission and special procedures are available to employees and applicants who believe they have been discriminated against in any aspect of Federal service. Under these procedures, 36,933 persons contacted equal employment opportunity counselors during 1975 for advice and assistance, and, of this total, 5,563 filed formal discrimination complaints. If equal employment opportunity counseling, impartial investigation, and a third-party hearing do not resolve the matter to an individual's satisfaction, the complainant may appeal to the Commission's Appeals Review Board or may file a civil action in U.S. district court.

Table M-1. **FEDERAL CIVIL RIGHTS OUTLAYS BY PROGRAM CATEGORY**  
(In millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
Civil rights enforcement: <sup>1</sup>				
Federal service equal employment opportunities.....	145.62	173.43	44.90	187.66
Military services equal opportunities <sup>2</sup> .....	37.50	40.48	12.83	40.10
Private sector equal employment opportunities.....	94.07	106.48	28.80	115.01
Equal educational opportunity <sup>3</sup> .....	16.69	21.51	5.48	23.91
Fair housing <sup>4</sup> .....	16.78	17.56	4.41	18.13
Enforcement and investigation <sup>5</sup> .....	22.25	24.53	6.77	26.73
Research and information dissemination.....	9.05	10.50	3.29	14.17
Civil rights conciliation and prevention of disputes....	3.57	3.84	.98	4.16
<b>Total</b> .....	<b>345.54</b>	<b>398.32</b>	<b>107.46</b>	<b>429.85</b>

<sup>1</sup> Civil rights enforcement programs guarantee and protect the basic civil rights as defined by law.

<sup>2</sup> Excludes outlays of \$18.8 million for contract compliance, fair housing and title VI activities reported elsewhere. Includes U.S. Coast Guard.

<sup>3</sup> Excludes outlays under the Emergency School Aid Act. Cf. table M-4.

<sup>4</sup> Excludes funds for contract compliance and departmental personnel who directly administer housing and urban development programs but also concern themselves with the objectives of fair housing laws.

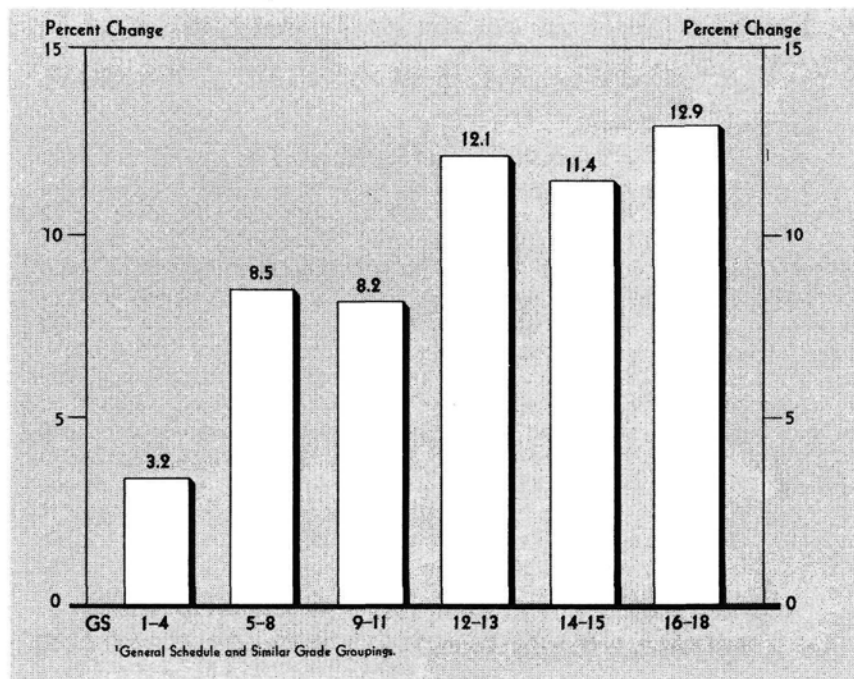
<sup>5</sup> Includes all title VI efforts except HEW and HUD.

Government policy is clear that personnel actions shall be free from discrimination based on race, color, religion, sex, or national origin and that Federal agencies shall take affirmative action to assure equal employment opportunity. Agency equal employment opportunity pro-

<sup>2</sup> For example, expenditures for minority participants in employment and training programs (40%) are not included. See Special Analysis J, Training and Employment.

Increase in Minorities by Grades<sup>1</sup> — November 1973—November 1974

M-2



grams are documented in written plans of action which must be submitted to the Commission annually for review and approval. Careful consideration is to be given to assure that recruitment activities reach all sources of job candidates, that present employee skills are fully utilized, that opportunities for upward mobility are provided and that managers are trained with regard to their equal employment opportunity responsibilities.

Outlays for Federal civil service equal employment opportunity programs (including upward mobility) will increase by 29% in the 2 years, 1975 to 1977, to \$188 million. Work-years in these programs will increase to 11,839.

As of November 30, 1974, over one-fifth (21.0%) of Federal employees were members of minority groups. Recent surveys have reflected a continuing trend of more minorities in the middle and upper grade and pay levels. As of October 31, 1974, women represented 41.7% of the nonpostal, full-time Federal white-collar work force. Between October 1973 and October 1974, women represented 61.0% (38,843) of the total increase (63,677) in general schedule employment.

Under the Intergovernmental Personnel Act of 1970 (IPA), the Civil Service Commission provides technical and financial assistance to State and local governments and their agencies for improving personnel management and employee development, with a concerted emphasis on equal employment opportunity. State and local governments across the country have made considerable progress recently toward the goal of assuring equal opportunity for employment and

promotion in the public service. Under this program in 1975, the Commission has:

- Awarded \$830 thousand in IPA grant funds to State and local governments for 30 projects relating to equal employment opportunity.
- Provided assistance on request to more than 1,000 jurisdictions on affirmative action planning, removing artificial personnel barriers and improving job-related selection procedures.
- Developed and issued a variety of publications for State and local use, aimed wholly or partially at improving equal employment opportunity.

In 1977, the Commission will continue to provide technical and financial assistance in this area.

***Military services equal opportunities.***—Each of the military services has placed equal opportunity officers and their staffs at various levels within individual command structures. They guide, monitor, and evaluate all matters pertaining to the equal opportunity and treatment of military personnel and their dependents and are responsible for and participate in race relations councils, seminars, and training. In 1977, outlays for insuring equal opportunities for members of the Armed Services, excluding fair housing expenditures, will total \$40.1 million<sup>3</sup> and provide for more than 3,150 work-years.

Equal opportunity for servicewomen will receive added emphasis. As the number of women in the military services continues to rise at a rapid rate, greater utilization is being made of their talents. For example, the Army has now opened 92% of their enlisted occupational specialties to women. All services are now also training women as noncombat pilots and, beginning in 1976, women will attend the service academies. Service ROTC programs are also open to women.

The Defense Race Relations Institute, located at Patrick Air Force Base, Fla., trains officers and enlisted members for service with their units as instructors. The Institute has graduated over 3,857 instructors from all the services in the past 5 years.

Recruiting efforts will continue to insure balanced minority participation in the military services. All services have increased the percentage of minority recruiters. As an example of their success, there are over 1,500 minority cadets enrolled in the service academies today. Significant progress has also been made in procuring minority officers from reserve officer training programs and officer candidate training schools and in the detailing of qualified minority officers to attend senior and intermediate level professional military schools.

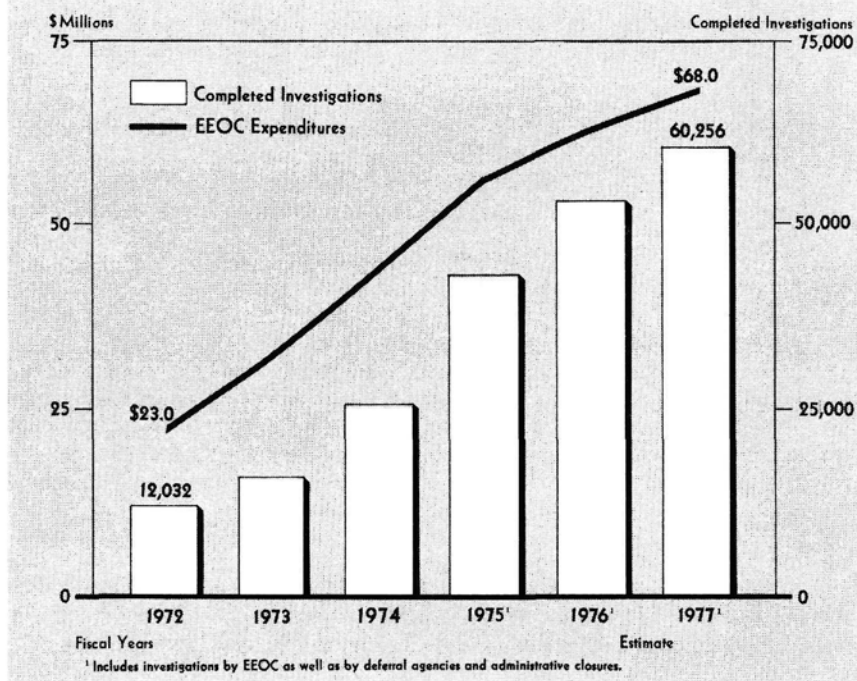
For the first time in history, there is a minority at the 4-star general rank. In addition, there are 17 other minority general officers on active duty whereas, prior to 1971, only 4 minority officers had ever achieved general/flag officer rank in the entire history of Armed Services. The top enlisted position in the Air Force continues to be held by a minority.

***Private sector opportunities.***—Title VII of the Civil Rights Act of 1964, as amended, prohibits discrimination in employment on the basis of race, color, religion, sex, or national origin by either employers,

<sup>3</sup> Military services equal opportunities includes the U.S. Coast Guard.

## Equal Employment Opportunity Commission Activities

M-3



unions, or employment agencies. Executive Order 11246, as amended, requires Federal and federally assisted Government contractors and subcontractors to provide similar opportunities. Outlays for the agencies charged with these responsibilities, the Equal Employment Opportunity Commission, the Justice Department, the Department of Labor, and 17 cooperating agencies, will total \$115 million in 1974.<sup>4</sup>

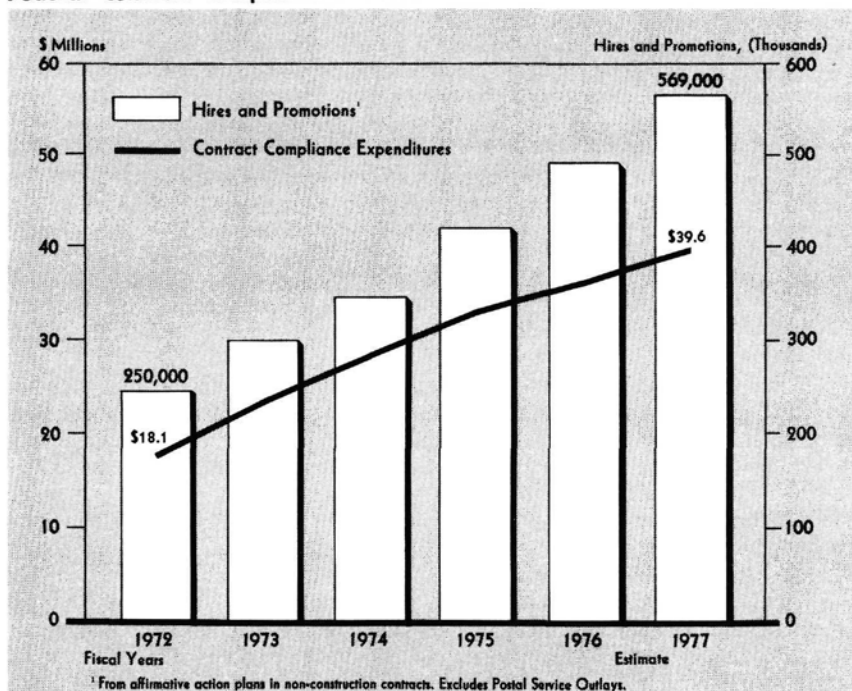
The Equal Employment Opportunity Commission will spend \$68 million in 1977 to carry out its responsibilities relating to nondiscrimination in employment in the private sector and State and local government. An estimated 80,500 charge resolutions are projected through the combined efforts of the Commission and the State and local agencies to which, under law, charges are deferred. The Commission will increase the amount of its grants by 33% to \$8 million for State and local agencies which administer fair-employment practices statutes to strengthen the Federal/State partnership in handling charges. As a result of these actions, an estimated 82,532 persons will receive \$159 million in cash benefits in 1977.

Enforcement of title VII, as amended, is also the responsibility of the Justice Department which, through conciliation and litigation, seeks to secure compliance with the law where it finds patterns or practices of employment discrimination in State and local governments and their agencies. In 1977, the Justice Department plans to spend \$1.5 million to help eliminate such discrimination in the State and local public sectors.

<sup>4</sup> Excludes amounts for nondiscrimination against the aged, handicapped, and veterans.

## Federal Contract Compliance Activities

M-4



Executive Order 11246, as amended, prohibits the practice of discrimination in Federal contracts, subcontracts, and on federally assisted construction projects. Nondiscrimination assurances cover construction as well as industrial work forces and require affirmative action on the part of recipients of Federal contract moneys to promote the equal employment of minorities and women. In 1977, the Federal agencies responsible for implementing this order will spend \$39.6 million. More than 550,000 new hires and promotions will be effected by such affirmative action goals.

Sixty-nine "citywide" plans for affirmative action in the construction industry, including the well-known "Philadelphia plan," have been put into effect. In addition, the Office of Federal Contract Compliance programs, Department of Labor, is continuing to develop proposals for statewide construction contracts. The goal for 1977 is to insure that all areas with substantial minority populations are covered under either a voluntary or imposed affirmative action plan.

Other highlights include:

- The Federal Communications Commission will continue to investigate complaints of employment discrimination by broadcasters, cable television systems, and common carriers and review licensees' annual reports of employment patterns as part of its program to enforce the rules of the Commission relating to equal employment opportunity.



- The Department of Labor will spend \$4.1 million in administering the Equal Pay Act. In 1975, as a result of these efforts, \$26.5 million in wages was received by 31,843 employees, primarily women, to rectify illegal pay practices. An additional \$7.4 million in back wages was also restored to 17,889 employees.

**Equal educational opportunity.**—Responsibility for insuring equality of educational opportunity rests both with the Department of Health, Education, and Welfare and with the Department of Justice. This responsibility includes guaranteeing students the full range of educational opportunity, as well as promoting a nondiscriminatory policy with regard to school staff and administration. In 1977, educational activities in support of these goals will expend \$23.9 million excluding capital assistance to predominantly black colleges and the emergency school assistance program.<sup>5</sup>

To enforce Federal laws requiring equal education opportunities for public school students, the Justice Department will spend \$2.0 million in the coming year. Although substantial compliance with the constitutional mandate has been achieved in recent years, the Justice Department continues its enforcement supervision through over 200 cases involving some 500 school systems.<sup>6</sup> In addition, the Department engaged in active litigation in 103 of these cases to assure full compliance with the law, including nondiscrimination in the hiring and promoting of school personnel. Currently, the Federal Government is also taking steps to provide demonstration programs for non-English-speaking pupils to provide them full equality of opportunity. Title IX of the Higher Education Amendments of 1972 charged the Department of Health, Education, and Welfare with the responsibility of insuring nondiscrimination on the basis of sex in some 2,700 institutions of higher education throughout the United States. In 1977, the Department expects to conduct 150 onsite compliance reviews and to investigate 100 complaints.

**Fair housing.**—Title VIII of the Civil Rights Act of 1968 prohibits discrimination in the sale, rental, or financing of housing, and in the provision of brokerage services, on the basis of race, color, religion, sex or national origin. The Department of Housing and Urban Development (HUD) is charged with the administration and enforcement of this act and the promotion of fair housing throughout the United States. All executive agencies and departments are required to cooperate with HUD—the lead agency in this area—and to conduct their programs in a manner that affirmatively furthers fair housing opportunities for all Americans.

<sup>5</sup> Excludes amounts for nondiscrimination against the handicapped.

<sup>6</sup> The desegregation of schools is progressing nationwide. The Administration will continue its commitment to assist school districts in this important process by requesting ongoing support for the Emergency School Aid Act. In 1977, \$221 million will be spent under this program for project grants throughout the Nation to assist school districts in overcoming the effects of minority group isolation. These discretionary funds will permit a flexible approach to insure educational achievement in districts that are desegregating.

Since this money represents project grant money rather than an enforcement effort directed by on the scene Federal personnel, it is included under minority assistance programs in table M-4.

Expenditures for the administration of fair housing programs in executive departments and agencies will increase in 1977 to \$18.1 million.

- HUD will spend \$5.1 million to strengthen its efforts under title VIII and enable it to reduce the backlog in the reactive complaint system.
- The Department of Justice will spend \$2.1 million in the development, litigation, and negotiation of cases to enforce title VIII.
- The Department of Defense will spend \$6.1 million to assure the rights of all military personnel to available offbase housing.
- The General Services Administration (GSA) will spend \$1.1 million to assure that federally constructed or leased space is located where there is an adequate supply of low- and moderate-income housing available on a nondiscriminatory basis.
- Pursuant to the Equal Credit Opportunity Act (title V of Public Law 93-495), the Federal Reserve Board published final regulations in November 1975, to prevent discrimination in providing credit on the basis of sex or marital status.

Table M-2. FEDERAL CIVIL RIGHTS OUTLAYS BY TYPE OF ACTIVITY  
(In millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
Civil rights enforcement: <sup>1</sup>				
Complaint conciliation.....	21.12	24.42	6.63	26.99
Complaint investigation.....	48.62	56.13	15.40	61.78
Compliance review and monitoring.....	66.30	76.97	20.09	84.28
Legal enforcement.....	23.64	28.12	7.54	29.61
Program direction, research and information dissemination.....	82.14	91.95	24.65	101.15
Technical assistance.....	6.21	6.45	1.72	6.65
Upward mobility.....	60.00	73.80	18.60	79.30
Military services equal opportunities.....	37.50	40.48	12.83	40.10
<b>Total.....</b>	<b>345.54</b>	<b>398.32</b>	<b>107.46</b>	<b>429.85</b>

<sup>1</sup> Civil rights enforcement programs guarantee and protect the basic civil rights as defined by law.

During 1975, HUD received 3,167 complaints, and closed 2,575. In addition, 355 conciliation agreements were negotiated, generally including both specific relief for the complainant and actions to eliminate any discriminatory practices found as a result of the complaint. Enforcement of title VIII is also implemented through requiring the display of fair housing posters, overseeing advertising guidelines and reviewing affirmative marketing plans.

Finally, title VIII requirements are an integral part of HUD regulations implementing title I of the Housing and Community Development Act of 1974, which provides for community block grants, and title II of that act, which establishes the new section 8 housing assistance payments program. To assure nondiscrimination under these programs, the Department will continue communitywide administrative meetings; expand compliance reviews; and increase cooperative efforts with other agencies, particularly the independent Federal

financial regulatory agencies, in order to insure the affirmative administration of all programs relating to housing. HUD's enforcement efforts herein are supplemented by the Department of Justice and by private civil suits which may be brought pursuant to title VIII.

The Justice Department has brought or participated in 229 suits against some 700 defendants in 34 States and the District of Columbia. At least 221 court orders have been entered, most of them requiring comprehensive affirmative relief to correct the effects of past housing discrimination and to maximize equal opportunity in the future. The Department has also obtained supplemental relief or brought contempt of court proceedings in 21 cases where defendants had failed to implement provisions of earlier orders and voluntary compliance agreements have been concluded with the real estate boards of major cities.

The Defense Department expects to continue its successful implementation of the open offbase housing program. Today, 99% of surveyed facilities are pledged to a policy of nondiscrimination. Recently, Defense revised its procedures to take stronger measures against landlords practicing race and sex discrimination. In 1977, Defense will devote 469 work-years of effort to furthering this record of achievement.

GSA, under Executive Order 11512, will expend 43 work-years on matters relating to the positive impact that selection of sites for Federal facilities can have on the social and economic conditions in the area. GSA and HUD are continuing to develop affirmative action plans where necessary to insure that an adequate supply of low- and moderate-income housing will be available on a nondiscriminatory basis.

**Civil rights enforcement.**—Primary responsibility for the enforcement of civil rights laws and constitutional guarantees is vested in the Justice Department. This includes the development, negotiation, conciliation, and litigation of cases and complaints. In 1977, the Justice Department and other agencies with enforcement responsibilities will spend \$26.7 million to carry out the above mandate. In addition the efforts of the Department will focus on its ongoing coordination of Federal agencies, enforcement efforts under title VI of the 1964 Civil Rights Act which prohibits discrimination in federally assisted programs and under the general revenue sharing legislation. The Department will also carry on enforcement activities directed toward compliance with laws which prohibit the interference with basic civil rights, including the right to vote and the use of public accommodations and facilities.

In 1977, the Justice Department will continue to allocate resources for investigation and litigation to protect the civil rights of citizens who may have suffered violence or threats of violence including special protections for migrant workers, prison inmates, and, along with the Interior Department, American Indians. Attention will also be directed, as before, to civil litigation involving injustices and substandard conditions in correctional institutions, mental hospitals, and juvenile homes.

The voting rights program will expand its efforts to secure to all citizens, including non-English-speaking citizens, the right to register

and vote without discrimination or intimidation. In addition, all proposed changes affecting voting under section 5 of the Voting Rights Act of 1965, as amended, are submitted to the Attorney General and must be investigated, reviewed, and adjudicated in the Department of Justice. 652 submissions involving 2,080 changes were processed in 1975. In support of the voting rights program, the Civil Service Commission provides personnel to prepare and maintain lists of eligible voters and to observe election procedures in States or other political subdivisions designated by the Attorney General. The Commission receives complaints, hears and determines challenges, and assists in the defense of challenge cases filed in the U.S. circuit courts of appeals. In 1977, the Commission will spend \$1.4 million to assist in this responsibility.

***Civil rights research and information dissemination.***—Expenditures grouped in this category include all moneys for civil rights activities not counted elsewhere as well as Federal research and information dissemination efforts. Outlays in this area will total \$14.2 million in 1977.

- The Commission on Civil Rights will spend \$8.9 million to carry on its factfinding function relating to denials of equal protection under the law.<sup>7</sup>
- The Women's Bureau, Department of Labor, will devote \$2.1 million to questions and issues relating to the utilization of womanpower and the economic, legal, and civil status of women. The Bureau works with appropriate State, national, international, local, and union organizations, and concerned individuals in achieving its goals and also provides support services to the Citizens Advisory Council on the Status of Women.
- A \$5 million appropriation is requested to enable the National Commission on the Observance of International Women's Year to convene a national conference evaluating the progress of American women over the past 200 years. Preparatory to that conference, State meetings are to be held assessing the current status of women and developing ways to eliminate remaining inequalities in this country. Expenditures for the Commission in 1977 will total \$2.9 million.
- The women's action program, Department of Health, Education, and Welfare (HEW), in association with the Secretary's Advisory Committee on the Rights and Responsibilities of Women, will spend \$0.3 million to analyze the effects of HEW programs on women and develop the changes required to help attain equality for women.

***Civil rights conciliation and prevention of disputes.***—The Community Relations Service of the Department of Justice was established by title X of the Civil Rights Act of 1964 to provide

<sup>7</sup> Excludes expenditures authorized under the Age Discrimination Act of 1975.

assistance to communities in resolving difficulties arising from discriminatory practices which disrupt peaceful relations among citizens. It also seeks to reduce and prevent racial tensions. The Service actively cooperates with appropriate Federal, State, and local agencies, private and public groups, and individuals on methods and programs for the peaceful resolution of racial disputes.

In 1977, the Service will spend \$4.2 million for this purpose. This will permit an expansion in crisis resolution and State liaison activities. State liaison representatives continue to work with State and local officials in developing their own crisis contingency plans to enable communities to eventually provide community relations services for themselves.

Table M-3. **FEDERAL CIVIL RIGHTS OUTLAYS BY DEPARTMENT AND AGENCY** (in millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
Civil rights enforcement: <sup>1</sup>				
Department of Agriculture.....	5.30	5.74	1.41	5.88
Department of Commerce.....	1.00	.97	.24	1.02
Department of Defense.....	53.72	57.22	17.05	58.47
Department of Health, Education, and Welfare.....	17.69	24.15	6.19	26.53
Department of Housing and Urban Development.....	10.91	11.78	2.89	11.85
Department of the Interior.....	1.65	2.00	.51	2.05
Department of Justice.....	20.61	21.48	5.42	22.53
Department of Labor.....	10.63	12.44	3.14	12.98
Department of State.....	*	*	*	*
Department of Transportation.....	3.55	3.98	1.02	4.30
Treasury Department.....	.95	1.00	.25	2.38
Civil Service Commission <sup>2</sup> .....	146.00	174.65	45.18	189.09
Commission on Civil Rights.....	6.92	7.92	2.26	8.90
Energy Research and Development Administration <sup>3</sup> .....	2.35	2.23	.55	2.24
Environmental Protection Agency.....	.75	.90	.17	.90
Equal Employment Opportunity Commission.....	56.13	62.99	17.87	68.04
Federal Communications Commission.....	.29	.30	.08	.39
General Services Administration.....	4.53	5.17	1.36	5.91
National Commission, IWY <sup>4</sup> .....		.26	.44	2.90
Postal Service <sup>5</sup> .....				
Small Business Administration.....	1.05	1.08	.99	1.13
Veterans Administration.....	.87	1.28	.32	1.57
Other independent agencies.....	.64	.78	.12	.79
<b>Total.....</b>	<b>345.54</b>	<b>398.32</b>	<b>107.46</b>	<b>429.85</b>

<sup>1</sup> Civil rights enforcement programs guarantee and protect the basic civil rights as defined by law.

<sup>2</sup> All Federal service equal employment opportunity outlays, including upward mobility, are reported under the lead agency, Civil Service Commission.

<sup>3</sup> The Atomic Energy Commission expired Jan. 19, 1975. The majority of its resources were transferred to this new agency upon its expiration.

<sup>4</sup> National Commission on the Observance of International Women's Year, 1975.

<sup>5</sup> Postal Service outlays appear in the Annexed Budget.

\*Less than \$10 thousand.

Table M-4. FEDERAL MINORITY ASSISTANCE PROGRAMS

Minority Assistance Outlays by Program Category <sup>1</sup>

(In millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
Indian programs <sup>2</sup> .....	1,244.20	1,594.60	460.00	1,535.50
Minority business enterprise <sup>3</sup> .....	1,029.51	1,440.44	316.06	1,562.80
Emergency School Aid Act.....	215.94	234.66	58.82	220.79
Minority higher education assistance <sup>4</sup> .....	105.79	105.24	27.66	114.33
<b>Total</b> .....	<b>2,595.44</b>	<b>3,374.94</b>	<b>862.54</b>	<b>3,433.42</b>

<sup>1</sup> Minority assistance programs broaden opportunities for economic participation and self-determination.

<sup>2</sup> The composition of Indian outlays remains unchanged from the prior to 1976 format to exclude programs not specifically established for Indians. These amounts include outlays from Indian tribal funds held in trust by the Federal Government.

<sup>3</sup> Excludes the minority bank deposit program and Indian programs, but includes loans, surety bonds, guarantees and 8(a) contracts at obligated values.

<sup>4</sup> Outlays shown in the above table for predominantly black colleges reflect only the HEW program for strengthening developing minority institutions and assistance to minority institutions from the National Science Foundation and the Department of Agriculture. They exclude other Federal financial assistance in this area and the Federal share of Howard University expenses.

Minority Assistance Outlays by Agency <sup>1</sup>

(In millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
Department of Agriculture.....	15.92	20.86	6.41	22.36
Department of Commerce.....	85.70	88.28	19.47	78.65
Department of Defense.....	98.00	110.00	30.00	125.00
Department of Health, Education, and Welfare.....	684.31	797.77	206.44	775.37
Department of Housing and Urban Development.....	28.18	29.27	3.37	30.74
Department of the Interior <sup>2</sup> .....	847.65	1,104.45	326.61	1,055.70
Department of Labor.....	40.19	52.60	12.93	55.23
Department of Transportation.....	37.81	48.99	15.88	91.35
Energy Research and Development Administration.....	10.25	11.80	2.90	15.60
National Aeronautics and Space Administration.....	13.74	15.50	2.50	16.00
Small Business Administration <sup>3</sup> .....	660.66	1,024.78	223.41	1,093.22
Veterans Administration.....	20.50	16.00	2.00	17.00
Other agencies.....	52.53	54.64	10.62	57.20
<b>Total</b> .....	<b>2,595.44</b>	<b>3,374.94</b>	<b>862.54</b>	<b>3,433.42</b>

<sup>1</sup> Minority assistance programs broaden opportunities for economic participation and self-determination and include Indian programs. Loans, surety bonds, guarantees and 8(a) contracts are included at their obligated values.

<sup>2</sup> These amounts include outlays from Indian tribal funds held in trust by the Federal Government.

<sup>3</sup> All Federal procurement from minorities through sec. 8(a) of the Small Business Act is reported under the lead agency, Small Business Administration.

## SPECIAL ANALYSIS N

### FEDERAL PROGRAMS FOR THE REDUCTION OF CRIME

Two basic responsibilities of government are to maintain public order and administer justice. Federal programs are designed to identify the underlying causes of criminal behavior, gain better understanding of the magnitude and nature of the crime problem, and prevent or reduce crime through more effective law enforcement, public education, and treatment of adult and juvenile offenders. The objective is to reverse the trend of rising crime, thereby reducing the tragic loss of human and economic resources associated with crime and alleviating the fear of criminal abuse and exploitation in our communities.

Recognizing that State and local governments have the primary responsibility for controlling crime, the Federal Government will:

- Provide leadership by improving the quality of Federal laws and the criminal justice system.
- Vigorously enforce laws covering criminal conduct that cannot be controlled effectively at the State and local level.
- Provide financial and technical assistance to State and local law enforcement agencies.
- Emphasize Federal law enforcement efforts against organized and white collar crime, illegal commerce in firearms, large scale trafficking in narcotics and dangerous drugs and illegal aliens.

### ACCOMPLISHMENTS OF THE PAST YEAR

Accomplishments of the past year reflect the high priority the Administration has placed on combating crime and improving our entire system of criminal justice. During the past year:

- The President transmitted a special message to Congress in which he proposed:
  - a comprehensive “Criminal Justice Reform Act” which would combine diverse Federal statutes into a uniform coherent code;
  - a “career criminal program” to assure quick identification and prosecution of repeat offenders;
  - pretrial treatment programs for certain first offenders;
  - additional Federal District court judgeships and expanded criminal jurisdictions of U.S. magistrates;
  - new and upgraded prison facilities to reduce overcrowding;
  - strengthened Federal firearms laws to prohibit the manufacture, assembly, and sale of cheap, highly concealable handguns;
  - reauthorization of the Law Enforcement Assistance Administration through 1981, and continued financial and technical assistance to State and local governments.
- The Domestic Council completed a comprehensive study on drug abuse which recommended a reordering of enforcement priorities and a coordinated national effort to combat drug abuse.

- The Treasury Department's Bureau of Alcohol, Tobacco and Firearms began intensive investigative efforts against illegal commerce in firearms in three large metropolitan areas; 180 additional firearms investigators were assigned to these areas in 1976, and an additional 320 will be provided in 1977.
- The Treasury Department began training law enforcement officers at a new facility in Glynnco, Georgia.
- The Presidential Clemency Board, established pursuant to a proclamation and Executive order issued on September 16, 1974, successfully completed its work and ceased operations after reviewing and preparing recommendations on 15,500 requests for clemency.

### 1977 BUDGET HIGHLIGHTS

In 1977, Federal programs for the reduction of crime will build upon the numerous directives and recommendations contained in the President's special message to Congress on crime. Federal outlays for crime reduction programs will total almost \$3.1 billion in 1977, approximately the same as in 1976 and \$254 million greater than 1975. It is estimated that total expenditures by all levels of government—Federal, State, and local—will exceed \$17.9 billion in 1977.

Recognizing that the heaviest burden of enforcing our criminal laws rests upon State and local governments, over \$1.1 billion in Federal expenditures will be used to improve State and local criminal justice systems and assist communities in preventing crimes and juvenile delinquency. Federal outlays channeled to State and local governments through the Justice Department's Law Enforcement Assistance Administration (LEAA) will total \$815 million in 1977, compared with \$896 million in 1976.

The Department of Justice anticipates outlays of \$1.9 billion in 1977 for crime reduction programs. The Administration will place specific emphasis on enhancing the Department's capabilities in the following program areas:

- litigation and court support* by extensive use of automated data processing systems and by adding 291 U.S. attorneys and 87 U.S. marshals to increase criminal and civil litigation capabilities in the field offices;
- corrections* through activation of three new prison facilities, renovation and rehabilitation of existing facilities and construction of four new institutions. Also, expanded research and evaluation efforts in the field of corrections is being funded through the National Institute of Corrections;
- drug enforcement* by adding 102 new positions to implement the comprehensive Federal enforcement strategy as well as recommendations contained in the Domestic Council's White Paper on Drug Abuse.
- illegal alien control*, by emphasizing enforcement activities and expanding detention and deportation capabilities to assure that illegal aliens are effectively deported or otherwise removed from the country.

The Department of Treasury has the second largest Federal crime reduction program and will spend \$393 million in 1977. To carry out the President's directive to control illegal firearms, the Bureau of



Alcohol, Tobacco, and Firearms will expand enforcement efforts against illegal commerce in firearms from 3 to 11 large metropolitan areas.

Total Federal outlays for drug law enforcement are expected to exceed \$300 million in 1977. Emphasis will be placed on attaining a coordinated, effective Federal effort in consort with State and local enforcement organizations in the battle against drugs.

Table N-1. **FEDERAL OUTLAYS FOR THE REDUCTION OF CRIME BY AGENCY**<sup>1</sup> (in thousands of dollars)

	Outlays		
	1975 actual	1976 estimate	1977 estimate
The Judiciary.....	120,680	144,963	150,188
Department of Agriculture.....	9,685	12,204	12,738
Department of Commerce.....	3,206	2,715	2,715
Department of Defense—Civil.....	6,763	7,419	7,888
Department of Health, Education, and Welfare.....	284,140	245,781	222,100
Department of Housing and Urban Development.....	20,931	13,736	14,267
Department of the Interior.....	44,765	60,446	63,093
Department of Justice.....	1,822,948	2,017,416	1,997,541
Department of Labor.....	3,395	3,554	3,430
Department of State.....	15,250	48,000	36,000
Department of Transportation.....	41,399	44,164	46,973
Department of the Treasury.....	335,024	387,940	393,175
General Services Administration.....	3,453	4,340	4,716
Veterans Administration.....	108,326	136,933	119,922
Other independent agencies.....	1,435	1,309	880
<b>Total Federal outlays.....</b>	<b>2,821,400</b>	<b>3,130,920</b>	<b>3,075,626</b>

<sup>1</sup> Does not include Department of Defense—Military and \$38.3 million of outlays for the U.S. Postal Service which are included in the Annexed Budget for 1977.

### CRIME REDUCTION PROGRAMS BY ACTIVITIES

Budget outlays included in this special analysis represent all Federal programs directly related to crime reduction except those of the Department of Defense.<sup>1</sup> The analysis excludes general social programs, even though such programs may indirectly reduce the causes of crime, and does not include resources devoted to background investigations for employment, administrative inspections, or investigations of a regulatory nature which might in rare cases result in the application of criminal sanctions. Where activities involve both criminal and civil proceedings, such as operation of Federal courts, an allocation of outlays to the crime-related function has been estimated. The narrative is not intended to be all-inclusive, but rather to highlight the wide range of activities and agencies involved in Federal crime reduction programs.

<sup>1</sup> Defense Department outlays for law enforcements are estimated as follows (in thousands of dollars):

	1975	1976	1977
Department of the Army.....	306,535	325,856	321,028
Department of the Navy.....	14,990	16,259	23,156
Department of the Air Force.....	193,917	201,863	187,849
<b>Total, Department of Defense.....</b>	<b>515,442</b>	<b>543,978</b>	<b>532,033</b>

Table N-2. **FEDERAL OUTLAYS FOR THE REDUCTION OF CRIME BY MAJOR PROGRAM AND SELECTED ACTIVITY** <sup>1</sup> (in thousands of dollars)

Major program and selected activity	Outlays		
	1975 actual	1976 estimate	1977 estimate
<b>Crime research and statistics:</b>			
Statistics on crime, criminals, and criminal justice system.....	94,952	107,669	97,017
Research on criminal behavior and sociology of crime.....	11,938	12,757	10,286
Program total.....	106,890	120,426	107,303
<b>Reform of criminal laws.....</b>	<b>3,891</b>	<b>4,174</b>	<b>3,462</b>
<b>Services for prevention of crime:</b>			
Public education on law observance, enforcement, and crime prevention.....	14,311	16,184	13,144
Special programs for the treatment of narcotic addicts.....	258,776	226,683	214,324
Prevention and control of juvenile delinquency.....	110,577	116,630	106,099
Development of other community crime prevention services..	35,910	27,783	19,852
Program total.....	419,574	387,280	353,419
<b>Criminal law enforcement:</b>			
Investigations into violations of Federal criminal law.....	821,109	909,609	942,484
Federal protection of individuals and facilities.....	50,842	60,420	61,806
Assistance to State and local governments for enforcement..	244,336	274,010	269,547
Program total.....	1,116,287	1,244,039	1,273,837
<b>Law enforcement support:</b>			
Criminal intelligence and information systems.....	57,413	62,138	63,537
Education and training of enforcement officers.....	165,054	210,373	170,263
Laboratories and criminalistics.....	48,311	51,303	47,365
International programs in support of domestic law enforcement.....	31,806	70,348	57,056
Program total.....	302,584	394,162	338,221
<b>Administration of criminal justice:</b>			
Conduct of Federal criminal prosecutions.....	82,471	96,147	114,671
Operation and support of Federal court systems.....	98,973	112,838	115,784
Assistance to States and localities for improved administration of justice.....	78,007	80,814	70,056
Program total.....	259,451	289,799	300,511
<b>Corrections:</b>			
Operation of Federal correctional institutions.....	182,797	217,976	226,868
Federal probation, parole, and community treatment.....	48,157	62,737	73,654
Federal inmate education and training.....	10,816	13,161	12,705
Federal inmate medical treatment.....	21,600	24,094	26,380
Other programs supporting Federal corrections.....	1,152	1,692	1,860
Assistance to States and localities for improved correctional programs.....	264,071	279,825	261,796
Program total.....	528,593	599,485	603,263
<b>Planning and coordination of crime reduction programs.....</b>	<b>84,130</b>	<b>91,555</b>	<b>95,610</b>
<b>Total Federal outlays.....</b>	<b>2,821,400</b>	<b>3,130,920</b>	<b>3,075,626</b>

<sup>1</sup> Does not include Department of Defense—Military and U.S. Postal Service.

*Crime research and statistics.*—Crime research and statistics encompass Federal activities which produce numerical data and other information concerning crime, criminals, and the criminal justice system which contribute to the development of new techniques and methods for effective law enforcement. Total Federal outlays for crime research and statistics are estimated to be \$107 million in 1977—\$97 million for the collection of quantitative data, and \$10 million for research.

- The National Institute of Law Enforcement and Criminal Justice engages in applied research, evaluation, and technology transfer activities to improve existing strategies for crime prevention and control. Projects include studies of community crime prevention; police discretion, patrol, and corruption; sentencing disparities among courts; standards and goals for corrections; and the National Evaluation Program.
- The National Criminal Justice Statistics and Information Service has an ongoing data collection program. Project SEARCH, which is a 50-State consortium of representatives from the criminal justice community, will support projects involving the development of information systems technology and initiate additional efforts to strengthen the capacity of State and local governments in data collection.
- The Drug Enforcement Administration will improve its capability to monitor drug abuse trends and develop techniques for determining sources of illegal drugs. Research will focus on developing tools and techniques for determining sources of illegal drugs and on improving productivity of investigators and agents.
- The Coast Guard research program will include the design and testing of an ocean dumping surveillance system to detect hazardous substances discharged illegally in the marine environment.
- The U.S. Postal Service will seek means to improve postal security through development of devices such as a letter tracing system, antitampering devices for mail sacks, and portable containers for suspect letter bombs.

*Reform of criminal laws.*—Criminal law reform consists of efforts to improve the effectiveness of criminal statutes and assure that they accurately reflect the values and standards of our society. The Administration places high priority on reform of Federal criminal laws, and \$3.4 million will be spent on criminal law reform in 1977. Approximately 70% of these expenditures will support law reform efforts of State and local governments.

- One of the top legislative priorities of the Administration in 1977 is enactment of the "Criminal Justice Reform Act" (S. 1). This bill would combine and reform the Federal criminal laws into a uniform, coherent code and would serve as a model for reform of State and local laws.
- The Administration will work closely with the Congress to achieve enactment of legislation to strengthen Federal firearms laws. The President has proposed that the manufacture, assembly, and sale of cheap handguns, often referred to as "Saturday night specials," be banned and that only bona fide gun dealers be permitted to obtain Federal licenses to engage in the business of selling firearms.

- During 1977, the Commission to Review the National Policy Toward Gambling will submit its final recommendations to the President and Congress. The final report will include recommendations to change existing law enforcement practices and Federal laws and regulations on gambling. Also, the report will propose model legislation to accomplish similar changes in State practices.

*Prevention of crime.*—Crime prevention includes Government efforts to reduce crime through means other than direct enforcement or general correctional activities, i.e., actions taken before the fact. The category therefore includes public education, drug addict treatment, juvenile offender programs, and projects to improve police/community relations. An estimated \$353 million will be concentrated on crime prevention programs in 1977.

- The National Institute on Drug Abuse (NIDA) located within the Alcohol, Drug Abuse, and Mental Health Administration, has the principal responsibility for the Federal drug treatment, rehabilitation, research, and prevention programs. In 1977, funds will be provided to support a variety of community-based treatment programs for narcotic addicts and drug abusers and to support demonstration programs that are established to evaluate the effectiveness of existing or new treatment programs. Also, NIDA will match State funds (based on a predetermined formula) for operational costs of treatment activities which offer detoxification, institutional (medical, psychological, educational), and community-based aftercare services.
- The Bureau of Prisons will maintain its specialized institutional treatment programs for narcotic addicts and for other drug-dependent offenders who use drugs such as amphetamines, barbiturates, and hallucinogens.
- The Justice Department's Law Enforcement Assistance Administration will fund projects which promote more citizen participation in criminal justice proceedings.
- The Veterans Administration will provide assistance to eligible veterans through its drug dependence treatment program. The program combines medical, social, psychiatric, and vocational treatment designed to remove dependence on opiates and other drugs, thereby alleviating the need for the addict to commit crimes to support his habit.

*Criminal law enforcement.*—Criminal law enforcement includes activities to detect, identify, and apprehend violators of criminal laws. Federal support of State and local enforcement is also included in this category. High Federal priority will be placed on white collar and organized crime, narcotic trafficking, illegal alien control, and an intensification of Federal firearms law enforcement. Criminal law enforcement will account for \$1.2 billion in outlays during 1977, including \$269.5 million in support of State and local enforcement programs.

- The Federal Bureau of Investigation will stress quality of case-load rather than quantity. This new policy of prioritizing investigations will permit the FBI to concentrate additional resources

- on white collar and organized crime offenders, and to vigorously investigate civil rights cases and counterespionage matters.
- The Drug Enforcement Administration will add 102 positions to implement the comprehensive Federal enforcement strategy and recommendations contained in the Domestic Council's White Paper on Drug Abuse. Conspiracy investigations will be stressed in 1977 and increased emphasis will be devoted to regulatory and compliance activities aimed at preventing diversion of amphetamines and barbiturates into the illicit market.
  - The Immigration and Naturalization Service will redeploy its staff, expand detention and deportation capabilities and emphasize strict enforcement to assure that illegal aliens are effectively apprehended and deported or otherwise removed from the country.
  - The Bureau of Alcohol, Tobacco and Firearms will intensify its enforcement efforts in the 11 largest metropolitan areas by adding 320 firearms investigators.
  - The Customs Service will continue its efforts to intercept drugs and other contraband at the Nation's borders. Efforts will include air and sea interception, coordinated with highly mobile ground interception units. A computerized intelligence lookout system and sophisticated communications will help direct enforcement efforts against suspected smugglers and known fugitives.
  - The Federal strike force program, initiated in 1966 and supervised by the Department of Justice, will concentrate efforts in 17 large metropolitan and outlying areas in 1977. Strike forces consist of representatives from Federal investigative agencies and selected State and local law enforcement agencies operating under the legal guidance of the Criminal Division and the U.S. Attorneys. In 1977, this consolidated force will maintain pressure on organized and white collar violators, those who manipulate welfare and pension funds, drug and tax offenders, and other major violators of Federal criminal laws.
  - The Department of Transportation and the Criminal Division will combine efforts with those of other Federal agencies to foster improvements in State car title and registration systems in order to frustrate false documentation by auto theft rings.
  - The Securities and Exchange Commission will place top priority on investigation of cases involving organized crime, particularly those instances where there is evidence of criminal infiltration into the securities industry.

*Law enforcement support.*—Law enforcement support includes contributions to the operation of criminal intelligence systems, education and training of enforcement officers, activities of forensic laboratories, and international programs supporting domestic enforcement efforts—primarily in the area of narcotics control. Outlays of \$338.2 million are projected for law enforcement support in 1977. Of this amount, \$206 million will assist State and local enforcement by funding laboratories, training programs, and criminal intelligence networks.

- In 1977 the Federal Law Enforcement Training Center will operate a criminal investigation and police school as well as conduct a full-time driver training program at new facilities in Glynco, Georgia.

- The Veterans Administration will provide financial assistance for veterans pursuing approved and supervised programs of on-the-job training in law enforcement.
- The Bureau of Alcohol, Tobacco and Firearms will train and provide assistance to police officers and organizations in the areas of explosives and firearms investigations.
- During 1977, the Department of State will use Foreign Assistance Act funds to assist foreign governments and international organizations in their efforts to disrupt the flow of illicit narcotics through training in drug enforcement and intelligence, equipment procurement, advisory assistance, crop substitution projects, and drug abuse prevention activities.
- Reductions are proposed in 1977 for education and training assistance to local law enforcement officers. The Law Enforcement Education Program of LEAA, which provides financial assistance for pursuit of college studies, is being reduced from \$40 million to \$5 million. In addition, the budget proposes that 50% of the training costs incurred by the FBI for local law enforcement officers be paid for by local governments.

*Administration of criminal justice.*—This category includes the preparation and prosecution of criminal cases, operation of court systems, trial of cases, provision of adequate defense, and related activities. The President highlighted this activity as one requiring particular attention in 1977. Over \$300 million will be devoted to prosecution of criminal cases and administration of criminal justice in 1977, including \$70 million for assisting State and local prosecution and court systems. Operation of the Federal judiciary will require expenditure of \$115 million, while criminal prosecutions will account for \$114 million.

- Staff of the U.S. Attorneys' offices will be expanded by 9%, adding significantly to the U.S. Attorneys' capabilities to prosecute criminal cases.
- The fees and expenses of witnesses appearing on behalf of the Federal Government to provide factual information or expert testimony will require expenditure of \$19.4 million in 1977.
- The Commission on Revision of the Federal Appellate Court System will continue its study of the jurisdiction and procedures of the Federal Courts of Appeals.
- In coordination with the Criminal Division and the Internal Revenue Service, the Tax Division of the Justice Department will increase its prosecutive efforts against organized crime racketeers during 1977.
- The U.S. Marshals Service will enhance its witness security program with 87 additional deputies and continue upgrading the service of Federal warrants by deputy marshals.

*Corrections.*—These programs encompass Government custody and treatment of criminal offenders, including supervision and operation of correctional institutions, inmate and offender treatment and training programs, probation and parole services, and other supportive functions. Particular emphasis will be placed on activating prison facilities and constructing new ones in 1977. Expenditure of \$603 million will support correctional activities in 1977, of which \$261 million will be allocated to non-Federal correctional activities.

- During 1977, \$282 million will be spent on correctional programs of the Bureau of Prisons, with emphasis on developing a balanced system of community and institutional facilities for the reintegration of offenders into society. Three new prisons will be activated and funds are provided for the construction of four additional facilities to replace outdated prisons and relieve overcrowding.
- The U.S. Board of Parole will receive a 12% staff increase; decentralization and new decisionmaking criteria will contribute to greater equity, consistency, and speed in the parole process in 1976 and 1977.

*Planning and coordination.*—Included in this category are outlays supporting State and local criminal justice planning, coordination of Federal enforcement activities, and coordination of enforcement efforts. Approximately \$96 million will be spent on planning and coordination of crime reduction programs in 1977. The Law Enforcement Assistance Administration will spend \$95 million to assist State and local governments to plan and evaluate their criminal justice activities, an increase of about \$4 million over 1976. The Department of State will work with foreign governments and international organizations to implement drug control policies and to coordinate interagency participation in international narcotics control.

Table N-3. **FEDERAL OUTLAYS FOR THE REDUCTION OF CRIME BY MAJOR PROGRAM AND AGENCY**<sup>1</sup> (in thousands of dollars)

Major program and agency	Outlays		
	1975 actual	1976 estimate	1977 estimate
<b>Crime research and statistics:</b>			
The Judiciary.....	1,386	2,978	2,758
Department of Defense—Civil.....	18	20	65
Department of Health, Education, and Welfare.....	2,686	2,961	1,972
Department of Justice.....	99,429	110,674	98,529
Department of Transportation.....	2,468	2,453	2,839
Department of the Treasury.....	840	840	840
General Services Administration.....	63	500	300
Program total.....	106,890	120,426	107,303
<b>Reform of criminal laws:</b>			
Department of Justice.....	2,943	3,404	3,178
Other Independent Agencies.....	948	770	284
Program total.....	3,891	4,174	3,462
<b>Services for prevention of crime:</b>			
Department of Defense—Civil.....	169	178	192
Department of Health, Education, and Welfare.....	238,539	199,915	180,828
Department of Housing and Urban Development.....	17,287	7,154	3,237
Department of the Interior.....	1,266	2,305	2,519
Department of Justice.....	127,369	140,487	127,579
Department of Transportation.....	125	500	1,000
Veterans Administration.....	34,813	36,733	38,022
General Services Administration.....	6	8	42
Program total.....	419,574	387,280	353,419

See footnotes at end of table.

Table N-3. FEDERAL OUTLAYS FOR THE REDUCTION OF CRIME BY MAJOR PROGRAM AND AGENCY <sup>1</sup> (in thousands of dollars)—Continued

Major program and agency	Outlays		
	1975 actual	1976 estimate	1977 estimate
<b>Criminal law enforcement:</b>			
Department of Agriculture.....	9,685	12,204	12,738
Department of Defense—Civil.....	5,126	5,605	5,893
Department of the Interior.....	40,384	52,731	54,587
Department of Justice.....	694,454	762,576	783,077
Department of Labor.....	3,395	3,554	3,430
Department of Transportation.....	38,723	41,121	43,036
Department of the Treasury.....	323,332	363,059	365,207
Department of Housing and Urban Development.....	80	1,892	4,415
General Services Administration.....	621	758	858
Other independent agencies.....	487	539	596
Program total.....	1,116,287	1,244,039	1,273,837
<b>Law enforcement support:</b>			
Department of Defense—Civil.....	164	174	186
Department of Health, Education, and Welfare.....	5	5	0
Department of the Interior.....	563	935	1,442
Department of Justice.....	196,167	214,208	183,540
Department of State.....	15,250	48,000	36,000
Department of Transportation.....	81	88	96
Department of the Treasury.....	10,852	24,041	27,128
General Services Administration.....	2,753	3,061	3,500
Veterans Administration.....	73,513	100,200	81,900
Department of Commerce.....	3,206	2,715	2,715
Department of Housing and Urban Development.....	30	735	1,714
Program total.....	302,584	394,162	338,221
<b>Administration of criminal justice:</b>			
The Judiciary.....	81,195	91,901	87,791
Department of Defense—Civil.....	101	102	105
Department of the Interior.....	1,499	2,136	2,089
Department of Justice.....	176,618	195,627	210,523
Department of Transportation.....	2	2	2
Department of Health, Education, and Welfare.....	35	30	0
General Services Administration.....	1	1	1
Program total.....	259,451	289,799	300,511
<b>Corrections:</b>			
The Judiciary.....	38,099	50,084	59,639
Department of Defense—Civil.....	1,185	1,340	1,447
Department of Health, Education, and Welfare.....	42,875	42,870	39,300
Department of Housing and Urban Development.....	3,524	3,712	4,334
Department of the Interior.....	1,053	2,339	2,456
Department of Justice.....	441,857	499,140	496,087
Program total.....	528,593	599,485	603,263
<b>Planning and coordination of crime reduction programs:</b>			
Department of Justice.....	84,111	91,300	95,028
Other.....	19	255	582
Program total.....	84,130	91,555	95,610
<b>Total Federal outlays.....</b>	<b>2,821,400</b>	<b>3,130,920</b>	<b>3,075,626</b>

<sup>1</sup> Does not include Department of Defense—Military and U.S. Postal Service.



Table N-4. SELECTED CRIME REDUCTION DATA (dollars in thousands)

	1973	1974	1975
Federal outlays for crime reduction:			
Federal crime reduction outlays assisting States and localities.....	\$966, 863	\$1, 023, 906	\$1, 142, 297
Federal crime reduction outlays for reduction of Federal crimes.....	\$1, 326, 831	\$1, 407, 227	\$1, 679, 103
Total Federal outlays for reduction of crime.....	\$2, 293, 694	\$2, 431, 133	\$2, 821, 400
Federal personnel:			
Full-time Federal criminal investigators <sup>1</sup> .....	19, 117	19, 515	19, 205
U.S. attorneys and assistant attorneys (work-years on criminal workload).....	722	775	834
Attorneys—criminal division (work-years).....	<sup>2</sup> 366	324	386
U.S. district court judgeships.....	400	400	400
State and local crimes: <sup>3</sup>			
Serious crimes recorded (UCR—table 2).....	8, 666, 200	10, 192, 000	( <sup>4</sup> )
Violent crimes recorded (UCR—table 2).....	871, 450	969, 820	
Rate of serious crimes per 100,000 inhabitants (UCR—table 2).....	4, 129	4, 821	( <sup>4</sup> )
Rate of violent crimes per 100,000 inhabitants (UCR—table 2).....	415	459	( <sup>4</sup> )
Percent index crimes cleared by arrest (UCR—table 14 in 1973, table 18 in 1974).....	21. 2	21. 3	( <sup>4</sup> )
Percent found guilty of persons charged by police (UCR—table 18 in 1973, table 22 in 1974).....	63. 7	63. 3	( <sup>4</sup> )
Federal investigations:			
FBI, investigative matters received.....	774, 583	745, 840	673, 957
Immigration and Naturalization Service (investigations completed).....	30, 940	32, 101	38, 067
Postal Service, criminal caseload.....	347, 528	319, 293	307, 509
IRS, case closed.....	8, 500	7, 215	8, 000
U.S. Customs Service, cases closed.....	40, 276	21, 981	24, 508
Secret Service, cases closed.....	124, 389	128, 947	139, 159
Bureau of Alcohol, Tobacco, and Firearms, cases closed.....	5, 403	5, 455	5, 203
Disposition of Federal criminal matters:			
Investigative matters presented for prosecutive decision—prosecution declined.....	93, 926	102, 535	105, 737
Federal criminal cases commenced <sup>6</sup> .....	46, 663	47, 050	46, 951
Federal criminal cases terminated <sup>6</sup> .....	47, 853	48, 200	46, 467
Federal criminal cases pending <sup>6</sup> .....	28, 352	27, 202	27, 898
Federal criminal defendants convicted.....	37, 261	34, 699	49, 281
High echelon organized crime figures convicted.....	69	69	54
Corrections:			
Average Federal jail population.....	5, 870	5, 877	5, 738
Average Federal prison population.....	22, 294	23, 332	23, 034
Court commitments to Federal institutions.....	16, 402	16, 144	17, 718
Average Federal prison sentences (months).....	50. 9	48. 0	50. 9
Persons under supervision of Federal probation system (end of year).....	54, 346	59, 615	64, 261
Federal paroles granted.....	6, 339	5, 540	8, 886
Warrants issued for violation of conditions of release from prison.....	1, 635	1, 591	2, 212
Executive clemency petitions granted.....	207	195	156

<sup>1</sup> CSC jobs classified in series 1811.<sup>2</sup> Includes internal security functions transferred into the Criminal Division.<sup>3</sup> From FBI uniform crime report.<sup>4</sup> Not available.<sup>5</sup> Reflects closing out case backlog where no further investigation was warranted.<sup>6</sup> Excludes transfers.

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PART 3

SPECIALIZED ASPECTS AND  
VIEWS OF FEDERAL PROGRAMS

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## INTRODUCTION

*Part 3* discusses trends and developments in selected areas of Government activity—aid to State and local governments, research and development, and environmental quality. It groups three special analyses, those designated O through Q.

*Special Analysis O* summarizes Federal grants to State and local governments as well as assistance provided through loans, tax expenditures, and indirect aid. It traces the development of Federal aids over time and relates them to the finances of both the Federal Government and State and local governments. This analysis also provides a profile of Federal grants by region, and a description of the State and local government sector of the national income accounts.

*Special Analysis P* identifies Federal programs for the conduct of research and development, and for facilities related to such activities.

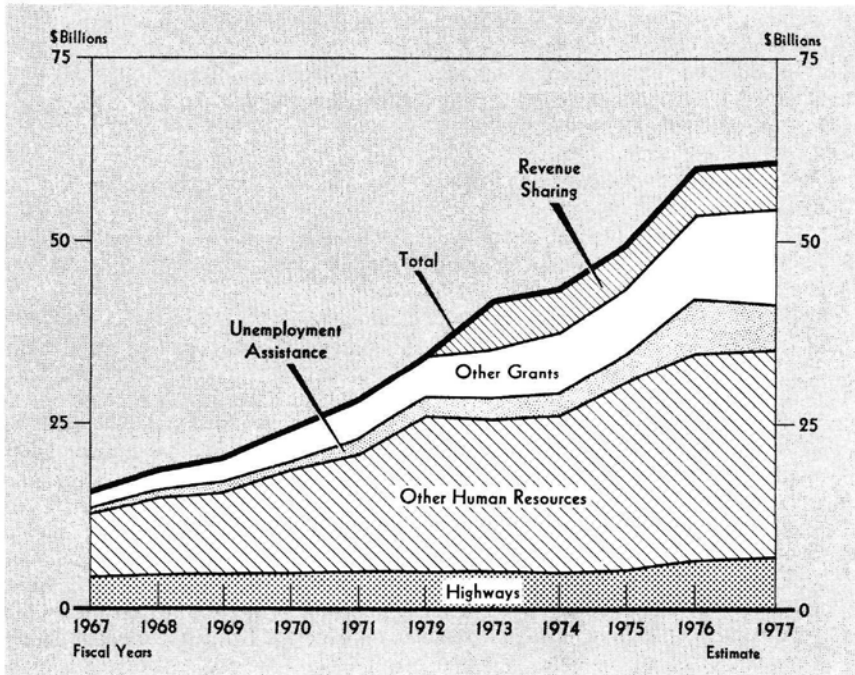
*Special Analysis Q* identifies Federal funding for selected environmental activities, including pollution control and abatement, environmental protection and enhancement, and understanding, describing, and predicting the environment.

## SPECIAL ANALYSIS O

### FEDERAL AID TO STATE AND LOCAL GOVERNMENTS

Federal aid to State and local governments is defined as the provision of resources by the Federal Government in support of a State or local program of governmental service to the public. This includes both grants-in-aid and loans. In 1977, Federal grant-in-aid outlays are expected to total \$60.5 billion. This amount—a small increase over 1976—represents a 22% increase over the amount provided in 1975, and an annual average increase of 14% since 1967. Net loan outlays are expected to be \$211 million in 1977.<sup>1</sup>

#### Federal Grants to State and Local Governments



<sup>1</sup> Unless specifically indicated to the contrary, reference to "Federal aid" or "grants" from this point forward is confined to grants-in-aid, and excludes net lending.

A major revision has been made in the classification of Federal aid to State and local governments. The bulk of budget outlays for the food stamp program—the benefit payments or “bonus costs”—have been reclassified from grants to direct Federal payments, reflecting the current national nature of the program. From 1971 forward, only the Federal matching payments to State and local governments to pay for program administration are considered Federal grants. This revision is further explained later in this analysis.

### HIGHLIGHTS OF THE FEDERAL AID PROGRAM

The 1977 budget continues the policy of consolidating and simplifying grant programs with proposals for four major consolidations and a number of other significant structural changes.

The Administration’s proposal to extend the general revenue sharing program through 1982 exemplifies efforts to seek a better balance among political and managerial accountability, regional and local needs and priorities, and the financial means to support public services. Extension of this program—which was proposed to the Congress last spring—will allow State and local governments to plan on the basis of assured entitlements.

The major grant proposals of the 1977 budget are listed below. They are divided into major grant consolidations, other major structural changes, and other highlights.

**Major grant consolidations.**—The 1977 budget proposes major changes in the structure of Federal grant programs, including the formation of four major block grants, which will be phased in over several years. All matching requirements would be eliminated by these reforms. The proposals are the following:

- The *Financial Assistance for Health Care Act*—the largest Federal grant-in-aid program ever proposed—will consolidate medicaid and 15 other health programs. The primary purpose of this grant will be to assist States in providing health care for their low-income population. Proposed 1977 budget authority of \$10 billion will be distributed according to a formula based on State low-income population, ability to pay, and tax effort. More information about this proposed block grant is provided in Part 5 of the 1977 budget document.
- The *Financial Assistance for Elementary and Secondary Education Act* will consolidate 27 separate grants into one program. Like some other education programs, the block grant would be forward-funded. The 1977 budget authority of \$3.3 billion represents an increase of more than \$260 million over the separate grant programs. A discussion of reforms in elementary and secondary education grant programs is provided in Part 5 of the 1977 budget document.
- Under the proposed *Child Nutrition Reform Act*, 15 complex and overlapping child nutrition programs will be consolidated into one child nutrition block grant. This program will provide benefits to the 700,000 needy children who are not receiving assistance, while permitting savings of over \$700 million in 1977 by eliminating subsidies for the nonpoor. The child nutrition

block grant program is treated in greater detail in Part 5 of the 1977 budget document.

- The program providing social services to the poor and needy will be amended by the *Financial Assistance for Community Services Act*, substantially reducing Federal requirements and increasing the options open to recipient governments. The 25% matching provision would be eliminated. The overall outlay ceiling on this program would be maintained at \$2.5 billion.

**Other major structural changes.**—There are a number of other modifications of Federal grant programs in the proposed budget. Chief among these are:

- The total Federal long-range commitment for waste water treatment plants. Proposed legislation will reduce this by eliminating legislation will eventually obligate the Federal Government to \$333 billion of subsidies to build municipal waste water treatment plants. Proposed legislation will reduce this by eliminating marginally useful but very costly activities. Despite this long-range phase down, both new construction activity and outlays for this program will rise substantially in 1977.
- Mass transit formula grants, primarily aimed at subsidizing capital investment in this area, have been heavily used for operating subsidies. Proposed reforms will provide that no more than 50% of these funds be used for operating subsidies.
- Funding levels for highway assistance programs, which were increased in 1975 and 1976 as economy stimulation measures, will return to more normal levels in 1977 and 1978. Proposed 1977 outlays will increase 8% to \$6.8 billion, reflecting the 1975-76 expansion of the highway program. Levels of new contract authorizations are being restrained, and the proposal to permit State takeover of \$1 billion of motor fuel taxes is being withdrawn. In addition, the numerous non-interstate categorical grants are proposed to be consolidated into three programs.
- The Administration is again proposing to reform the impact aid program. Recognizing that Federal activities provide an economic benefit to host communities, the reform will limit Federal aid to those school districts where free education is provided for children whose parents both live and work on Federal property. Since Federal property is exempt from local taxes, these families do not contribute to the cost of education, as other families do, and Federal contributions are fully justified.
- The Allied Services Act is proposed to encourage coordination of all human service delivery programs at the State and local level.
- New legislation is proposed for the work incentive program (WIN) to emphasize direct placement and training of participants through the Employment Services and the Comprehensive Employment and Training Act (CETA) programs.

**Other highlights.**—Other program changes of interest are the following:

- State and local governments are not subject to the Federal unemployment tax from which funds for grants to States to administer the unemployment insurance program and employment services are derived. However, some employees of these

governments are covered. Accordingly, the Administration has proposed legislation providing that effective in 1977 such grants be adjusted to omit administrative expenses resulting from coverage of State and local government workers. As a part of this proposed legislation, State and local workers in public schools and hospitals would be added to those State and local workers now covered. State or local governments will reimburse the unemployment insurance trust fund for benefits paid to their insured workers.

- Outlays for direct law enforcement assistance will decline 5% to \$716 million in 1977. A lower level of grant awards will be coupled with greater emphasis on evaluation and research. Such evaluation will provide guidance for basic decisions to be made on future directions for this program.
- Outlays for the temporary employment assistance program will decline in 1977, reflecting improved economic conditions. Outlays of \$1.1 billion will generally be limited to areas with unemployment over 6.5%.
- Under the newly authorized New York City Seasonal Financing Fund, the Treasury Department is authorized to lend the city up to \$2.3 billion each year through 1978. The city will be charged an interest rate one percentage point above Treasury borrowing rates and must repay all loans by June 30, the end of its fiscal year. The difference in the Federal and New York City fiscal years will result in estimated net loans of \$1.1 billion in the transition quarter and \$—0.1 billion in 1977. However, because the Federal Financing Bank will purchase all loans outstanding at the end of the Federal fiscal period, there will be no impact on Federal budget outlays.
- New commitments under the community development grant program will increase \$446 million in 1977 to \$3.2 billion. Outlays, which reflect the rate at which recipient jurisdictions carry out projects, are estimated to be \$1.6 billion.
- Outlays for the housing assistance programs will increase 23% to \$2.0 billion in 1977. Rents charged public housing tenants will be adjusted to better reflect their ability to pay, permitting a savings of \$112 million in 1977.
- Outlays for vocational rehabilitation will rise by \$45 million to \$775 million in 1977.
- The summer youth program for 1977 anticipates \$400 million for about 670,000 jobs.
- Outlays for planning and management assistance under the HUD “701” program are estimated to decrease to \$75 million in 1977.
- Outlays for the Community Services Administration’s aid programs are estimated to decrease \$139 million in 1977, due to the statutory requirement for an increased non-Federal matching share and the proposed elimination of duplicative categorical programs.
- Outlays for airport development and improvement are estimated at \$355 million, \$20 million less than 1976, but \$63 million over the 1975 level.

## FEDERAL GRANT-IN-AID PROGRAMS BY FUNCTION AND BY AGENCY

Pursuant to the Congressional Budget Act of 1974, Congress reviews the budget and sets targets by function. Consequently, the budget by function has become an important analysis and control mechanism, as well as a means of describing Federal activities by program. Part 5 of the budget discusses the entire Federal budget by function, and comparison permits the setting of Federal grants-in-aid against the broader perspective of all Federal activities in each function.

Table O-1. **FEDERAL GRANT-IN-AID OUTLAYS BY FUNCTION**  
(In millions of dollars)

Function	1975 actual	1976 estimate	TQ estimate	1977 estimate
National defense.....	74	77	17	67
Natural resources, environment, and energy.....	2,479	3,088	789	4,505
Agriculture.....	404	499	98	556
Commerce and transportation.....	5,872	8,227	2,371	8,990
Community and regional development.....	3,335	4,008	1,063	3,917
Education, training, employment, and social services...	11,638	14,422	3,518	12,497
Health.....	8,810	10,032	2,602	10,188
Income security.....	9,279	11,212	2,778	11,434
Veterans benefits and services.....	32	73	17	80
Law enforcement and justice.....	725	838	227	805
General government.....	102	145	42	135
Revenue sharing and general purpose fiscal assistance...	6,971	7,166	2,039	7,349
<b>Total outlays.....</b>	<b>49,723</b>	<b>59,787</b>	<b>15,561</b>	<b>60,523</b>

Table O-1 provides a functional distribution of Federal grant-in-aid outlays. Major trends in 1977 include increases in natural resources, environment, and energy reflecting spending for water and sewer construction, and a decline in education, training, employment and social services as the economy improves and spending for programs to alleviate the effects of unemployment decreases.

Table O-2. **FEDERAL GRANT-IN-AID OUTLAYS BY AGENCY**  
(In millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
Department of Agriculture.....	2,936	3,626	805	3,403
Department of Commerce.....	299	498	136	477
Department of Defense—Military.....	74	77	17	67
Department of Health, Education, and Welfare.....	22,010	24,060	6,015	24,125
Department of Housing and Urban Development.....	3,439	4,289	1,201	4,769
Department of the Interior.....	557	618	249	542
Department of Justice.....	722	750	203	717
Department of Labor.....	4,012	6,888	1,789	5,081
Department of Transportation.....	5,688	8,029	2,327	8,797
Department of the Treasury.....	6,423	6,603	1,704	6,883
Environmental Protection Agency.....	2,025	2,532	651	3,955
Veterans Administration.....	32	73	17	80
Community Services Administration.....	510	478	120	339
District of Columbia.....	226	254	64	280
Washington Metropolitan Area Transit Authority.....	175	182	40	185
Other.....	595	830	223	823
<b>Total outlays.....</b>	<b>49,723</b>	<b>59,787</b>	<b>15,561</b>	<b>60,523</b>



In total, Federal aid will finance about 23% of State and local expenditures in 1977. As can be seen in Table O-2, about 40% of this aid is administered by the Department of Health, Education, and Welfare.

*Technical note.*—One reclassification that has been made affects the grant total significantly—the reclassification of the food stamp bonus (benefit payment) as a direct Federal payment.

When the food stamp program began in 1961 as a series of pilot programs, it fell well within the budget definition of Federal grants-in-aid. The local government issued the food stamps, and the Federal Government paid 100% of the bonus costs and part of the administrative costs. In 1964, the program was made permanent, but retained its essentially local character. Eligibility standards were prescribed by State agencies.

The program has now become a uniform national program, administered by State and local jurisdictions, but with uniform income and resource eligibility standards. While the program changed gradually, the most significant turning point was the 1969 amendments to the Food Stamp Act. These amendments, which became effective in fiscal year 1971, resulted in the participation rate almost doubling in one year with outlays almost trebling. As a result, the reclassification of the bonus from grants to nongrants was carried back through 1971.

#### THE IMPACT OF FEDERAL AID

The effect of Federal aid is not limited to direct resources made available to States and localities. Many grant programs are intended to encourage innovation by State and local governments. Other programs require States to establish and maintain specific agencies, though many of these provisions are being phased out. Most importantly, many programs require the recipient government to match Federal aid funds with its own resources. In the last few years, State and local governments have allocated about 10% of their own revenue to meet matching requirements for Federal grant moneys. The enactment of the four major grant consolidation proposals will significantly reduce this percentage.

The functional composition of the grant program has changed significantly over the years, as shown in Table O-3. The most dramatic growth has occurred in the health area, which has increased from 4% of Federal aid in 1957 to an estimated 17% in 1977. Other recent changes are the addition of general revenue sharing, increases in outlays for environmental protection, and the relative decline in grants for transportation programs.

*Tax expenditures.*—Federal aid is also provided through a number of tax expenditures. (More information on tax expenditures is provided in Special Analysis F, "Tax Expenditures".) First, the deductibility of most State and local taxes permits taxpayers to offset part of these taxes with a reduced Federal income tax liability. Hence, a State or locality can raise a dollar of revenue with significantly less than a dollar net cost to its taxpayers. The receipts foregone by the Federal Government in 1977 are estimated to be \$0.6 billion for gasoline taxes, \$3.8 billion for property taxes on owner-occupied homes, and \$6.7 billion for other nonbusiness State and local taxes.

Table O-3. PERCENTAGE FUNCTION DISTRIBUTION OF FEDERAL GRANTS-IN-AID

	Actual						Estimates	
	1952	1957	1962	1967	1972	1975	1976	1977
Natural resources, environment and energy.....	1	1	2	2	2	5	5	7
Agriculture.....	4	9	6	3	1	1	1	1
Commerce and transportation.....	18	24	36	27	15	12	14	15
Community and regional development.....	1	1	3	6	9	7	7	6
Education, training, employment, and social services.....	9	8	8	25	26	23	24	21
Health.....	8	4	5	10	17	18	17	17
Income security.....	57	49	38	25	26	19	19	19
Revenue sharing and general purpose fiscal assistance.....	2	3	2	2	1	14	12	12
Other.....	*	1	*	*	1	2	2	2
Total.....	100	100	100	100	100	100	100	100

\* Less than 0.5%.

Second, the exclusion of interest on State and local securities from Federal taxable income permits these jurisdictions to borrow at reduced interest rates. The tax expenditures for the exclusion of interest on State and local general purpose debt is estimated to be \$4.5 billion in 1977, with a somewhat smaller benefit going to these Governments. Interest on industrial revenue bonds—which are nominally governmental debt, but are backed only by revenues from private industry—is also excluded from income. Benefits from this tax-exempt borrowing go largely to private companies. The exclusion on debt to finance pollution control facilities will reduce Federal receipts by \$0.2 billion; the exclusion on general-purpose industrial development borrowing will cost \$0.3 billion.

*Impact of other programs.*—Certain other activities proposed in the 1977 budget may have a noticeable effect on State or local government activities. Chief among these are:

- Federal aid to higher education will emphasize grants and loans to students, rather than institutional support. This may affect State aid to certain of its institutions and State and local scholarship and grant-in-aid programs for students. Further information about Federal programs in higher education is to be found in Special Analysis I, “Federal Education Programs.”
- Federal assistance to railroads and the restructuring of the Northeast railroads may affect certain State programs for transportation and regional and local development.
- Reforms in the food stamp program have been proposed to simplify and improve its administration and assure that benefits go only to the needy.
- The Administration is proposing unemployment insurance legislation that will require the upper limits on an individual's weekly benefit be no lower than two-thirds of the State's average covered wage. In this way, benefits will rise with average wages. To strengthen financing, the proposal increases the amount of wages on which employers pay the Federal unemployment tax from \$4,200 to \$6,000 and temporarily increases the tax rate.

- A national commission on unemployment insurance to study the need for reform is proposed.
- A major study of the need for the employment service and its future direction will be undertaken.
- The proposed Medicare Improvements Act of 1976 will improve protection of the elderly by limiting out-of-pocket payments for covered expenses to \$500 for hospital and nursing home care per illness and to \$250 annually for physician services. The proposed Medicare Improvements Act will limit increases in medicare payment rates to help slow down health-care cost inflation.
- While the Federal Government is permitted by law to withhold State and local income taxes from the pay of its civilian employees, it is specifically prohibited from withholding military pay. The law, therefore, hampers and discourages States from collecting revenues which are properly due them and may make it more difficult for military personnel to meet their State income tax obligations. Three initiatives have already been proposed in the Congress to correct this situation. The Administration will soon submit its own initiatives, which would benefit both military personnel and the affected States and reduce to a minimum the administrative workload associated with implementing such an action.
- In addition, there will be increased emphasis to reduce paperwork and other burdens on States and localities in administering Federal programs, to simplify Federal grant requirements, and to improve coordination and streamline delivery of services to States and localities through Federal Regional Councils, joint funding simplification and other intergovernmental initiatives.

*Distribution of grants by region.*—Table O-4 shows that Federal aid on a per capita basis varies widely among regions. The thinly populated Western States traditionally rank high because of highway construction grants and shared revenues from Federal land holdings. For example, the Rocky Mountain States have the lowest regional population density, extensive Federal land holdings, and, until recently, the highest per capita aid.

This effect has diminished in recent years, however, as human resource programs have grown relative to physical resource programs. Further, the addition of general revenue sharing has tended to equalize per capita figures among the regions. Region VIII, which had per capita grants 37% above the national average in 1969, now has grants only 14% over the average, while region V has risen from 22% below the average to only 16% below. Region II has experienced the most rapid growth during the period.

Table O-4. DISTRIBUTION OF GRANTS, SELECTED FISCAL YEARS

Federal region <sup>1</sup>	1975 <sup>2</sup> total grants	Per capita		
		1969	1975	Percent change 1969-75
I—Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island.....	\$3.0	\$102	\$247	142
II—New York, New Jersey, Puerto Rico, Virgin Is- lands.....	8.1	103	283	175
III—Virginia, Pennsylvania, Delaware, Maryland, West Virginia, District of Columbia.....	6.1	94	256	172
IV—Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida....	7.3	101	207	105
V—Illinois, Indiana, Michigan, Ohio, Wisconsin, Minnesota.....	8.8	77	195	153
VI—Arkansas, Louisiana, Oklahoma, New Mexico, Texas.....	4.7	111	213	92
VII—Iowa, Kansas, Missouri, Nebraska.....	2.3	88	197	124
VIII—Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming.....	1.6	136	266	96
IX—Arizona, California, Nevada, Hawaii, other territories.....	6.0	116	236	103
X—Idaho, Oregon, Washington, Alaska.....	1.9	117	267	128
United States.....	49.7	99	233	135

<sup>1</sup> These are not the same regions as those used for National Income Account computations.

<sup>2</sup> In billions of dollars.

See "Federal Aid to States," Department of the Treasury, for additional information concerning State distribution of Federal grants.

### HISTORICAL PERSPECTIVES

Though grants from the National Government technically predate the Constitution, they were very small until the end of the 19th century, and did not become a truly significant factor in government expenditure until after World War II. In 1950, Federal grants to State and local governments totaled \$2 billion, and by 1965 they had risen to \$11 billion. In 1975, they were \$50 billion, an average annual increase of 18.3% since 1965. This compares to an average annual growth of 11% for total Federal outlays over the same period.

Table O-5 shows the recent growth in grant outlays, and illustrates that Federal aid has become an increasingly important factor in the finances of all levels of Government over the past two decades. In 1977, Federal grants will constitute 15.4% of total Federal outlays, and 21.1% of domestic Federal outlays. Despite the irregular pattern reflected in the table, the growth of Federal grant outlays has been relatively steady. Outlays for 1972 reflect a \$1 billion advance payment of public assistance funds, and are therefore not precisely comparable with other years. Grant outlays for 1973 are understated by this amount, but are still abnormally high, reflecting the payment of retroactive 1972 general revenue sharing entitlements. In addition, the conversion of the public assistance program for the aged, blind, and disabled from a grant-in-aid program in 1973 to a direct Federal program (supplemental security income) in 1974 significantly distorts the trend. Finally, the slight percentage drop in 1975-77 is due to the large increase in total Federal outlays in those years—notably in direct

Federal payments to individuals—rather than a net decrease in grants. Federal aid has also increased as a percentage of State and local governmental expenditures, growing from 10% in 1955 to 15% in 1965 and 23% in 1977.

Table O-5. IMPACT OF FEDERAL GRANT OUTLAYS (dollar amounts in millions)

	Grants	Federal grants as a percent of		
		Federal outlays		State and local expenditures <sup>2</sup>
		Total	Domestic <sup>1</sup>	
1950.....	\$2,253	5.3	8.8	10.4
1955.....	3,207	4.7	12.1	10.1
1960.....	7,020	7.6	15.9	14.7
1965.....	10,904	9.2	16.6	15.3
1969.....	20,255	11.0	20.1	18.0
1970.....	24,018	12.2	21.1	19.4
1971.....	28,109	13.3	21.4	19.9
1972.....	34,372	14.8	22.8	22.0
1973.....	41,832	17.0	24.8	24.3
1974.....	43,308	16.1	23.3	22.7
1975.....	49,723	15.3	21.3	23.4
1976 estimate.....	59,787	16.0	21.7	25.2
TQ estimate.....	15,561	15.9	21.7	24.3
1977 estimate.....	60,523	15.4	21.1	23.0

<sup>1</sup> Defined for this purpose as excluding national defense and international programs.

<sup>2</sup> As defined in the National Income Accounts.

### THE STATE AND LOCAL GOVERNMENT SECTOR OF THE NATIONAL INCOME ACCOUNTS <sup>1</sup>

The national income accounts (NIA) provide a detailed statistical description of the U.S. economy, with State and local government receipts and expenditure data a part of that description. These State and local data provide a measure of the relationships between these governments as a sector of the economy and other sectors. The data are not designed to serve as financial measures of State or local financial condition.

There are two basic differences between NIA data and the budgetary accounting for a government's revenue and expenditures. First, only those State and local governmental revenue and expenditure activities that figure into the calculation of national income are included in the NIA data. Excluded are such items as financial transactions and the purchase and sale of land. Second, a large number of transactions in the NIA accounts are recorded on an accrual basis, while in general many governments keep their accounts on a cash basis. As a result of these differences, NIA totals are not the same as an aggregate of these governments' financial budgets. However, they do provide timely estimates of *total* State and local fiscal transactions not otherwise available.

*NIA State and local sector.*—Table O-6 provides a historical tabulation of these data with the surplus or deficit broken into two

<sup>1</sup> Special Analysis A of this volume provides general information on the national income accounts. NIA data in this analysis are adjusted to incorporate the "benchmark" revisions just issued. These resulted in virtually no change in grants-in-aid estimates from the prior usage.

Table O-6. NATIONAL INCOME ACCOUNTS, STATE AND LOCAL SECTOR  
(In billions of dollars)

	Receipts	Expenditures	Surplus or deficit (-) entire sector	Surplus or deficit (-) State and local social insurance funds	Surplus or deficit (-) operating account
<b>Calendar year</b>					
1950.....	21.3	22.5	-1.2	0.7	-1.9
1951.....	23.4	23.9	-.4	.8	-1.3
1952.....	25.4	25.5	-.*	1.0	-1.0
1953.....	27.4	27.3	.1	1.0	-.9
1954.....	29.0	30.2	-1.1	1.2	-2.4
1955.....	31.7	32.9	-1.3	1.3	-2.6
1956.....	35.0	35.9	-.9	1.5	-2.3
1957.....	38.5	39.8	-1.4	1.6	-3.0
1958.....	42.0	44.3	-2.4	1.8	-4.1
1959.....	46.4	46.9	-.4	2.0	-2.5
1960.....	49.9	49.8	.1	2.3	-2.2
1961.....	54.0	54.4	-.4	2.4	-2.8
1962.....	58.5	58.0	.5	2.6	-2.1
1963.....	63.2	62.8	.5	2.8	-2.4
1964.....	69.5	68.5	1.0	3.2	-2.2
1965.....	75.1	75.1	-.*	3.4	-3.4
1966.....	84.8	84.3	.5	4.0	-3.5
1967.....	93.6	94.7	-1.1	4.8	-5.9
1968.....	107.2	106.9	.3	5.3	-5.0
1969.....	119.7	117.6	2.1	5.9	-3.7
1970.....	134.9	132.2	2.8	6.8	-4.0
1971.....	152.6	148.9	3.7	7.5	-3.8
1972.....	177.4	163.7	13.7	8.1	5.6
1973.....	193.8	180.9	12.9	8.8	4.1
1974.....	209.4	201.3	8.1	9.8	-1.7
<b>SEASONALLY ADJUSTED, ANNUAL RATES</b>					
<b>Calendar quarter</b>					
1973:					
I.....	190.3	174.4	15.9	8.6	7.3
II.....	192.1	178.9	13.2	8.8	4.4
III.....	195.2	182.8	12.4	8.9	3.6
IV.....	197.6	187.5	10.1	9.1	1.0
1974:					
I.....	201.9	192.6	9.4	9.3	.1
II.....	207.3	199.1	8.2	9.6	-1.4
III.....	213.5	204.5	9.1	10.0	-0.9
IV.....	214.9	209.0	5.9	10.2	-4.3
1975:					
I.....	221.2	215.5	5.7	10.8	-5.0
II.....	228.2	219.4	8.8	11.1	-2.2
III.....	237.7	224.8	12.9	11.2	1.7

basic components, social insurance funds and the operating account.<sup>1</sup> As the table shows, the insurance funds have been in surplus since 1950. The funds accumulate assets to pay for their future liabilities. Because surpluses of these insurance funds are not generally available to pay for deficits in operating accounts, the operating account is generally thought to be a better measure of State and local fiscal condition than the sector as a whole. However, the accrued liability of many of these social insurance funds exceeds their assets, posing a potential threat to State and local financial health in future years.

<sup>1</sup> The operating account is defined here as all activities except those of social insurance funds. This includes expenditures for capital investment.

Since the late 1940's the operating account has generally been in deficit. This is not unusual, since it includes capital expenditures, often financed through borrowing. Surpluses in 1972 and 1973 were generated by the first general revenue sharing distributions and new revenues generated by significant tax increases in 1971-72.

In 1974, the operating account returned to a deficit situation. In part, this reflected a return to previous patterns, as State and local expenditure increases absorbed the new, higher income streams. It also reflected the worsening economic situation, with State and local governments opting to draw down on balances accumulated during 1972-73 rather than enact new tax increases. As Table O-7 illustrates, increases in own-source revenues during 1973-75 were mainly generated by changes in economic conditions. This contrasts significantly with the 1971-72 period, during which major increases in revenue were generated by changes in tax structure, in addition to those generated by economic growth. The return of the operating account to a surplus position in the third quarter of 1975 was generated primarily by a significant increase in federal grants.

Table O-7. STATE AND LOCAL GOVERNMENT RECEIPTS, CHANGE FROM PREVIOUS YEAR (in billions of dollars)

	1971	1972	1973	1974	1975 estimate
<b>Total receipts, national income and product accounts basis.....</b>	<b>17.7</b>	<b>24.8</b>	<b>16.4</b>	<b>15.6</b>	<b>23.0</b>
<b>Less:</b>					
Contributions to social insurance funds.....	1.0	.9	1.2	1.4	1.4
Federal grants-in-aid.....	4.6	8.5	3.0	3.3	10.6
<b>Equals:</b>					
<b>Own-source revenues, total.....</b>	<b>12.1</b>	<b>15.4</b>	<b>12.1</b>	<b>10.9</b>	<b>11.1</b>
Due to economic growth and inflation.....	10.1	11.2	11.5	10.9	9.9
Due to tax structure changes.....	2.0	4.2	.6	-----	1.2
<b>Personal taxes and nontaxes, total.....</b>	<b>3.3</b>	<b>6.7</b>	<b>3.4</b>	<b>3.3</b>	<b>3.8</b>
Due to economic growth and inflation.....	2.4	3.8	3.4	3.5	3.6
Due to tax structure changes.....	.9	<sup>1</sup> 2.9	-----	-.2	.2
<b>Indirect business tax and nontax accruals, total.....</b>	<b>8.3</b>	<b>8.0</b>	<b>7.9</b>	<b>6.6</b>	<b>7.4</b>
Due to economic growth and, inflation.....	7.5	6.8	7.5	6.4	6.8
Due to tax structure changes.....	.8	1.2	.4	.2	.6
<b>Corporate profits tax accruals, total.....</b>	<b>.5</b>	<b>.8</b>	<b>.7</b>	<b>1.0</b>	<b>-.1</b>
Due to economic growth and inflation.....	.2	.6	.6	1.0	-.5
Due to tax structure changes.....	.3	.2	.2	-----	.5

<sup>1</sup> Includes \$1.3 billion shift in withholding patterns.

Source: Based on unpublished material from the Bureau of Economic Analysis.

*Three measures of Federal aid.*—The national income accounts and the Census Bureau have statistical series for Federal grants-in-aid different from the budget series exhibited in this special analysis.

The budget series is designed to provide a comprehensive picture of Federal aid, focusing on programs that are financed but not directly administered by the Federal Government. The census and NIA series are parts of broader statistical concepts encompassing the entire economy, and as a consequence they define Federal aid somewhat

differently from the budget series. They both omit the following items which the budget series includes:

- Federal aid to the Governments of Puerto Rico and U.S. territories;
- Payments in-kind, primarily commodities purchased by the Department of Agriculture and donated to the school lunch and other nutrition programs;
- Food stamp benefit payments prior to 1971; and
- Payments to private, nonprofit entities (such as manpower training programs and nonprofit hospitals) which operate under State auspices or within a State plan.

Table O-8. **THREE MEASURES OF FEDERAL AID TO STATE AND LOCAL GOVERNMENTS, 1965-74** (in billions of dollars)

	1965	1968	1971	1972	1973	1974
<b>Budget (Special O)</b> .....	<b>10.9</b>	<b>18.6</b>	<b>28.1</b>	<b>34.4</b>	<b>41.8</b>	<b>43.3</b>
Less principal exclusions:						
Agricultural commodities.....	-.4	-.5	-.6	-.6	-.5	-.6
Food stamps (bonus).....	—*	-.2	—	—	—	—
Geographical exclusions.....	-.3	-.3	-.4	-.4	-.6	-.7
Plus payments for research.....	.8	1.1	1.4	1.1	1.2	1.3
All other, net.....	*	-.7	-1.0	-.9	-.2	-.4
<b>Federal payments (Census)</b> .....	<b>11.1</b>	<b>18.1</b>	<b>27.5</b>	<b>33.6</b>	<b>41.7</b>	<b>42.9</b>
Less low-rent public housing.....	-.2	-.3	-.5	-.7	-1.0	-1.1
All other, net.....	.1	*	-.2	-.3	-.3	-.2
<b>Grants in-aid (national income accounts)</b> .....	<b>10.9</b>	<b>17.8</b>	<b>26.8</b>	<b>32.6</b>	<b>40.4</b>	<b>41.6</b>

\*Less than \$50 million.

One major group of payments that the budget definition of grants excludes but census and the NIA series include is payments for research conducted by public universities. The budget series excludes these payments because they are considered to be a purchase of services for the Federal Government rather than aid for State programs. Since both census and the NIA series focus on cash payments to State and local governments, they count these as grants. One major kind of outlay included in the budget and census definitions but excluded from the NIA series is payments for low-rent public housing, which the NIA count as subsidies by the Federal Government rather than as grants. In addition, there are other minor differences in the three series.

Table O-8 illustrates the major differences. As the table demonstrates, differences among the series frequently offset each other numerically.

#### DETAILED FEDERAL AID TABLES

The following two tables present detailed Federal aid data for the 3 budget years and the transition quarter. Table O-9, "Federal Grants to State and Local Governments—Outlays and Budget Authority," provides detailed budget authority and outlay data for grants and shared revenues. This is the first year budget authority figures have been published in this table. Table O-10, "Federal Loans to State and Local Governments," provides disbursement and net outlay data for loan programs.



Table O-9. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—OUTLAYS AND BUDGET AUTHORITY  
(In millions of dollars)

1975 actual	1976 estimate	TQ estimate	1977 estimate	Agency and program	Func- tional code	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>OUTLAYS</b>				<b>National defense:</b>		<b>BUDGET AUTHORITY</b>			
				Department of Defense—Military:					
39	42	9	37	Civil Preparedness Agency.....	051	43	43	12	30
34	35	8	30	National Guard centers construction.....	051	38	28	-----	24
<u>74</u>	<u>77</u>	<u>17</u>	<u>67</u>	<b>Total, national defense.....</b>		<u>80</u>	<u>70</u>	<u>12</u>	<u>53</u>
<b>Natural resources, environment and energy:</b>				Department of Agriculture:					
94	108	38	90	Watershed planning and flood control.....	301	56	58	15	54
9	11	1	5	Resource conservation and development.....	302	8	10	3	4
32	32	5	27	Forest Service.....	302	36	33	5	28
				Department of Commerce:					
7	17	5	17	NOAA coastal zone management.....	302	15	18	5	23
18	19	5	19	NOAA—Operations research and facilities.....	306	19	21	5	20
				Department of the Interior:					
4	1	*	*	Bureau of Reclamation.....	301	2	1	*	*
9	9	1	9	Office of Water Research and Technology.....	301	7	9	1	12
157	160	40	158	Land and water conservation fund.....	303	180	176	44	176
72	79	20	81	Fish and Wildlife Service.....	303	82	89	19	94
6	7	3	9	Preservation of historic properties.....	303	11	11	3	6
7	9	2	6	Energy Research and Development Administration.....	305	7	9	2	6
2,025	2,532	651	3,955	Environmental Protection Agency.....	304	7,917	174	23	107
-----	50	-----	60	Federal Energy Administration.....	305	-----	55	-----	55
37	48	17	68	Tennessee Valley Authority (shared revenue).....	301	-----	-----	-----	-----
5	4	1	-----	Water Resources Council.....	301	5	5	-----	-----
<u>2,479</u>	<u>3,088</u>	<u>789</u>	<u>4,505</u>	<b>Total, natural resources, environment and energy.....</b>		<u>8,345</u>	<u>669</u>	<u>124</u>	<u>585</u>

92	108	28	120	<b>Agriculture:</b>					
183	192	48	185	Cooperative State Research Service.....	352	98	111	28	118
128	199	23	251	Cooperative Agricultural Extension Work.....	352	182	194	48	183
*				Commodity Credit Corporation—Donations.....	351				
				Agricultural Marketing Service—Cooperative Projects in Marketing..	352	2			
<b>404</b>	<b>499</b>	<b>98</b>	<b>556</b>	<b>Total, agriculture.....</b>		<b>282</b>	<b>304</b>	<b>76</b>	<b>301</b>
				<b>Commerce and transportation:</b>					
6	10	3	5	Department of Agriculture: FmHA: Housing.....	401	10			
2	4	1	3	Department of Commerce: EDA—Minority business development.....	403	2	2	1	2
*	2			Department of Housing and Urban Development: Urban transportation	404				
				Department of Transportation:					
1	2	1	2	Grants-in-aid for natural gas pipeline safety.....	407	1	2		2
5	6	2	6	State boating safety assistance.....	406	6	6	1	6
292	375	95	355	Airport and airway trust fund.....	405		350	88	350
26	46	11	40	Highway beautification.....	404	75			32
4,573	6,170	1,816	6,567	Highway trust fund.....	404	6,248	2,984		6,254
29	48	11	158	Other highway aid.....	404	286	40		26
74	87	24	93	National Highway Traffic Safety Administration.....	404	198	56		103
*	19	10	73	Federal Railroad Administration.....	404	1	26	9	201
688	1,276	358	1,503	Urban Mass Transportation Administration.....	404	8,816	680		655
175	182	40	185	Washington Metropolitan Area Transit Authority.....	404	127	100	27	116
<b>5,872</b>	<b>8,227</b>	<b>2,371</b>	<b>8,990</b>	<b>Total, commerce and transportation.....</b>		<b>15,769</b>	<b>4,247</b>	<b>125</b>	<b>7,747</b>
				<b>Community and regional development:</b>					
				Funds appropriated to the President:					
306	33	94	321	Appalachian regional development programs.....	452	274	307	12	359
131	158	35	158	Disaster relief.....	453	140	105	26	70
				Department of Agriculture:					
35	62	16	84	Rural water and waste disposal grants.....	451	30	125	12	
4	9	2	8	Rural development grants.....	452	14	2		
2	2			Rural community fire protection grants.....	452	4			
				Department of Commerce:					
209	204	34	174	Economic Development Administration.....	452	178	218	54	146
41	79	12	42	Regional Action Planning Commissions.....	452	46	87	15	41

See footnote at end of table.

Table O-9. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—OUTLAYS AND BUDGET AUTHORITY—Continued  
(In millions of dollars)

1975 actual	1976 estimate	TQ estimate	1977 estimate	Agency and program	Func- tional code	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>OUTLAYS</b>				<b>BUDGET AUTHORITY</b>					
38	750	400	1,600	Department of Housing and Urban Development:					
1,374	1,375	300	1,000	Community development block grants.....	451	2,432	1,838	-----	3,248
				Urban renewal.....	451	48	-----	-----	-----
601	444	23	110	Other categorical programs replaced by community development					
96	107	25	75	block grants.....	451	70	-----	-----	-----
3	3	2	5	Comprehensive planning grants.....	451	100	75	-----	25
2	2	1	2	New Communities Administration.....	451	-----	-----	-----	-----
1	2	*	*	Department of the Interior: Bureau of Indian Affairs.....	452	5	10	1	2
493	478	120	339	Joint Federal-State Land Use Planning Commission for Alaska.....	452	1	1	*	*
				Community Services Administration.....	451	547	394	86	308
<b>3,335</b>	<b>4,008</b>	<b>1,063</b>	<b>3,917</b>	<b>Total, community and regional development.....</b>		<b>3,889</b>	<b>3,162</b>	<b>207</b>	<b>4,199</b>
				<b>Education, employment, training, and social services:</b>					
22	175	80	222	Department of Commerce: Job opportunities program.....	504	125	374	-----	-----
			294	Department of Health, Education, and Welfare:					
2,276	2,277	520	1,925	Financial assistance for elementary and secondary education.....	501	-----	-----	-----	3,300
24	24	5	20	Elementary and secondary education.....	501	2,252	2,344	2,079	139
577	438	40	344	Indian education.....	501	25	25	-----	25
214	232	58	219	School assistance in federally affected areas.....	501	612	389	64	272
58	96	23	75	Emergency school assistance.....	501	213	240	*	248
653	674	108	662	Education for the handicapped.....	501	100	100	75	9
83	33	6	25	Occupational, vocational, and adult education.....	501	689	663	220	539
210	128	41	94	Higher education.....	502	15	3	-----	-----
-----	4	3	37	Library resources.....	503	155	62	137	-----
118	26	1	3	Special projects and training.....	503	-----	25	-----	64
304	330	75	243	Educational development.....	503	-----	-----	-----	-----
				Work incentives.....	504	196	380	75	243

2,047	2,358	607	2,546	Social services.....	506	1,995	2,810	607	2,546
430	466	127	458	Assistant Secretary for Human Development:					
1,166	1,122	242	1,098	Child development.....	501	470	468	114	464
			5	Youth, aging, and vocational rehabilitation programs.....	506	1,103	1,031	258	1,004
				Allied services.....	506				20
24	34	7	28	Department of the Interior: Bureau of Indian Affairs, Indian education programs.....	501	28	31	7	28
2,504	3,050	925	2,494	Department of Labor:					
319	2,331	485	1,065	Employment and training assistance.....	504	2,552	2,548	524	2,494
53	4			Temporary employment assistance.....	504	875	3,325		
-19	94	18	82	Emergency employment assistance.....	504				
481	434	114	466	Grants for employment services.....	504	64	77	18	82
62	70	18	70	Unemployment trust fund: training and employment.....	504	419	451	105	466
14	22	14	22	Corporation for Public Broadcasting.....	503	62	70	18	70
17				National Foundation on the Arts and Humanities.....	503	22	22	14	22
				Community Services Administration.....	501				
<b>11,638</b>	<b>14,422</b>	<b>3,518</b>	<b>12,497</b>	<b>Total, education, employment training and social services.....</b>		<b>11,973</b>	<b>15,437</b>	<b>4,314</b>	<b>12,034</b>
10	6			<b>Health:</b>					
33	34	9	34	Special Action Office for Drug Prevention.....	553	9			
567	595	161	285	Department of Agriculture: Animal and Plant Health Inspection					
59	56	9	23	Service—meat and poultry.....	553	32	34	9	34
590	508	90	375	Department of Health, Education and Welfare:					
672	613	102	433	Health Services Administration.....	551	698	540	134	-19
			9,001	Center for Disease Control.....	553	58	34	6	
6,840	8,184	2,220		Alcohol, Drug Abuse, and Mental Health Administration.....	551	487	425	48	197
1	1	*	1	Health Resources Administration.....	552	433	240	47	153
37	36	11	36	Financial assistance for health care.....	555				10,002
<b>8,810</b>	<b>10,032</b>	<b>2,602</b>	<b>10,188</b>	Medicaid.....	551	6,996	8,262	2,220	
				Department of the Interior: Mining Enforcement and Safety Administration.....	553	1	1	*	1
				Department of Labor: Occupational Safety and Health Administration.....	553	37	36	9	38
				<b>Total, health.....</b>		<b>8,721</b>	<b>9,571</b>	<b>2,474</b>	<b>10,405</b>

See footnote at end of table.

Table O-9. **FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—OUTLAYS AND BUDGET AUTHORITY—Continued**  
(In millions of dollars)

1975 actual	1976 estimate	TQ estimate	1977 estimate	Agency and program	Func- tional code	1975 actual	1976 estimate	TQ estimate	1977 estimate
OUTLAYS				BUDGET AUTHORITY					
				<b>Income security:</b>					
				Department of Agriculture:					
				Agricultural Marketing Service—Funds for strengthening markets, income and supply-donations.....	604	276	227	-----	-----
494	294	59	—5	Institutional nutrition support.....	604	-----	-----	-----	22
-----	-----	-----	22	Food stamps—administration.....	604	250	250	62	275
136	230	62	245	Special nutrition supplements.....	604	-----	-----	-----	6
-----	-----	-----	6	Child nutrition and special milk programs.....	604	1,650	2,218	427	-----
1,565	2,225	388	291	Food donations.....	604	-----	17	4	-----
-----	17	4	-----	Child nutrition reform.....	604	-----	-----	-----	2,000
-----	-----	-----	2,000	Department of Health, Education, and Welfare: Public assistance— maintenance.....	604	4,862	5,898	1,576	5,959
5,121	5,898	1,576	5,959	Department of Housing and Urban Development: Housing assistance.....	604	25,496	13,785	102	10,728
1,326	1,609	452	1,979	Department of Labor: Unemployment trust fund: administration of payments.....	603	759	924	144	888
636	939	235	938						
<u>9,279</u>	<u>11,212</u>	<u>2,778</u>	<u>11,434</u>	<b>Total, income security.....</b>		<u>33,293</u>	<u>23,318</u>	<u>2,316</u>	<u>19,878</u>
				<b>Veterans benefits and services:</b>					
				Veterans Administration:					
22	25	6	28	Medical care.....	703	22	25	6	28
1	1	*	1	Medical administrative expenses.....	703	1	1	*	1
3	6	1	5	Grants for construction of State nursing homes.....	703	10	10	-----	10
6	41	8	42	Health training.....	703	10	27	8	35
-----	-----	-----	4	Grants for State cemeteries.....	705	-----	-----	-----	5
<u>32</u>	<u>73</u>	<u>17</u>	<u>80</u>	<b>Total, veterans benefits and services.....</b>		<u>43</u>	<u>64</u>	<u>15</u>	<u>79</u>

				<b>Law enforcement and justice:</b>			
			1	National Institute of Corrections.....	754		2
722	750	203	716	Department of Justice: Law enforcement assistance.....	754	734	608
3	6	1	8	Equal Employment Opportunity Commission.....	751	4	8
	82	23	80	Legal Services Corporation.....	751		78
						85	23
725	838	227	805	<b>Total, law enforcement and justice.....</b>	<b>738</b>	<b>756</b>	<b>695</b>
				<b>General government:</b>			
				Department of Interior:			
16	22	8	25	Administration of Territories.....	806	15	21
69	89	18	80	Trust Territory of the Pacific Islands.....	806	69	81
2	18	11	20	General Services Administration.....	804		
15	16	4	10	Civil Service Commission (intergovernmental personnel assistance).....	806	15	10
						15	4
102	145	42	135	<b>Total, general government.....</b>	<b>98</b>	<b>130</b>	<b>112</b>
				<b>Revenue sharing and general purpose fiscal assistance:</b>			
121	91	118	37	Department of Agriculture: Forest Service (shared revenue).....	852	121	37
4	4	4	1	Department of Defense: Flood Control Act (shared revenue).....	852	4	4
				Department of Interior:			
178	179	145	127	Bureau of Land Management.....	852	178	127
3	3	1	3	Fish and Wildlife Service.....	852	3	3
17	31	5	19	Internal revenue collections for the Virgin Islands (shared revenue).....	852	17	18
				Department of the Treasury:			
172	216	54	220	Customs receipts for Puerto Rico and the Virgin Islands (shared revenue).....	852	161	220
122	114	24	114	Internal revenue collections for Puerto Rico (shared revenues).....	852	112	114
6, 130	6, 272	1, 627	6, 549	General revenue sharing.....	851	6, 205	6, 542
226	254	64	280	Federal payment to the District of Columbia (shared revenue).....	852	226	280
						254	64
6, 971	7, 166	2, 039	7, 349	<b>Total, revenue sharing and general purpose fiscal assistance.....</b>	<b>7, 027</b>	<b>7, 235</b>	<b>7, 346</b>
49, 723	59, 787	15, 561	60, 523	<b>Total, grants and shared revenues.....</b>	<b>90, 258</b>	<b>64, 964</b>	<b>63, 435</b>

\* Less than \$500 thousand.

Table O-10. FEDERAL LOANS TO STATE AND LOCAL GOVERNMENTS (in millions of dollars)

Agency and program by function	Disbursements				Net outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Natural resources, environment and energy:</b>								
Department of the Interior: Reclamation loans.....	10.1	20.8	16.4	13.1	10.1	20.8	16.4	13.1
<b>Commerce and transportation:</b>								
Department of Transportation:								
Federal aid highways (trust fund).....		100.0	25.0			100.0	25.0	
Right-of-way revolving fund.....	37.0	36.9	5.0	46.6	37.0	36.9	5.0	46.6
Urban Mass Transportation Administration.....	-2	-2		-2	-2	-2		-2
Total, commerce and transportation.....	36.8	136.7	30.0	46.4	36.8	136.7	30.0	46.4
<b>Community and regional development:</b>								
Department of Commerce: Economic development assistance.....	17.5	31.0	7.5	32.0	2.6	6.0	1.5	4.0
Department of Housing and Urban Development:								
Urban renewal fund—loans and planning advances.....	556.2	656.2	152.0	700.0	-28.5	50.0		-25.0
Public facility loans.....	23.8				16.5			
Revolving fund (liquidating programs).....	-5	6.3	4.6	13.8	-6.8	-6.8	1.4	-43.1

District of Columbia:								
Loans for capital outlay.....	192.1	201.3	41.6	185.1	192.1	201.3	41.6	185.1
Advances to stadium sinking fund, armory board.....	.8	.8	-----	.8	.8	.8	-----	.8
Total, community and regional development.....	<u>759.9</u>	<u>864.6</u>	<u>198.2</u>	<u>899.7</u>	<u>176.8</u>	<u>251.3</u>	<u>44.5</u>	<u>121.8</u>
<b>Education, training, employment, and social services:</b>								
Department of Health, Education, and Welfare:								
Higher education.....	-----	-----	-----	-----	-----	1.0	-----	.8
Higher education facilities.....	8.0	8.0	1.0	4.0	-1.3	-2.0	-.9	-4.0
Department of Housing and Urban Development: College housing loans.....	-----	-----	-----	-----	-40.9	-20.7	-4.8	-----
Total, education, training, employment and social services.....	<u>8.0</u>	<u>8.0</u>	<u>1.0</u>	<u>4.0</u>	<u>-42.2</u>	<u>-21.7</u>	<u>-5.7</u>	<u>-3.2</u>
<b>Health:</b>								
Department of Health, Education, and Welfare: Medical facilities.....	<u>61.4</u>	<u>62.5</u>	<u>18.0</u>	<u>195.0</u>	<u>6.4</u>	<u>6.5</u>	<u>-7.0</u>	<u>-9.0</u>
<b>Income security:</b>								
Department of Housing and Urban Development: Low-rent public housing.....	<u>645.1</u>	<u>650.0</u>	<u>162.0</u>	<u>650.0</u>	<u>-41.5</u>	-----	-----	-----
<b>General government:</b>								
Department of the Interior: Administration of Territories.....	<u>2.2</u>	<u>2.0</u>	-----	<u>2.0</u>	<u>2.2</u>	<u>2.0</u>	-----	<u>2.0</u>
<b>Revenue sharing and general purpose fiscal assistance:</b>								
District of Columbia: Repayable advances.....	<u>40.0</u>	<u>40.0</u>	<u>40.0</u>	<u>40.0</u>	<u>40.0</u>	<u>40.0</u>	<u>40.0</u>	<u>40.0</u>
<b>Total.....</b>	<u>1,563.5</u>	<u>1,784.6</u>	<u>465.6</u>	<u>1,850.2</u>	<u>188.5</u>	<u>435.7</u>	<u>118.2</u>	<u>211.1</u>



## SPECIAL ANALYSIS P

### FEDERAL RESEARCH AND DEVELOPMENT PROGRAMS

The significant increases in the funding of research and development (R. & D.) reflected in this analysis demonstrate the Administration's belief that science and technology are important to the Nation's future defense, economy and human welfare. The Federal Government, through its budget and tax policies, seeks also to encourage continued and expanded private funding of R. & D., which now constitutes nearly half the annual national investment in R. & D.

This analysis summarizes the funding of R. & D. incorporated in individual agency budgets. Research and development is not a separately programmed or budgeted activity of the Federal Government. Its funding must therefore be considered primarily in light of the potential contributions of science and technology to meeting agency or national goals and not as an end in itself.

The first part of this analysis presents a summary and highlights of the 1977 budget as it affects Federal funding of research and development; the second part describes the longer term trends in Federal support of R. & D.; and the last portion describes the 1977 programs of the 11 major agencies which together account for about 98% of total Federal spending for R. & D.

#### PART I: HIGHLIGHTS OF THE 1977 BUDGET

Federal obligations for R. & D. in 1977 will total \$24.7 billion, an increase of 11% over 1976. Outlays will increase by 10% to \$23.5 billion. Specific amounts for the conduct of R. & D. and for related facilities in 1975, 1976, the transition quarter, and 1977 are shown in Table P-1.

Table P-1. TOTAL FEDERAL FUNDING FOR CONDUCT OF R. & D. AND RELATED FACILITIES (in billions of dollars)<sup>1</sup>

	Obligations				Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Conduct of R. & D.	19.0	21.3	5.4	23.5	18.7	20.4	5.4	22.9
R. & D. facilities...	.8	.9	.1	1.2	.8	.9	.2	.6
Total.....	19.8	22.2	5.5	24.7	19.5	21.3	5.6	23.5

<sup>1</sup> For budget analysis purposes, R. & D. includes basic and applied research, and the design, testing and demonstration of prototypes and new processes, but does not include routine product testing collection of general purpose statistics, or training of scientific manpower.

#### CONDUCT OF RESEARCH AND DEVELOPMENT

Increases in obligations for the conduct of research and development by major program area are shown in Table P-2.

Table P-2. CONDUCT OF R. & D. BY MAJOR PROGRAM AREA  
(Obligations in billions of dollars)

Program	1975 actual	1976 estimate	TQ estimate	1977 estimate
Conduct of R. & D.:				
Defense <sup>1</sup> .....	9.6	10.6	2.7	12.0
Space <sup>2</sup> .....	2.5	2.7	.7	2.9
Civilian (other than space).....	6.9	8.0	2.0	8.6
Total.....	19.0	21.3	5.4	23.5

<sup>1</sup> Includes military-related programs of the Energy Research and Development Administration—transferred from the AEC.

<sup>2</sup> Includes all NASA programs except aeronautical research, space applications (e.g., pollution monitoring, communications, earth observations), energy technology applications, and technology utilization, which are classified as civilian programs.

Some of the more important developments in each of the major program areas are illustrated in the following summary.

- *Defense.* Obligations for R. & D. will increase by 13%. High-lights of the 1977 budget include:
  - the start of advanced development of both the air-launched and sea-launched cruise missiles;
  - increases in programs aimed at improving ballistic missile warheads and providing options for a new intercontinental ballistic missile system;
  - development of weapons systems to modernize the tactical forces, including an advanced air combat fighter for the Air Force, an attack helicopter for the Army, and a surface-to-air missile system known as SAM-D.
- *Space.* Funds for R. & D. will increase slightly. They provide for:
  - continued development of the space shuttle, leading to an initial manned orbital flight in 1979;
  - continued development of automated spacecraft to explore the solar system;
  - initiation of a new satellite, the solar maximum mission, which will be launched in 1979 to study the Sun during the next period of peak solar flare activity in 1979–80.
- *Civilian.* R. & D. funding for civilian programs will rise by 8%. More specifically, the 1977 budget includes amounts to:
  - expand research on the basic biological processes underlying agricultural production, and expand development of additional sources of useable vegetable protein;
  - continue research on human biological processes and the causes, prevention, diagnosis and treatment of disease, including increased support for research on immunology, aging, and environmental health;
  - define and evaluate alternatives relating to mass transit and develop advanced traffic management systems;
  - increase aeronautical R. & D. to achieve more energy-efficient aircraft;

- expand the development of fusion technology and the breeder demonstration program (particularly the Clinch River Breeder Reactor) and increase efforts in the light water reactor program, especially in nuclear fuel waste management;
- accelerate the development of technologies to use domestic fossil fuel resources in an environmentally acceptable manner through gasification and liquefaction of coal, and increase assistance to industry in advancing energy conservation, solar and geothermal technologies.

The major agencies involved in energy technologies will increase their budget authority for direct energy research and development (including facilities) by 37% from \$1.9 billion in 1976 to \$2.6 billion in 1977. Indirect or supporting energy research will also increase, including research on environmental, health and safety aspects of energy systems and research in basic energy sciences. More detailed analysis of the Federal energy R. & D. effort is provided in the annual "National Plan for Energy Research, Development and Demonstration" published by the Energy Research and Development Administration.

#### RESEARCH AND DEVELOPMENT FACILITIES

Obligations for the construction and renovation of facilities or for the acquisition of major items of equipment used to conduct R. & D. will increase by \$0.3 billion, from \$0.9 billion in 1976 to \$1.2 billion in 1977. Of particular significance is the inclusion of funds to begin construction of the large colliding beam facility for the Stanford linear accelerator designed to develop and test new theories in high-energy physics concerning the ultimate nature of matter. Also included are funds to initiate construction of a new wind tunnel at NASA's Langley Research Center and an aircraft engine test complex at DOD's Arnold Research Center. The unique Very Large Array radio telescope in New Mexico will be placed in limited operation.

#### OTHER HIGHLIGHTS

##### BASIC RESEARCH

Included in the totals above for the conduct of R. & D. is Federal support for basic research, which will increase from about \$2.4 billion in 1976 to more than \$2.6 billion in 1977, for an increase of 11%. Within this total, support by the National Science Foundation, as the key agency in fostering basic research in all fields of science, will grow by almost 20%. These amounts exclude support for research facilities (such as the colliding beam facility mentioned above) and for major items of equipment, particularly the cost of launch vehicles for space missions devoted to basic research.

##### COLLEGES AND UNIVERSITIES

Federal funds furnish the largest source of support for research and development activities undertaken by colleges and universities. Federal agencies are expected to commit more than \$2.6 billion to colleges and universities for this purpose in 1977, a 9% increase over the \$2.4 billion estimated in 1976. More information may be found in Table P-10.

## INDIRECT SUPPORT OF RESEARCH AND DEVELOPMENT

In addition to the amounts for direct Federal support of R. & D. reflected in the tables and analysis above, the Federal Government encourages the support of R. & D. through tax provisions which permit businesses to treat R. & D. expenditures as current costs rather than investments to be depreciated over a number of years. This results in a tax saving for industry. Assuming that R. & D. is on the average a 5-year investment, the tax saving is estimated to grow from over \$600 million in 1975 to nearly \$700 million in 1977. Tax expenditures in general are discussed in Special Analysis F.

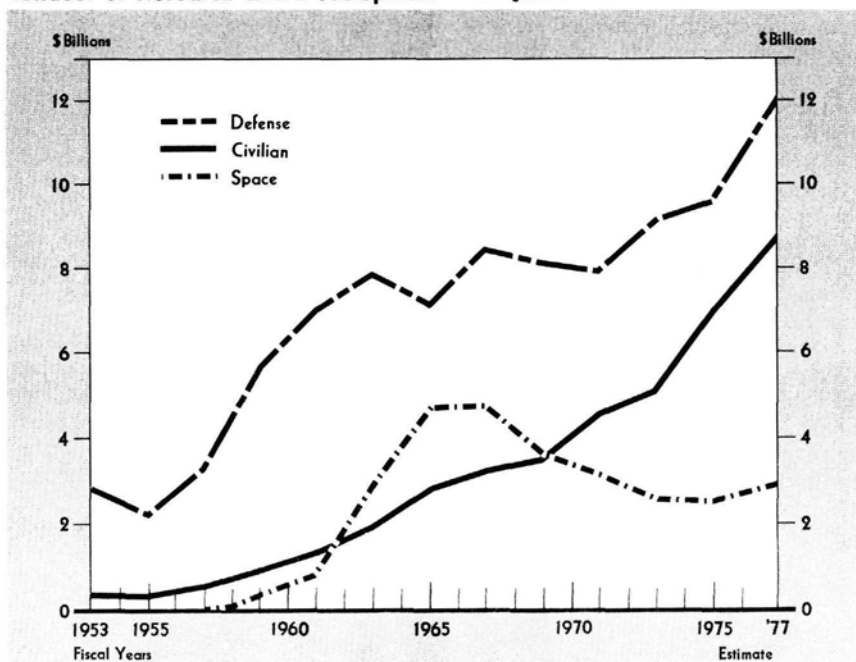
The amounts in this Special Analysis also do not reflect Federal allowances to contractors for performing independent R. & D. associated with particular contracts. These allowances are estimated to approximate \$500 million for each of the years mentioned. Further, the Federal Government provides incentives to State and local governments and to the private sector, particularly in the energy and agricultural R. & D. areas, through such mechanisms as cost-sharing in research and demonstration projects. While estimates of the non-Federal investment stimulated by these incentives are unavailable, these incentives contribute substantially to the overall national R. & D. effort.

## PART II: LONG-TERM TRENDS

Federal funding for R. & D. has increased tenfold since the early 1950's and significant changes in the focus of that funding have taken place. Chart P-1 shows the trends of the Federal R. & D. effort over the last 25 years.

Conduct of Research and Development — Obligations

P-1



At the time of the Soviet launching of Sputnik in 1957 and before the establishment of NASA, Federal R. & D. funding was concentrated in Defense, the Atomic Energy Commission, and the Department of Health, Education, and Welfare (principally for medical research). Total funding for national defense, including defense-related nuclear programs of the Atomic Energy Commission, alone accounted for 87%.

Following the decision to land a man on the Moon by 1970, the space program grew rapidly in the early 1960's. Space funding reached its peak in 1966, when it represented 33% of Federal R. & D. spending. Funding for space programs thereafter declined to a level commensurate with the development of the space shuttle and the continuation of programs in space science and applications of space technology.

Funding for civilian R. & D., other than space programs, while steadily climbing since the late 1950's, has grown markedly since 1969. Energy-related R. & D. in particular has received major increases since 1974. In 1977, Federal obligations for R. & D. devoted to civilian programs will amount to approximately 37% of the total, space R. & D. will account for 12%, and defense R. & D., 51%.

### PART III: AGENCY R. & D. PROGRAMS

More than 99% of Federal R. & D. is supported by 14 departments and major agencies. Table P-3 summarizes obligations and outlays for the conduct of R. & D. by these agencies, and table P-4 separately aggregates obligations and outlays for the construction and renovation of facilities used in the conduct of R. & D. and for the acquisition of major items of equipment.

#### DEPARTMENT OF DEFENSE—MILITARY

Department of Defense obligations in 1977 for research and development, including construction of R. & D. facilities and the cost of associated military personnel, will increase by \$1,499 million over the 1976 level, reaching a total of \$11,554 million. Basic research undertaken or sponsored by DOD will increase from \$330 million in 1976 to \$383 million in 1977. The increase in facilities obligations, from \$176 in 1976 to \$356 million in 1977, reflects funding of the Aeropropulsion System Test Facility, an aircraft engine test complex to be built at the Arnold Engineering Development Center, Tullahoma, Tenn. Obligations for the conduct of research will increase by \$279 million to a level of \$2,035 million, and obligations for development programs will increase by \$1,040 million to a level of \$9,163 million.

In the strategic area, funding for development of the Trident long range submarine and missile system and the B-1 strategic bomber will decrease as these systems enter procurement. These decreases are offset by increases in programs aimed at ballistic missile warhead improvements and at providing options for a new intercontinental ballistic missile system for fixed or mobile employment. In addition,

Table P-3. CONDUCT OF RESEARCH AND DEVELOPMENT OF MAJOR DEPARTMENTS AND AGENCIES (in millions of dollars)

Department or agency	Obligations				Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Defense—Military functions.....	8,987	9,879	2,510	11,198	9,189	9,468	2,537	10,762
National Aeronautics and Space Administration.....	3,088	3,473	921	3,573	3,181	3,402	877	3,550
Energy Research and Development Administration.....	2,071	2,812	756	3,282	1,862	2,423	643	3,042
Health, Education, and Welfare.....	2,395	2,369	526	2,570	2,108	2,366	578	2,512
National Science Foundation.....	604	628	158	726	571	602	204	647
Agriculture.....	424	483	123	507	418	486	136	510
Transportation.....	291	340	76	319	307	338	74	304
Interior.....	296	332	80	316	265	307	83	310
Environmental Protection Agency.....	258	305	87	241	207	324	83	298
Commerce.....	222	247	63	243	220	239	64	233
Veterans Administration.....	99	108	28	106	97	99	26	100
Nuclear Regulatory Commission.....	61	97	23	109	54	88	23	103
Housing and Urban Development.....	57	62	16	70	52	57	19	67
Justice.....	44	65	11	41	44	50	14	44
All other.....	126	138	35	164	124	142	37	156
<b>Total.....</b>	<b>19,023</b>	<b>21,338</b>	<b>5,413</b>	<b>23,465</b>	<b>18,699</b>	<b>20,391</b>	<b>5,398</b>	<b>22,638</b>
<b>Total, conduct of research.....</b>	<b>6,759</b>	<b>7,150</b>	<b>1,860</b>	<b>7,782</b>	<b>6,355</b>	<b>7,192</b>	<b>1,835</b>	<b>7,709</b>
<b>Total, conduct of development.....</b>	<b>12,264</b>	<b>14,188</b>	<b>3,553</b>	<b>15,683</b>	<b>12,344</b>	<b>13,199</b>	<b>3,563</b>	<b>14,929</b>

Table P-4. RESEARCH AND DEVELOPMENT FACILITIES BY MAJOR DEPARTMENTS AND AGENCIES (in millions of dollars)

Department or agency	Obligations				Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Energy Research and Development Administration.....	393	461	66	638	415	418	119	454
Defense—Military functions.....	164	176	36	356	152	185	43	179
National Aeronautics and Space Administration.....	143	82	11	124	85	115	31	126
National Science Foundation.....	31	52	8	34	29	49	10	33
Health, Education, and Welfare.....	39	27	4	11	81	38	5	26
Transportation.....	13	20	3	16	15	15	3	14
Agriculture.....	8	36	1	3	8	14	8	8
Commerce.....	10	8	3	6	11	7	3	6
Environmental Protection Agency.....	2	7	1	4	11	5	1	5
All other.....	18	40	6	23	19	36	7	25
<b>Total facilities.....</b>	<b>821</b>	<b>909</b>	<b>139</b>	<b>1,215</b>	<b>826</b>	<b>882</b>	<b>230</b>	<b>876</b>

full-scale development of both the air-launched and sea-launched long-range cruise missiles will be initiated. In the strategic defensive area, antiballistic missile technology efforts will be continued to guard against technological surprise and to provide future deployment options if they are needed.

In the tactical forces area, a number of major programs are continued which will allow significant future modernization of the tactical forces. For example, the Air Force will continue development of the F-16 air combat fighter and systems to neutralize enemy air defenses. In conjunction with the other services, the Air Force is exploring the combat potential of remotely piloted vehicles and of high energy lasers. Army developments include a new tactical transport helicopter and an advanced attack helicopter. The SAM-D theater air defense system will enter full-scale development and the Army will continue work to adapt the French/German short-range air defense system to U.S. mission requirements.

The Navy will continue to emphasize antisubmarine warfare and fleet air defense missile systems and continue the development of the Surface Effects Ship. Full-scale development of a tactical cruise missile will be initiated to provide ships other than aircraft carriers with an improved strike capability.

Table P-5. DEPARTMENT OF DEFENSE—MILITARY RESEARCH AND DEVELOPMENT (obligations in millions of dollars)

	1975 actual	1976 estimate	TQ estimate	1977 estimate
Conduct of R. & D.:				
Research, development, test, and evaluation:				
Military sciences.....	405	442	115	513
Aircraft and related equipment.....	1,648	1,941	443	2,260
Missiles and related equipment.....	2,160	2,277	562	2,504
Military astronautics and related equipment.....	527	582	139	593
Ships, small craft and related equipment.....	634	608	165	736
Ordnance, combat vehicles and related equipment.....	471	556	171	751
Other equipment.....	1,844	2,096	538	2,361
Programwide management and support.....	869	935	263	1,037
Other appropriations.....	429	442	114	443
<b>Total conduct of R. &amp; D., obligations.....</b>	<b>8,987</b>	<b>9,879</b>	<b>2,510</b>	<b>11,198</b>
<b>Total conduct of research, included above.....</b>	<b>1,661</b>	<b>1,756</b>	<b>519</b>	<b>2,035</b>
<b>Total conduct of development, included above.....</b>	<b>7,326</b>	<b>8,123</b>	<b>1,991</b>	<b>9,163</b>
R. & D. facilities, obligations.....	164	176	36	356
<b>Total obligations.....</b>	<b>9,151</b>	<b>10,055</b>	<b>2,546</b>	<b>11,554</b>

#### NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

The 1977 NASA budget—classified entirely as research and development—provides for ongoing and new programs in manned space flight, space science, space applications, and aeronautics. Funds for R. & D., including construction of facilities, will increase by \$142 million over the 1976 level, reaching a total of \$3,697 million.

Manned space flight activities will be concentrated on development of the space shuttle. The shuttle is a partially reusable vehicle which will be the key component of a transportation system expected to



provide a major advancement in U.S. space capabilities beginning in the early 1980's. NASA will be progressing toward key schedule milestones, including the roll-out of the first shuttle orbiter in September 1976 and horizontal flight tests in early 1977. The first launch of a shuttle orbiter will follow in mid-1979.

The space science program emphasizes the exploration of the solar system and the universe using unmanned spacecraft. Two Pioneer spacecraft are continuing the exploration of the outer planets—one spacecraft is now escaping the solar system and the other will fly by Saturn in 1979. Two Viking unmanned orbiter/lander spacecraft launched to Mars in 1975 will start the search for life on that planet in July 1976. Two Mariner spacecraft are being developed for the Jupiter-Saturn flyby missions scheduled for launch in 1977. An orbiter and probe are being developed to be launched to Venus in 1978 to initiate atmospheric investigations of that planet.

In addition to these planetary missions, development will continue on spacecraft to conduct high energy and ultraviolet astronomy from Earth orbit. Development will continue on the High Energy Astronomy Observatories to be launched during 1977-79 to study X-ray and gamma-ray sources in the galaxy and distant parts of the universe. A new satellite, the Solar Maximum Mission, will be initiated in 1977 and launched in 1979 to study the Sun during the next period of peak solar flare activity during 1979-80.

In the space applications program, NASA is continuing development of a third Earth resources technology satellite (LANDSAT), scheduled to be launched in 1977, to conduct experiments on the utility of space gathered information for agricultural, geologic, and other applications. Development is proceeding on a new generation of satellites to provide improvements in weather forecasting, the first of which, Tiros-N, will be launched in 1978. Work is continuing on a spacecraft, the Heat Capacity Mapping Mission, to be launched in 1978 to locate and map potential sources of geothermal energy. Nimbus-G is being developed

Table P-6. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—RESEARCH AND DEVELOPMENT (budget plan in millions of dollars)

Program and type of activity	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>Conduct of R. &amp; D.:</b>				
Space flight.....	1,188	1,492	392	1,581
Space sciences.....	454	496	130	429
Space applications.....	186	185	48	212
Space research and technology.....	76	81	21	82
Aeronautical research and technology.....	166	175	44	189
Supporting activities.....	253	248	65	266
Research and program management.....	765	796	221	814
<b>Total conduct of R. &amp; D. budget plan.....</b>	<b>3,088</b>	<b>3,473</b>	<b>921</b>	<b>3,573</b>
Total conduct of research, included above.....	795	824	215	864
Total conduct of development, included above.....	2,293	2,649	706	2,709
<b>R. &amp; D. facilities, budget plan.....</b>	<b>143</b>	<b>82</b>	<b>11</b>	<b>124</b>
<b>Total budget plan.....</b>	<b>3,231</b>	<b>3,555</b>	<b>932</b>	<b>3,697</b>

for launch in 1978 to demonstrate the capability of monitoring pollution from space. An additional satellite, Seasat-A, is being developed to be orbited in 1978 to monitor ocean conditions (e.g., sea surface winds and wave heights). A new satellite will be started in 1977 and launched in 1980 to improve mapping of the Earth's magnetic field.

Aeronautical research and technology will continue to explore ways to reduce aircraft engine noise, to improve aircraft performance, and to mitigate undesirable environmental effects of civil and military aircraft. In 1977, NASA will also increase research aimed at ways to reduce aircraft energy requirements.

Funds are provided to continue the development of new technology for future missions in space science and applications. The areas of emphasis include improved materials, structures, propulsion, electric power sources, communications and data handling systems.

#### ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

Obligations for the conduct of research and development supported by the Energy Research and Development Administration will increase from \$2,812 million in 1976 to \$3,282 million in 1977 and obligations for related construction and equipment will total \$638 million.

Obligations for the conduct of ERDA direct energy research and development programs will increase by 26% in 1977 in order to accelerate the achievement of greater long-term energy independence.

In direct nuclear energy research and development, ERDA will expand efforts to improve the use of current commercial reactors by increasing R. & D. on the long-term management of radioactive wastes, fuel reprocessing, and safeguards against theft of nuclear materials. In addition, funding for the Liquid Metal Fast Breeder Reactor (LMFBR) program will be increased to support continued construction of the LMFBR demonstration plant. Research to determine the scientific feasibility of controlled thermonuclear fusion will also increase significantly.

In ERDA's direct nonnuclear energy research and development programs, the major funding will continue to be devoted to fossil energy development. ERDA will accelerate the development of technology to substitute coal for oil and natural gas, increase fuel conversion efficiencies, and increase the recovery of oil and gas from fields in the United States.

Significant increases will also be provided to develop those solar energy systems and applications that are economically attractive and environmentally acceptable for supplementing other available energy resources. Expanded development of drilling and exploration techniques along with the development of environmentally acceptable long-range applications will be pursued in order to stimulate commercial development of geothermal resources. All programs of conservation R. & D. will be maintained or increased, particularly those concerned with energy storage, transportation, buildings and industrial processes.

Table P-7. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION—RESEARCH AND DEVELOPMENT  
(In millions of dollars)

Programs and groups of programs	Obligations				Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Conduct of research and development:								
Direct nuclear energy research and development:								
Fission power reactor and nuclear fuel cycle.....	466	584	167	921	462	511	140	796
Laser and magnetic fusion.....	144	197	67	239	132	180	55	225
Subtotal.....	610	781	234	1,160	594	691	195	1,021
Direct nonnuclear energy research and development:								
Fossil.....	264	492	97	422	138	327	61	413
Solar.....	40	111	33	142	15	81	25	111
Geothermal.....	25	33	12	49	20	31	9	44
Conservation.....	34	75	16	113	21	53	13	88
Environmental control technology.....	8	13	4	16	7	11	3	14
Subtotal.....	371	724	162	742	201	503	111	670
Supporting energy research and development:								
Biomedical and environmental effects.....	142	175	46	183	135	164	43	175
Basic energy sciences.....	156	174	49	183	151	167	45	174
Subtotal.....	298	349	95	366	286	331	88	349
Nuclear weapons and naval reactors.....	620	749	212	775	613	702	196	776
Other:								
High energy physics.....	136	153	37	168	132	148	38	163
Nuclear space power and other programs.....	36	56	16	71	36	48	15	63
Subtotal.....	172	209	53	239	168	196	53	226
Total conduct of research and development.....	2,071	2,812	756	3,282	1,862	2,423	643	3,042
Total conduct of research, included above.....	563	694	186	743	509	640	169	707
Total conduct of development, included above.....	1,508	2,118	570	2,539	1,353	1,783	474	2,335
Research and development facilities.....	393	461	66	638	415	418	119	454
Total.....	2,464	3,273	822	3,920	2,277	2,841	762	3,496

A strong effort will be maintained on programs to determine the biomedical and environmental effects of nuclear and nonnuclear energy sources and to solve fundamental scientific and engineering problems that constrain the development of energy technologies. ERDA will also continue current levels of activity to develop improved nuclear weapons and naval propulsion reactors for the Department of Defense.

ERDA's budget for construction of R. & D. facilities will include \$6 million to proceed with the design and initial construction of a major new positron-electron colliding beam facility for high energy physics. Total construction costs for the facility, located at the Stanford Linear Accelerator Center in California, are estimated to be \$78 million over a 4-year period. Other major R. & D. facilities under construction include fission fuel demonstration projects, the fusion test reactor, and the fast flux test facility, which will provide data on the performance of LMFBR fuels and materials.

#### HEALTH, EDUCATION, AND WELFARE

Department of Health, Education, and Welfare (HEW) obligations in 1977 for the conduct of R. & D. will increase by \$201 million over the 1976 level, reaching a total of \$2,570 million. Obligations for R. & D. facilities will be \$11 million.

The largest share of the Department's R. & D. funds is devoted to the biomedical area. The National Institutes of Health (NIH) is the primary source of support for health research in the United States. R. & D. obligations by NIH will increase by \$181 million from \$1,797 million in 1976 to \$1,978 million in 1977. These funds will support research into human biological processes and the mechanisms of such diseases as cancer, heart and lung diseases, arthritis, diabetes and venereal disease. While maintaining current levels of effort in cancer and heart disease research, NIH will increase support for emerging areas of national importance such as immunology, aging and environmental health.

Preventive health care research is being pursued by other HEW components through investigation into infant and child health; new approaches to drug abuse treatment; new ways to treat, prevent and control alcohol abuse; basic and chemical research on the multiple causes of alcoholism; and development of new approaches to the causes, diagnosis, treatment and prevention of mental illness. In addition, demonstrations of health maintenance organizations, family planning, and emergency medical systems will be funded.

The National Institute for Education (NIE) is the focal point for educational R. & D. NIE supports research in the areas of equality of education; essential skills education; education and work; dissemination of research information; and school finance, productivity, organization and management. R. & D. obligations by NIE will increase by \$20 million, from \$70 million in 1976 to \$90 million in 1977.

Table P-8. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE—RESEARCH AND DEVELOPMENT  
(in millions of dollars)

Program areas and organizational units	Obligations				Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Conduct of R. & D.:								
Health:								
National Institutes of Health.....	1,856	1,797	407	1,978	1,630	1,878	439	1,999
Alcohol, Drug Abuse, and Mental Health Administration.....	140	125	32	128	114	91	20	88
Food and Drug Administration.....	35	36	9	45	27	28	7	32
Center for Disease Control.....	41	44	12	50	42	43	16	38
Health Resources Administration.....	42	34	5	32	60	34	25	27
Assistant Secretary for Health.....	6	13	2	14	6	11	2	12
Health Services Administration.....	17	14	3	2	10	14	3	5
Subtotal, health.....	2,187	2,063	470	2,249	1,889	2,099	512	2,201
Education:								
Office of Assistant Secretary for Education.....	12	12	-----	12	11	12	-----	11
Office of Education.....	59	102	7	102	51	68	19	92
National Institute of Education.....	70	70	20	90	83	70	14	88
Subtotal, education.....	141	184	27	204	145	150	33	191
Welfare:								
Office of Human Development.....	59	62	13	56	42	54	15	57
Social Security Administration.....	23	26	7	27	21	22	5	25
Departmental Management.....	26	25	7	25	9	32	11	30
Social and Rehabilitation Service.....	9	9	2	9	2	9	2	8
Subtotal, welfare.....	117	122	29	117	74	117	33	120
Total conduct of R. & D. ....	2,395	2,369	526	2,570	2,108	2,366	578	2,512
Conduct of research, included above.....	1,930	1,901	437	2,070	1,681	1,932	471	2,031
Conduct of development, included above.....	465	468	89	500	427	434	107	481
R. & D. facilities.....	39	27	4	11	81	38	5	26
Total.....	2,434	2,396	530	2,581	2,189	2,404	583	2,538

The total obligations for the conduct of R. & D. on human services and welfare programs will decrease by \$5 million, from \$122 million in 1976 to \$117 million in 1977.

The Office of Human Development will continue to fund R. & D. activities which support its role in providing ameliorative services to the aged, physically and mentally handicapped, Native Americans, children and other subgroups of the population-at-risk.

The Social and Rehabilitation Service will emphasize development of an effective child support enforcement program, upgrading long-term care, and studying child care standards.

Table P-8 displays obligations and outlays by agency within the Department.

#### NATIONAL SCIENCE FOUNDATION

National Science Foundation obligations for the conduct of R. & D. will increase from \$628 million in 1976 to \$726 million in 1977. In addition, \$34 million will be obligated for facilities in 1977.

Fundamental research that contributes basic knowledge in all fields of science will be strengthened and special emphasis will be given to research in the physical sciences, including physics, engineering, chemistry, and materials; to oceanography, earth, and atmospheric sciences; and to biology, especially in the plant sciences.

Emphasis in applied research programs will move away from energy research (which has been shifted to the Energy Research and Development Administration) to new areas such as productivity, where research not currently being undertaken by mission agencies can yield comparatively short-term results. The Foundation's programs in polar research and a broad range of international science and technology efforts conducted through bilateral and multinational arrangements will continue.

Funding will continue for construction of the Very Large Array radio telescope near Socorro, New Mexico; this unique instrument will be placed in limited operation by mid-1977.

#### DEPARTMENT OF AGRICULTURE

Obligations of the Department of Agriculture for the conduct of research and development, excluding construction of facilities, will increase from \$483 million in 1976 to \$507 million in 1977.

At no time in recent history has the need for new technology for increasing our capacity to produce food been more apparent. In addition to reductions in reserves of basic commodities, consumers face higher costs for all kinds of food and fiber products. Agricultural efficiency is increasingly vital to our national well-being. Improved efficiency in American agricultural production can also help ease critical worldwide food shortages.

Obligations for basic research will increase from \$177 million in 1976 to \$197 million in 1977. Emphasis will be in such areas as cell biology, improvements in the photosynthesis process, and new research on nitrogen fixation; increased efficiency in the production of meat animals; developing additional sources of usable proteins from vegetable sources; and protecting against devastating losses to major food crops resulting from genetic vulnerability to disease by collecting, testing, and preserving diverse germplasmic materials.

Environmental research will include the further development of nonchemical means of controlling agricultural pests, and the development of information required for the clearance of agricultural pesticides for use in cooperation with the Environmental Protection Agency.

The Department of Agriculture, in cooperation with State and private research organizations, will continue development of a national system designed to improve coordination in the planning, financing, and evaluation of agricultural research. The goal of such a system will be to increase the overall efficiency and effectiveness of agricultural research.

#### DEPARTMENT OF TRANSPORTATION

The research and development obligations for the Department of Transportation, including facilities, are estimated at \$360 million for 1976 and \$335 million for 1977. The \$25 million decrease is primarily a result of an unusually high level of obligations in 1976. The 1977 obligations will provide funding of research to solve the near-term transportation problems facing the Nation, as well as some funding for longer range, high-payoff technology development needed for future transportation systems. Transportation alternatives are being better defined and tradeoffs are being evaluated so that the near-term problems of energy conservation, urban mobility, environmental protection, improved safety, and cost reduction will receive appropriate emphasis and attention.

Urban mass transportation R. & D. will support the evaluation of improved transit vehicles, urban rail systems, and the development of automated guideway transit systems. The program of demonstrating improved transit service, methods, and management techniques, which encourages low-cost service and management innovation to improve the use of current urban transportation systems will be emphasized.

Highway R. & D. will seek to increase highway safety and reduce the growth rate of construction and maintenance costs. Advanced traffic management systems will be developed to investigate methods of increasing capacity and reducing delays on roadways. Efforts will be made to improve the environmental compatibility of the present and future highway system. Highway traffic safety research will emphasize accident investigation and data analysis and will support the establishment of Federal safety standards leading to improved vehicle occupant protection, the reduction of drug- and alcohol-related accidents, and the improvement of driver performance.

Railroad R. & D. funding will emphasize improved freight and safety research including studies of equipment and human failures. The industry problems and intermodal freight system demonstration programs will be expanded to reduce the cost of freight service. The energy/electrification and propulsion programs provide a knowledge base for rail transportation planners and provide options for improving future rail transportation.

Air transportation research funding will provide for continued upgrading of the air traffic control system and for increasing airport and airway capacity through improved surveillance, communication and landing aid development, and increased automation of air traffic control. Increased funding will permit the development of air traffic control equipment and systems needed to operate the air transportation networks of the 1980's. Aviation safety, aircraft noise and pollution abatement activities will also be emphasized.

Coast Guard R. & D. will emphasize pollution control and abatement, all-weather harbor traffic monitoring and control, improved aids to navigation, and programs to improve vessel safety including commercial and recreational boating safety.

#### DEPARTMENT OF THE INTERIOR

Obligations for the Department of the Interior for conduct of research and development will show a net decrease from \$332 million in 1976 to \$316 million in 1977, although outlays will increase to \$310 million. The \$16 million reduction in obligations results from several changes, the largest of which are: a reduction of \$6 million for direct geothermal research by the Geological Survey (which is offset by a corresponding increase for contract research in the ERDA budget), and a reduction of \$9 million in obligations by the Bureau of Mines resulting from an unusually high level of obligations in 1976.

The R. & D. activities of the Department support a broad range of responsibilities for encouraging wise development of the Nation's energy, mineral, water, land, and recreation resources, and for managing those resources on the public lands.

The research programs of the Department provide an accurate appraisal of the Nation's mineral resources, and include research on new or improved methods, techniques and instruments for mineral exploration. Basic information is developed on geologic principles and processes relating to terrain conditions and causes of earthquakes. An extensive program is aimed at new methods of coal mining which will increase productivity, improve the health and safety of mine workers, and minimize damage to the environment. Research also is conducted to improve the extraction and processing of nonenergy minerals to meet national needs.

Public land use problems, the quality of the environment, and the efficient allocation and conservation of scarce water and water-related resources will continue to be studied. Special attention will be accorded studies directed toward better understanding of basic principles of hydrology necessary for the appraisal and evaluation of the Nation's water resources for improving the quantity and quality of water for municipal and industrial uses, and for augmenting water supply by precipitation management, water salvage and improved water methods.



Electrical energy R. & D. by the Bonneville Power Administration features the development of new transmission equipment design concepts, development and adaptation of new power system control techniques, development and design of ultra-high voltage transmission systems, and participation in the Federal wind energy program.

Research is conducted to improve the management of habitat to protect fish and wildlife resources and the environment in general. Studies also support the direct management of fisheries and migratory birds. These studies include population dynamics, bird banding, fish disease prevention and control, restoration of endangered species, effects of toxic substances, and the effects of non-energy-related development.

Energy-related studies of the Bureau of Land Management and the Fish and Wildlife Service include data collection and analyses as necessary background for understanding potential impacts of energy development on the environment and as a basis for managing resource programs on the public lands.

#### DEPARTMENT OF COMMERCE

Department of Commerce obligations for the conduct of research and development and facilities will decrease by \$9 million, from \$258 million in 1976 to \$249 million in 1977. This reflects increases for the research and development programs of the National Oceanic and Atmospheric Administration (NOAA) and offsetting decreases for the R. & D. program of the Economic Development Administration (EDA). Other programs, including those of the National Bureau of Standards and the Maritime Administration, will be continued at about the 1976 level.

The principal objectives of the R. & D. programs in the Department of Commerce are to improve the Nation's weather prediction and warning capabilities, to improve the competitive position of the U.S. maritime industry, and to encourage general technological advancement through application of improved standards of measurement. R. & D. activities conducted by EDA will decline in 1977 as a result of a reduction of the EDA program to assist economically distressed areas.

NOAA will continue research on improving the detection and tracking of weather systems and violent storms, extending environmental forecasting and data gathering programs, and modifying severe storms and hurricanes. NOAA will also continue its development of systems and components in the area of mapping and charting, and research aimed at the conservation, development, and management of fisheries resources.

The National Fire Prevention and Control Administration will continue to conduct research to reduce the loss of life and property from fires and will provide the essential technical knowledge on which new and improved fire prevention efforts can be based.

The technology development and utilization programs of the National Bureau of Standards will continue to improve standards and measurement procedures for organic water pollution, computer security, and energy conservation and efficiency. R. & D. efforts of the Maritime Administration will be directed toward improving methods of building ships, developing new, improved ship machinery,

and increasing automation aboard ships. Maritime Administration programs also aim to improve ship operations by new communication and navigation systems using satellites; to improve ship operations management and control techniques by using computerized systems; and to improve machinery and propulsion systems for better energy utilization.

#### ENVIRONMENTAL PROTECTION AGENCY

EPA obligations for the conduct of R. & D. will decrease by \$64 million, from \$305 million in 1976 to \$241 million in 1977. This decrease is due in part to significant increases in budget authority in 1975 that were not obligated until 1976, and in part to planned completion of certain aspects of the energy-related R. & D. program and to reductions in some lower-priority R. & D. activities.

EPA research and development efforts are directed at determining the sources and effects of pollution and developing and testing pollution control technologies. The overall objective is to provide a strong scientific basis for development of standards and effective control strategies, as well as attempting to identify and evaluate long-range suspected environmental problems.

Air pollution R. & D. seeks to develop predictive models for pollutant emission, transport and removal, and to verify these models by actual measurements. In 1977, research will be conducted in qualitative assessment of pollutants (carcinogenic v. noncarcinogenic) and their quantitative effects (i.e., dose-response relationships) in order to determine estimates to risk in human populations. Work on acid rain will assess its extent, examine its effects upon soil fertility, and determine what techniques or natural processes may be used to restore affected areas. The industrial processes research program will be expanded to allow pollution control technology assessment and demonstration or controls for metallic particulate and industrial hydrocarbon sources.

The goals of the water quality research program are to develop: (1) criteria for clean, safe, ecologically stable water in various aquatic environments, (2) useful and validatable monitoring methods, (3) cost-effective and efficient wastewater treatment technology for both municipalities and industries, and (4) strategies for control of pollution from various nonpoint sources such as farming, mining, and oil spills. In 1977, research will be expanded on viral problems related to land application of wastewater and sludges; the ecological impacts of ocean outfalls, ocean dumping, and dredging operations; and on ecosystem perturbations caused by heavy metals, persistent organics, and petroleum hydrocarbons.

The primary purpose of water supply research is to support the Agency's mission in establishing standards for water supply systems, monitoring for compliance with these standards, and investigating potential hazards. In 1977, research will be conducted to provide recommendations on treatment processes for the removal of organics from drinking water.

Efforts in the solid waste area are directed toward the development of improved disposal and resource recovery technology to enable local agencies to handle effectively and economically their solid waste problems.

EPA conducts an extensive research program on pesticides released into the environment to determine their effects on human, animal

and aquatic life and to develop better analytic methods for measuring residues in plant and animal tissue. This program will continue to strengthen the data base for classification of pesticides, to support standards setting for applicator certification, and to provide information for the formulation of a national plan for monitoring pesticides.

Environmental assessment programs in coal gasification, coal liquefaction, fluidized bed combustion, coal cleaning, Eastern coal mining, and offshore oil and gas production will be completed. Standards for first-generation facilities and guidelines for the exploitation of indigenous resources will be developed. Work on flue gas desulfurization system improvements, sludge fixation processes, and studies of various pollutants will be expanded. Baseline data studies will be completed in order to provide a basis for the early assessments of the impacts of deepwater ports, floating nuclear power plants, and expanded resource extraction activities.

The socioeconomic program will be increased in 1977 to develop a comprehensive report on the benefits of water pollution control and to complete the development of a simple, understandable system for ranking pollution problems, with emphasis on human exposure. An automated regional laboratory analytical system will be implemented.

#### NUCLEAR REGULATORY COMMISSION

Obligations of the Nuclear Regulatory Commission for the conduct of R. & D. will increase from \$97 million in 1976 to \$109 million in 1977, and obligations for related construction and equipment will total \$8 million in 1977.

This research is directed towards the improvement of data needed on the safety of nuclear power plants in order to assure an independent technical basis for licensing these facilities; the health effects associated with the nuclear power cycle; environmental impact of nuclear power; waste treatment and disposal; and the transportation of radioactive materials.

#### RESEARCH AND DEVELOPMENT IN COLLEGES AND UNIVERSITIES

A portion of the funds discussed above will be committed by agencies to colleges and universities to perform R. & D. As shown in table P-10, the 1977 budget will provide \$2,635 million in obligations for this purpose as contrasted with \$2,407 million in 1976. Within this total, the National Science Foundation will increase its support activities in colleges and universities by nearly 20%, from \$465 million in 1976 to \$550 million in 1977.

Federal funds are expected to continue to furnish more than half of the total support for college and university R. & D. activities. The funds assist faculty researchers and also provide valuable experience and training for graduate students employed on R. & D. projects.

Table P-9. RESEARCH AND DEVELOPMENT IN COLLEGES AND UNIVERSITIES <sup>1</sup>

(in millions of dollars)

Department or agency	Obligations				Outlays			
	1975 actual	1976 estimate	TQ estimate	1977 estimate	1975 actual	1976 estimate	TQ estimate	1977 estimate
Health, Education, and Welfare.....	1,269	1,218	260	1,302	1,176	1,307	237	1,366
National Science Foundation.....	447	465	117	550	440	475	160	504
Department of Defense—Military.....	190	202	52	225	182	196	55	216
Agriculture.....	108	120	30	128	102	118	30	129
Energy Research and Development Administration.....	135	141	39	166	119	137	36	158
National Aeronautics and Space Administration.....	108	107	27	107	98	97	24	97
All others.....	142	154	31	157	111	130	30	141
<b>Total.....</b>	<b>2,399</b>	<b>2,407</b>	<b>556</b>	<b>2,635</b>	<b>2,228</b>	<b>2,460</b>	<b>572</b>	<b>2,611</b>

<sup>1</sup> Amounts reported in this table are included in totals for conduct of R. & D. in previous tables.

# SPECIAL ANALYSIS Q

## FEDERAL ENVIRONMENTAL PROGRAMS

### INTRODUCTION

In 1977, 21 Federal agencies and departments expect to have outlays of \$8.7 billion for environmental programs. This is an increase of 21% over 1976 Federal outlays of \$7.2 billion. Although covering a wide range of activities, Federal environmental programs are classified in three broad categories: pollution control and abatement; understanding, describing and predicting the environment; and environmental protection and enhancement activities. Chart Q-1 shows the trends in total Federal expenditures for each category from 1972-77. The following table depicts the relationship between budget authority and outlays in each category.<sup>1</sup>

<sup>1</sup> Not included in this analysis is \$245 million in lost Federal revenue resulting from the tax exempt status of interest income from pollution control bonds.

**Environmental Outlays, by Category, 1972-1977**

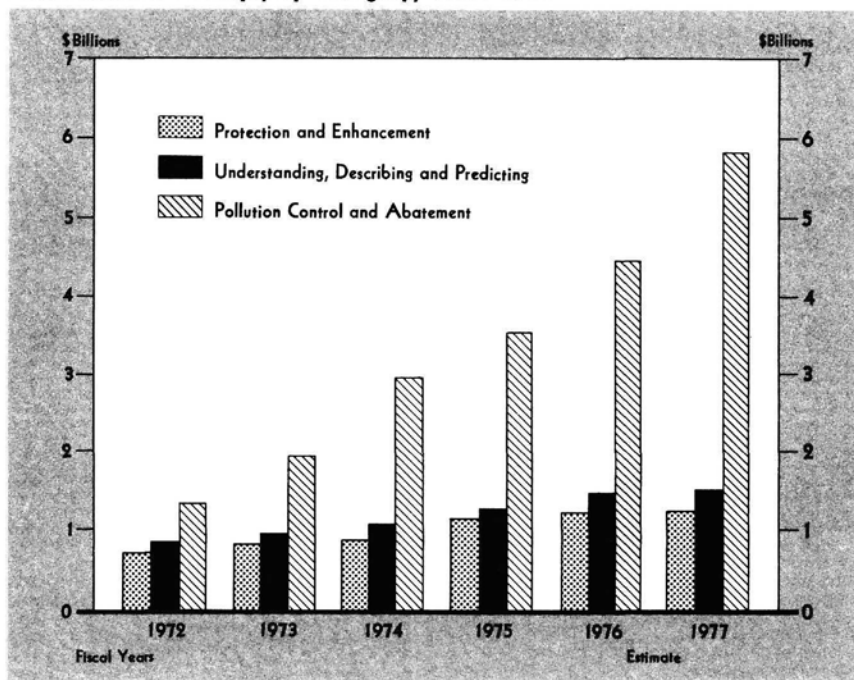


Table Q-1. BUDGET AUTHORITY AND OUTLAYS—FEDERAL ENVIRONMENT PROGRAMS (in millions of dollars)

Activities	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>BUDGET AUTHORITY</b>				
Protection and enhancement.....	1,248.2	1,300.9	296.9	1,381.4
Understanding, describing, and predicting.....	1,352.4	1,486.5	375.3	1,607.1
Pollution control and abatement.....	1,802.5	1,843.9	409.5	1,870.5
Construction grants <sup>1</sup> .....	7,810.4	173.2	16.0	174.2
<b>Total.....</b>	<b>12,213.5</b>	<b>4,804.5</b>	<b>1,097.7</b>	<b>5,033.2</b>
<b>OUTLAYS</b>				
Protection and enhancement.....	1,128.5	1,242.6	328.5	1,327.0
Understanding, describing, and predicting.....	1,296.4	1,467.5	382.9	1,524.8
Pollution control and abatement.....	1,510.3	1,992.8	486.5	1,910.1
Construction grants <sup>1</sup> .....	2,060.5	2,474.4	633.7	3,913.0
<b>Total.....</b>	<b>5,995.7</b>	<b>7,177.3</b>	<b>1,831.6</b>	<b>8,674.9</b>

<sup>1</sup> Includes but is not limited to grants under the Water Pollution Control Act Amendments of 1972 which provided \$18 billion in contract authority to EPA. Obligations and outlays from this authority in 1976, transition quarter, and 1977 are funded from carryover balances.

As chart Q-1 and table Q-1 indicate, total Federal outlays being directed to environmental programs have been increasing significantly. Pollution control and abatement activities, including construction grants, represent the largest category of programs while understanding, describing and predicting, and protection and enhancement rank second and third, respectively, in size of programs.

Federal expenditures can occur either as direct outlays by a Federal agency (funding of in-house activities) or as a transfer (grants) to State or local governments or to the private sector. The distribution of 1977 Federal outlays for environmental programs according to direct or transfer spending is summarized below. It should be noted that State and local governments have been receiving increasingly greater amounts of financial assistance through transfer payments from the Federal Government.

#### 1977 FEDERAL OUTLAYS FOR ENVIRONMENTAL PROGRAMS

[In millions of dollars]

	Outlays	
	Direct	Transfer
Enhancement.....	858.9	468.1
Understanding, describing and predicting.....	1,524.8	( <sup>1</sup> )
Pollution abatement (excluding construction grants).....	1,604.3	305.8
Construction grants.....	( <sup>1</sup> )	3,913.0
<b>Total.....</b>	<b>3,988.0</b>	<b>4,686.9</b>

<sup>1</sup> Not applicable.

#### POLLUTION CONTROL AND ABATEMENT

Pollution control and abatement expenditures, including construction grant funds, represent 67% of total Federal outlays on the environment. These expenditures are directed toward cleaning up the

environment and preventing further deterioration. Outlays for 1977 are estimated at \$5,823.1 million. Principal activities funded include actions necessary to reduce pollution from Federal facilities; the establishment and enforcement of standards; research and development of new control technology; and the identification of pollutants, their sources, and their impact on health.

Two other types of pollution control and abatement activities are also funded. A major Federal grants program provides substantial financial assistance to State and local governments to establish and develop pollution control programs, and a smaller grants program to fund manpower development and training activities. Legislation will be proposed which provides a basis for formulating a multiyear program, commencing in 1978, for the construction of wastewater treatment plants. The legislation strikes a more appropriate balance between Federal and non-Federal responsibilities in meeting the goals of the FWPCA.

In table Q-2, budget authority and outlays for pollution control and abatement activities are presented by function. Federal expenditures for these programs are estimated to reach \$5,823.1 million in 1977, representing an increase of 30% over 1976 outlays of \$4,467.2 million.

Table Q-2. POLLUTION CONTROL AND ABATEMENT ACTIVITIES—BY FUNCTION (in millions of dollars)

Activity	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>BUDGET AUTHORITY</b>				
Financial aid to State, interstate, and local governments <sup>1</sup> .....	8,077.3	363.9	43.7	306.3
Research and development.....	710.9	707.9	177.3	716.9
Standard setting and enforcement.....	354.3	392.0	119.4	433.4
Reduce pollution from Federal facilities.....	367.1	426.4	58.6	474.3
Manpower development.....	11.8	17.4	1.7	7.0
Other.....	91.5	109.5	24.8	106.8
<b>Total.....</b>	<b>9,612.9</b>	<b>2,017.1</b>	<b>425.5</b>	<b>2,044.7</b>
<b>OUTLAYS</b>				
Financial aid to State, interstate, and local governments <sup>1</sup> .....	2,189.0	2,718.6	706.0	4,143.7
Research and development.....	569.6	740.5	180.5	743.0
Standard setting and enforcement.....	368.8	404.7	133.4	377.5
Reduce pollution from Federal facilities.....	334.2	475.0	76.1	441.8
Manpower development.....	14.7	14.3	1.1	8.6
Other.....	94.5	114.1	23.1	108.5
<b>Total.....</b>	<b>3,570.8</b>	<b>4,467.2</b>	<b>1,120.2</b>	<b>5,823.1</b>

<sup>1</sup> Includes but is not limited to grants under the Water Pollution Control Act Amendments of 1972 which provided \$18 billion in contract authority to EPA. Obligations and outlays from this authority in 1976, transition quarter, and 1977 are funded from carryover balances.

**Activities involved.**—*Financial aid.*—Federal outlays for 1977 in the financial aid category are estimated at \$4,143.7 million. Of this total, \$3,913.0 million will be directed toward the construction of sewage treatment facilities. These federally funded grants cover 75% of the total eligible costs of these projects. The remainder of these grant funds are utilized in funding the air and water pollution control

programs of State, areawide and local agencies. Specifically, these funds—\$231 million—will be used to support objectives such as the development of the national primary and secondary ambient air quality monitoring systems, emission inventories, the development of effective and enforceable standards, and the development of transportation control and air pollution emergency plans.

The Environmental Protection Agency (EPA), the Department of Housing and Urban Development (HUD), and the Department of Commerce (DOC) respectively are the agencies most active in supporting the sewage treatment facilities construction grants program while EPA plays a leading role in funding the planning and agency support grants.

*Research, development, and demonstration.*—Federal outlays on research and development for pollution control and abatement are expected to reach \$743 million in 1977.

These outlays cover two types of research and development activities: primary, where pollution control and abatement is the sole objective; and secondary, where pollution control and abatement activities are not the principal goal but rather represent an auxiliary benefit from research having some other primary purpose.

Research and development programs, by their nature, involve a variety of separately identifiable activities. In the abatement and control of pollutants, the sequential development of research and development programs leads first to the identification of pollutants and their sources, then to an assessment of their impact on health and the environment in general, next to development of control technologies, and, finally to systems and procedures for monitoring both point source emissions and ambient quality of air and water.

Once it is determined that a specific pollutant has an adverse impact on man or the environment, efforts need to be directed toward initiation of programs that will determine the actual adverse health effects of the pollutant. Such programs seek to determine at what level pollutants become hazardous and establish realistic exposure limits. These steps are necessary in order to establish a logical framework within which decisions can be made relative to the development of appropriate abatement strategies and control technologies. The primary mission of health effects research and development programs is to develop a sufficient quantitative data base on chemical, physical, and biological environmental factors affecting human health to initiate a scientific strategy for control measures.

Having established a basis for the development of control technologies, research and development efforts can then be directed toward processes and procedures to curb and/or eliminate undesirable or hazardous pollutants. Generally, two methods of control are available—utilization of retrofit devices which remove emitted pollutants, and the reduction of the initial generation of pollutants through changes in production methods.

The final stage of research and development activities in the pollution control and abatement category involves efforts to develop techniques for monitoring the emission of pollutants. These programs are concerned with the improvement in technology—both in devices and techniques—for monitoring point source emissions as well as the ambient quality of air and water. Federal research and develop-



ment efforts in this area have generally been concentrated on improving monitoring techniques and sampling procedures; whereas, the development of monitoring equipment has been concentrated in the private sector.

Examples of pollution abatement related research and development activities in 1977 will include:

1. Turbidity studies and sediment and waste runoff control measures designed to improve water quality. These programs result in safer water supplies for human use and an improved environment for marine life.

2. Field investigation programs, air pollution modeling and epidemiological and toxicological studies relating to air quality research and development. These activities are directed toward measurement of the effects of air pollutants on man and animals.

3. Demonstration of stack gas technology designed to effect transition to clean fuels and to promote energy conservation.

*Standard setting and enforcement.*—Twelve Federal agencies reported 1977 outlays of \$377.5 million. Primary emphasis, in terms of program funding in this area, is placed on Federal support of monitoring, surveillance, standard setting and enforcement. Monitoring programs are those that measure discharged pollutants from point sources while surveillance refers to testing of ambient levels of pollution. These monitoring and surveillance data provide a basis for Federal efforts to develop and review new and/or existing standards, and establish effective enforcement programs.

Those agencies funding major programs in this area are EPA, NRC, DOT, ERDA, and the Corps of Engineers. Spending is concentrated on monitoring, standard setting and enforcement, technical support and surveillance.

*Pollution abatement from Federal facilities.*—Federal agencies also have active programs to abate pollution from their own facilities in order to be in compliance with Federal laws and the substantive requirements of the State and local governments in which Federal facilities are located.<sup>1</sup>

In 1977, Federal agencies reporting expenditures on environmental programs estimate spending of \$441.8 million on abatement of pollutants from their facilities. Outlays under this category of activity fund remedial actions, process changes, and fuel switching to abate emission of pollutants. Related administrative costs are also included.

About 80% (\$355 million) of Federal outlays in this area of activity occur in remedial action programs. These programs involve the installation of retrofit devices on existing facilities or facilities under construction. Retrofit devices treat pollution only after generation and are separately identifiable abatement equipment such as electrostatic precipitators or dust collectors.

Expenditures on process changes are defined as those outlays incurred due to the incorporation of pollution abatement processes within an existing system. The process change approach to pollution abatement reduces or eliminates pollution by modifying the procedures which generate pollutants. Process changes may take the form

<sup>1</sup> Outlays are for facilities or properties which are either owned or leased by the Federal Government and reflect expenditures on existing facilities, additions to existing facilities or new facilities.

of material substitution, reuse of waste or water, and equipment or production process alternatives. \$29 million in 1977 Federal outlays are directed to this program.

While remedial action continues to command the major portion of outlays in this category, a shift toward larger relative outlays in process changes can be expected as standards become more clearly defined, technological capabilities expand, and older facilities are replaced.

In addition to the programs mentioned above, Federal outlays of \$52 million are required to support incremental costs of fuel switching and operating costs. Fuel switching costs are those incremental costs associated with the increased fuel or power costs incurred from using low-sulfur or low-polluting fuels or from the operation of remedial equipment or process change procedures. Outlays for operating costs include those expenditures incurred due to cleaning, servicing, and monitoring remedial action or process change devices. Expenditures for these two activities represent 12% of Federal outlays for the abatement of pollution from Federal facilities.

*Manpower development.*—In 1977, Federal outlays of \$8.6 million will be directed toward funding various manpower development programs which relate to improving pollution abatement efforts. These Federal funds are used to support such activities as inhouse training, fellowships, and training grants.

*Pollution abatement by media.*—Table Q-3 presents Federal outlays and obligations for pollution control and abatement categorized by media in contrast to the functional distribution shown in table Q-2. Outlays and obligations for water programs receive the largest share of Federal funds because of the large grant and loan programs which fund the construction of waste treatment facilities. It should also be noted that only funding for those activities that directly lead to pollution abatement are included in table Q-3. Programs that may ultimately lead to abatement and control of pollutants but which do not have abatement as their primary objective are excluded.

Examples of activities which are excluded from table Q-3 are:

- Pest management and control programs developed in the Department of Agriculture and designed to control pests by means other than the use of chemical pesticides.
- Urban Mass Transit Authority programs in the Department of Transportation that work to improve transit operations and rapid rail vehicles, thereby reducing pollution as a secondary benefit.
- Development of associated air and water quality monitoring instruments by NASA. These instruments were developed for use in advanced spacecrafts but can also be utilized in more generalized pollution control efforts.

Table Q-3. POLLUTION CONTROL AND ABATEMENT ACTIVITIES—BY MEDIA OR POLLUTANT (in millions of dollars)

	Outlays 1975 actual	Obligations			
		1975 actual	1976 estimate	TQ estimate	1977 estimate
Media polluted:					
Water.....	2,658.8	5,179.2	5,491.9	1,193.3	6,979.7
Construction grants or loans.....	2,100.6	4,407.8	4,717.7	1,048.6	6,294.3
Other.....	558.2	771.4	774.2	144.7	685.4
Air.....	274.3	347.8	334.4	83.1	356.5
Land.....	52.7	57.5	66.0	18.3	107.5
Other (e.g., living things, materials).....	400.7	433.6	573.5	165.8	463.6
Multimedia (i.e., more than one of above).....	82.5	85.0	116.6	31.7	117.5
Total.....	3,469.0	6,103.1	6,582.4	1,492.2	8,024.8
Selected pollutants: <sup>1</sup>					
Solid wastes.....	152.3	173.5	196.1	59.6	194.5
Pesticides.....	56.8	58.6	69.2	20.5	102.5
Radiation.....	164.9	160.1	188.9	51.6	231.0
Noise.....	58.4	49.6	77.7	14.5	53.2

<sup>1</sup> Funds for selected pollutants are included in "media" distribution above.

Pollution control and abatement programs in air and water (excluding construction grants) are primarily directed toward research and development activities, grants to States and local control agencies, and such direct Federal operations as monitoring and enforcement. Most of the activities relating to the abatement of pollutants on land are concentrated in the research and development area and encompass such projects as studies of acid mine drainage, nutrients, pesticides and solid waste disposal. Federal activities concerned with the selected pollutants shown in table Q-3 are, for the most part, directed toward research in effects, control technology, standard setting and enforcement.

**Pollution control and abatement by agency.**—Federal budget authority and outlays on pollution control and abatement are presented by agency in table Q-4. Twenty agencies reported budget authority and outlays for this category of environmental expenditures in 1977.

Table Q-4. POLLUTION CONTROL AND ABATEMENT ACTIVITIES—BY AGENCY (in millions of dollars)

Agency	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>BUDGET AUTHORITY</b>				
Environmental Protection Agency.....	8,516.5	771.5	188.6	718.2
Defense—Military.....	346.9	423.1	47.7	469.9
Energy Research and Development Administration.....	175.5	199.6	61.4	230.7
Agriculture.....	116.9	144.2	41.1	129.5
Transportation.....	88.6	99.3	18.3	98.7
Housing and Urban Development.....	83.4	93.4	0.9	104.6
National Aeronautics and Space Administration.....	83.9	74.9	23.4	76.8
Interior.....	54.3	54.3	11.8	56.2
Commerce.....	58.9	63.1	15.5	56.8
Defense—Civil.....	37.3	36.0	7.7	36.0
Nuclear Regulatory Commission.....	24.3	24.7	6.2	31.5
Other agencies.....	26.4	33.0	2.9	35.8
<b>Total.....</b>	<b>9,612.9</b>	<b>2,017.1</b>	<b>425.5</b>	<b>2,044.7</b>
<b>OUTLAYS</b>				
Environmental Protection Agency.....	2,530.5	3,192.6	844.0	4,500.0
Defense—Military.....	318.1	458.9	65.3	436.0
Energy Research and Development Administration.....	159.0	200.4	51.3	224.9
Agriculture.....	142.5	167.7	57.6	195.3
Transportation.....	79.9	94.8	15.3	92.8
Housing and Urban Development.....	79.2	73.8	20.0	83.6
National Aeronautics and Space Administration.....	75.3	83.0	22.0	85.0
Interior.....	52.6	52.2	12.0	52.8
Commerce.....	52.1	54.9	13.5	53.0
Defense—Civil.....	37.3	36.0	7.2	36.0
Nuclear Regulatory Commission.....	23.1	23.8	6.0	30.2
Other agencies.....	21.2	29.1	6.0	33.5
<b>Total.....</b>	<b>3,570.8</b>	<b>4,467.2</b>	<b>1,120.2</b>	<b>5,823.1</b>

**Main agency activities.**—The *Environmental Protection Agency* programs represent over 77% (\$4,500.0 million) of the total expected outlays in this category primarily because of its sewage treatment grant program. Outlays by EPA will increase by more than 40% over 1976 outlay levels of \$3,192.6 million.

The operating budget of EPA, which excludes construction grants, highlights various other programs conducted by this agency. Research and development programs (\$280 million) will account for some 38% of EPA's operating budget, with major program support going to sources and effects, control technology, and health effects activities.

In its abatement and control operations, EPA devotes much of its effort to standard setting and enforcement, technical support, and grants for these activities. In 1977, outlays are expected to reach \$305 million. These funds support a wide variety of programs, ranging from enforcement of standards to the issuance of permits and the provision of assistance in assessing the impacts of air, water, solid waste, noise, hazardous materials, and pesticides pollution.

In the *Department of Defense—Military*, research programs leading to reduction of pollution from its facilities are continuing. In 1977, outlays are expected to reach \$436.0 million, with the major portion of these expenditures being directed toward remedial actions. Abatement and control outlays on environmental programs by the Corps of Engineers (*DOD—Civil*) have primarily been used in improving and expanding knowledge relating to water quality and management. Programs include assessment of the environmental impact of pollutants on fish, wildlife, and aquatic systems, as well as on man. The Corps has expanded its activities relating to the governing of the discharge of dredged or fill material into navigable waters or the ocean and the implementing of the "Endangered Species Act."

*The Energy Research and Development Administration* will increase its pollution and abatement control outlays by more than 10% from \$200.4 million in 1976 to \$224.9 million in 1977. ERDA will concentrate its efforts in abatement and control operations, research and development, and remedial action. Specifically, ERDA is expanding efforts in: (1) research and development of pilot plant programs to convert coal to fuel gas with less pollution, (2) health research to determine human thresholds of exposure to hazardous agents, and (3) environmental research on offshore powerplant siting and oil drilling and exploration. Additionally, programs are being continued in ecological effects of thermal effluents, alternative methods of cooling water disposal, and the toxicity of chemicals added to prevent fouling of cooling systems.

Problems of agriculture-related pollution are being researched by the *Department of Agriculture*. Continued emphasis is being placed on the development of methods to abate pollution from the production and processing of agricultural products; the recycling of animal wastes; and preventing degradation of air, water, and soil by agricultural chemicals. Programs relating to sediment control and agricultural runoff are being maintained as part of water quality and management programs. In addition, the Farmers Home Administration provides funding for construction of facilities in rural areas to improve the collection, processing, and disposal of wastes.

*The Department of Transportation* will expend \$92.8 million for pollution control and abatement programs in 1977. Major programs in noise control are being funded by DOT. The Federal Aviation Agency is concentrating its efforts on the demonstration of technical, operational, and economic feasibility of reducing noise, sonic boom, and pollution generated by aircraft. The Urban Mass Transportation Administration continues to support programs that have as their objective a reduction in emission of hydrocarbon and carbon monoxide and the conservation of energy used by mass transportation systems. The Coast Guard is funding programs to improve its ability to investigate oil spills and to initiate preventive and cleanup actions in order to alleviate the adverse environmental impacts of such pollution.

Environmental programs in the *Department of Housing and Urban Development* are continuing in the areas of sewage treatment grants and public facilities loans. The Department also conducts research and development programs providing for the development and application of improved control technology in the areas of solid and liquid waste management and noise abatement.

*The National Aeronautics and Space Administration (NASA)* plans to spend \$85.0 million in outlays in 1977 for pollution control and abatement research and development programs. For example, NASA is conducting programs to reduce and control aircraft noise and emission pollutants. Through the use of satellites, NASA is monitoring atmospheric pollution. For example, a pollution monitoring satellite, the Stratospheric Aerosol and Gas Experiment (SAGE), is now under development to provide data on the concentrations and distributions of aerosols in the ozone layer of the upper atmosphere.

#### UNDERSTANDING, DESCRIBING, AND PREDICTING THE ENVIRONMENT

Fourteen Federal agencies will spend \$1,524.8 million in 1977 to describe the physical characteristics of the environment, to increase understanding of the environment, and to predict environmental conditions. This is a 4% increase over estimated 1976 expenditures of \$1,467.5 million. Programs in these areas protect and enhance the environment as well as control pollution.

As table Q-5 indicates, almost half of these expenditures will support environmental observation and measurement efforts that help describe and predict weather, ocean conditions, and earthquakes. Also included are efforts to investigate and report on climate fluctuations and the funding of weather satellite programs to provide improved environmental warning services.

Locating and describing natural resources account for \$394.1 million in 1977 expenditures. Activities such as the Earth Resources Survey Program are increasing man's understanding of existing natural resource systems and identifying, evaluating, and monitoring new natural resources.

Other expenditures will be for further ecological research, for physical environmental survey activities, and for aerial reconnaissance of tropical cyclones and winter storms. There also are expenditures for earthquake engineering and polar research projects.

Table Q-5. UNDERSTANDING, DESCRIBING, AND PREDICTING THE ENVIRONMENT—BY FUNCTION (in millions of dollars)

Activity	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>BUDGET AUTHORITY</b>				
Observe and predict weather, ocean conditions, and disturbances:				
Research and development.....	196.8	212.3	62.7	230.8
Operations.....	404.0	471.4	111.9	507.5
Locating and describing natural resources:				
Research and development.....	201.5	211.4	53.1	214.7
Operations.....	177.4	193.7	47.6	195.7
Physical environmental surveys:				
Research and development.....	13.6	12.6	3.1	14.9
Operations.....	138.1	135.6	34.2	152.3
Weather modification activities.....	22.3	17.5	7.8	18.4
Research on environmental impact on man.....	67.3	75.4	16.7	94.9
Ecological and other basic environmental research.....	131.4	156.6	38.2	177.9
<b>Total.....</b>	<b>1,352.4</b>	<b>1,486.5</b>	<b>375.3</b>	<b>1,607.1</b>
<b>OUTLAYS</b>				
Observe and predict weather, ocean conditions, and disturbances:				
Research and development.....	192.9	212.3	67.2	232.1
Operations.....	402.2	449.0	106.6	469.0
Locating and describing natural resources:				
Research and development.....	179.8	212.2	52.2	204.4
Operations.....	170.9	197.7	50.1	189.7
Physical environmental surveys:				
Research and development.....	14.7	13.5	3.1	13.9
Operations.....	130.7	131.3	33.3	140.5
Weather modification activities.....	23.5	18.0	10.7	20.2
Research on environmental impact on man.....	56.8	77.3	17.5	86.3
Ecological and other basic environmental research.....	124.9	156.2	42.2	168.7
<b>Total.....</b>	<b>1,296.4</b>	<b>1,467.5</b>	<b>382.9</b>	<b>1,524.8</b>

Table Q-6 shows the distribution of total budget authority and outlays by the major agencies involved.

Table Q-6. UNDERSTANDING, DESCRIBING, AND PREDICTING THE ENVIRONMENT—BY AGENCY (in millions of dollars)

Agency	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>BUDGET AUTHORITY</b>				
Commerce.....	371.7	429.1	107.6	470.7
Interior.....	234.3	254.5	65.0	248.3
Defense—Military.....	204.3	215.0	53.6	235.4
National Science Foundation.....	128.6	141.6	39.0	155.9
National Aeronautics and Space Administration..	162.7	166.6	42.6	190.2
Agriculture.....	135.0	146.1	34.8	146.7
Energy Research and Development Administra- tion.....	32.1	41.9	10.6	50.2
Health, Education, and Welfare.....	35.7	34.6	7.8	46.7
Defense—Civil.....	18.0	17.9	4.4	19.7
Transportation.....	13.6	15.3	3.8	17.8
Smithsonian Institution.....	11.4	12.7	3.3	13.3
Other.....	5.0	11.2	2.8	12.2
<b>Total.....</b>	<b>1,352.4</b>	<b>1,486.5</b>	<b>375.3</b>	<b>1,607.1</b>
<b>OUTLAYS</b>				
Commerce.....	371.5	409.4	107.7	429.2
Interior.....	212.0	262.3	67.8	239.8
Defense—Military.....	200.2	204.2	47.4	222.8
National Science Foundation.....	126.5	139.6	46.9	153.2
National Aeronautics and Space Administration..	149.5	167.7	42.3	186.9
Agriculture.....	132.9	150.2	37.7	143.1
Energy Research and Development Administra- tion.....	30.1	39.9	10.2	48.2
Health, Education, and Welfare.....	26.0	37.2	8.7	39.3
Defense—Civil.....	18.0	17.9	4.4	19.7
Transportation.....	13.3	15.4	3.8	17.7
Smithsonian Institution.....	11.6	13.0	3.4	13.1
Other.....	4.8	10.7	2.6	11.8
<b>Total.....</b>	<b>1,296.4</b>	<b>1,467.5</b>	<b>382.9</b>	<b>1,524.8</b>

**Agencies involved.**—The National Science Foundation plans to spend \$153.2 million in 1977 in support of research to increase the Nation's knowledge of the environment. Particular emphasis will be on increasing the capacity for more accurate and long-range weather forecasts and for accurate assessments of their impact on human affairs. Other efforts will be directed toward finding ways to minimize the adverse effects of extracting and processing natural resources and to expand environmentally acceptable ways of recovering, converting, storing, and distributing energy resources. Major programs include the Global Atmospheric Research Program, the International Decade of Ocean Exploration, and the Climate Dynamics Program.



*The Department of Commerce*, primarily through the National Oceanic and Atmospheric Administration (NOAA), conducts environmental monitoring and prediction activities, surveys for mapping and charting, data storage and dissemination, and related research. NOAA plans to spend \$367 million on such environmental observation and measurement activities as observing, predicting, and reporting on climatic fluctuations. NOAA hopes to reduce loss of life and property from recurring natural disasters through their weather warning and weather reconnaissance efforts. Further procurement and use of satellite systems accounts for much of NOAA's 1977 expenditure increase. Other activities that will increase in 1977 are efforts to analyze man's impact on marine ecosystems. For example, the effect of offshore waste disposal on aquatic life will be investigated.

*The Department of Interior* through several of its bureaus will spend \$239.8 million in 1977 for its efforts to understand, describe, and predict the environment. Most of this money (90%) will be spent by the Geological Survey to continue programs such as urban pilot area studies that provide land and water resource and hazard data in order to improve the basis for urban planning; topographic mapping to describe the physical environment; and resource evaluation of the Outer Continental Shelf.

The Bureau of Reclamation performs various ecological research programs; for example, it studies the effects of water projects on the ecology of local areas or river basins, and analyzes the effects of vegetation management on wildlife along the Lower Colorado River. Through their cloud seeding efforts, the Bureau has found that precipitation can be increased 10% to 30% annually under certain conditions with only minor and transitory environmental impacts. The Bureau hopes that these research activities will be utilized to manage the amount and use of precipitation as part of the Nation's total water resources program.

*The National Aeronautics and Space Administration (NASA)* plans to spend \$87 million in 1977 on research and development in environmental observation and measurement. These activities include (1) developing the capacity to make accurate short- and long-term weather predictions through use of satellites; (2) improving atmospheric temperature sounding and wind measurements through the all-weather atmospheric sounding satellite; and (3) using temperature soundings for earlier detections of tornados.

NASA will also be spending \$91 million on its efforts to develop new capabilities to locate and describe natural resources. The Earth Resources Survey Program, by utilizing satellites, is conducting experiments throughout the world in taking inventories of natural resources and monitoring their changes over time. Research and technology activities underway involve improved approaches to detection and utilization of Earth resources information, such as expansion of efforts into the thermal infrared region through the development of the Thematic Mapper.

*The Department of Defense—Military* plans to spend 70% of its outlays in this category for activities in environmental observation and measurement to describe and predict weather, ocean conditions, and disturbances important to military operations. The Corps of Engineers (*DOD—Civil*) is spending 20% of its outlays in this category on other observation efforts. Research is continuing in oceanographic instrumentation development. The Corps also conducts studies of terrestrial and marine ecological systems to determine the impact of engineering works. These studies are designed to develop technology and methodology for minimizing the impact of these projects on the ecosystem and environment, while at the same time permitting national economic growth.

The Soil Conservation Service (SCS) in the *Department of Agriculture* will spend \$117 million during 1977 on programs that locate and describe natural resources. Specifically, SCS conducts soil, snow, and river basin surveys, and makes water-supply forecasts. The Forest Service will spend \$22 million in the same period, with most expenditures used for environmental research. The Forest Service is attempting to better understand ecosystems so that management practices can lead to improved productivity and quality of the environment. Other research efforts attempt to solve the complex problems concerning forests and related ecosystems and their interface with urban areas.

The Agricultural Research Service (ARS) also conducts research in this area. By utilizing remote sensing, ARS is devising improved capabilities for (1) determining soil characteristics and updating soil maps and watershed measurements; and (2) assessing environmental and ecological conditions and interactions between man and the environment.

#### ENVIRONMENTAL PROTECTION AND ENHANCEMENT

In 1977, 10 Federal agencies are expected to spend \$1.3 billion to protect and enhance the environment. This is a 7% increase over 1976 outlays. As table Q-7 shows, 35% of these expenditures are Federal grants to State and local governments and the balance are for direct Federal activities.

Table Q-7. ENVIRONMENTAL PROTECTION AND ENHANCEMENT  
ACTIVITIES—BY FUNCTION (in millions of dollars)

Activities	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>BUDGET AUTHORITY</b>				
Financial aid to State and local government:				
Purchase, development and operations:				
City recreation.....	151.6	143.8	8.0	161.8
Preserve unique areas.....	.1	2.0	.3	5.4
Noncity general recreation.....	156.1	155.7	37.8	156.1
Sport fish and wildlife.....	97.8	110.5	25.1	119.9
Historic preservation and rehabilitation.....	20.2	20.2	4.7	10.2
Other State local aid.....	46.9	56.9	1.1	75.9
Subtotal.....	472.7	489.1	77.0	529.3
Direct Federal activities:				
Purchase, development and operations:				
City recreation.....	154.5	129.1	33.7	125.4
Preserve unique areas.....	155.2	221.8	63.7	250.1
Noncity general recreation.....	188.4	191.6	63.2	188.4
Sport fish and wildlife.....	137.8	143.8	34.2	160.2
Historic preservation and rehabilitation.....	65.2	44.6	12.7	43.5
Other direct activities.....	74.4	80.9	12.4	84.5
Subtotal.....	775.5	811.8	219.9	852.1
<b>Total.....</b>	<b>1,248.2</b>	<b>1,300.9</b>	<b>296.9</b>	<b>1,381.4</b>
<b>OUTLAYS</b>				
Financial aid to State and local government:				
Purchase, development and operations:				
City recreation.....	110.1	122.1	31.6	126.2
Preserve unique areas.....	.1	2.0	.3	3.6
Noncity general recreation.....	150.9	151.4	37.4	149.7
Sport fish and wildlife.....	89.9	101.7	24.6	105.9
Historic preservation and rehabilitation.....	11.3	14.0	4.7	10.6
Other State local aid.....	40.8	55.9	9.6	72.1
Subtotal.....	403.1	447.1	108.2	468.1
Direct Federal activities:				
Purchase, development and operations:				
City recreation.....	145.2	141.3	35.0	128.9
Preserve unique areas.....	163.6	226.4	61.8	269.5
Noncity general recreation.....	189.3	197.2	62.9	203.7
Sport fish and wildlife.....	127.8	140.6	35.8	162.6
Historic preservation and rehabilitation.....	60.5	46.3	13.1	49.5
Other direct activities.....	39.0	43.7	11.7	44.7
Subtotal.....	725.4	795.5	220.3	858.9
<b>Total.....</b>	<b>1,128.5</b>	<b>1,242.6</b>	<b>328.5</b>	<b>1,327.0</b>

The major activities in this category are:

- City recreation projects which establish or develop parks and recreational facilities in urban areas.
- Preservation of unique natural areas and protection of endangered species including national parks, monuments, scenic rivers, trails, wildernesses, seashores, and refuges for endangered species.
- General recreation projects outside of cities—including expenditures for national recreation areas, recreation programs in national forests, and recreation sites at Federal water projects.
- Management of sport fish and wildlife at national wildlife refuges, national fish hatcheries, and other similar projects.
- Historic preservation and rehabilitation, including national historic sites, military parks, and other federally assisted historic preservation and rehabilitation projects.

These enhancement and protection activities are categorized in table Q-7 as direct Federal spending or as grants to States and local governments for these activities. Table Q-8 lists the departments and agencies making these expenditures.

Table Q-8. ENVIRONMENTAL PROTECTION AND ENHANCEMENT—  
BY AGENCY (in millions of dollars)

Agency	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>BUDGET AUTHORITY</b>				
Interior.....	875.9	908.2	229.2	941.7
Housing and Urban Development.....	136.0	150.3	-----	182.0
Agriculture.....	93.0	102.0	38.3	100.6
Defense—Civil.....	77.3	77.8	19.5	85.6
Commerce.....	38.6	50.3	6.8	58.2
Tennessee Valley Authority.....	4.3	4.7	1.6	4.8
Other agencies.....	23.1	7.6	1.5	8.5
<b>Total.....</b>	<b>1,248.2</b>	<b>1,300.9</b>	<b>296.9</b>	<b>1,381.4</b>
<b>OUTLAYS</b>				
Interior.....	797.9	861.8	226.7	917.6
Housing and Urban Development.....	104.9	122.4	34.5	160.1
Agriculture.....	87.4	98.7	36.6	97.7
Defense—Civil.....	72.8	82.3	20.6	90.5
Commerce.....	38.3	48.9	6.8	48.9
Tennessee Valley Authority.....	4.7	4.5	1.6	4.4
Other agencies.....	22.5	24.0	1.7	7.8
<b>Total.....</b>	<b>1,128.5</b>	<b>1,242.6</b>	<b>328.5</b>	<b>1,327.0</b>

**Agencies involved.**—The Department of the Interior through the Fish and Wildlife Service administers 89 hatcheries and 379 units in the National Wildlife Refuge System encompassing 33.5 million acres. The Service also manages 353 wildlife refuges with 9.8 million acres for migratory birds. In 1977, \$132 million will be spent for direct Federal activities and \$90 million will be granted to State and local governments for fish and wildlife restoration, management and research.

The Bureau of Outdoor Recreation promotes coordination of outdoor recreation programs. It also administers the Land and Water Conservation Fund which provides grants for planning, acquisition, and development of State and local recreation areas and provides funds for Federal purchases of nationally important lands. Outlays for these programs in 1977 will be \$336 million, of which \$158 million will be for grants to State and local governments and \$178 million for direct Federal activities.

The National Park Service will spend \$340 million for all activities of the National Park System. These funds will be for operation, maintenance, general administration, planning and construction of facilities, and restoration or rehabilitation of historic areas within the National Park System. States and local governments will receive approximately \$10 million in matching funds for acquiring historic properties to help preserve them for future generations.

*The Department of Housing and Urban Development* estimates outlays of \$160.1 million for financial aid to States and local governments for environmental protection and enhancement activities. One such program in HUD is the Community Development Block Grant Program which will fund, at the grant recipient's discretion, the protection and improvement of properties having scenic, recreation, conservation and/or historic value. Grants for open space can also be obtained.

*The Department of Agriculture* carries out a variety of enhancement activities, particularly through the Forest Service and the Soil Conservation Service. The Forest Service will spend \$67 million in 1977 primarily for direct Federal activities including administration of concession and recreation special use permits, enhancement of wildlife and fish habitat, and improvement and protection of rare and endangered species habitats on National Forest lands.

The Soil Conservation Service will spend \$29 million for protection and enhancement activities—primarily for recreation area improvement.

In the *Department of Defense—Civil*, the Corps of Engineers will spend \$90.5 million to protect and enhance lands and shorelines within its jurisdiction. For example, in the Forest Management Program, the forest resources at civil works projects are managed to increase their value for recreation and wildlife habitat and to promote natural ecological conditions by following accepted conservation practices. Activities of this nature are also funded by the Fish and Wildlife Management Program and the Lakeshore Management Program.

The National Oceanic and Atmospheric Administration in the *Department of Commerce* will be spending \$16 million for improving the management of the Nation's coastal zones through joint projects with the States. For example, the onshore impact of oil and gas facilities in coastal areas will be studied and States will be assisted in establishing a national system of estuarine sanctuaries for research and educational purposes. NOAA will also spend \$33 million on other protection and enhancement projects. For example, programs conserving marine resources which include marine mammal conservation and endangered species research will be undertaken.

## RESEARCH AND DEVELOPMENT

A description of funding for environmental research and development programs appears elsewhere in this analysis. However, because research and development expenditures occur in more than one category of activity, these expenditures have been summarized in table Q-9. Total Federal funding for research and development programs related to environmental improvement will reach an estimated \$1,468.6 million in 1977. This represents an increase of 26% over actual 1975 outlays of \$1,162.2 million and an increase of 3% over 1976 funding levels of \$1,430 million.

Federal funding for environmental research and development programs are almost evenly distributed between pollution control and abatement activities and programs relating to understanding, describing, and predicting the environment. Research and development expenditures for environmental protection and enhancement programs, to the extent that they exist, are not included in table Q-9 because these outlays are not reported separately.

Table Q-9. ENVIRONMENTAL RESEARCH AND DEVELOPMENT ACTIVITIES  
(In millions of dollars)

Category	1975 actual	1976 estimate	TQ estimate	1977 estimate
<b>BUDGET AUTHORITY</b>				
Pollution control and abatement <sup>1</sup> .....	710.9	707.9	177.3	716.9
Understanding, describing, and predicting.....	632.9	685.8	181.6	751.6
<b>Total</b> .....	<b>1,343.8</b>	<b>1,393.7</b>	<b>358.9</b>	<b>1,468.5</b>
<b>OUTLAYS</b>				
Pollution control and abatement <sup>1</sup> .....	569.6	740.5	180.5	743.0
Understanding, describing, and predicting.....	592.6	689.5	192.9	725.6
<b>Total</b> .....	<b>1,162.2</b>	<b>1,430.0</b>	<b>373.4</b>	<b>1,468.6</b>

<sup>1</sup> Includes both primary and secondary research and development.

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