



EXECUTIVE OFFICE OF
THE PRESIDENT
OFFICE OF MANAGEMENT
AND BUDGET

**SPECIAL
ANALYSES
BUDGET OF THE
UNITED STATES
GOVERNMENT**

FISCAL YEAR
1987

THE BUDGET DOCUMENTS

Budget of the United States Government, 1987 contains the Budget Message of the President and presents an overview of the President's budget proposals. It includes explanations of spending programs in terms of national needs, agency missions, and basic programs, and an analysis of receipts, including a discussion of the President's tax program. This document also contains a description of the budget system and various summary tables on the budget as a whole.

United States Budget in Brief, 1987 is designed for use by the general public. It provides a more concise, less technical overview of the 1987 budget than the above volume. Summary and historical tables on the Federal budget and debt are also provided, together with graphic displays.

Budget of the United States Government, 1987—Appendix contains detailed information on the various appropriations and funds that comprise the budget. The *Appendix* contains more detailed information than any of the other budget documents. It includes for each agency: the proposed text of appropriation language, budget schedules for each account, new legislative proposals, explanations of the work to be performed and the funds needed, and proposed general provisions applicable to the appropriations of entire agencies or groups of agencies. Supplementals and rescission proposals for the current year are presented separately. Information is also provided on certain activities whose outlays are not part of the budget-totals.

Special Analyses, Budget of the United States Government, 1987 contains analyses that are designed to highlight specified program areas or provide other significant presentations of Federal budget data. This document includes information about: alternative views of the budget, i.e., current services and national income accounts; economic and financial analyses of the budget covering Government finances and operations as a whole; information on Federal aid to State and local governments; and Government-wide program and financial information for Federal civil rights and research and development programs.

Historical Tables, Budget of the United States Government, 1987 provides data on budget receipts, outlays, surpluses or deficits, and Federal debt covering extended time periods—in many cases from 1940–1991. These are much longer time periods than those covered by similar tables in other budget documents. The data have been restructured to be consistent with the concepts and presentation used in the 1987 Budget, so these data series are comparable over time.

Management of the United States Government, 1987 provides a description of efforts to improve the management of Federal agencies. It reports on the President's Council on Integrity and Efficiency, describes Reform '88 initiatives undertaken by the President's Council on Management Improvement, and outlines the Administration's management proposals. Management improvement themes covered in the report include privatization, productivity improvement, return of responsibilities to State and local governments, administrative streamlining, program delivery improvements, cost reductions, cash and credit management, payment integrity efforts, upgraded information technology systems, and increased use of user fees and contracting out. Special sections describe current procurement reforms, the status of Grace Commission recommendations, and implementation of the Debt Collection Act of 1982, the Prompt Payment Act of 1982, and the Financial Integrity Act of 1982.

Instructions for purchasing copies of any of these documents are on the last two pages of this volume.

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.
3. Sequestration of budgetary resources in 1986 is required by the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177). All 1986 data shown in this volume incorporate the effects of sequestration, unless otherwise noted.

TABLE OF CONTENTS

	Page
PART 1. ALTERNATIVE VIEWS OF THE BUDGET.....	1-1
A. Current services estimates.....	A-1
B. Federal transactions in the national income and product accounts	B-1
PART 2. ANALYSES OF THE TOTALS	2-1
C. Funds in the budget	C-1
D. Federal investment and operating outlays	D-1
E. Borrowing and debt	E-1
F. Federal credit programs	F-1
G. Tax expenditures	G-1
H. Federal aid to State and local governments	H-1
I. Civilian employment in the executive branch	I-1
PART 3. SELECTED FEDERAL PROGRAMS	3-1
J. Civil rights activities.....	J-1
K. Research and development	K-1

PART 1

**ALTERNATIVE VIEWS OF
THE BUDGET**

1-1

INTRODUCTION

Part 1 includes two alternative views of the budget—current services estimates and national income accounts. The data include both on-budget and off-budget amounts (i.e., transactions of the Federal old-age, survivors, and disability insurance trust funds). These special analyses are designated A and B.

Special Analysis A (Current Services Estimates) presents the estimates required by the Congressional Budget Act of 1974 (31 U.S.C. 1109(a)). These estimates reflect the anticipated costs of continuing ongoing Federal programs and activities at present levels without any policy changes. Estimates are provided through 1991.

Special Analysis B (Federal Transactions in the National Income and Product Accounts) presents the Federal Government estimates in terms of the national income and product accounts (NIPA). It also explains the relationships of the unified budget of the Federal Government to the NIPA, which constitute the most widely used measure of aggregate economic activity in the United States. These data conform to the benchmark revisions of the NIPA issued in December 1985.

SPECIAL ANALYSIS A

CURRENT SERVICES ESTIMATES

The Congressional Budget Act of 1974, as amended, requires that the President submit to the Congress estimates of the outlays and budget authority needed to maintain current Government services and activity levels. The Act defines the current services levels as

. . . the estimated budget outlays and proposed budget authority that would be included in the budget for the following fiscal year if programs and activities of the United States Government were carried on during that year at the same level as the current year without a change in policy.

Since current services estimates show what outlays, receipts, and budget authority would be if no policy changes were made, they provide a base with which the administration's budget proposals, or other proposals, may be compared. Such comparisons are made in various parts of the budget and serve to highlight the effects of recommended policy changes.¹

Since interest in the longer term budget outlook and in the long-range effects of the President's budget proposals has increased substantially in recent years, current services estimates are being provided for the 4 years beyond the budget year. Generally, these long-range current services estimates are based on the same concepts as the budget year current services estimates. Current services estimates include both on- and off-budget receipts and outlays.

The current services estimates are based on the same economic assumptions as the President's budget proposals. Changes in economic conditions significantly affect budget estimates because of their effects on tax receipts, unemployment benefits, interest on the Federal debt, and other programs under which spending varies with the unemployment, interest, or inflation rates. As a result, if different economic assumptions were used, it would be very difficult to separate the effects of policy differences from the effects of differences in the economic assumptions.

The economic assumptions assume that all the President's budget proposals will be adopted. Continuation of all programs and tax laws unchanged at current services levels would result in dif-

¹ Summary comparisons are in the *Budget of the United States Government, Fiscal Year 1987, Part 3.*

ferent economic conditions than would occur under the budget proposals. The economic assumptions common to the budget and the current services estimates are summarized in table A-1. For further details and discussion of these economic assumptions, see Part 2 in the 1987 *Budget*.

Table A-1. SUMMARY OF ECONOMIC ASSUMPTIONS

(Fiscal years)

	1985	1986	1987	1988	1989	1990	1991
Gross national product (in billions of current dollars)	3,937	4,192	4,538	4,903	5,269	5,623	5,955
Change in constant dollar GNP (percent change, year over year)	2.9	3.0	4.0	4.0	3.9	3.7	3.6
Inflation measures (percent change, year over year):							
GNP deflator	3.6	3.4	4.1	3.9	3.4	3.0	2.3
Consumer Price Index	3.6	3.4	4.0	3.9	3.4	3.0	2.3
Federal construction deflator	2.9	3.5	4.4	4.2	3.7	3.1	2.5
State and local purchases deflator	5.9	3.5	4.5	4.3	3.7	3.2	2.5
Unemployment rate (percent, annual average)	7.1	6.8	6.6	6.4	6.1	5.9	5.6
Interest rate, 91-day Treasury bills (percent)	7.9	7.3	6.8	5.8	5.0	4.3	4.0
Interest rate, 10-year Treasury notes (percent)	11.1	9.2	8.6	7.7	5.8	4.8	4.5
ADDENDUM							
Federal pay raise (percent): ¹							
Current services:							
Military	4.0	² 3.0	4.0	4.8	5.1	4.9	4.5
Civilian	3.5	0.0	4.0	4.8	5.1	4.9	4.5
President's Budget:							
Military	4.0	² 3.0	4.0	4.8	5.1	4.9	4.5
Civilian ³	3.5	0.0	3.0	3.0	3.0	3.0	3.0

¹ The 1985 raise was effective on January 1. All other raises except where noted, are effective on October 1.

² The 1986 raise is retroactive to October 1.

³ All proposed civilian pay raises are effective on January 1.

THE CURRENT SERVICES CONCEPT

The current services estimates are neither recommended amounts nor forecasts as to what the budget results for 1986-1991 will actually be. Rather, they provide a base against which budgetary alternatives may be assessed. This base embodies the cumulative effects of all past congressional and presidential budgetary choices. Since the estimates indicate the budgetary implications of the current directions of Federal programs, they in effect answer the question: "How would the budget come out if we simply continued enacted budget policy?"

The guiding principle in establishing a conceptual basis for the current services estimates was to make the results useful to the Congress and the public. The current services concepts used in this analysis, and in previous current services estimates submitted by the Executive Branch, are not the only ones possible. Different

concepts may be useful for different purposes. The current services estimates presented in this analysis generally reflect the expected costs of continuing ongoing Federal programs at 1986 levels in real terms, without policy change; that is, they omit all proposed new legislative initiatives, presidential or congressional, that are not now enacted. (The major exceptions to this approach are described below.) In general, the 1986 level on which the current services estimates are based is that which is authorized or implied by enacted 1986 appropriations or continuing resolutions as modified by administrative actions anticipated to be in place before the end of 1986. The estimates allow for the future implications of current law, and for anticipated changes of a relatively uncontrollable nature (as distinct from policy changes) such as increases in the number of medicaid recipients. The 1986 current services base has been reduced as a result of sequestration under the Balanced Budget and Emergency Deficit Control Act of 1985, as estimated in the January 15th report from the Directors of the Office of Management and Budget and the Congressional Budget Office to the Comptroller General. As many as possible of the changes made by the Comptroller General to the joint report are reflected in the estimates. The reductions are scheduled to take effect on March 1.

The current services estimates reflect the effects of inflation on virtually all budget accounts, including discretionary programs. The current services estimates thus provide a "constant real program" base against which to measure the President's budget proposals. To facilitate the comparison between the current services estimates and the President's budget proposals, the current services estimates are presented in the same account structure as the budget, even if legislation is required to effect any structural changes that may be proposed in the budget.

Specific guidelines for this year's detailed programmatic estimates are:

- For the Legislative Branch and the Judiciary, the estimates are the budget requests submitted by these Branches.
- For the Department of Defense—Military, the atomic-energy defense activities of the Department of Energy, and other programs in the national defense function, the 1987 and 1988 estimates are the same as those of the 1986 Congressional Budget Resolution. For 1989 through 1991, the estimates reflect the budget resolution policy of 3% annual real growth in budget authority.
- For General Revenue Sharing, the estimates assume that the program will not be reauthorized for 1987 and subsequent years. The 1986 Congressional Budget Resolution called for termination of this program and the conference agreement on

the Consolidated Omnibus Reconciliation Act of 1985 included language repealing the Revenue Sharing Act.

- For entitlement programs (such as social security), the current services estimates take into account inflation adjustments that are mandatory under current law, changes in the benefit base (usually determined by past earnings), and changes in the anticipated numbers of beneficiaries.
- Individual grants to State and local governments are assumed to support the same program levels or to be funded at the same real (constant-dollar) amounts as in 1986 unless the grants are: (a) set by law at specified amounts; (b) tied by legislation to cost-of-living increases or the unemployment rate; (c) affected by changes in beneficiary populations or other factors that alter benefit payments under entitlement programs; or (d) affected by spending from prior-year commitments (for example, highway grants).
- Entitlement programs that are not linked by law to the cost-of-living (such as veterans compensation) are assumed to remain level in real (constant-dollar) amounts except for changes in the benefit base and in the number of people eligible.
- Procurement and construction activities are assumed to proceed in an orderly fashion, consistent with current law and past appropriation levels. Outlays for these programs are largely determined by prior-year contracts and obligations. Some appropriations provide for anticipated inflation in the cost of multiyear projects. In other cases, however, current services estimates may reflect constraints on spending levels imposed by available funding.
- As already set by law, the 1986 Federal pay was 3% for military personnel and 0% for civilians. For all other years, Federal pay is assumed to increase at rates comparable to private sector pay. The pay raise assumptions are shown in table A-1.
- Interest on the public debt is estimated on the basis of the current services deficits and the same interest rate assumptions as are used in computing the budget estimates for interest.
- Offsetting receipts are estimated on the basis of judgment as to their most likely level, assuming no change in current law.
- Budget authority for certain major trust funds consists of trust fund receipts. These are estimated using standard revenue estimating techniques.
- Proposed rescissions of budget authority are not reflected.
- It is assumed that deferral actions continue in effect for the period specified in the special message transmitted to the Congress under the Impoundment Control Act of 1974 (unless they have been overturned by the Congress).

Many Federal programs are authorized for a limited number of years, but are routinely renewed. If authority for such a program is scheduled to expire before or during the projection period, it is generally assumed for purposes of current services estimates that it will be renewed and that budget authority will be held constant in real terms. Programs that are clearly temporary in nature, such as temporary study commissions, are assumed to expire.

The estimates of receipts on a current services basis assume that future tax changes will occur as scheduled under current law. Provisions that are clearly temporary in nature are assumed to expire. Airport and airway trust fund taxes and highway trust fund taxes scheduled to expire under current law are assumed to be extended at present rates. Hazardous substance trust fund taxes, which expired September 30, 1985, are assumed to be reauthorized and expanded to fund the program at the current real level.

CURRENT SERVICES TOTALS

As shown in Table A-2, current services outlays are estimated to be \$1,025.9 billion in 1987, 4.5% higher than in 1986, and budget authority is estimated to be \$1,142.4 billion, an increase of 7.1% over 1986. Outlays are projected to grow at an average annual rate of 4.5% from 1987 to 1991. Receipts for 1987 are estimated to increase 8.7% on a current services basis, from \$776.5 billion in 1986 to \$844.1 billion in 1987. Receipts are projected to grow at an average annual rate of 7.3% from 1987 to 1991. The resulting 1987 current services deficit is \$181.8 billion, \$23.8 billion lower than the \$205.6 billion deficit for 1986. The deficit is projected to decline further each year, falling to \$103.9 billion in 1991.

Table A-2. CURRENT SERVICES TOTALS

(In billions of dollars)

	1985 actual	1986	1987	1988	1989	1990	1991
Budget authority	1,074.1	1,066.4	1,142.4	1,220.7	1,285.4	1,351.0	1,423.6
(On-budget)	(889.7)	(879.1)	(928.4)	(978.1)	(1,022.7)	(1,064.9)	(1,117.2)
(Off-budget)	(184.3)	(187.3)	(214.0)	(242.6)	(262.8)	(286.2)	(306.3)
Receipts	734.1	776.5	844.1	927.3	989.2	1,053.0	1,120.2
(On-budget)	(547.9)	(578.5)	(630.1)	(684.7)	(726.4)	(766.9)	(813.9)
(Off-budget)	(186.2)	(197.9)	(214.0)	(242.6)	(262.8)	(286.2)	(306.3)
Outlays	946.3	982.0	1,025.9	1,077.3	1,128.1	1,179.3	1,224.1
(On-budget)	(769.5)	(797.3)	(827.4)	(867.6)	(908.1)	(947.4)	(984.4)
(Off-budget)	(176.8)	(184.7)	(198.6)	(209.7)	(220.0)	(232.0)	(238.6)
Surplus or deficit (—)	—212.3	—205.6	—181.8	—150.0	—138.9	—126.3	—103.9
(On-budget)	(—221.6)	(—218.8)	(—197.2)	(—182.9)	(—181.7)	(—180.5)	(—171.6)
(Off-budget)	(9.4)	(13.2)	(15.4)	(32.9)	(42.8)	(54.2)	(67.7)

Receipts.—Table A-3 shows receipts by major source on a current services basis. Current services receipts are projected to increase by \$67.6 billion from 1986 to 1987 and by \$276.1 billion from 1987 to 1991, largely due to assumed increases in incomes resulting from both real economic growth and inflation.

Individual income taxes are estimated to increase by \$31.8 billion from 1986 to 1987 on a current services basis. This growth of 9.0% is the effect of increased collections resulting from rising personal incomes. Individual income taxes are projected to grow at an average annual rate of 7.7% between 1987 and 1991, to \$518.1 billion.

Corporation income taxes on a current services basis are estimated to grow by \$15.6 billion or 22.0% from 1986 to 1987, in large part due to higher corporate profits. Corporation income taxes are projected to increase at an average annual rate of 9.4% from 1987 to 1991.

Table A-3. CURRENT SERVICES RECEIPTS BY SOURCE

(in billions of dollars)

	1985 actual	1986	1987	1988	1989	1990	1991
Individual income taxes.....	334.5	354.0	385.8	426.2	456.3	483.6	518.1
Corporation income taxes.....	61.3	70.9	86.5	100.2	110.0	117.8	123.5
Social insurance taxes and contributions.....	265.2	280.4	301.4	333.4	355.9	383.0	407.8
(On-budget).....	(79.0)	(82.5)	(87.4)	(90.8)	(93.1)	(96.8)	(101.5)
(Off-budget).....	(186.2)	(197.9)	(214.0)	(242.6)	(262.8)	(286.2)	(306.3)
Excise taxes.....	36.0	33.6	32.0	30.1	29.3	29.8	30.3
Other.....	37.0	37.5	38.4	37.4	37.7	38.9	40.6
Total.....	734.1	776.5	844.1	927.3	989.2	1,053.0	1,120.2
(On-budget).....	(547.9)	(578.5)	(630.1)	(684.7)	(726.4)	(766.9)	(813.9)
(Off-budget).....	(186.2)	(197.9)	(214.0)	(242.6)	(262.8)	(286.2)	(306.3)

Social insurance taxes and contributions are estimated to increase by \$20.9 billion on a current services basis between 1986 and 1987, and by an additional \$106.4 billion between 1987 and 1991. The estimates reflect assumed increases in total wages and salaries paid; scheduled increases in the combined employer-employee social security (OASDHI) tax rate from 14.3% to 15.02% on January 1, 1988 and to 15.3% on January 1, 1990; and annual increases in the social security taxable earnings base to \$51,600 in 1990. The social security taxable earnings base will remain at \$51,600 in 1991 because under the budget economic assumptions recipients of social security benefits would not receive a cost-of-living adjustment in that year. This is because the consumer price index is projected to increase by less than 3.0%.

On a current services basis, excise taxes are estimated to decrease by \$1.6 billion or 4.8% from 1986 to 1987. This decrease is in large part due to a \$1.3 billion decline in windfall profit taxes from

\$4.1 billion in 1986 to \$2.8 billion in 1987, and to a \$1.2 billion decline in cigarette excise taxes, reflecting expiration of the temporary extension of the doubling of these taxes effective March 15, 1986. Excise taxes are projected to decline by \$1.7 billion between 1987 and 1991 to an estimated \$30.3 billion. This is in large part due to the continued decline in windfall profit tax receipts to \$1.0 billion by 1991 and expiration of the telephone excise tax December 31, 1987. The estimates for 1986-1991 assume that the hazardous substance trust fund taxes, which expired September 30, 1985, will be reauthorized and expanded to a level sufficient to fund current services outlays. The estimates for 1988-91 assume extension of the airport and airway trust fund taxes and the highway trust fund taxes that are scheduled to expire December 31, 1987 and September 30, 1988, respectively.

Other receipts (estate and gift taxes, customs duties, and miscellaneous receipts) are projected to increase on a current services basis by \$3.1 billion from 1986 to 1991, largely as a result of increased economic activity.

Outlays.—The level of outlays necessary to continue ongoing Federal programs and activities at current services levels is estimated at \$1,025.9 billion in 1987. The increase in current services outlays from 1986 to 1987 is \$43.9 billion, or 4.5%. Between 1987 and 1991 current services outlays are projected to increase at an average annual rate of 4.5%.

Table A-4 shows current services outlays by function. Estimates by agency are presented in table A-5. The nondefense outlay increases from 1986 to 1987 are largely due to increases in the number of beneficiaries, cost-of-living adjustments, increases in the prices of goods and services purchased or financed and, in the case of interest, increased borrowing requirements.

Table A-6 shows the major components of the changes in current services outlays between 1986 and 1987. Outlays for social security (OASDI) are estimated to increase by \$12.1 billion between 1986 and 1987, from \$200.0 billion in 1986 to \$212.2 billion in 1987. Medicare outlays are estimated to increase by \$6.2 billion, from \$68.7 billion in 1986 to \$74.9 billion in 1987, largely as a result of increases in medical care prices and utilization. Outlays for income security programs are estimated to rise by \$3.8 billion, from \$119.6 billion in 1986 to \$123.4 billion in 1987. Outlays for Federal employee retirement and disability programs increase by \$2.2 billion between 1986 and 1987 due to automatic cost-of-living increases, increases in the number of beneficiaries, and higher earnings records for new retirees. Outlays for the remaining income security programs are estimated to grow by \$1.6 billion on net. Table A-7 shows caseload projections for these and other major benefit programs and other selected programmatic assumptions.

Table A-4. CURRENT SERVICES OUTLAYS BY FUNCTION

(In billions of dollars)

	1985 actual	Current services		1987 administration proposals	1987 differences
		1986 estimate	1987 estimate		
National defense:					
Department of Defense--Military	245.4	258.4	276.7	274.3	-2.5
Other	7.4	7.4	8.2	8.0	-0.2
International affairs	16.2	17.1	17.1	18.6	1.5
General science, space, and technology	8.6	8.9	9.0	9.2	0.2
Energy	5.7	4.5	5.1	4.0	-1.1
Natural resources and environment	13.4	12.9	12.6	12.0	-0.6
Agriculture	25.6	25.9	21.5	19.5	-2.0
Commerce and housing credit	4.2	4.2	2.9	1.4	-1.6
Transportation	25.8	27.2	26.9	25.5	-1.4
Community and regional development	7.7	8.1	7.6	6.5	-1.1
Education, training, employment, and social services	29.3	31.0	30.7	27.4	-3.3
Health	33.5	35.9	38.7	35.0	-3.7
Medicare	65.8	68.7	74.9	70.2	-4.7
Income security	128.2	119.6	123.4	118.4	-5.0
Social security	188.6	200.0	212.2	212.2	*
On-budget	(5.2)	(8.0)	(5.7)	(5.7)	(*)
Off-budget	(183.4)	(192.0)	(206.5)	(206.5)	(*)
Veterans benefits and services	26.4	26.6	27.1	26.4	-0.7
Administration of justice	6.3	6.9	6.9	6.9	*
General government	5.2	5.7	6.5	6.1	-0.4
General purpose fiscal assistance	6.4	6.2	2.8	1.7	-1.1
Net interest	129.4	141.5	149.2	148.0	-1.2
On-budget	(133.6)	(145.9)	(153.9)	(152.7)	(-1.2)
Off-budget	(-4.1)	(-4.4)	(-4.7)	(-4.7)	(-*)
Allowances:					
Civilian agency pay raises			1.4	0.4	-1.0
Increased employer share, employee retirement				0.3	0.3
Undistributed offsetting receipts:					
Employer share, employee retirement (on-budget)	-24.7	-26.3	-27.3	-28.5	-1.2
Employer share, employee retirement (off-budget)	-2.5	-2.8	-3.2	-3.2	*
Rents and royalties on the Outer Conti- nental Shelf	-5.5	-5.5	-5.3	-5.3	
Sale of major physical assets (proposed)				-1.2	-1.2
Total undistributed offsetting re- ceipts	-32.8	-34.6	-35.8	-38.1	-2.4
On-budget	(-30.3)	(-31.7)	(-32.6)	(-35.0)	(-2.4)
Off-budget	(-2.5)	(-2.8)	(-3.2)	(-3.2)	(*)
Total outlays	946.3	982.0	1,025.9	994.0	-31.9
On-budget	(769.5)	(797.3)	(827.4)	(795.4)	(-32.0)
Off-budget	(176.8)	(184.7)	(198.6)	(198.6)	(0.1)

* \$50 million or less.

The estimated 1987 current services deficit of \$181.8 billion would add a like amount to the Federal debt. Primarily because of this increase in debt, net interest outlays would increase by \$7.7 billion between 1986 and 1987 under current services assumptions.

Under the 1987 levels contained in the 1986 Congressional Budget Resolution, outlays in 1987 for the Department of Defense—Military would be \$18.3 billion higher than the post-sequestration level for 1986.

Table A-5. CURRENT SERVICES OUTLAYS BY AGENCY

(In billions of dollars)

	actual 1985	Current services		1987 administration proposals	1987 difference
		1986 estimate	1987 estimate		
Legislative Branch.....	1.6	1.9	2.0	2.0	.....
The Judiciary.....	1.0	1.1	1.2	1.2	.....
Executive Office of the President.....	0.1	0.1	0.1	0.1	*
Funds Appropriated to the President.....	12.0	12.5	13.1	13.8	0.7
Department of Agriculture.....	55.5	54.7	50.0	44.6	-5.4
Department of Commerce.....	2.1	2.1	2.3	2.1	-0.2
Department of Defense—Military.....	245.4	258.4	276.7	274.3	-2.5
Department of Defense—Civil.....	18.8	20.6	21.5	20.9	-0.6
Department of Education.....	16.7	18.1	18.0	15.4	-2.5
Department of Energy.....	10.6	10.1	11.7	10.2	-1.4
Department of Health and Human Services, except Social Security.....	132.1	141.3	146.8	139.1	-7.7
Department of Health and Human Services, Social Security.....	183.4	192.0	206.5	206.5	*
Department of Housing and Urban Development.....	28.7	16.5	16.6	13.9	-2.7
Department of the Interior.....	4.8	4.3	4.4	4.3	-0.1
Department of Justice.....	3.6	3.9	3.9	4.1	0.3
Department of Labor.....	23.9	23.3	23.7	23.2	-0.5
Department of State.....	2.6	2.8	2.9	3.6	0.7
Department of Transportation.....	25.0	26.4	26.1	24.7	-1.4
Department of the Treasury.....	165.1	183.2	191.1	188.3	-2.8
Environmental Protection Agency.....	4.5	4.6	4.5	4.5	*
General Services Administration.....	-0.2	-*	0.4	-*	-0.4
National Aeronautics and Space Administration.....	7.3	7.4	7.5	7.5	*
Office of Personnel Management.....	23.7	24.1	26.5	24.7	-1.8
Small Business Administration.....	0.7	0.9	1.1	0.1	-1.0
Veterans Administration.....	26.3	26.5	27.0	26.4	-0.7
Other Independent Agencies.....	9.8	10.9	9.7	10.1	0.4
Allowances:					
Civilian agency pay raises.....			1.4	0.4	-1.0
Increased employer share, employee retirement.....				0.3	0.3
Undistributed offsetting receipts:					
Interest received by on-budget trust funds.....	-22.1	-26.6	-30.2	-29.6	0.5
Interest received by off-budget trust funds.....	-4.1	-4.4	-4.7	-4.7	-*
Interest received by OCS escrow account.....	-*	-0.3			
Employer share, employee retirement (on-budget).....	-24.7	-26.3	-27.3	-28.5	-1.2
Employer share, employee retirement (off-budget).....	-2.5	-2.8	-3.2	-3.2	*
Rents and royalties on the Outer Continental Shelf.....	-5.5	-5.5	-5.3	-5.3	.....
Sale of major physical assets (proposed).....				-1.2	-1.2
Total undistributed offsetting receipts.....	-58.9	-65.9	-70.7	-72.5	-1.8
On-budget.....	(-52.3)	(-58.7)	(-62.8)	(-64.6)	(-1.8)
Off-budget.....	(-6.6)	(-7.3)	(-7.9)	(-7.9)	(*)
Total outlays.....	946.3	982.0	1,025.9	994.0	-31.9
On-budget.....	(769.5)	(797.3)	(827.4)	(795.4)	(-32.0)
Off-budget.....	(176.8)	(184.7)	(198.6)	(198.6)	(0.1)

* \$50 million or less.

Table A-6. CHANGE IN CURRENT SERVICES BUDGET AUTHORITY AND OUTLAYS, 1986 TO 1987

(In billions of dollars)

	Budget authority	Outlays
1986 current services estimate	1,066.4	982.0
(On-budget)	(879.1)	(797.3)
(Off-budget)	(187.3)	(184.7)
Changes:		
National defense:		
Department of Defense—Military	36.2	18.3
Other national defense	1.1	0.8
Subtotal, National defense	37.3	19.1
Social security	28.2	12.1
Medicare	-2.8	6.2
Income security:		
General retirement and disability (excluding social security)	-0.9	0.2
Federal employee retirement and disability	4.0	2.2
Unemployment compensation	1.1	0.3
Housing assistance	1.6	0.8
Food and nutrition assistance	0.6	0.4
Other income security programs	0.3	-0.1
Subtotal, income security	6.8	3.8
International affairs	-0.1	0.1
General science, space, and technology	0.3	0.1
Energy programs	0.6	0.6
Natural resources and environment	2.2	-0.3
Agriculture	-6.8	-4.3
Commerce and housing credit	0.8	-1.2
Transportation programs	0.7	-0.3
Community and regional development	0.1	-0.4
Education	0.8	0.1
Training and Employment	0.1	-0.3
Social and other labor services	0.2	-0.1
Medicaid	1.6	1.3
Other health programs	0.4	1.5
Veterans programs	0.3	0.5
General purpose fiscal assistance	-3.9	-3.4
Net interest	7.7	7.7
Allowances for civilian agency pay raises	1.5	1.4
Undistributed offsetting receipts	-1.2	-1.2
All other programs, net	1.4	0.9
Subtotal, changes	76.0	43.9
(On-budget)	(49.3)	(30.0)
(Off-budget)	(26.7)	(13.8)
1987 current services estimate	1,142.4	1,025.9
(On-budget)	(928.4)	(827.4)
(Off-budget)	(214.0)	(198.6)

The decline of \$4.3 billion for the agriculture function between 1986 and 1987 results primarily from a decrease in estimated outlays required for farm price supports and related Commodity Credit Corporation programs. The decrease of \$3.4 billion for the general purpose fiscal assistance function is largely a result of the assumed expiration of General Revenue Sharing.

Table A-7. PROGRAMMATIC ASSUMPTIONS

	Fiscal years					
	1986	1987	1988	1989	1990	1991
Beneficiaries (annual average, in thousands):						
Social security (OASDI) ¹	37,396	38,064	38,686	39,308	39,946	40,579
Railroad retirement ²	940	926	912	897	881	866
Federal civil service retirement.....	2,018	2,065	2,112	2,159	2,206	2,253
Military retirement.....	1,496	1,525	1,553	1,583	1,612	1,642
Veterans compensation.....	2,564	2,543	2,520	2,496	2,471	2,444
Veterans pensions.....	1,365	1,269	1,185	1,113	1,052	1,002
GI bill.....	321	252	210	176	106	0
Disabled coal miners programs.....	380	361	342	324	307	290
Supplemental security income.....	4,135	4,211	4,228	4,240	4,253	4,364
Maintenance assistance (AFDC).....	10,790	10,822	10,872	10,905	10,967	11,021
Food stamps.....	19,720	19,510	19,310	19,050	18,780	18,560
HUD Housing subsidy recipients (households).....	4,070	4,108	4,320	4,423	4,469	4,609
Medicaid.....	22,894	23,599	23,711	23,837	24,004	24,256
Medicare:						
Hospital insurance.....	30,773	31,401	32,000	32,604	33,210	33,785
Supplementary medical insurance.....	30,566	31,235	31,864	32,502	33,139	33,723
Automatic benefit increases (percent):						
Social security and veterans pensions (January) ³	3.1	3.7	4.3	3.6	3.3	0.0
Federal employee retirement (January).....	3.1	3.7	4.3	3.6	3.3	2.7
Food stamps (October).....	1.5	1.9	4.0	3.9	3.4	2.6
Unemployment rate (percent, annual average):						
Total.....	6.8	6.6	6.4	6.1	5.9	5.6
Insured ⁴	2.7	2.6	2.5	2.4	2.2	2.1
Strategic petroleum reserves annual fill rate (millions of barrels).....	12.8	12.8	12.8	12.8	12.8	12.8

¹ In current pay status as of June.² End of year.³ Under current law, cost-of-living adjustments for these programs are not made unless inflation, as measured by the consumer price index, is above 3 percent.⁴ This measures unemployment under State regular unemployment insurance as a percentage of covered employment under that program. It does not include recipients of extended benefits under that program.

Other large changes in current services outlays between 1986 and 1987 are a \$1.3 billion increase in medicaid and a \$1.4 billion increase in allowance for the 1987 civilian agency pay raise.

Budget authority.—Current services budget authority is estimated to total \$1,142.4 billion in 1987, \$76.0 billion more than in 1986. Increases in budget authority between 1986 and 1987 generally reflect the higher funding levels that would be necessary to maintain 1986 nondefense program levels in real terms in 1987. In the case of most trust funds, however, the funds' receipts automatically become budget authority; thus increases in budget authority for these funds simply reflect year-to-year growth in expected receipts. Budget authority for some programs displays erratic year-to-year changes due to sporadic funding patterns or advance funding.

Tables A-8 and A-9 show the estimates of current services budget authority by function and by agency, respectively. The

Table A-8. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION

(In billions of dollars)

	1985 actual	Current services		1987 administration proposals	1987 differences
		1986 estimate	1987 estimate		
National defense:					
Department of Defense—Military	286.8	278.4	314.7	311.6	-3.1
Other	7.9	7.7	8.8	8.7	-0.1
International affairs	26.5	20.0	20.0	22.6	2.7
General science, space, and technology	9.2	8.8	9.2	9.5	0.3
Energy	8.8	5.9	6.5	4.4	-2.1
Natural resources and environment	13.3	10.4	12.6	10.9	-1.7
Agriculture	27.5	28.1	21.2	19.6	-1.6
Commerce and housing credit	12.1	10.0	10.8	10.2	-0.6
Transportation	29.6	27.9	28.6	22.6	-6.1
Community and regional development	8.2	7.3	7.4	3.8	-3.6
Education, training, employment, and social services	32.4	30.2	31.4	27.0	-4.4
Health	33.6	36.4	38.3	35.3	-3.0
Medicare	71.7	86.6	83.8	82.3	-1.6
Income security	164.1	156.3	163.1	153.3	-9.8
Social security	199.5	199.4	227.6	227.9	0.3
On-budget	(8.5)	(4.8)	(5.7)	(5.7)	(*)
Off-budget	(191.0)	(194.6)	(221.9)	(222.2)	(0.3)
Veterans benefits and services	27.4	27.4	27.6	26.7	-0.9
Administration of justice	6.7	6.8	7.1	7.1	0.1
General government	6.0	5.8	6.9	6.2	-0.7
General purpose fiscal assistance	6.3	6.0	2.1	1.7	-0.3
Net interest	129.4	141.5	149.2	148.0	-1.2
On-budget	(133.6)	(145.9)	(153.9)	(152.7)	(-1.2)
Off-budget	(-4.1)	(-4.4)	(-4.7)	(-4.7)	(-*)
Allowances:					
Civilian agency pay raises			1.5	0.4	-1.0
Increased employer share, employee retirement				0.3	0.3
Undistributed offsetting receipts:					
Employer share, employee retirement (on-budget)	-24.7	-26.3	-27.3	-28.5	-1.2
Employer share, employee retirement (off-budget)	-2.5	-2.8	-3.2	-3.2	*
Rents and royalties on the Outer Conti- nental Shelf	-5.5	-5.5	-5.3	-5.3	
Sale of major physical assets (proposed)				-1.2	-1.2
Total undistributed offsetting re- ceipts	-32.8	-34.6	-35.8	-38.1	-2.4
On-budget	(-30.3)	(-31.7)	(-32.6)	(-35.0)	(-2.4)
Off-budget	(-2.5)	(-2.8)	(-3.2)	(-3.2)	(*)
Total budget authority	1,074.1	1,066.4	1,142.4	1,102.0	-40.4
On-budget	(889.7)	(879.1)	(928.4)	(887.7)	(-40.7)
Off-budget	(184.3)	(187.3)	(214.0)	(214.3)	(0.3)

* \$50 million or less.

major components of the changes in current services budget authority between 1986 and 1987 are also shown in table A-6.

An increase in budget authority of \$28.2 billion for social security is primarily due to higher social security trust fund receipts. Budget authority for Medicare declines by \$2.8 billion between 1986 and 1987; this is because the 1986 level is unusually high,

Table A-9. CURRENT SERVICES BUDGET AUTHORITY BY AGENCY

(In billions of dollars)

	actual 1985	Current services		1987 administration proposals	1987 difference
		1986 estimate	1987 estimate		
Legislative Branch.....	1.7	1.8	2.0	2.0	.....
The Judiciary.....	1.1	1.0	1.2	1.2	.....
Executive Office of the President.....	0.1	0.1	0.1	0.1	*
Funds Appropriated to the President.....	20.5	15.3	14.2	15.6	1.5
Department of Agriculture.....	61.9	57.6	53.1	45.8	-7.3
Department of Commerce.....	2.3	2.0	2.3	1.8	-0.5
Department of Defense—Military.....	286.8	278.4	314.7	311.6	-3.1
Department of Defense—Civil.....	30.4	34.0	36.5	36.6	0.1
Department of Education.....	19.1	17.8	18.5	15.2	-3.3
Department of Energy.....	12.6	9.9	11.6	10.3	-1.4
Department of Health and Human Services, except Social Security.....	141.1	155.2	155.7	151.0	-4.8
Department of Health and Human Services, Social Security.....	191.0	194.6	221.9	222.2	0.3
Department of Housing and Urban Development.....	31.4	16.3	18.2	5.5	-12.6
Department of the Interior.....	5.0	3.9	4.3	3.9	-0.4
Department of Justice.....	3.8	3.9	4.0	4.3	0.3
Department of Labor.....	27.7	27.6	28.9	28.5	-0.4
Department of State.....	3.6	3.4	3.4	4.9	1.4
Department of Transportation.....	28.8	27.2	27.8	21.7	-6.1
Department of the Treasury.....	166.3	183.2	190.8	190.3	-0.5
Environmental Protection Agency.....	4.3	2.8	4.8	4.2	-0.6
General Services Administration.....	0.3	0.2	0.7	0.2	-0.4
National Aeronautics and Space Administration.....	7.6	7.3	7.6	7.7	0.1
Office of Personnel Management.....	41.6	43.5	45.0	46.6	1.7
Small Business Administration.....	1.3	0.9	1.2	0.1	-1.1
Veterans Administration.....	27.3	27.0	27.3	26.6	-0.7
Other Independent Agencies.....	15.5	17.0	15.9	15.7	-0.1
Allowances:					
Civilian agency pay raises.....			1.5	0.4	-1.0
Increased employer share, employee retirement.....				0.3	0.3
Undistributed offsetting receipts:					
Interest received by on-budget trust funds.....	-22.1	-26.6	-30.2	-29.6	0.5
Interest received by off-budget trust funds.....	-4.1	-4.4	-4.7	-4.7	-*
Interest received by OCS escrow account.....	-*	-0.3			
Employer share, employee retirement (on-budget).....	-24.7	-26.3	-27.3	-28.5	-1.2
Employer share, employee retirement (off-budget).....	-2.5	-2.8	-3.2	-3.2	*
Rents and royalties on the Outer Continental Shelf.....	-5.5	-5.5	-5.3	-5.3	
Sale of major physical assets (proposed).....				-1.2	-1.2
Total undistributed offsetting receipts.....	-58.9	-65.9	-70.7	-72.5	-1.8
On-budget.....	(-52.3)	(-58.7)	(-62.8)	(-64.6)	(-1.8)
Off-budget.....	(-6.6)	(-7.3)	(-7.9)	(-7.9)	(*)
Total budget authority.....	1,074.1	1,066.4	1,142.4	1,102.0	-40.4
On-budget.....	(889.7)	(879.1)	(928.4)	(887.7)	(-40.7)
Off-budget.....	(184.3)	(187.3)	(214.0)	(214.3)	(0.3)

* \$50 million or less.

reflecting a transfer of \$10.6 billion from the social security trust fund to payoff earlier interfund borrowing. If the 1986 level were adjusted to exclude this repayment, increases in Medicare trust fund receipts would raise the 1987 budget authority level above that in 1986.

A \$36.2 billion increase in budget authority for the Department of Defense—Military reflects the increases in defense purchases needed to reach the Congressional Budget Resolution levels for 1987. Budget authority for net interest increases by \$7.7 billion because of higher borrowing requirements. Other major changes in current services budget authority include a \$4.0 billion increase for Federal employee retirement and disability; a \$6.8 billion decrease in agriculture programs; a \$3.9 billion decrease for general purpose fiscal assistance; and a \$1.6 billion increase for Medicaid.

DIFFERENCES BETWEEN CURRENT SERVICES AND THE BUDGET

The differences between the administration's budget proposals and the current services estimates are summarized in table A-10.

Table A-10. SUMMARY OF CURRENT SERVICES AND PROPOSED BUDGET TOTALS

(In billions of dollars)

	1985 actual	Estimate					
		1986	1987	1988	1989	1990	1991
Receipts:							
Current services.....	734.1	776.5	844.1	927.3	989.2	1,053.0	1,120.2
Effect of proposals.....		0.7	6.3	5.9	6.9	5.0	3.9
Administration budget.....	734.1	777.1	850.4	933.2	996.1	1,058.1	1,124.0
Total outlays:							
Current services.....	946.3	982.0	1,025.9	1,077.3	1,128.1	1,179.3	1,224.1
Effect of proposals.....		-2.1	-31.9	-50.5	-64.5	-85.5	-101.4
Administration budget.....	946.3	979.9	994.0	1,026.8	1,063.6	1,093.8	1,122.7
Total surplus or deficit (-):							
Current services.....	-212.3	-205.6	-181.8	-150.0	-138.9	-126.3	-103.9
Effect of proposals.....		2.8	38.2	56.4	71.4	90.5	105.2
Administration budget.....	-212.3	-202.8	-143.6	-93.6	-67.5	-35.8	1.3
Receipts excluding off-budget:							
Current services.....	547.9	578.5	630.1	684.7	726.4	766.9	813.9
Effect of proposals.....		0.7	6.0	5.7	6.1	5.0	4.7
Administration budget.....	547.9	579.2	636.1	690.4	732.5	771.9	818.6
Outlays excluding off-budget:							
Current services.....	769.5	797.3	827.4	867.6	908.1	947.4	985.4
Effect of proposals.....		-2.1	-32.0	-50.4	-64.4	-85.3	-101.2
Administration budget.....	769.5	795.2	795.4	817.1	843.8	862.1	884.3
Deficit excluding off-budget:							
Current services.....	-221.6	-218.8	-197.2	-182.9	-181.7	-180.5	-171.6
Effect of proposals.....		2.8	38.0	56.1	70.4	90.3	105.9
Administration budget.....	-221.6	-216.0	-159.3	-126.8	-111.3	-90.1	-65.6

The administration's proposals would reduce the current services budget deficit by \$38.2 billion in 1987 and would reduce the 1991 deficit by \$105.2 billion. Between 1986 and 1991, the cumulative deficit reductions proposed by the administration total \$364.6 billion. Receipts proposals would reduce the deficit by a total of \$28.7 billion between 1986 and 1991, whereas proposed outlay reductions would reduce the deficit by \$335.9 billion over the same period. As shown in table A-11, reductions to human resources programs account for \$166.6 billion or 46% of the cumulative reduction in total deficits. Cumulative increases for international affairs, space and science, and administration of justice are \$8.4 billion. Reductions to civilian agency pay and selective reductions in other domestic programs account for \$109.0 billion or 30% of the total deficit reduction. Net interest savings from all of the reductions during 1986-1991 total \$32.7 billion.

Table A-11. COMPOSITION OF ADMINISTRATION BUDGET PROPOSALS:
CHANGE FROM CURRENT SERVICES

(In billions of dollars)

	1986	1987	1988	1989	1990	1991	Total 1986-1991
National defense.....		-2.7	-4.5	-6.3	-9.3	-13.1	-36.0
International affairs, space and science, and justice	*	+1.7	+1.5	+1.8	+1.6	+1.7	+8.4
Human resources ¹	-2.1	-17.4	-26.0	-33.2	-40.5	-47.4	-166.6
Net interest.....	1.2	-1.2	-3.6	-6.8	-9.5	-12.8	-32.7
Other domestic programs...	-1.3	-12.3	-17.9	-20.0	-27.9	-29.7	-109.0
Subtotal, outlays...	-2.1	-31.9	-50.5	-64.5	-85.5	-101.4	-335.9
Receipts ²	-0.7	-6.3	-5.9	-6.9	-5.0	-3.9	-28.7
Total deficit reduction.....	-2.8	-38.2	-56.4	-71.4	-90.5	-105.2	-364.6
(On-budget)	(-2.8)	(-38.0)	(-56.1)	(-70.4)	(-90.3)	(-105.9)	(-363.6)
(Off-budget)	(-*)	(-0.2)	(-0.3)	(-1.0)	(-0.2)	(0.7)	(-1.0)

*50 million or less.

¹ Education, training, employment and social services; Health; Medicare; Income security; Social security; and Veterans functions.

² Receipt increases are shown as a negative because they reduce the deficit.

Receipts.—As shown in table A-12, the administration's estimate of receipts for 1986 is \$0.7 billion above the current services level of \$776.5 billion, in large part due to the extension of the temporary doubling of the cigarette excise tax, which is scheduled to expire effective March 15, 1986.

Current services receipts for 1987 are estimated at \$844.1 billion, \$6.3 billion below the administration's estimate. Legislative and

Table A-12. DIFFERENCES BETWEEN CURRENT SERVICES AND ADMINISTRATION POLICY RECEIPTS

(In billions of dollars)

	1986	1987	1988	1989	1990	1991
Current services receipts estimates..	776.5	844.1	927.3	989.2	1,053.0	1,120.2
(On-budget)	(578.5)	(630.1)	(684.7)	(726.4)	(766.9)	(813.9)
(Off-budget)	(197.9)	(214.0)	(242.6)	(262.8)	(286.2)	(306.3)
Differences:						
Higher education tax incentive		—*	—0.2	—0.3	—0.6	—0.7
Tuition tax credit		—0.4	—0.6	—0.9	—0.9	—0.9
Railroad unemployment insurance coverage		0.1	0.1	0.1	0.1	0.1
Black lung disability trust fund ¹		0.2	0.2	0.2	0.2	0.3
State and local deposit of payroll taxes		0.4	0.3	1.2	0.1	—0.9
Equitable taxation of rail industry benefits		*	0.1	0.1	0.1	0.1
IRS revenue initiative		0.6	1.5	2.6	2.8	2.9
Nuclear Regulatory Commission fee		0.2	0.2	0.2	0.2	0.2
Hazardous substance response trust fund ¹		0.1	0.1	0.1	*	—*
Cigarette excise tax ¹	0.8	1.7	1.7	1.7	1.7	1.7
Repeal gasohol and bus exemptions ¹		0.2	0.2	0.2	0.2	0.2
Increase in D.C. employer contribution to civil service retirement		*	*	0.1	0.1	0.1
Increase in employee contribution to civil service retirement		0.9	1.2	1.2	1.2	1.2
IRS automated examination system		0.3	0.8	1.2	1.3	1.5
IRS cost of collection charge		0.3	0.4	0.4	0.4	0.4
Railroad windfall subsidy financing		0.1	0.1	0.1	0.1	0.1
Federal pay raise proposal	—0.1	—0.4	—0.8	—1.4	—1.9	—2.3
Petroleum overcharge funds		1.0				
Other	*	0.9	0.6	0.4	*	0.2
Total differences	0.7	6.3	5.9	6.9	5.0	3.9
(On-budget)	(0.7)	(6.0)	(5.7)	(6.1)	(5.0)	(4.7)
(Off-budget)	(—)	(0.3)	(0.2)	(0.9)	(—*)	(—0.9)
Administration policy receipts estimates	777.1	850.4	933.2	996.1	1,058.1	1,124.0
(On-budget)	(579.2)	(636.1)	(690.4)	(732.5)	(771.9)	(818.6)
(Off-budget)	(197.9)	(214.3)	(242.8)	(263.7)	(286.1)	(305.4)

* \$50 million or less.

¹ Net of income tax offsets.

administrative proposals, which include the acceleration of State and local deposit of social security payroll taxes, increases in contributions to civil service retirement (CSR), extension of the temporary doubling of the cigarette excise tax, an IRS revenue initiative, an IRS automated examination system, a higher education tax

incentive, and a tuition tax credit, increase receipts by a net \$6.7 billion above the current services level.¹ The administration's Federal employee pay raise proposal reduces Federal employee retirement contributions, social security (OASDHI) receipts, and individual income taxes by \$0.4 billion.

The administration's proposals, including the effect on receipts of reduced Federal employee pay raises, are estimated to increase receipts above the current services level by between \$3.9 billion and \$6.9 billion in each year, 1988-1991.

Outlays.—Table A-13 shows the major differences between the administration's budget request and current services for outlays by function.

A detailed discussion of the administration's budget authority and outlay proposals is presented in the *Budget of the United States Government, Fiscal Year 1987, Part 5, "Meeting National Needs: The Federal Program by Function."*

Table A-13. DIFFERENCES BETWEEN CURRENT SERVICES AND ADMINISTRATION POLICY OUTLAYS

(Outlays: in billions of dollars)

	1986	1987	1988	1989	1990	1991
Current services estimates	982.0	1,025.9	1,077.3	1,128.1	1,179.3	1,224.1
(On-budget)	(797.3)	(827.4)	(867.6)	(908.1)	(947.4)	(985.4)
(Off-budget)	(184.7)	(198.6)	(209.7)	(220.0)	(232.0)	(238.6)
Differences:						
National defense:						
Department of Defense—Military		—2.5	—4.3	—6.0	—8.5	—12.4
Other		—0.2	—0.3	—0.3	—0.8	—0.7
Subtotal, national defense		—2.7	—4.5	—6.3	—9.3	—13.1
International affairs:						
International development and humanitarian assistance	— *	—0.1	—0.3	—0.3	—0.4	—0.4
International security assistance:						
Military assistance		0.2	0.2	0.2	0.2	0.2
Other	*	0.6	0.7	0.8	0.8	0.7
Subtotal, International security assistance	*	0.8	0.9	1.0	0.9	0.9
Conduct of foreign affairs	0.1	0.7	0.7	1.0	1.1	0.8
Foreign information and exchange activities	*	0.1	0.1	0.2	0.2	0.2
International financial programs		*	—0.3	—0.4	—0.4	—0.4
Subtotal, international affairs	0.1	1.5	1.3	1.5	1.4	1.0

¹ A more detailed discussion of the administration's receipts proposals is presented in the *Budget of the United States Government, Fiscal Year 1987, Part 4, "Federal Receipts by Source."*

Table A-13. DIFFERENCES BETWEEN CURRENT SERVICES AND ADMINISTRATION POLICY OUTLAYS—
Continued

(Outlays, in billions of dollars)

	1986	1987	1988	1989	1990	1991
General science, space, and technology.....	— *	0.2	0.3	0.3	0.3	0.8
Energy.....	— 0.1	— 1.1	— 0.7	— 0.9	— 1.2	— 1.4
Natural resources and environment.....	*	— 0.6	— 1.1	— 1.3	— 1.7	— 2.2
Agriculture:						
Farm income stabilization.....	— *	— 1.7	— 1.4	— 1.8	— 2.6	— 2.5
Agricultural research and services.....		— 0.3	— 0.3	— 0.4	— 0.5	— 0.5
Subtotal agriculture.....	— *	— 2.0	— 1.7	— 2.2	— 3.0	— 3.0
Commerce and housing credit:						
Mortgage credit and deposit insurance.....	— 0.4	— 1.7	— 2.1	— 2.6	— 2.9	— 3.2
Postal service.....		0.8	0.6	*	0.2	0.1
Other advancement of commerce.....	— *	— 0.6	— 1.3	— 1.4	— 1.4	— 1.2
Subtotal, commerce and housing credit.....	— 0.4	— 1.6	— 2.8	— 4.0	— 4.2	— 4.2
Transportation:						
Ground transportation.....	— *	— 1.2	— 2.1	— 3.6	— 4.6	— 5.8
Air transportation.....	*	*	— 0.2	— 0.2	— 0.3	— 0.4
Water transportation.....	— *	— 0.2	— 0.3	— 0.3	— 0.4	— 0.4
Other transportation.....		*	*	*	*	*
Subtotal, transportation.....	— 0.1	— 1.4	— 2.6	— 4.1	— 5.2	— 6.5
Community and regional development.....	— 0.1	— 1.1	— 2.2	— 2.9	— 2.6	— 2.7
Education, training, employment, and social services:						
Education.....	— 0.2	— 2.4	— 3.9	— 4.1	— 5.0	— 5.7
Training and employment.....	— 0.1	— 0.6	— 0.7	— 0.9	— 1.0	— 1.1
Social services and other.....	— 0.1	— 0.3	— 0.5	— 0.7	— 0.8	— 0.9
Subtotal, education, training, employment, and social services.....	— 0.3	— 3.3	— 5.1	— 5.7	— 6.8	— 7.7
Health:						
Medicaid.....		— 1.3	— 2.6	— 3.5	— 4.3	— 5.3
Other health.....	— 0.2	— 2.4	— 2.1	— 2.7	— 3.2	— 3.7
Subtotal, health.....	— 0.2	— 3.7	— 4.8	— 6.2	— 7.6	— 9.0
Medicare.....	— *	— 4.7	— 7.7	— 10.6	— 13.7	— 17.0
Income security:						
General retirement and disability (excluding social security).....	— 0.2	— 0.3	— 0.3	— 0.3	— 0.4	— 0.4
Federal employee retirement and disability.....		— 1.2	— 2.0	— 2.7	— 3.4	— 4.0

Table A-13. DIFFERENCES BETWEEN CURRENT SERVICES AND ADMINISTRATION POLICY OUTLAYS—
Continued

(Outlays; in billions of dollars)

	1986	1987	1988	1989	1990	1991
Unemployment compensation.....		0.1	0.1	0.1	0.1	0.1
Housing assistance.....	-1.2	-2.1	-3.1	-3.6	-4.0	-4.3
Food and nutrition assistance.....	-0.1	-1.1	-1.4	-1.7	-1.8	-1.9
Other income security.....	-*	-0.4	-0.5	-0.6	-0.7	-0.8
Subtotal, income security.....	-1.5	-5.0	-7.2	-8.9	-10.3	-11.4
Social Security.....	*	*	-0.1	-0.2	-0.3	-0.3
(On-budget).....		(*)	(*)	(*)	(*)	(*)
(Off-budget).....	(*)	(*)	(-0.1)	(-0.2)	(-0.3)	(-0.3)
Veterans benefits and services:						
Income security for veterans.....		-*	-*	-*	-*	-*
Hospital and medical care for veterans.....	-*	-0.6	-1.0	-1.4	-1.4	-1.4
Other.....		-0.1	-*	-0.2	-0.4	-0.5
Subtotal, veterans benefits and services.....	-*	-0.7	-1.1	-1.6	-1.8	-2.0
Administration of justice:						
Federal law enforcement activities.....	-*	0.2	0.2	0.2	0.2	0.2
Federal correctional activities.....	*	0.1	0.2	0.2	0.1	0.1
Other.....	-0.1	-0.3	-0.4	-0.4	-0.4	-0.5
Subtotal, administration of justice.....	-0.1	*	-*	-*	-0.1	-0.1
General government:						
Central fiscal operations.....	0.3	-0.1	0.6	0.7	0.8	0.9
Other.....	0.3	-0.4	-0.4	-0.1	-0.3	-0.7
Subtotal, general government.....	0.6	-0.4	0.1	0.7	0.5	0.1
General purpose fiscal assistance.....	*	-1.1	-0.4	-0.4	-0.4	-0.4
Net interest.....	1.2	-1.2	-3.6	-6.8	-9.5	-12.8
(On-budget).....	(1.2)	(-1.2)	(-3.6)	(-6.8)	(-9.4)	(-12.8)
(Off-budget).....		(-*)	(-*)	(-*)	(-0.1)	(-*)
Allowances:						
Civilian agency pay raises.....		-1.0	-1.3	-2.1	-3.0	-3.7
Other.....		0.3	0.4	0.4	0.4	0.3
Subtotal, allowances.....		-0.7	-0.9	-1.7	-2.6	-3.4
Undistributed offsetting receipts:						
Employer share, employee retirement.....		-1.2	-1.4	-1.6	-1.6	-1.2
(On-budget).....		(-1.2)	(-1.5)	(-1.7)	(-1.7)	(-1.3)
(Off-budget).....		(*)	(*)	(0.1)	(0.1)	(0.2)
Rents and royalties on the Outer Continental Shelf.....						
Sale of major physical assets (proposed).....	-1.2	-1.2	-4.2	-1.5	-5.8	-4.8

Table A-13. DIFFERENCES BETWEEN CURRENT SERVICES AND ADMINISTRATION OUTLAYS—
Continued

(Outlays, in billions of dollars)

	1986	1987	1988	1989	1990	1991
Subtotal, undistributed off-setting receipts.....	-1.2	-2.4	-5.6	-3.1	-7.3	-6.0
(On-budget).....	(-1.2)	(-2.4)	(-5.7)	(-3.2)	(-7.4)	(-6.2)
(Off-budget).....		(*)	(*)	(0.1)	(0.1)	(0.2)
Total, differences.....	-2.1	-31.9	-50.5	-64.5	-85.5	-101.4
(On-budget).....	(-2.1)	(-32.0)	(-50.4)	(-64.4)	(-85.3)	(-101.2)
(Off-budget).....	(*)	(0.1)	(-0.1)	(-0.1)	(-0.2)	(-0.2)
Administration policy estimates.....	979.9	994.0	1,026.8	1,063.6	1,093.8	1,122.7
(On-budget).....	(795.2)	(795.4)	(817.1)	(843.8)	(862.1)	(884.3)
(Off-budget).....	(184.7)	(198.6)	(209.6)	(219.9)	(231.8)	(238.5)

* \$50 million or less.

The effects of the administration budget proposals on Federal borrowing and debt held by the public are substantial. As shown in table A-14, the budget proposals would reduce the debt held by the public in 1991 by \$365 billion, from \$2,413 billion to \$2,048 billion.

Table A-14. DIFFERENCES BETWEEN CURRENT SERVICES AND ADMINISTRATION BUDGET REQUEST
BORROWING REQUIREMENTS

(in billions of dollars)

	1986	1987	1988	1989	1990	1991
Requirements for borrowing from the public:						
Current services.....	207	180	149	138	125	103
Budget proposals.....	204	142	93	67	35	-2
Difference.....	-3	-38	-56	-71	-91	-105
End of year debt held by the public:						
Current services.....	1,717	1,897	2,046	2,184	2,310	2,413
Budget proposals.....	1,714	1,856	1,949	2,015	2,050	2,048
Difference.....	-3	-41	-97	-169	-259	-365

Tables A-15 and A-16 provide a more detailed comparison (by function, subfunction, and program) of the President's policy estimates for 1987 with the current services budget authority and outlay estimates.

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
050 NATIONAL DEFENSE				
051 Department of Defense-Military.....	286,802	278,412	314,652	311,600
053 Atomic energy defense activities.....	7,325	7,232	8,350	8,230
054 Defense-related activities.....	528	471	441	510
Total budget authority.....	294,656	286,115	323,443	320,340
150 INTERNATIONAL AFFAIRS				
151 International development and humanitarian assistance:				
Multilateral development banks:				
Existing law.....	1,548	1,143	1,193	1,348
Proposed legislation.....				44
International organizations.....	359	266	271	186
Agency for International Development.....	2,492	1,992	2,069	2,098
P.L. 480 food aid.....	1,964	1,243	1,311	1,164
Refugee assistance.....	363	324	363	373
Other.....	249	218	226	232
Offsetting receipts.....	- 479	- 524	- 552	- 552
Subtotal, International development and humani- tarian assistance.....	6,496	4,662	4,880	4,893
152 International security assistance:				
Foreign military sales credit.....	4,940	4,967	5,176	5,661
Foreign military sales (FFB).....	1,683	950	473	473
Military assistance.....	805	748	779	996
Economic support fund.....	6,160	3,547	3,613	4,094
Other.....	214	92	95	118
Offsetting receipts.....	- 71	- 68	- 70	- 70
Subtotal, International security assistance.....	13,730	10,236	10,066	11,272
153 Conduct of foreign affairs:				
Administration of foreign affairs.....	2,272	2,125	2,110	3,609
International organizations and conferences.....	545	477	447	493
Other.....	- 306	- 308	- 274	- 272
Subtotal, Conduct of foreign affairs.....	2,510	2,294	2,284	3,830
154 Foreign information and exchange activities.....	940	938	999	1,129
155 International financial programs:				
Foreign military sales trust fund (net).....	2,862	2,000	1,300	1,300
Export-Import Bank.....			536	
Fair export financing program.....				300
Offsetting receipts.....	- 85	- 87	- 89	- 89
Subtotal, International financial programs.....	2,776	1,913	1,747	1,511
Total budget authority.....	26,453	20,043	19,976	22,636
250 GENERAL SCIENCE, SPACE, AND TECHNOLOGY				
251 General science and basic research:				
National Science Foundation programs.....	1,505	1,463	1,521	1,691
Department of Energy general science programs.....	722	656	690	773
Subtotal, General science and basic research.....	2,227	2,119	2,211	2,464
253 Space flight.....	3,951	3,776	3,795	3,777
254 Space, science, applications, and technology.....	2,023	2,119	2,212	2,219
255 Supporting space activities.....	950	833	962	992

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Total budget authority	9,152	8,847	9,180	9,452
270 ENERGY				
271 Energy supply:				
Research and development	2,309	2,061	2,336	1,391
Uranium enrichment	238	176		
Nuclear waste disposal fund	-1,467	118	346	346
Petroleum reserves:				
Existing law	-689	-818	-637	-885
Proposed legislation				427
Tennessee Valley Authority	856	766	716	716
Other power marketing:				
Existing law	-41	-124	-126	-126
Proposed legislation				-28
Subsidies for nonconventional fuel production	1,464	23	*	*
Rural electric and telephone:				
Existing law	2,840	2,475	2,566	1,906
Proposed legislation				-98
Subtotal, Energy supply	5,511	4,677	5,202	3,651
272 Energy conservation:				
Energy conservation grants and R&D	457	428	396	39
Solar Energy and Energy Conservation Bank	15			
Subtotal, Energy conservation	472	428	396	39
274 Emergency energy preparedness	2,056	113	193	6
276 Energy information, policy, and regulation	719	673	677	658
Total budget authority	8,758	5,891	6,468	4,355
300 NATURAL RESOURCES AND ENVIRONMENT				
301 Water resources:				
Corps of Engineers:				
Existing law	2,932	2,788	3,062	3,287
Proposed legislation				
Bureau of Reclamation:				
Existing law	1,098	781	902	932
Proposed legislation				2
Other	227	261	269	104
Offsetting receipts:				
Existing law	-169	-231	-394	-411
Proposed legislation				-203
Subtotal, Water resources	4,087	3,600	3,839	3,711
302 Conservation and land management:				
Management of national forests, cooperative forestry, and forestry research (Forest Service):				
Existing law	1,831	1,734	1,757	1,590
Proposed legislation				57
Management of public lands (BLM):				
Existing law	562	457	466	450
Proposed legislation				3
Mining reclamation and enforcement	377	279	298	291
Conservation of agricultural lands	624	595	607	373
Other:				
Existing law	296	280	287	273
Proposed legislation				*
Offsetting receipts:				
Existing law	-2,245	-2,573	-2,775	-2,581
Proposed legislation				

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Subtotal, Conservation and land management	1,446	774	640	457
303 Recreational resources:				
Federal land acquisition:				
Existing law	356	217	224	64
Proposed legislation				-28
Urban park and historic preservation funds	25	24	25	
Operation of recreational resources:				
Existing law	1,265	1,316	1,343	1,227
Proposed legislation				59
Offsetting receipts:				
Existing law	-72	-78	-81	-133
Proposed legislation				-43
Subtotal, Recreational resources	1,574	1,478	1,511	1,147
304 Pollution control and abatement:				
Regulatory, enforcement, and research programs	1,296	1,374	1,412	1,322
Hazardous substance response fund:				
Existing law	606	860	895	1,083
Proposed legislation				-33
Oil pollution funds (gross)	9	9	9	9
Sewage treatment plant construction grants:				
Existing law	2,400	574	2,480	
Proposed legislation				1,800
Offsetting receipts:				
Existing law	-8	-38	-61	-61
Proposed legislation				-21
Subtotal, Pollution control and abatement	4,303	2,778	4,734	4,099
306 Other natural resources:				
Program activities	1,935	1,766	1,913	1,544
Offsetting receipts:				
Existing law	-1	-2	-1	-1
Proposed legislation				-20
Subtotal, Other natural resources	1,934	1,764	1,912	1,523
Total budget authority	13,344	10,394	12,636	10,937
350 AGRICULTURE				
351 Farm income stabilization:				
Commodity price support and related programs:				
Existing law	15,249	21,694	15,703	15,655
Proposed legislation				-140
Crop insurance:				
Existing law	474	344	617	376
Proposed legislation				-136
Agricultural credit:				
Existing law	2,981	2,022	2,873	2,838
Proposed legislation				-537
Agricultural credit (FFB):				
Existing law	6,815	2,172	166	166
Proposed legislation				-166
Other programs and unallocated overhead	51	*	*	
Subtotal, Farm income stabilization	25,569	26,232	19,359	18,057
352 Agricultural research and services:				
Research programs	821	765	780	761
Extension programs	344	328	342	140
Marketing programs:				
Existing law	131	129	129	129
Proposed legislation				-43

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Animal and plant health programs:				
Existing law.....	306	310	317	260
Proposed legislation.....				-21
Economic intelligence.....	191	182	187	179
Other programs and unallocated overhead:				
Existing law.....	211	206	209	214
Proposed legislation.....				-4
Offsetting receipts.....	-92	-90	-90	-90
Subtotal, Agricultural research and services.....	1,911	1,830	1,873	1,526
Total budget authority.....	27,480	28,062	21,232	19,583
370 COMMERCE AND HOUSING CREDIT				
371 Mortgage credit and deposit insurance:				
Mortgage purchase activities (GNMA).....	*			
Mortgage credit (FHA and other).....	160	123	130	79
Housing for the elderly or handicapped.....	504	504	532	
Rural housing programs (FmHA).....	6,218	3,368	4,945	2,865
Federal Savings & Loan Insurance Corp & other.....	200			
Subtotal, Mortgage credit and deposit insurance.....	7,081	3,994	5,607	2,944
372 Postal Service:				
Existing law.....	2,639	3,974	2,765	2,738
Proposed legislation.....				777
Subtotal, Postal Service.....	2,639	3,974	2,765	3,515
376 Other advancement of commerce:				
Small and minority business assistance:				
Existing law.....	1,303	929	1,228	2,622
Proposed legislation.....				-95
Science and technology.....	361	334	353	369
Economic and demographic statistics.....	197	217	286	308
International trade and other:				
Existing law.....	528	506	514	504
Proposed legislation.....				28
Subtotal, Other advancement of commerce.....	2,389	1,985	2,381	3,736
Total budget authority.....	12,109	9,953	10,752	10,195
400 TRANSPORTATION				
401 Ground transportation:				
Highways (including block grant proposal).....	14,964	14,717	15,379	12,769
Highway safety.....	315	259	237	230
Mass transit (including block grant proposal).....	4,178	3,616	3,738	1,272
Railroads.....	809	682	741	57
Regulation:				
Existing law.....	51	46	49	48
Proposed legislation.....				-28
Subtotal, Ground transportation.....	20,318	19,320	20,144	14,350
402 Air transportation:				
Airports and airways (FAA).....	5,317	4,726	4,799	4,754
Aeronautical research and technology.....	648	606	648	706
Regulation.....	5			
Air carrier subsidies.....	41	27	28	
Subtotal, Air transportation.....	6,011	5,358	5,476	5,460
403 Water transportation:				
Marine safety and transportation:				
Existing law.....	2,534	2,231	2,288	2,386

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Proposed legislation.....				5
Proposed boat and yacht fees.....				-238
Ocean shipping.....	559	894	596	465
Regulation.....	12	11	12	12
Subtotal, Water transportation.....	3,105	3,137	2,895	2,630
407 Other transportation.....	126	119	120	126
Total budget authority.....	29,559	27,934	28,636	22,565
450 COMMUNITY AND REGIONAL DEVELOPMENT				
451 Community development:				
Community development block grants.....	3,472	2,990	3,125	2,125
Urban development action grants.....	440	316	330	
Rental rehabilitation and rental development.....		144	150	
Other.....	350	376	419	338
Subtotal, Community development.....	4,262	3,826	4,024	2,462
452 Area and regional development:				
Rural development.....	2,331	1,741	1,692	1,180
Economic development assistance.....	259	200	209	
Indian programs.....	1,122	1,081	1,136	1,101
Regional commissions.....	155	120	125	1
Tennessee Valley Authority.....	125	100	113	58
Offsetting receipts.....	-328	-300	-315	-313
Subtotal, Area and regional development.....	3,664	2,943	2,960	2,027
453 Disaster relief and insurance:				
Small business disaster loans:				
Existing law.....				-403
Proposed legislation.....				-483
Disaster relief.....	100	346	246	100
National flood insurance fund.....		79	13	5
Other.....	139	123	127	65
Subtotal, Disaster relief and insurance.....	239	548	385	-715
Total budget authority.....	8,166	7,317	7,370	3,775
500 EDUCATION, TRAINING, EMPLOYMENT, AND SOCIAL SERVICES				
501 Elementary, secondary, and vocational education:				
Block grant and special programs:				
Existing law.....	758	675	696	604
Proposed legislation.....				75
Compensatory education.....	3,696	3,537	3,689	3,688
Education for the handicapped.....	1,321	1,350	1,408	1,303
Impact aid.....	695	663	693	548
Vocational and adult education.....	940	907	946	512
Other:				
Existing law.....	552	528	545	436
Proposed legislation.....				76
Subtotal, Elementary, secondary, and vocational education.....	7,963	7,660	7,977	7,242
502 Higher education:				
Student financial assistance:				
Existing law.....	5,160	4,677	4,875	25
Proposed legislation.....				3,788
Guaranteed student loan program:				
Existing law.....	3,800	3,331	3,445	3,445

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Proposed legislation.....				-1,115
Other:				
Existing law.....	803	718	740	318
Proposed legislation.....				286
Subtotal, Higher education.....	9,763	8,726	9,059	6,746
503 Research and general education aids.....	1,223	1,179	1,292	1,118
504 Training and employment:				
Employment and training assistance.....	3,775	3,337	3,447	2,910
Older Americans employment.....	326	312	312	326
Work incentive program.....	267	211	220	
Federal-State employment service.....	987	954	983	951
Other.....	68	65	65	63
Subtotal, Training and employment.....	5,422	4,879	5,027	4,250
505 Other labor services.....	716	679	686	715
506 Social services:				
Social services block grant.....	2,725	2,584	2,584	2,700
Community service programs.....	372	354	370	4
Rehabilitation services.....	1,234	1,310	1,362	1,225
Family social services.....	770	761	831	818
Services for children, the elderly, and other special groups:				
Existing law.....	2,007	1,929	2,007	1,948
Proposed legislation.....				30
Domestic volunteer programs.....	150	145	148	150
Other social services.....	25	23	23	20
Subtotal, Social services.....	7,285	7,106	7,326	6,895
Total budget authority.....	32,372	30,229	31,368	26,965
550 HEALTH				
551 Health care services:				
Medicaid grants:				
Existing law.....	21,845	24,440	25,998	25,880
Proposed legislation.....				-1,172
Federal employees' health benefits:				
Existing law.....	1,342	1,537	1,469	1,469
Proposed legislation.....				-322
Other health care services:				
Existing law.....	3,267	3,211	3,322	2,812
Proposed legislation.....				190
Subtotal, Health care services.....	26,454	29,189	30,789	28,857
552 Health research:				
National Institutes of Health research.....	4,883	4,995	5,095	4,680
Other research programs.....	518	538	712	680
Subtotal, Health research.....	5,402	5,533	5,807	5,360
553 Education and training of health care work force:				
Research training.....	269	263	274	257
Clinical training.....	237	217	224	3
Other.....	43	39	41	19
Subtotal, Education and training of health care work force.....	549	519	539	279

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
554 Consumer and occupational health and safety:				
Consumer safety:				
Existing law.....	816	785	794	822
Meat and poultry inspection fees.....				-366
Occupational safety and health.....	380	363	372	392
Subtotal, Consumer and occupational health and safety.....	1,196	1,148	1,166	849
Total budget authority.....	33,601	36,389	38,301	35,344
570 MEDICARE				
571 Medicare:				
Hospital insurance (HI):				
Existing law.....	52,739	67,335	62,598	62,583
Proposed legislation.....				124
Supplementary medical insurance (SMI):				
Existing law.....	24,576	24,934	27,887	27,414
Proposed legislation.....				-562
Medicare premiums and collections:				
Existing law.....	-5,562	-5,771	-6,655	-6,569
Proposed legislation.....				-725
Interfund transactions:				
Existing law.....	-52	150		
Proposed legislation.....				
Total budget authority.....	71,701	86,648	83,830	82,265
600 INCOME SECURITY				
601 General retirement and disability insurance (excluding social security):				
Railroad retirement:				
Existing law.....	5,131	5,597	4,880	4,745
Proposed legislation.....				155
Special benefits for disabled coal miners:				
Existing law.....	1,373	1,708	1,556	1,539
Proposed legislation.....				
Other.....	60	78	87	87
Subtotal, General retirement and disability insurance (excluding social security).....	6,564	7,383	6,523	6,526
602 Federal employee retirement and disability:				
Civilian retirement and disability programs:				
Existing law.....	40,873	42,603	44,211	44,019
Proposed legislation.....				2,034
Military retirement.....	27,426	30,955	33,365	33,702
Federal employees workers' compensation (FECA).....	207	232	264	259
Subtotal, Federal employee retirement and disability.....	68,506	73,790	77,840	80,014
603 Unemployment compensation:				
Existing law.....	21,001	21,079	22,181	22,213
Proposed legislation.....				111
Subtotal, Unemployment compensation.....	21,001	21,079	22,181	22,324
604 Housing assistance:				
Subsidized housing.....	10,759	9,394	10,522	
Public housing operating subsidies.....	1,402	1,159	1,204	1,172
Low-rent public housing loans:				
Existing law.....	14,566	1,238	1,632	1,366
Proposed legislation.....				356
Other housing assistance.....	152	158	168	93

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Subtotal, Housing assistance.....	26,879	11,947	13,527	2,986
605 Food and nutrition assistance:				
Food stamps and aid to Puerto Rico:				
Existing law.....	12,577	12,582	12,682	12,657
Proposed legislation.....				—313
Child nutrition and other programs:				
Existing law.....	6,078	6,192	6,672	6,583
Proposed legislation.....				—775
Subtotal, Food and nutrition assistance.....	18,655	18,774	19,354	18,151
609 Other income security:				
Supplemental security income (SSI):				
Existing law.....	9,442	9,870	10,570	10,569
Proposed legislation.....				—34
AFDC and child support enforcement:				
Existing law.....	9,207	9,580	9,212	9,211
Proposed legislation.....				—278
Earned income tax credit (EITC).....	1,100	1,283	1,228	1,228
Refugee assistance.....	444	409	370	374
Low-income home energy assistance.....	2,100	2,010	2,100	2,100
Other.....	205	185	188	143
Subtotal, Other income security.....	22,499	23,337	23,668	23,313
Total budget authority.....	164,103	156,310	163,092	153,315
650 SOCIAL SECURITY				
651 Social security:				
Old-age and survivors insurance (OASI)—Off-budget:				
Existing law.....	177,558	181,319	208,035	207,996
Proposed legislation.....				289
Old-age and survivors insurance (OASI)—On-budget.....	—1,928	—1,007	—602	—602
Disability insurance (DI)—Off-budget:				
Existing law.....	20,602	22,383	20,220	20,218
Proposed legislation.....				28
Disability insurance (DI)—On-budget.....	—69	—60	—58	—58
Interfund transactions (Off-budget).....	—7,187	—9,117	—6,363	—6,363
Interfund transactions (On-budget).....	10,525	5,897	6,363	6,363
Total budget authority.....	199,501	199,415	227,595	227,871
On-budget.....	(8,527)	(4,830)	(5,702)	(5,702)
Off-budget.....	(190,973)	(194,586)	(221,892)	(222,168)
700 VETERANS BENEFITS AND SERVICES				
701 Income security for veterans:				
Service-connected compensation:				
Existing law.....	10,232	10,465	10,712	10,406
Proposed legislation.....				306
Non-service-connected pensions.....	3,810	3,834	3,824	3,824
Burial and other benefits:				
Existing law.....	133	128	134	134
Proposed legislation.....				—31
National service life insurance trust fund.....	1,305	1,361	1,393	1,393
All other insurance programs.....	33	29	22	22
Insurance program receipts.....	—423	—438	—438	—438
Subtotal, Income security for veterans.....	15,089	15,378	15,647	15,616
702 Veterans education, training, and rehabilitation:				
G.I. Bill.....	1,131	878	741	741
All-volunteer force educational assistance trust fund:				
Existing law.....	49	138	79	79

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Proposed legislation.....				— 155
Subtotal, Veterans education, training, and reha- bilitation.....	1,180	1,015	820	665
703 Hospital and medical care for veterans:				
Medical care and hospital services:				
Existing law.....	8,941	9,130	9,468	9,084
Proposed legislation.....				2
Construction.....	803	637	692	451
Medical administration, research, and other.....	261	233	225	232
Third party reimbursement (proposed).....				— 188
Subtotal, Hospital and medical care for veterans.....	10,005	10,000	10,385	9,581
704 Veterans housing:				
Loan guaranty revolving fund.....	307	200		
Housing program receipts.....	— *			
Subtotal, Veterans housing.....	306	200		
705 Other veterans benefits and services:				
Cemeteries, administration of veterans benefits and other:				
Existing law.....	770	729	723	777
Proposed legislation.....				1
Non-VA support programs.....	57	66	67	61
Subtotal, Other veterans benefits and services.....	828	795	790	839
Total budget authority.....	27,408	27,389	27,642	26,702
750 ADMINISTRATION OF JUSTICE				
751 Federal law enforcement activities:				
Criminal investigations (DEA, FBI and OCDE).....	1,526	1,522	1,544	1,690
Alcohol, tobacco, and firearms investigation (ATF).....	172	167	169	178
Border enforcement activities (Customs and INS).....	1,317	1,326	1,351	1,357
Protection activities (Secret Service).....	304	293	297	319
Other enforcement:				
Existing law.....	390	377	384	391
Proposed legislation.....				7
Subtotal, Federal law enforcement activities.....	3,709	3,685	3,746	3,943
752 Federal litigative and judicial activities:				
Civil and criminal prosecution and representation:				
Existing law.....	827	857	890	979
Proposed legislation.....				3
Federal judicial activities.....	1,063	1,063	1,251	1,252
Representation of indigents in civil cases.....	313	292	304	
Subtotal, Federal litigative and judicial activities.....	2,204	2,213	2,445	2,234
753 Federal correctional activities.....	599	577	560	758
754 Criminal justice assistance.....	220	301	308	184
Total budget authority.....	6,733	6,776	7,058	7,119
800 GENERAL GOVERNMENT				
801 Legislative functions.....	1,358	1,474	1,616	1,616
802 Executive direction and management.....	118	110	113	117
803 Central fiscal operations:				
Collection of taxes.....	3,584	3,486	3,939	4,098
Other fiscal operations:				
Existing law.....	291	241	263	307

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Proposed legislation.....				— 20
Proposed custom fees.....				— 520
Other proposed legislation.....				78
Subtotal, Central fiscal operations.....	3,875	3,727	4,202	3,943
804 General property and records management:				
Real property:				
Existing law.....	— 63	— 205	304	— 158
Proposed legislation.....				
Personal property.....	16	14	15	15
Records management.....	101	98	99	102
Other:				
Existing law.....	353	328	341	353
Proposed legislation.....				2
Subtotal, General property and records management.....	407	235	759	314
805 Central personnel management:				
Existing law.....	149	136	137	142
Proposed legislation.....				
Subtotal, Central personnel management.....	149	136	137	142
806 Other general government:				
Compact of free association.....				144
Territories.....	176	153	160	85
Indian affairs.....	1	9	2	2
Treasury claims.....	314	366	336	336
Other.....	74	59	42	43
Subtotal, Other general government.....	565	587	540	609
809 Deductions for offsetting receipts:				
Existing law.....	— 506	— 510	— 510	— 510
Government-sponsored enterprises user fees (proposed).....				— 45
Subtotal, Deductions for offsetting receipts.....	— 506	— 510	— 510	— 555
Total budget authority.....	5,967	5,758	6,856	6,186
850 GENERAL PURPOSE FISCAL ASSISTANCE				
851 General revenue sharing:				
General revenue sharing payments.....	4,567	4,185		
Administration.....	8	7	6	6
Subtotal, General revenue sharing.....	4,575	4,192	6	6
852 Other general purpose fiscal assistance:				
Payments and loans to the District of Columbia.....	237	495	599	522
Payments to States and counties from Forest Service receipts:				
Existing law.....	236	228	310	310
Proposed legislation.....				— 225
Payments to States from receipts under the Mineral Leasing Act.....	539	574	604	551
Payments to States and counties from Federal land management activities.....	148	19	59	59
Payments in lieu of taxes.....	103	100	105	105
Payments to territories and Puerto Rico.....	478	392	393	408
Other.....	8	7	7	7
Subtotal, Other general purpose fiscal assistance.....	1,747	1,814	2,076	1,737

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Total budget authority	6,322	6,007	2,082	1,742
900 NET INTEREST				
901 Interest on the public debt:				
Existing law	179,063	196,095	209,555	207,470
Proposed legislation				-616
Subtotal, Interest on the public debt	179,063	196,095	209,555	206,855
902 Interest received by on-budget trust funds:				
Existing law	-22,071	-26,626	-30,180	-30,251
Proposed legislation				621
Subtotal, Interest received by on-budget trust funds	-22,071	-26,626	-30,180	-29,631
903 Interest received by off-budget trust funds:				
Existing law	-4,118	-4,418	-4,712	-4,711
Proposed legislation				-5
Subtotal, Interest received by off-budget trust funds	-4,118	-4,418	-4,712	-4,716
908 Other interest:				
Interest on refunds of tax collections	1,750	1,502	1,473	1,473
Interest on loans to Federal Financing Bank	-17,296	-16,578	-17,857	-17,639
OCS interest	-2	-300		
Other:				
Existing law	-7,888	-8,161	-9,076	-9,038
Proposed legislation				693
Subtotal, Other interest	-23,437	-23,536	-25,459	-24,511
Total budget authority	129,437	141,514	149,203	147,996
<i>On-budget</i>	<i>(133,555)</i>	<i>(145,932)</i>	<i>(153,915)</i>	<i>(152,713)</i>
<i>Off-budget</i>	<i>(-4,118)</i>	<i>(-4,418)</i>	<i>(-4,712)</i>	<i>(-4,716)</i>
920 ALLOWANCES				
921 Civilian agency pay raises:				
Civilian agency pay raises			1,432	403
Coast Guard military pay raises			36	36
Subtotal, Civilian agency pay raises			1,468	439
926 Increased employing agency payments for employee retirement:				
Proposed legislation				331
Subtotal, Increased employing agency payments for employee retirement				331
Total budget authority			1,468	770
950 UNDISTRIBUTED OFFSETTING RECEIPTS				
951 Employer share, employee retirement (on-budget):				
Military retired contributions	-16,964	-18,034	-18,737	-19,069
Other contributions:				
Existing law	-7,744	-8,248	-8,557	-8,480
Proposed legislation				-921
Subtotal, Employer share, employee retirement (on-budget)	-24,708	-26,283	-27,294	-28,471
952 Employer share, employee retirement (off-budget)	-2,509	-2,843	-3,197	-3,177

Table A-15. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
953 Rents and royalties on the Outer Continental Shelf:				
Existing law	— 5,542	— 5,450	— 5,280	— 5,280
Proposed legislation				
Subtotal, Rents and royalties on the Outer Continental Shelf	— 5,542	— 5,450	— 5,280	— 5,280
954 Sale of major physical assets				— 1,200
Total budget authority	— 32,759	— 34,576	— 35,771	— 38,128
On-budget	(— 30,250)	(— 31,733)	(— 32,574)	(— 34,951)
Off-budget	(— 2,509)	(— 2,843)	(— 3,197)	(— 3,177)
Total budget authority	1,074,063	1,066,417	1,142,420	1,101,985
On-budget	(889,716)	(879,093)	(928,437)	(887,710)
Off-budget	(184,347)	(187,325)	(213,983)	(214,275)

*\$500 thousand or less.

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
050 NATIONAL DEFENSE				
051 Department of Defense-Military	245,371	258,425	276,718	274,265
053 Atomic energy defense activities	7,098	7,152	8,000	7,708
054 Defense-related activities:				
Existing law	279	250	222	515
Proposed legislation				-250
Subtotal, Defense-related activities	279	250	222	265
Total outlays	252,748	265,827	284,940	282,238
150 INTERNATIONAL AFFAIRS				
151 International development and humanitarian assistance:				
Multilateral development banks:				
Existing law	1,427	1,189	1,550	1,551
Proposed legislation				22
International organizations	336	327	280	226
Agency for International Development	1,929	2,093	2,059	2,084
P.L. 480 food aid	1,715	1,373	1,304	1,158
Refugee assistance	385	343	335	340
Other:				
Existing law	95	117	106	108
Proposed legislation				40
Offsetting receipts	-479	-524	-552	-552
Subtotal, International development and humani- tarian assistance	5,409	4,919	5,081	4,978
152 International security assistance:				
Foreign military sales credit	2,275	3,770	5,999	6,121
Foreign military sales (FFB)	978	187	-306	-306
Military assistance	848	761	774	992
Economic support fund	4,889	4,809	3,631	4,058
Other	473	234	128	144
Offsetting receipts	-71	-68	-70	-70
Subtotal, International security assistance	9,391	9,692	10,156	10,939
153 Conduct of foreign affairs:				
Administration of foreign affairs	1,838	2,059	2,177	2,842
International organizations and conferences	540	514	451	487
Other	-324	-294	-282	-274
Subtotal, Conduct of foreign affairs	2,054	2,279	2,345	3,055
154 Foreign information and exchange activities	793	911	939	1,043
155 International financial programs:				
Foreign military sales trust fund (net)	143	-300	-200	-200
Export-Import Bank:				
Existing law	-384	-156	-950	-950
Proposed legislation				-5
Fair export financing program				16
Other	-1,145	-208	-167	-167
Offsetting receipts	-85	-87	-89	-89
Subtotal, International financial programs	-1,471	-751	-1,406	-1,395
Total outlays	16,176	17,051	17,116	18,619
250 GENERAL SCIENCE, SPACE, AND TECHNOLOGY				
251 General science and basic research:				
National Science Foundation programs	1,313	1,490	1,498	1,631

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Department of Energy general science programs	707	677	682	731
Subtotal, General science and basic research	2,019	2,167	2,179	2,362
253 Space flight	3,989	3,809	3,731	3,761
254 Space, science, applications, and technology	1,858	2,111	2,207	2,161
255 Supporting space activities	761	835	892	904
Total outlays	8,627	8,922	9,009	9,188
270 ENERGY				
271 Energy supply:				
Research and development	2,479	2,217	2,504	2,138
Uranium enrichment	300	-110		-235
Nuclear waste disposal fund	-1,478	121	317	317
Petroleum reserves:				
Existing law	-687	-663	-599	-846
Proposed legislation				426
Tennessee Valley Authority	870	416	278	278
Other power marketing:				
Existing law	-714	-447	-434	-434
Proposed legislation				-162
Subsidies for nonconventional fuel production	324	135	65	65
Rural electric and telephone:				
Existing law	1,521	1,176	1,212	1,406
Proposed legislation				-96
Subtotal, Energy supply	2,615	2,845	3,343	2,858
272 Energy conservation:				
Energy conservation grants and R&D	464	434	431	256
Solar Energy and Energy Conservation Bank	27	36	9	9
Subtotal, Energy conservation	491	470	440	265
274 Emergency energy preparedness	1,838	516	639	240
276 Energy information, policy, and regulation	740	702	693	654
Total outlays	5,685	4,533	5,115	4,017
300 NATURAL RESOURCES AND ENVIRONMENT				
301 Water resources:				
Corps of Engineers:				
Existing law	3,047	2,940	3,062	3,252
Proposed legislation				
Bureau of Reclamation:				
Existing law	954	1,002	959	984
Proposed legislation				2
Other	290	280	283	223
Offsetting receipts:				
Existing law	-169	-231	-394	-411
Proposed legislation				-203
Subtotal, Water resources	4,122	3,992	3,910	3,847
302 Conservation and land management:				
Management of national forests, cooperative forestry, and forestry research (Forest Service):				
Existing law	1,964	1,803	1,774	1,622
Proposed legislation				43
Management of public lands (BLM):				
Existing law	550	470	463	449
Proposed legislation				3
Mining reclamation and enforcement	272	316	335	343

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Conservation of agricultural lands	620	622	629	447
Other:				
Existing law	320	295	292	275
Proposed legislation				*
Offsetting receipts:				
Existing law	-2,245	-2,573	-2,775	-2,581
Proposed legislation				
Subtotal, Conservation and land management	1,481	933	718	600
303 Recreational resources:				
Federal land acquisition:				
Existing law	383	312	274	210
Proposed legislation				2
Urban park and historic preservation funds	73	38	30	7
Operation of recreational resources:				
Existing law	1,237	1,288	1,314	1,274
Proposed legislation				47
Offsetting receipts:				
Existing law	-72	-78	-81	-133
Proposed legislation				-43
Subtotal, Recreational resources	1,621	1,561	1,538	1,365
304 Pollution control and abatement:				
Regulatory, enforcement, and research programs	1,208	1,326	1,391	1,373
Hazardous substance response fund:				
Existing law	360	471	738	804
Proposed legislation				-33
Oil pollution funds (gross)	4	9	9	9
Sewage treatment plant construction grants:				
Existing law	2,900	2,820	2,420	2,355
Proposed legislation				40
Offsetting receipts:				
Existing law	-8	-38	-61	-61
Proposed legislation				-21
Subtotal, Pollution control and abatement	4,465	4,588	4,497	4,466
306 Other natural resources:				
Program activities	1,669	1,798	1,913	1,702
Offsetting receipts:				
Existing law	-1	-2	-1	-1
Proposed legislation				-20
Subtotal, Other natural resources	1,668	1,796	1,912	1,680
Total outlays	13,357	12,870	12,575	11,958
350 AGRICULTURE				
351 Farm income stabilization:				
Commodity price support and related programs:				
Existing law	17,733	20,399	16,374	16,341
Proposed legislation				-140
Crop insurance:				
Existing law	506	557	574	370
Proposed legislation				-134
Agricultural credit:				
Existing law	2,782	2,126	2,918	2,368
Proposed legislation				-489
Agricultural credit (FFB):				
Existing law	2,658	922	-219	-216
Proposed legislation				-166
Other programs and unallocated overhead	72	14	-3	4
Subtotal, Farm income stabilization	23,751	24,017	19,644	17,938

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
352 Agricultural research and services:				
Research programs	739	773	812	799
Extension programs	338	331	340	179
Marketing programs:				
Existing law	138	135	126	128
Proposed legislation				-43
Animal and plant health programs:				
Existing law	305	312	316	260
Proposed legislation				-21
Economic intelligence	180	185	186	177
Other programs and unallocated overhead:				
Existing law	205	207	210	218
Proposed legislation				-4
Offsetting receipts	-92	-90	-90	-90
Subtotal, Agricultural research and services	1,813	1,854	1,901	1,603
Total outlays	25,565	25,871	21,545	19,541
370 COMMERCE AND HOUSING CREDIT				
371 Mortgage credit and deposit insurance:				
Mortgage-backed securities (GNMA)	-234	-268	-309	-324
Mortgage purchase activities (GNMA)	-590	-465	-433	-433
Mortgage credit (FHA and other)	-594	-1,434	-1,824	-1,970
Housing for the elderly or handicapped	501	490	498	385
Rural housing programs (FmHA)	3,971	3,695	3,086	1,666
Federal Deposit Insurance Corporation	-1,942	-1,658	-1,900	-1,900
Federal Savings & Loan Insurance Corp & other	615	456	-197	-197
National Credit Union Administration	-855	-259	-293	-293
Subtotal, Mortgage credit and deposit insurance	871	556	-1,373	-3,067
372 Postal Service:				
Existing law	1,351	1,345	1,933	1,906
Proposed legislation				777
Subtotal, Postal Service	1,351	1,345	1,933	2,683
376 Other advancement of commerce:				
Small and minority business assistance:				
Existing law	1,008	1,145	1,164	435
Proposed legislation				50
Science and technology	303	450	353	362
Economic and demographic statistics	212	209	263	276
International trade and other:				
Existing law	484	488	603	596
Proposed legislation				24
Subtotal, Other advancement of commerce	2,007	2,291	2,384	1,743
Total outlays	4,229	4,192	2,944	1,359
400 TRANSPORTATION				
401 Ground transportation:				
Highways (including block grant proposal)	12,832	13,843	13,841	13,346
Highway safety	250	279	270	262
Mass transit (including block grant proposal)	3,427	3,564	3,420	3,367
Railroads	1,047	914	898	255
Regulation:				
Existing law	50	49	50	49
Proposed legislation				-27
Subtotal, Ground transportation	17,606	18,650	18,480	17,251

Table A-16. **CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued**

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
402 Air transportation:				
Airports and airways (FAA)	4,215	4,305	4,515	4,530
Aeronautical research and technology	643	609	627	652
Regulation	4			
Air carrier subsidies	34	38	24	2
Subtotal, Air transportation	4,895	4,952	5,165	5,184
403 Water transportation:				
Marine safety and transportation:				
Existing law	2,513	2,476	2,466	2,643
Proposed legislation				5
Proposed boat and yacht fees				-238
Ocean shipping	677	939	592	484
Regulation	12	11	12	12
Subtotal, Water transportation	3,201	3,426	3,069	2,905
407 Other transportation	137	140	159	163
Total outlays	25,838	27,168	26,873	25,503
450 COMMUNITY AND REGIONAL DEVELOPMENT				
451 Community development:				
Community development block grants	3,817	3,575	3,119	3,099
Urban development action grants	497	499	474	413
Rental rehabilitation and rental development	15	286	357	241
Other	269	336	278	166
Subtotal, Community development	4,598	4,696	4,228	3,918
452 Area and regional development:				
Rural development	1,688	1,690	1,612	1,527
Economic development assistance	351	239	222	174
Indian programs	1,054	1,073	1,148	1,149
Regional commissions	218	166	154	128
Tennessee Valley Authority	140	139	107	108
Other	-5	-6	-6	-6
Offsetting receipts	-328	-300	-315	-313
Subtotal, Area and regional development	3,117	3,002	2,923	2,768
453 Disaster relief and insurance:				
Small business disaster loans:				
Existing law	-273	-158	20	-585
Proposed legislation				121
Disaster relief	192	322	321	249
National flood insurance fund	-119	51	24	-38
Other	166	149	130	92
Subtotal, Disaster relief and insurance	-35	364	495	-161
Total outlays	7,680	8,062	7,646	6,525
500 EDUCATION, TRAINING, EMPLOYMENT, AND SOCIAL SERVICES				
501 Elementary, secondary, and vocational education:				
Block grant and special programs:				
Existing law	526	662	643	612
Proposed legislation				8
Compensatory education	4,207	2,952	3,541	3,536
Education for the handicapped	1,018	1,512	1,300	1,261
Impact aid	647	710	718	611
Vocational and adult education	658	992	972	820

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Other:				
Existing law.....	576	533	529	479
Proposed legislation.....				33
Subtotal, Elementary, secondary, and vocational education.....	7,633	7,362	7,703	7,361
502 Higher education:				
Student financial assistance:				
Existing law.....	4,163	5,065	4,769	3,168
Proposed legislation.....				1,096
Guaranteed student loan program:				
Existing law.....	3,535	3,281	3,401	3,401
Proposed legislation.....				—855
Other:				
Existing law.....	513	759	637	—81
Proposed legislation.....				62
Subtotal, Higher education.....	8,211	9,104	8,807	6,792
503 Research and general education aids.....	1,121	1,251	1,266	1,219
504 Training and employment:				
Employment and training assistance.....	3,415	3,686	3,466	3,112
Older Americans employment.....	320	323	312	315
Work incentive program.....	279	217	216	25
Federal-State employment service.....	918	985	956	950
Other.....	39	62	67	65
Subtotal, Training and employment.....	4,972	5,274	5,017	4,467
505 Other labor services.....	678	694	688	714
506 Social services:				
Social services block grant.....	2,743	2,604	2,577	2,693
Community service programs.....	375	356	368	62
Rehabilitation services.....	798	1,490	1,316	1,198
Family social services.....	749	754	809	823
Services for children, the elderly, and other special groups:				
Existing law.....	1,910	1,928	1,980	1,944
Proposed legislation.....				7
Domestic volunteer programs.....	129	160	148	149
Other social services.....	24	28	27	20
Subtotal, Social services.....	6,728	7,320	7,224	6,896
Total outlays.....	29,342	31,006	30,706	27,447
550 HEALTH				
551 Health care services:				
Medicaid grants:				
Existing law.....	22,655	24,686	25,998	25,880
Proposed legislation.....				—1,172
Federal employees' health benefits:				
Existing law.....	1,221	672	1,869	1,869
Proposed legislation.....				—1,186
Other health care services:				
Existing law.....	3,108	3,287	3,313	2,773
Proposed legislation.....				190
Subtotal, Health care services.....	26,984	28,645	31,181	28,354
552 Health research:				
National Institutes of Health research.....	4,437	4,984	5,114	4,764
Other research programs.....	471	546	707	671

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Subtotal, Health research	4,908	5,530	5,821	5,435
553 Education and training of health care work force:				
Research training	233	279	272	269
Clinical training	189	220	235	87
Other	46	39	41	3
Subtotal, Education and training of health care work force	468	538	548	360
554 Consumer and occupational health and safety:				
Consumer safety:				
Existing law	812	794	797	824
Meat and poultry inspection fees				-366
Occupational safety and health	370	368	372	389
Subtotal, Consumer and occupational health and safety	1,182	1,162	1,169	848
Total outlays	33,542	35,875	38,719	34,997
570 MEDICARE				
571 Medicare:				
Hospital insurance (HI):				
Existing law	48,654	49,140	52,796	51,598
Proposed legislation				-1,657
Supplementary medical insurance (SMI):				
Existing law	22,730	25,307	28,774	28,160
Proposed legislation				-573
Medicare premiums and collections:				
Existing law	-5,562	-5,771	-6,655	-6,569
Proposed legislation				-725
Interfund transactions:				
Existing law				
Proposed legislation				
Total outlays	65,822	68,677	74,915	70,234
600 INCOME SECURITY				
601 General retirement and disability insurance (excluding social security):				
Railroad retirement:				
Existing law	3,911	3,779	3,881	3,750
Proposed legislation				74
Special benefits for disabled coal miners:				
Existing law	1,668	1,653	1,664	1,648
Proposed legislation				
Pension Benefit Guaranty Corporation:				
Existing law	-19	39	89	92
Proposed legislation				-203
Other	57	71	81	81
Subtotal, General retirement and disability insurance (excluding social security)	5,617	5,542	5,715	5,442
602 Federal employee retirement and disability:				
Civilian retirement and disability programs:				
Existing law	23,268	24,264	25,624	25,630
Proposed legislation				-674
Military retirement:				
Existing law	15,801	17,649	18,516	18,516
Proposed legislation				-500
Federal employees workers' compensation (FECA)	196	232	264	259

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Federal employees life insurance fund.....	— 674	— 733	— 794	— 788
Subtotal, Federal employee retirement and disability.....	38,591	41,412	43,610	42,444
603 Unemployment compensation:				
Existing law.....	17,475	16,482	16,820	16,884
Proposed legislation.....				1
Subtotal, Unemployment compensation.....	17,475	16,482	16,820	16,885
604 Housing assistance:				
Subsidized housing:				
Existing law.....	9,994	10,641	11,105	10,657
Proposed legislation.....				— 1,720
Public housing operating subsidies.....	1,205	1,337	1,322	1,297
Low-rent public housing loans:				
Existing law.....	13,938	1,385	1,736	1,470
Proposed legislation.....				356
Other housing assistance.....	125	214	199	170
Subtotal, Housing assistance.....	25,263	13,578	14,362	12,230
605 Food and nutrition assistance:				
Food stamps and aid to Puerto Rico:				
Existing law.....	12,526	12,557	12,669	12,643
Proposed legislation.....				— 315
Child nutrition and other programs:				
Existing law.....	6,014	6,252	6,549	6,469
Proposed legislation.....				— 704
Subtotal, Food and nutrition assistance.....	18,540	18,808	19,218	18,094
609 Other income security:				
Supplemental security income (SSI):				
Existing law.....	9,606	10,162	10,571	10,569
Proposed legislation.....				— 34
AFDC and child support enforcement:				
Existing law.....	9,224	9,738	9,212	9,211
Proposed legislation.....				— 278
Earned income tax credit (EITC).....	1,100	1,283	1,228	1,228
Refugee assistance.....	442	414	368	343
Low-income home energy assistance.....	2,141	2,019	2,110	2,091
Other.....	201	188	197	150
Subtotal, Other income security.....	22,715	23,803	23,686	23,280
Total outlays.....	128,200	119,625	123,411	118,374
650 SOCIAL SECURITY				
651 Social security:				
Old-age and survivors insurance (OASI)—Off-budget....	171,249	180,677	191,796	191,784
Old-age and survivors insurance (OASI)—On-budget....	— 1,928	— 1,007	— 602	— 602
Disability insurance (DI)—Off-budget.....	19,372	20,416	21,033	21,088
Disability insurance (DI)—On-budget.....	— 69	— 60	— 58	— 58
Interfund transactions (Off-budget).....	— 7,187	— 9,117	— 6,363	— 6,363
Interfund transactions (On-budget).....	7,187	9,117	6,363	6,363
Total outlays.....	188,623	200,026	212,169	212,213
On-budget.....	(5,189)	(8,050)	(5,702)	(5,702)
Off-budget.....	(183,434)	(191,976)	(206,467)	(206,510)
700 VETERANS BENEFITS AND SERVICES				
701 Income security for veterans:				
Service-connected compensation:				
Existing law.....	10,228	10,468	10,690	10,415

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Proposed legislation.....				275
Non-service-connected pensions.....	3,842	3,835	3,825	3,825
Burial and other benefits:				
Existing law.....	133	128	134	134
Proposed legislation.....				—31
National service life insurance trust fund.....	956	1,067	1,170	1,170
All other insurance programs.....	—22	50	15	15
Insurance program receipts.....	—423	—438	—438	—438
Subtotal, Income security for veterans.....	14,714	15,110	15,397	15,366
702 Veterans education, training, and rehabilitation:				
G.I. Bill.....	1,174	910	755	755
Post-Vietnam era education:				
Existing law.....	—108	—211	—76	—76
Proposed legislation.....				—59
All-volunteer force educational assistance trust fund:				
Existing law.....	—8	—110	—116	—116
Proposed legislation.....				50
Veterans jobs program.....	69	49	5	5
Other:				
Existing law.....	—6	—7	—7	—7
Proposed legislation.....				—*
Subtotal, Veterans education, training, and rehabilitation.....	1,120	633	562	553
703 Hospital and medical care for veterans:				
Medical care and hospital services:				
Existing law.....	8,722	9,067	9,354	8,961
Proposed legislation.....				2
Construction.....	542	575	728	713
Medical administration, research, and other.....	283	240	227	232
Third party reimbursement (proposed).....				—188
Subtotal, Hospital and medical care for veterans.....	9,547	9,883	10,309	9,720
704 Veterans housing:				
Loan guaranty revolving fund:				
Existing law.....	278	285	149	149
Proposed legislation.....				—132
Direct loan revolving fund.....	—41	—45	—43	—43
Other (HUD participation sales trust fund).....	—24	—22	—24	—24
Housing program receipts.....	—*			
Subtotal, Veterans housing.....	214	219	82	—50
705 Other veterans benefits and services:				
Cemeteries, administration of veterans benefits and other:				
Existing law.....	710	725	715	774
Proposed legislation.....				1
Non-VA support programs.....	48	60	66	56
Subtotal, Other veterans benefits and services.....	758	785	781	831
Total outlays.....	26,352	26,629	27,131	26,420
750 ADMINISTRATION OF JUSTICE				
751 Federal law enforcement activities:				
Criminal investigations (DEA, FBI and OCDE).....	1,479	1,568	1,498	1,652
Alcohol, tobacco, and firearms investigation (ATF).....	169	164	166	174
Border enforcement activities (Customs and INS).....	1,214	1,350	1,322	1,341
Protection activities (Secret Service).....	300	295	293	311

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Other enforcement:				
Existing law.....	365	365	368	376
Proposed legislation.....				4
Subtotal, Federal law enforcement activities.....	3,526	3,742	3,647	3,857
752 Federal litigative and judicial activities:				
Civil and criminal prosecution and representation:				
Existing law.....	783	820	850	930
Proposed legislation.....				3
Federal judicial activities.....	981	1,094	1,229	1,228
Representation of indigents in civil cases.....	300	301	304	38
Subtotal, Federal litigative and judicial activities.....	2,064	2,215	2,383	2,199
753 Federal correctional activities.....	537	636	590	681
754 Criminal justice assistance.....	150	258	304	211
Total outlays.....	6,277	6,851	6,923	6,948
800 GENERAL GOVERNMENT				
801 Legislative functions.....	1,355	1,522	1,633	1,633
802 Executive direction and management.....	113	113	112	116
803 Central fiscal operations:				
Collection of taxes.....	3,562	3,487	3,885	4,023
Other fiscal operations:				
Existing law.....	— 77	52	23	67
Proposed legislation.....				184
Proposed custom fees.....				— 520
Other proposed legislation.....				76
Subtotal, Central fiscal operations.....	3,485	3,539	3,908	3,831
804 General property and records management:				
Real property:				
Existing law.....	— 273	— 128	259	— 217
Proposed legislation.....				
Personal property.....	15	14	15	15
Records management.....	100	100	98	101
Other:				
Existing law.....	254	333	342	350
Proposed legislation.....				2
Subtotal, General property and records management.....	96	319	714	251
805 Central personnel management:				
Existing law.....	164	127	135	140
Proposed legislation.....				
Subtotal, Central personnel management.....	164	127	135	140
806 Other general government:				
Compact of free association.....				162
Territories.....	186	189	152	118
Indian affairs.....	1	9	2	2
Treasury claims.....	314	366	336	336
Other.....	20	11	27	27
Subtotal, Other general government.....	521	575	517	645
809 Deductions for offsetting receipts:				
Existing law.....	— 506	— 510	— 510	— 510

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
Government-sponsored enterprises user fees (proposed).....				— 45
Subtotal, Deductions for offsetting receipts.....	— 506	— 510	— 510	— 555
Total outlays.....	5,228	5,685	6,508	6,060
850 GENERAL PURPOSE FISCAL ASSISTANCE				
851 General revenue sharing:				
General revenue sharing payments.....	4,584	4,433	760	.....
Administration.....	8	7	5	5
Subtotal, General revenue sharing.....	4,591	4,440	765	5
852 Other general purpose fiscal assistance:				
Payments and loans to the District of Columbia.....	237	495	599	522
Payments to States and counties from Forest Service receipts:				
Existing law.....	236	218	300	310
Proposed legislation.....				— 225
Payments to States from receipts under the Mineral Leasing Act.....	539	550	604	551
Payments to States and counties from Federal land management activities.....	146	30	58	57
Payments in lieu of taxes.....	103	100	105	105
Payments to territories and Puerto Rico.....	494	394	393	406
Other.....	7	8	7	7
Subtotal, Other general purpose fiscal assistance.....	1,762	1,794	2,066	1,733
Total outlays.....	6,353	6,235	2,831	1,739
900 NET INTEREST				
901 Interest on the public debt:				
Existing law.....	179,063	196,095	209,555	207,470
Proposed legislation.....				— 616
Subtotal, Interest on the public debt.....	179,063	196,095	209,555	206,855
902 Interest received by on-budget trust funds:				
Existing law.....	— 22,071	— 26,626	— 30,180	— 30,251
Proposed legislation.....				621
Subtotal, Interest received by on-budget trust funds.....	— 22,071	— 26,626	— 30,180	— 29,631
903 Interest received by off-budget trust funds:				
Existing law.....	— 4,118	— 4,418	— 4,712	— 4,711
Proposed legislation.....				— 5
Subtotal, Interest received by off-budget trust funds.....	— 4,118	— 4,418	— 4,712	— 4,716
908 Other interest:				
Interest on refunds of tax collections.....	1,750	1,502	1,473	1,473
Interest on loans to Federal Financing Bank.....	— 17,296	— 16,578	— 17,857	— 17,639
OCS interest.....	— 2	— 300		
Other:				
Existing law.....	— 7,889	— 8,161	— 9,076	— 9,038
Proposed legislation.....				693
Subtotal, Other interest.....	— 23,438	— 23,536	— 25,459	— 24,511
Total outlays.....	129,436	141,514	149,203	147,996
<i>On-budget.....</i>	<i>(133,554)</i>	<i>(145,932)</i>	<i>(153,915)</i>	<i>(152,713)</i>
<i>Off-budget.....</i>	<i>(— 4,118)</i>	<i>(— 4,418)</i>	<i>(— 4,712)</i>	<i>(— 4,716)</i>

Table A-16. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1985 actual	Current services		1987 administration proposals
		1986 estimate	1987 estimate	
920 ALLOWANCES				
921 Civilian agency pay raises:				
Civilian agency pay raises			1,374	387
Coast Guard military pay raises			36	36
Subtotal, Civilian agency pay raises			1,410	423
926 Increased employing agency payments for employee retirement:				
Proposed legislation				331
Subtotal, Increased employing agency payments for employee retirement				331
Total outlays			1,410	754
950 UNDISTRIBUTED OFFSETTING RECEIPTS				
951 Employer share, employee retirement (on-budget):				
Military retired contributions	-16,964	-18,034	-18,737	-19,069
Other contributions:				
Existing law	-7,744	-8,248	-8,557	-8,480
Proposed legislation				-921
Subtotal, Employer share, employee retirement (on-budget)	-24,708	-26,283	-27,294	-28,471
952 Employer share, employee retirement (off-budget)	-2,509	-2,843	-3,197	-3,177
953 Rents and royalties on the Outer Continental Shelf:				
Existing law	-5,542	-5,450	-5,280	-5,280
Proposed legislation				
Subtotal, Rents and royalties on the Outer Continental Shelf	-5,542	-5,450	-5,280	-5,280
954 Sale of major physical assets				-1,200
Total outlays	-32,759	-34,576	-35,771	-38,128
On-budget	(-30,250)	(-31,733)	(-32,574)	(-34,951)
Off-budget	(-2,509)	(-2,843)	(-3,197)	(-3,177)
Total outlays	946,323	982,040	1,025,919	994,002
On-budget	(769,515)	(797,325)	(827,361)	(795,386)
Off-budget	(176,807)	(184,715)	(198,558)	(198,617)

*\$500 thousand or less.

SPECIAL ANALYSIS B

FEDERAL TRANSACTIONS IN THE NATIONAL INCOME AND PRODUCT ACCOUNTS

The budget is designed to serve several purposes:

- It sets forth the *President's request to the Congress* for appropriations action on existing or new programs and for changes in tax legislation.
- It proposes an *allocation of resources* between the private and public sectors and within the public sector. Through its impact on consumption, investment, and the distribution of income it also affects the allocation of resources within the private sector.
- It is an *economic document* that reflects the taxing and spending policies of the Government for promoting economic growth, high employment, and a stable price level.
- 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 documents and related Treasury reports provide complete, detailed information on the finances of the Federal Government and on the tax and spending programs proposed by the President. For study of aggregate economic activity, however, the national income and product accounts (NIPA) of the United States provide the most useful measures. This special analysis shows Federal finances as measured in the NIPA. The analysis is divided into three major sections. The first shows the size, composition, and trends in Federal sector receipts and expenditures. Additional details will be published in the February 1986 issue of the Department of Commerce publication, *Survey of Current Business*. The second section of this analysis shows quarterly estimates of Federal sector receipts and expenditures. The final section explains the major differences between the budget and the NIPA concepts. A discussion of fiscal policy can be found in the main budget document and in the *Economic Report of the President*.

FEDERAL SECTOR RECEIPTS AND EXPENDITURES

Table B-1 shows Federal sector NIPA receipts, expenditures, and deficits for 1985-87. These estimates reflect the conceptual and statistical changes made in the benchmark revision of the NIPA,

which was released by the Bureau of Economic Analysis in December 1985. The change that has the largest impact by far is the imputation of an employer contribution for military retirement, which raises both contributions for social insurance and defense purchases. Other changes that affect Federal sector receipts and expenditures include the imputation of a Federal contribution for unemployment insurance for former military personnel, treating the Civilian Health and Medical Plan of the Uniformed Services (CHAMPUS) as an employer-paid health insurance plan, imputing bank service charges to foreigners, and reclassifying military shipments financed by forgiven loans. A detailed discussion of these and other changes to the Federal sector in the NIPA can be found in the October 1985 *Survey of Current Business*.

Table B-1. FEDERAL SECTOR RECEIPTS AND EXPENDITURES IN THE NIPA

(In billions of dollars)

Description	1985 actual	1986 estimate	1987 estimate
RECEIPTS			
Personal tax and nontax receipts	345.2	360.1	392.1
Corporate profits tax accruals	67.6	84.8	104.1
Indirect business tax and nontax accruals	56.4	55.8	60.7
Contributions for social insurance	304.0	322.5	348.3
Total receipts	773.1	823.2	905.2
EXPENDITURES			
Purchases of goods and services	342.2	358.6	372.7
Defense	(255.7)	(269.9)	(289.4)
Nondefense	(86.5)	(88.7)	(83.3)
Transfer payments	373.0	393.9	407.9
Domestic ("to persons")	(359.9)	(378.4)	(393.8)
Foreign	(13.1)	(15.5)	(14.1)
Grants-in-aid to State and local governments	97.8	102.6	93.9
Net interest paid	128.7	139.8	146.1
Subsidies less current surplus of Government enterprises	21.4	21.0	23.1
Wage disbursements less accruals .....	.1		
Total expenditures	963.2	1,015.9	1,043.7
Deficit (—)	—190.1	—192.7	—138.6

Note: The estimates for 1986 and 1987 are preliminary; revisions will be published in the February 1986 issue of the *Survey of Current Business*.

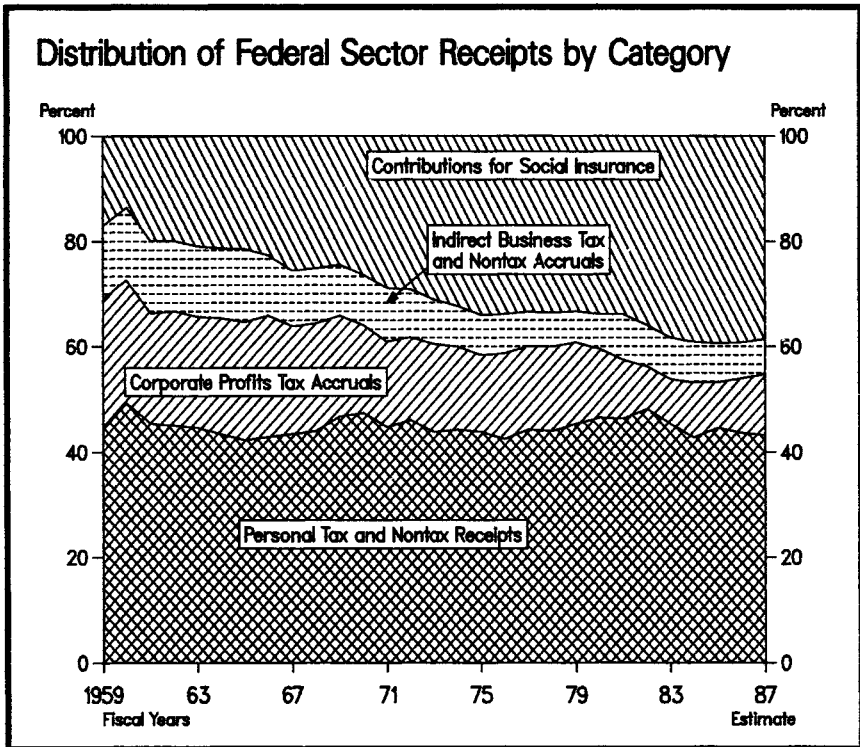
Trends in Federal sector receipts.—Table B-1 divides receipts into four major categories, which are also illustrated in the chart on the distribution of Federal sector receipts by category. Table B-2 shows 3-year averages of Federal sector receipts by category as a percent of the gross national product (GNP). The receipts are shown at 10-year intervals to provide a perspective relative to the 1987 levels. For the earlier periods, 3-year averages were used in order to eliminate the impact of annual fluctuations, thereby permitting greater focus on trends.

Table B-2. FEDERAL SECTOR RECEIPTS AS A PERCENT OF GNP ¹

Description	1954-56 average actual	1964-66 average actual	1974-76 average actual	1984-86 average estimate	1987 estimate
Personal tax and nontax receipts.....	8.0	7.8	8.4	8.5	8.6
Corporate profits tax accruals.....	4.9	4.1	3.0	1.9	2.3
Indirect business tax and nontax accruals.....	2.7	2.3	1.5	1.4	1.3
Contributions for social insurance.....	2.4	4.0	6.4	7.6	7.7
Total receipts.....	17.9	18.2	19.2	19.5	19.9

¹ GNP calculated as the average of seasonally adjusted data for the four quarters of the fiscal year, which may not equal the unadjusted fiscal year total due to the methods used to seasonally adjust the NIPA. Unadjusted fiscal year GNP data are not yet available.

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, cause these receipts to increase automatically. Since personal income tax rates are progressive, in the past these receipts normally grew at a faster rate than personal income. Periodically over the past 3 decades, tax reductions were enacted that partially offset the increase in effective tax rates resulting from the progressive tax structure. However, the Economic Recovery Tax Act of 1981 (ERTA) dramatically altered these circumstances. That act provided for across-the-board tax reductions and—starting in 1985—indexing of income tax brackets, the zero bracket amount, and the personal exemption to inflation. As discussed in Part 4 of the *Budget*, subsequent legislation has limited the reduction in personal tax and nontax receipts anticipated in ERTA, but its central components—rate reductions and indexing—remain largely intact. As a result, personal tax and nontax receipts now grow at rates roughly equal to the growth rates for the general economy. Largely due to the rate reductions enacted in 1981, personal tax and nontax receipts fell from a peak of 9.9% of GNP in 1982 to 8.8% in 1985. They are estimated to be 8.6% in both 1986 and 1987.



Corporate profits tax accruals.—Corporate profits tax accruals vary significantly from year to year because corporate profits are highly volatile. The NIPA corporate profits taxes differ from the corresponding budget category primarily because: (1) the NIPA include the deposit of earnings by the Federal Reserve System as corporate profits taxes, whereas the budget treats these collections as miscellaneous receipts; and (2) the NIPA record corporate profits taxes when the profits are earned (that is, accrued), while the unified budget records the cash receipts.

The gradual decline in corporate profits tax accruals 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) reductions in effective tax rates on corporate profits resulting from statutory rate reductions and tax credits. Provisions of the Economic Recovery Tax Act of 1981 designed to stimulate investment further accelerated this trend, although this was partially offset by subsequent legislation.

Indirect business tax and nontax accruals.—These receipts are composed of excise taxes, customs duties, and various miscellaneous receipts such as import fees on crude oil and petroleum products and coal-mining reclamation fees. Over time, indirect business tax and nontax accruals have become a much less important part of total Federal sector receipts. This is partly because they normally do not rise in proportion to the nominal growth in the economy, since most are taxes on physical quantities rather than on the value of a good, and partly because some of them, such as the automobile and telephone excise taxes, have been reduced or repealed. Enactment of the Crude Oil Windfall Profit Tax Act of 1980 resulted in a substantial increase in indirect business taxes in 1980 and 1981. The 5 cent per gallon increase in the excise tax on gasoline and diesel fuel and other provisions of the Highway Revenue Act of 1982 also caused indirect business tax accruals to rise. Despite their long-term decline, the use of excise taxes as user charges to finance Federal programs, such as highways and airways, makes this an important source of financing for certain specialized programs in the budget.

Contributions for social insurance.—This is the second largest category of Federal sector receipts, and the levels in all years are significantly higher relative to previous estimates due to conceptual and statistical changes incorporated in the benchmark revision issued in December 1985. The largest revision, the imputation of a social insurance contribution for military retirement, added \$15.8 billion to the 1985 level.

The increase in contributions for social insurance 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 and the enactment of new ones, and increases in the taxable wage base and tax 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. The combined effect of the reductions in individual income tax rates provided by the Economic Recovery Tax Act of 1981 and the increases in social security and other social insurance taxes mandated by the Social Security Amendments of 1983 and the Railroad Retirement Act of 1983 dramatically reinforce this trend toward increases in social insurance contributions relative to total NIPA receipts.

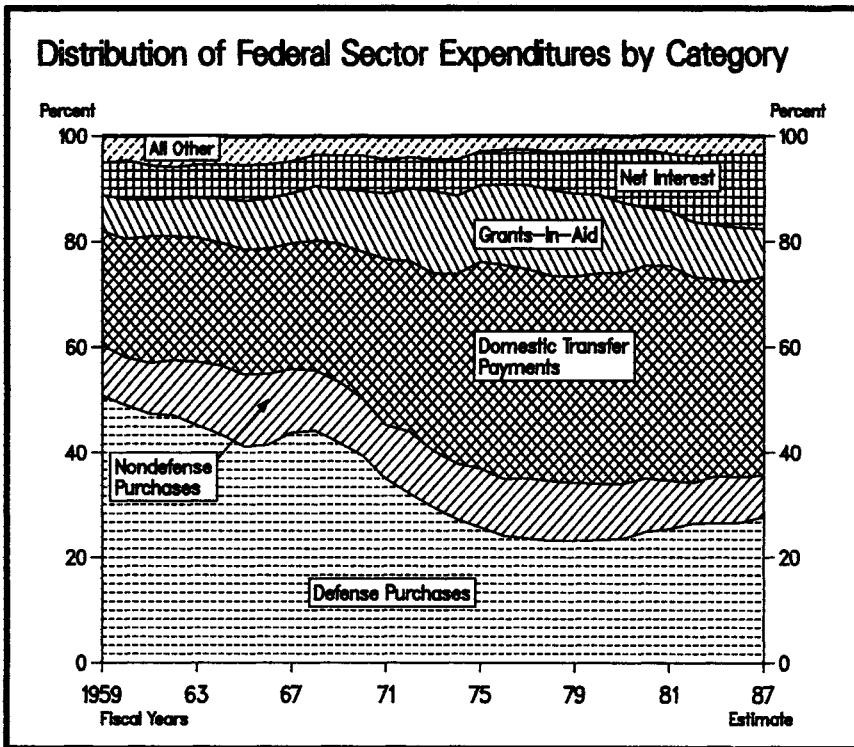
Major tax changes.—In the past 5 years, major tax legislation has been passed to reduce tax rates and increase investment incen-

tives; to curb tax shelter abuse, limit unwarranted tax benefits, and increase taxpayer compliance; to increase payroll taxes as part of overall legislation to restore the solvency of the social security system; and to increase gasoline taxes to fund infrastructure improvements.

In 1986, the administration will be working with Congress to further reform the tax system to make it simpler and fairer. These changes are intended to be revenue neutral (i.e., decreases and increases essentially offsetting), but the distribution of receipts by major category could be changed. However, since the administration's major tax reform proposals are excluded from the budget estimates, their effect is also excluded from the NIPA receipt estimates. The administration is also proposing several minor modifications of the existing tax system, the effects of which are included in both the budget and the NIPA estimates. Details about enacted and proposed tax changes on a unified budget basis can be found in Part 4 of the 1987 *Budget*; additional details on a NIPA basis will be published in the February 1986 *Survey of Current Business*.

Trends in Federal sector expenditures.—Federal sector expenditures are divided into several major NIPA categories. The principal distinction 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, are included in the GNP. The other expenditure categories consist primarily of transfer payments to individuals, net interest payments, and grants to State and local governments. These individuals and governments, in turn, can use the income to finance their own purchases of goods and services, to save, and—in the case of States and localities—to hold down taxes or to make transfer payments.

Major changes in composition.—As can be seen in the chart on the distribution of Federal sector expenditures since 1959, major shifts in the composition of Federal sector expenditures occur over time.



Over most of this period, defense purchases of goods and services constituted a declining share of Federal spending. This trend was temporarily reversed for 3 years during the Vietnam period, but by 1970 the defense share was well below the pre-Vietnam percentages and continued declining until 1978. The defense share rose slightly in 1979 and 1980, and has increased significantly under this administration, reflecting the President's commitment to strengthen our Nation's defense capability while reducing total Federal spending relative to the GNP. Defense purchases are expected to account for 26.6% of Federal sector expenditures in 1986 and 27.7% in 1987; they were 26.2% in 1984 and 26.5% in 1985.

Spending for domestic transfer payments contrasts sharply with the general decline in the defense purchases share during the previous six administrations. After remaining relatively stable at just below 25% of total expenditures for most of the 1960s, domestic transfer payments began growing rapidly in the latter part of the decade, and reached a peak share of about 40% in 1976. This growth is largely explained by higher expenditures for retirement and other social insurance programs, due to increases in the number of beneficiaries and the automatic increases in benefit levels enacted over a period of years beginning in 1962, and by the

creation and expansion of the medicare program. Domestic transfer payments have declined slightly below the 1976 share in recent years.

For the remaining categories of Federal sector expenditures, two patterns stand out. Grants-in-aid to State and local governments grew rapidly in earlier years, but their share began declining in 1979 and is expected to decline further in part due to the expiration of general revenue sharing in 1987. Conversely, the net interest share roughly doubled in the past decade and a half—from just over 6% throughout the 1960s to over 13.4% in 1985—and is expected to continue increasing to 14.0% in 1987. In earlier years this increase was due to a combination of growth in Federal debt and higher interest rates; the current increase is due entirely to debt increases.

Expenditures as a share of GNP.—The preceding section discussed the various categories of Federal sector expenditures relative to total expenditures. An alternative way to compare spending trends is to look at changes in the share of the Nation's current output claimed by the major expenditure categories. Table B-3, which shows 3-year averages of Federal sector expenditures by category as a percent of GNP at 10-year intervals, presents this alternative comparison.

Table B-3. FEDERAL SECTOR EXPENDITURES AS A PERCENT OF GNP ¹

Description	1954-56 average actual	1964-66 average actual	1974-76 average actual	1984-86 average estimate	1987 estimate
Defense purchases	10.7	7.7	5.5	6.4	6.4
Nondefense purchases.....	1.7	2.5	2.3	2.1	1.8
Domestic transfer payments (to "persons")	3.0	4.3	8.3	9.1	8.7
Foreign transfer payments.....	.5	.3	.2	.3	.3
Grants-in-aid to State and local governments .....	.8	1.6	3.2	2.5	2.1
Net interest paid.....	1.2	1.2	1.4	3.2	3.2
Subsidies less current surplus of Government enterprises.....	.3	.6	.4	.5	.5
Total expenditures.....	18.2	18.3	21.5	24.1	23.0

¹ GNP calculated as the average of seasonally adjusted data for the four quarters of the fiscal year, which may not equal the unadjusted fiscal year total due to the methods used to seasonally adjust the NIPA. Unadjusted fiscal year GNP data are not yet available.

Note.—Total expenditures include wage disbursements less accruals which are less than 0.1% in most years.

In 1954-56, which covers the cutback in defense spending in the immediate post-Korean war years, defense purchases were 10.7% of GNP. The years 1964-66 include the beginning of the large military build-up for the Vietnam war, yet the defense expenditures share of GNP (7.7%) was significantly lower than the post-Korean war level. Even though the 1974-76 period included some spending for the winding-down of the Vietnam war, defense purchases declined to 5.5% of GNP. For 1984-86 defense purchases are estimated to average 6.4% of the GNP, well below the 1964-66 average, but

above the 1974-76 average. In 1987 they are also expected to be 6.4% of GNP.

In contrast to the general decline over the past several decades in the share of GNP claimed by the Federal sector for defense purchases, spending on domestic transfer payments and net interest rose dramatically relative to GNP, while grants-in-aid spending relative to GNP increased rapidly for several years but declined significantly in recent years. Spending for everything except defense purchases averaged 7.5% of GNP in 1954-56. In 1984-86 such spending is estimated to average 17.8% of GNP; in 1987 it will decline to 16.6% of GNP.

Defense purchases of goods and services.—Defense purchases consist of all purchases of goods and services under programs included in the national defense function in the budget document. Also included are purchases of goods and services by the military assistance programs that in earlier years were classified in the national defense function but are now classified in the international affairs function in the budget. Normally about 95% of defense purchases are made by the Department of Defense-Military. Most of the remainder is for international security assistance, defense stockpiles, civil defense, and nuclear weapons programs carried out by other agencies.

The budget calls for an increase of \$19.5 billion in defense purchases in 1987 over 1986. This increase more than offsets the impact of inflation, thus continuing the recent trend of rising defense purchases in real terms. The pattern of real defense spending has altered significantly over the past 2 decades. From a Vietnam peak in 1968, real defense purchases declined each year until 1976. Between 1976 and 1978 such purchases remained relatively stable, and starting in 1979 began the rise that continues in this budget.

Table B-4. PURCHASES OF GOODS AND SERVICES BY CHARACTER OF EXPENDITURE

(In billions of dollars)

	1982 actual	1983 actual	1984 actual	1985 actual	1986 estimate	1987 estimate
Defense purchases:						
Compensation of employees.....	82.5	88.6	93.5	98.6	102.2	107.9
Other.....	104.9	122.7	137.3	157.1	167.7	181.5
Total defense purchases.....	187.3	211.3	230.8	255.7	269.9	289.4
Nondefense purchases:						
Compensation of employees.....	32.7	34.7	36.7	38.9	39.7	40.7
Other.....	44.4	42.2	32.0	47.6	49.0	42.6
Total nondefense.....	77.1	76.9	68.7	86.5	88.7	83.3

Table B-4 displays defense and nondefense purchases of goods and services, with a split by character of expenditures between compensation of employees and all other purchases. Defense purchases are growing much more rapidly than nondefense purchases, with non-compensation defense purchases growing at a significantly faster rate than all other categories. Spending for non-compensation defense purchases is estimated to increase by roughly 73% from 1982 to 1987, while spending for defense employee compensation will increase by 31%. In contrast, spending will increase by only 24% for nondefense employee compensation, while other non-defense purchases will decline by 4%.

Nondefense purchases of goods and services.—This category covers the goods and services purchased by Federal nondefense agencies. Included are such programs as the 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, energy, space, and other scientific research; the capital outlays of Government enterprises; Federal law enforcement; and operation of veterans hospitals. Table B-5 shows these purchases by agency for the years 1978 to 1987, reflecting the agency structure in the 1987 budget.

Nondefense purchases consist mainly of the cost of operating the various nondefense agencies. In the case of Government enterprises, including the Commodity Credit Corporation (CCC) and the Postal Service, the data also reflect capital formation net of sales of assets and changes in inventories. The most volatile major segment of nondefense purchases is CCC purchases, because the CCC buys, sells, or otherwise disposes of agricultural commodities. On occasion—as in 1979 and in 1984—CCC sales and other disposals may exceed new purchases. The negative in 1984 is largely due to disposition of commodities through the payments-in-kind (PIK) program. The NIPA treat the reduction in CCC inventories due to PIK as a reduction in net Federal purchases. However, PIK transactions have no effect on total Federal expenditures since the reduction in Federal purchases is offset by an equal increase in Federal subsidy payments. The value of these subsidies is reflected in the estimates in Table B-8.

The Department of Health and Human Services and the Veterans Administration are normally the two largest agencies in terms of nondefense purchases. Their combined purchases for health care, including medicare and research, are estimated at \$17.1 billion in 1987, over 80% of the total purchases for the two agencies. Most of their remaining purchases are for administering social security and income security transfer programs. Both the National Aeronautics

and Space Administration, with \$7.3 billion in 1987 nondefense purchases, and the Department of Energy, with \$3.2 billion in 1987 nondefense purchases, conduct major research and development programs. The Transportation Department's \$6.6 billion of 1987 nondefense purchases are mainly for the Federal Aviation Agency and the Coast Guard. The Corps of Engineers has an estimated \$3.0 billion in 1987 nondefense purchases which, along with the Tennessee Valley Authority's \$0.9 billion, is primarily used for natural resources public works projects and for power activities.

Table B-5. NONDEFENSE PURCHASES OF GOODS AND SERVICES BY AGENCY AND ACTIVITY

(In billions of dollars)

	Actual								Estimate	
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Legislative and judicial branches	1.5	1.6	1.8	1.8	2.1	2.2	2.4	2.6	3.0	3.2
Department of Agriculture	4.3	2.6	5.4	5.6	12.9	9.6	-2.0	11.9	12.9	5.1
Commodity Credit Corporation	(0.9)	(-1.0)	(1.0)	(1.2)	(8.0)	(4.3)	(-7.6)	(5.9)	(7.1)	(0.1)
Forest Service	(1.2)	(1.5)	(1.7)	(1.9)	(1.9)	(1.8)	(1.8)	(2.0)	(2.0)	(1.7)
All other	(2.2)	(2.1)	(2.7)	(2.6)	(3.0)	(3.5)	(3.8)	(4.1)	(3.8)	(3.3)
Department of Commerce	1.1	1.2	1.9	1.5	1.5	1.6	1.6	1.7	1.7	2.0
Corps of Engineers, Civil	2.6	2.9	3.2	3.2	3.0	3.0	3.0	3.0	2.8	3.0
Department of Education	0.5	0.5	0.7	0.8	0.8	0.7	0.9	0.8	0.8	0.8
Department of Energy	4.2	5.1	2.6	7.8	5.2	5.1	4.7	5.3	3.4	3.2
Department of Health and Human Services	6.3	6.6	7.5	8.3	8.7	8.6	9.2	9.8	10.4	10.2
Health, including medicare	(4.4)	(4.6)	(5.3)	(5.9)	(5.9)	(5.8)	(6.2)	(7.1)	(7.4)	(7.3)
Social security, income security, and other	(2.0)	(2.1)	(2.2)	(2.4)	(2.8)	(2.7)	(2.9)	(2.8)	(3.0)	(2.9)
Department of Housing and Urban Development	0.6	0.7	0.5	0.4	0.5	0.7	1.0	0.3	0.2	0.1
Department of the Interior	2.9	3.3	3.9	4.0	3.9	4.2	4.3	4.6	4.6	4.5
Department of Justice	1.8	1.9	2.1	2.3	2.4	2.7	3.0	3.4	3.6	3.9
Department of Labor	1.3	1.7	1.9	1.9	1.9	1.6	1.5	1.4	1.6	1.4
Department of State	0.8	0.9	1.0	1.0	1.1	1.3	1.4	1.7	1.9	2.6
Department of Transportation	4.0	4.3	4.8	5.1	5.3	5.7	6.0	6.3	6.4	6.6
Coast Guard	(1.1)	(1.3)	(1.4)	(1.6)	(1.8)	(2.1)	(2.2)	(2.3)	(2.1)	(2.3)
Federal Aviation Administration	(2.2)	(2.3)	(2.5)	(2.7)	(2.5)	(2.8)	(3.1)	(3.5)	(3.6)	(3.7)
Other	(0.7)	(0.8)	(0.9)	(0.8)	(0.9)	(0.8)	(0.8)	(0.6)	(0.7)	(0.6)
Department of the Treasury	3.1	3.4	4.0	4.2	4.2	4.6	4.7	5.3	5.6	5.9
Internal Revenue Service	(1.9)	(2.1)	(2.3)	(2.4)	(2.5)	(2.9)	(3.2)	(3.6)	(3.8)	(4.0)
Other	(1.2)	(1.4)	(1.7)	(1.8)	(1.7)	(1.7)	(1.5)	(1.7)	(1.8)	(1.9)
Environmental Protection Agency	0.6	0.8	0.9	1.0	0.9	1.0	1.1	1.2	1.4	1.7
National Aeronautics and Space Administration	3.9	4.1	4.7	5.3	5.9	6.5	6.9	7.1	7.2	7.3
Veterans Administration	5.8	6.2	7.1	7.6	8.1	8.9	9.6	10.3	10.5	10.2
Hospital and medical care	(5.1)	(5.4)	(6.3)	(6.8)	(7.3)	(6.1)	(8.7)	(9.5)	(9.8)	(9.8)
Administration and other	(0.7)	(0.7)	(0.8)	(0.8)	(0.8)	(0.8)	(0.9)	(10.8)	(0.6)	(0.4)

B-12

THE BUDGET FOR FISCAL YEAR 1987

All other	6.5	6.7	7.9	8.4	8.0	8.6	9.1	10.0	11.1	12.8
National Science Foundation	(0.3)	(0.4)	(0.4)	(0.4)	(0.5)	(0.5)	(0.5)	(0.6)	(0.6)	(0.7)
Nuclear Regulatory Commission	(0.3)	(0.3)	(0.4)	(0.4)	(0.4)	(0.5)	(0.5)	(0.5)	(0.4)	(0.4)
OPM: Employee health benefits and imputed employee retirement contributions	(1.5)	(1.6)	(1.9)	(2.3)	(2.5)	(2.7)	(3.0)	(3.3)	(3.0)	(3.2)
Postal Service	(0.3)	(0.4)	(0.4)	(0.5)	(0.4)	(0.6)	(0.9)	(1.0)	(1.4)	(1.5)
Tennessee Valley Authority	(1.5)	(2.0)	(1.7)	(1.5)	(1.0)	(0.9)	(0.2)	(0.9)	(0.9)	(0.9)
United States Information Agency	(0.3)	(0.4)	(0.4)	(0.4)	(0.5)	(0.5)	(0.5)	(0.6)	(0.7)	(0.8)
Imputed bank service charges	(0.6)	(0.4)	(0.3)	(0.4)	(0.4)	(0.4)	(0.5)	(0.5)	(0.5)	(0.5)
Other	(1.7)	(1.2)	(2.4)	(2.4)	(2.2)	(2.5)	(3.0)	(2.7)	(3.4)	(4.7)
Total nondefense purchases	52.2	55.5	62.8	71.1	77.1	76.9	68.7	86.5	88.7	83.3

Domestic transfer payments.—This is the largest category of Federal sector expenditures. Spending for domestic transfers has expanded rapidly in recent years, mainly as a result of more beneficiaries and higher benefit payments under social insurance programs. As Table B-6 shows, spending on human resources programs, especially social security and medicare, dominates domestic transfer payments. This spending is expected to continue to rise in 1987, largely due to increases in the covered population and cost-of-living adjustments. Social security is estimated to account for 52% of total domestic transfer payments in 1987, while medicare accounts for another 19%, unemployment assistance for 4%, Federal civilian and military employees' retirement and disability for 11%, and veterans benefits for 4% of the total. Program trends on a unified budget basis are discussed extensively in Part 5 of the *Budget* and elsewhere in the budget documents.

Most domestic transfer payments are for income support and are characterized by automatic eligibility of coverage and automatic benefit increases to account for changes in the cost-of-living. For these programs the demographic and economic conditions dominate the growth patterns, and the rate of growth is quite substantial for most years shown. However, due to the sharp decline in the unemployment rate, transfer payments for unemployment benefits are estimated to decline by \$14.2 billion between 1983 and 1987. This, combined with legislative and administrative efforts to slow the growth of Federal spending, is thereby significantly slowing the rate of growth for transfer payments as a whole.

Table B-6. FUNCTIONAL COMPOSITION OF DOMESTIC TRANSFER PAYMENTS

(In billions of dollars)

Description	Actual										Estimate	
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
HUMAN RESOURCES PROGRAMS												
Social security (OASDI)	70.3	81.1	89.3	99.4	113.7	134.1	149.6	163.2	170.9	181.2	192.0	203.6
Medicare (HI&SMI)	16.9	20.7	24.2	28.1	33.8	41.1	49.0	56.1	60.8	68.3	72.3	75.3
Income security:												
Railroad retirement	3.4	3.7	3.9	4.2	4.7	5.2	5.6	6.0	6.1	6.2	6.4	6.5
Civil service retirement	8.2	9.5	10.8	12.4	14.6	17.6	19.4	20.7	21.8	23.0	24.0	24.7
Military retired pay	7.2	8.1	9.0	10.1	11.8	13.6	14.7	15.8	16.3	15.8	17.5	17.9
Unemployment benefits	18.3	14.2	10.9	9.9	16.4	17.9	22.0	29.4	17.0	16.0	14.9	15.2
Benefits for coal miners	1.0	1.0	1.0	1.6	1.8	1.7	1.7	1.7	1.6	1.6	1.6	1.6
Supplemental security income	4.6	4.7	4.9	5.2	5.7	6.4	6.9	7.2	8.1	8.5	9.1	9.6
Food and nutrition	4.7	4.4	4.5	5.7	7.9	9.8	9.5	11.1	10.7	10.7	10.7	10.4
Special payments, Treasury .....	.9	.9	.9	.8	1.3	1.3	1.2	1.2	1.2	1.1	1.3	1.2
Workers' compensation .....	.5	.6	.6	.7	.8	.9	.9	.9	1.0	1.1	1.1	1.2
Other	*	*	*	.1	.1	.1	.1	.1	.1	.1	.2	.2
Subtotal, Income security	48.8	47.1	46.7	50.6	65.0	74.5	81.9	94.2	83.9	84.0	86.7	88.4
Health .....	.6	.6	.6	.6	.7	.7	.6	.6	.6	.6	.7	.6
Education, training, employment, and social services:												
Education	1.8	2.4	2.8	3.4	4.5	5.7	5.3	5.9	6.0	5.8	6.5	5.5
Training, employment, and social services .....	.4	.6	.8	.9	1.5	1.1	.9	.8	1.0	1.0	1.0	1.0
Subtotal, education, training, employment, and social services	2.2	2.9	3.5	4.3	6.0	6.8	6.2	6.7	7.0	6.8	7.5	6.4

SPECIAL ANALYSIS B

B-15

Table B-6. FUNCTIONAL COMPOSITION OF DOMESTIC TRANSFER PAYMENTS—Continued

(In billions of dollars)

Description	Actual										Estimate	
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Veterans benefits and services.....	14.3	13.3	13.5	14.0	14.4	15.5	16.2	16.5	16.3	16.5	16.6	16.7
Total, human resources programs.....	153.1	165.8	177.8	196.9	233.5	272.7	303.6	337.4	339.5	357.4	375.7	391.1
ALL OTHER FUNCTIONS												
National defense: CHAMPUS ¹.....	.5	.5	.6	.7	.7	.9	1.1	1.2	1.5	1.4	1.4	1.7
Other.....	.8	.8	.9	.9	1.1	1.1	1.0	1.1	1.3	1.1	1.3	1.0
Total functions not included in human resources grouping.....	1.3	1.3	1.5	1.5	1.8	1.9	2.1	2.3	2.8	2.5	2.7	2.7
Total domestic transfer payments.....	154.3	167.1	179.3	198.5	235.4	274.6	305.6	339.7	342.3	359.9	378.4	393.8

*\$50 million or less.

¹ Health care for dependents of active duty personnel and retired military personnel and their dependents.

Note.—Excludes the transition quarter.

Grants-in-aid.—These expenditures help State and local governments provide general public services and finance programs for the needy. Table B-7 shows grants-in-aid by budget function and major activity. Grant expenditures are discussed in greater detail in Special Analysis H of this document. While the definition of Federal aid used in that analysis differs somewhat from that used in the NIPA, the two sets of data largely overlap. Special Analysis H explains the relationship between the series.

Grants-in-aid may often substitute for domestic transfer payments and, to a lesser degree, nondefense purchases. For example, low-income veterans could be eligible for free medical care under medicaid (Federal grants to finance State and local transfer payments), in a veterans hospital (nondefense purchases), or perhaps under medicare (transfer payments). The supplemental security income transfer payments are substitutes for the previous program of grants to States for public assistance for the elderly and handicapped. (The State and local spending of Federal grant money for public assistance programs is classified as State and local government transfer payments.) Medicaid and most grants in the income security function are grants to assist States to provide income support; most other grants finance State and local services to the public. (The income support may be aid-in-kind, as is the case for medicaid, where much of the State and local spending is to reimburse for the cost of providing medical care for the poor.)

The growth in most Federal grants-in-aid categories has been constrained over the last 5 years as part of the administration's efforts to curb the growth in overall spending. However, expenditures have increased significantly for two categories—medicaid and transportation. Despite implementation of reforms to increase program efficiency and effectiveness, medicaid grants rose by about 42% from 1982 to 1986. The administration's proposals to contain medicaid costs will keep expenditures in 1987 at about the 1986 level. Transportation grants rose by about 46% from 1982 to 1986, largely due to the enactment of the Surface Transportation Assistance Act of 1982. Reflecting the administration's proposals to restrain domestic discretionary spending, they are expected to decline slightly in 1987. The administration also proposes to reduce expenditures for most other grants-in-aid categories, including general revenue sharing grants, which the administration proposes to terminate with the expiration of the program's authorization in 1987.

Table B-7. FUNCTIONAL COMPOSITION OF FEDERAL GRANTS-IN-AID

(In billions of dollars)

Description	Actual										Estimate	
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
HUMAN RESOURCES PROGRAMS												
Income security:												
Public assistance cash.....	5.8	6.3	6.6	6.5	7.2	8.4	7.9	7.8	8.2	8.5	9.0	8.1
Child nutrition and other food programs..	2.1	2.7	2.8	3.3	3.9	4.4	4.2	4.7	5.4	5.8	6.1	5.9
Other	1.3	1.6	1.6	1.7	2.2	4.5	4.7	5.4	5.4	5.6	5.5	5.8
Subtotal, income security	9.2	10.6	11.0	11.5	13.3	17.2	16.7	17.9	19.0	19.9	20.6	19.7
Health:												
Medicaid	8.6	9.8	10.6	12.4	13.9	16.8	17.3	18.9	20.0	22.6	24.6	24.6
Other (includes research, construction, services, and medical training)	2.8	2.7	2.7	2.7	3.0	3.1	3.1	2.8	3.0	3.2	3.4	3.2
Subtotal, health	11.4	12.5	13.4	15.1	16.9	19.9	20.5	21.8	23.0	25.7	28.0	27.8
Education, training, employment, and social services:												
Education	4.5	4.9	5.4	6.6	7.3	7.5	7.0	6.6	6.6	7.9	7.6	7.4
Training and employment	5.1	5.5	8.9	8.5	7.7	6.7	3.3	3.3	2.6	2.9	3.0	2.5
Social services	3.8	4.4	5.0	5.3	6.3	5.4	5.0	5.4	6.2	5.8	6.2	6.0
Subtotal, education, training, employment, and social services	13.3	14.8	19.3	20.3	21.3	19.6	15.3	15.3	15.5	16.6	16.8	15.9
Other (social security, medicare, and veterans benefits and services) .....	.3	.4	.4	.4	.5	.6	.7	.8	.8	.1	.2	.9
Total human resources programs	34.3	38.3	44.1	47.4	52.0	57.2	53.2	55.8	58.2	62.4	65.6	64.3

B-18

THE BUDGET FOR FISCAL YEAR 1987

OTHER FUNCTIONS:													
Natural resources and environment:													
EPA.....	2.5	3.7	3.4	3.9	4.6	4.1	4.0	3.2	2.9	3.2	3.1	2.8	
Other.....	.3	.4	.5	.6	.7	.7	.7	.6	.8	.8	.6	.4	
Subtotal, natural resources and environment.....	2.8	4.1	3.8	4.5	5.2	4.8	4.7	3.9	3.7	3.9	3.7	3.2	
Community and regional development:													
Local public works.....		.6	2.9	1.6	.4	.1	*	*	*				
Block grants.....	1.0	2.0	2.4	3.2	4.0	4.3	4.1	3.9	4.1	4.2	3.9	3.4	
Other.....	2.4	1.8	1.5	1.6	1.8	1.5	1.1	.9	.8	.8	.8	.7	
Subtotal, community and regional development.....	3.3	4.4	6.8	6.4	6.2	5.9	5.2	4.8	5.0	4.9	4.8	4.1	
Transportation.....	7.5	7.7	8.1	9.6	11.8	12.2	10.8	12.1	14.3	16.0	17.7	17.0	
General purpose fiscal assistance:													
General revenue sharing.....	6.2	6.8	6.8	6.8	6.8	5.1	4.6	4.6	4.6	4.6	4.4		
Anti-recession fiscal assistance.....		1.7	1.3										
Other.....	.5	.6	.9	.9	1.1	1.1	1.4	1.2	1.6	1.4	1.4	1.3	
Subtotal, general purpose fiscal assistance.....	6.7	9.0	9.1	7.8	7.9	6.3	5.9	5.9	6.1	6.0	5.8	1.3	
All other functions.....	2.9	2.7	2.8	3.5	3.5	3.7	3.6	3.3	3.4	4.5	5.0	4.1	
Total other functions.....	23.3	27.9	30.6	31.7	34.7	32.9	30.3	29.9	32.5	35.4	37.0	29.6	
Total grants-in-aid.....	57.5	66.3	74.7	79.1	86.7	90.1	83.4	85.7	90.7	97.8	102.6	93.9	

*50 million or less.

Note.—Excludes the transition quarter.

Foreign transfer payments.—There are three major types of foreign transfer payments: expenditure of dollars to assist foreign economic development, grants 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 declined to less than 0.2% of GNP. The peak year for foreign transfer payments was 1949; in that year they were equal to 1.9% of GNP.

Net interest paid.—Net interest paid depends on the size of Federal debt, loans outstanding, and the interest rates on borrowing and lending. In the early post-war years (1947-48), net interest paid amounted to over 13% of total Federal sector NIPA expenditures; from 1952 to 1977 it accounted for only 6-7% of the total each year. In contrast, it rose from 6.8% of Federal sector expenditures in 1977 to 13% in 1985, and is expected to continue rising to 14% in 1986 and in 1987.

In recent years foreign holdings of Federal debt have increased significantly. This expansion, combined with higher interest rates for several years, pushed up the amount of interest paid abroad to over \$21.2 billion in 1985, almost five times greater than the \$4.5 billion paid in 1975. These foreign interest payments are partially offset by interest collections from abroad; in 1975 such collections totaled \$1.1 billion, and in 1985 they totaled \$5.1 billion. The increase in foreign holdings of Federal debt and in interest payments on that debt is discussed further in Special Analysis E.

Subsidies less current surplus of Government enterprises.—This category of expenditures consists of two elements: (1) subsidy payments to resident businesses (including farms); and (2) the “current surplus” or “deficit” of Government enterprises. In this context, a subsidy is a monetary grant to a unit engaged in commercial activities. Examples are housing subsidies, railroad subsidies, and the construction and operating differential subsidies paid to operators of U.S.-flag merchant ships. As Table B-8 shows, normally over half of the subsidies are for housing programs (including Department of Agriculture housing programs). These subsidies are designed mainly to reduce the cost of housing to low- and moderate-income families. The large increase in Commodity Credit Corporation subsidies in 1984 was due to \$8.6 billion of payment-in-kind subsidies that year.

“Government enterprise” is the term used in the NIPA to designate certain business-type operations of the Government that usually appear 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 rather than

from tax receipts. The difference between the sales and the current operating expense of a Government enterprise constitutes its surplus or deficit. As noted above, the capital formation of Government enterprises net of sales of assets is classified as nondefense purchases. The largest Government enterprises are the Commodity Credit Corporation, the Postal Service, and the Tennessee Valley Authority. The large swing in the Postal Service from deficit to surplus in 1982 was largely due to postal rate increases.

Table B-8. SUBSIDIES LESS CURRENT SURPLUS OF GOVERNMENT ENTERPRISES

(In billions of dollars)

Description	Actual										Estimate	
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Subsidies:												
Commodity Credit Corporation.....	0.3	0.6	2.3	2.0	0.5	1.4	1.6	4.9	10.6	8.0	6.2	9.0
Rural housing insurance fund.....	.3	.4	.4	.6	.6	.8	1.4	1.7	1.8	1.9	2.0	1.8
Other Department of Agriculture.....	.3	.3	.4	.3	.3	.3	.2	.3	.3	.3	.6	1.3
Housing (HUD).....	2.3	2.9	3.5	4.3	5.1	6.3	7.6	9.2	9.7	10.9	11.0	10.0
Maritime.....	.5	.5	.5	.5	.6	.5	.6	.4	.4	.4	.3	.3
Railroad and mass transit.....	.9	1.3	1.4	1.5	2.0	2.2	1.9	1.7	1.7	1.6	.9	.4
Other ¹.....	.4	.3	.3	.6	.5	.2	.2	.1	.1	.1	.8	.8
Subtotal.....	5.0	6.4	8.9	9.9	9.5	11.7	13.5	18.2	24.5	23.2	21.7	23.8
Enterprise surpluses (—) or deficits:												
Commodity Credit Corporation.....	.2	.2	.8	1.4	1.5	1.8	2.3	5.5	2.5	2.2	5.3	4.6
Postal Service.....	2.3	1.6	1.5	0.6	1.6	1.1	—1	.4	.6	1.1	.4	.9
Bonneville Power.....	—2	—2	—2	—2	—2	—3	—2	—4	—7	—7	—8	—8
Tennessee Valley Authority.....	—4	—6	—6	—8	—1.1	—1.0	—1.2	—1.4	—1.5	—1.9	—2.1	—2.2
Federal Housing Administration.....	—2	—2	—2	—2	—4	—4	—5	—5	—4	—1.2	—1.3	—1.4
Federal Deposit Insurance Corporation.....	—2	—2	—3	—3	—2	—4	—6	—6	—1.2	—1.3	—1.4	—1.5
Federal Savings and Loan Insurance Corporation.....	—2	—2	—3	—3	—3	*	—2	.3	—4	—4	—3	—2
All other ¹	—1	.1	*	—2	*	*	*	.2	.2	.2	—5	—1
Subtotal.....	1.2	.5	.7	*	.9	.9	—5	3.0	—9	—1.8	—7	—6
Total subsidies less current surplus.....	6.2	6.9	9.7	9.9	10.4	12.5	13.0	22.2	23.5	21.4	21.0	23.1

* \$50 million or less.

¹ Includes wage disbursements less accruals.

Note.—Excludes the transition quarter.

Wage disbursements less accruals.—This is an adjustment occasionally made in the NIPA to bridge between the sum of the expenditure components and the totals. This is necessary when wages and salaries are received in a time period that is different from when they are earned. The budget records these payments on a cash basis (when they are paid). The NIPA treat such payments on an accrual basis (when they are earned) for nondefense purchases and the current surplus of Government enterprises, but on a cash basis for total expenditures. Wage disbursements less accruals is the timing adjustment necessary to allow the individual expenditure categories to sum to the total expenditures. The net adjustment made is normally small since wage and salary payments disbursed in one year but earned in another are approximately offset by payments disbursed in the next year but earned in the current one.

Quarterly Estimates

Table B-9 presents quarterly NIPA receipts and expenditures at seasonally adjusted annual rates for 1985 to 1987. The translation of the budget into the NIPA categories is inexact. When the annual NIPA estimates are converted into quarterly distributions that are seasonally adjusted at annual rates, greater imprecision must be expected. The data presented in Table B-9 are the best available estimates of the quarterly NIPA receipts and expenditures consistent with the 1987 budget, but should be used with clear recognition of their limitations.

Table B-9. FEDERAL RECEIPTS AND EXPENDITURES IN THE NIPA, QUARTERLY, 1985-87

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

Description	Actual					Estimate						
	Oct.-Dec. 1984	Jan.-Mar. 1985	Apr.-June 1985	July-Sept. 1985	Oct.-Dec. 1985	Jan.-Mar. 1986	Apr.-June 1986	July-Sept. 1986	Oct.-Dec. 1986	Jan.-Mar. 1987	Apr.-June 1987	July-Sept. 1987
RECEIPTS												
Personal tax and nontax receipts.....	327.8	363.9	321.3	355.4	363.8	354.9	361.8	369.4	377.8	381.6	395.6	410.0
Corporate profits tax accruals.....	69.2	65.9	65.0	68.9	72.7	84.2	88.7	93.2	97.4	103.2	106.5	109.4
Indirect business tax and nontax accruals....	56.2	55.5	60.2	55.4	57.0	55.0	55.8	55.4	58.7	60.6	60.6	60.8
Contributions for social insurance.....	288.9	304.4	308.4	311.0	315.9	323.0	326.2	329.3	335.8	346.0	351.5	356.9
Total, receipts.....	742.1	789.7	754.9	790.7	809.4	817.1	832.5	847.3	869.7	891.4	914.2	937.1
EXPENDITURES												
Purchases of goods and services.....	332.9	334.4	337.8	364.8	378.6	362.3	345.9	348.1	361.1	369.9	378.5	381.8
Defense.....	(247.5)	(249.5)	(256.0)	(269.9)	(272.5)	(270.0)	(267.2)	(270.0)	(279.6)	(286.4)	(294.4)	(297.2)
Nondefense.....	(85.4)	(84.9)	(81.7)	(95.0)	(106.1)	(92.3)	(78.7)	(78.1)	(81.5)	(83.5)	(84.1)	(84.6)
Transfer payments.....	361.9	374.1	376.7	383.5	384.3	393.6	396.3	401.0	399.2	408.1	410.2	414.3
Domestic.....	(346.4)	(362.9)	(364.2)	(368.8)	(369.7)	(378.4)	(380.6)	(384.6)	(384.2)	(393.8)	(396.4)	(401.0)
Foreign.....	(15.5)	(11.2)	(12.5)	(14.7)	(14.7)	(15.2)	(15.7)	(16.4)	(15.0)	(14.3)	(13.8)	(13.3)
Grants-in-aid to State and local govern- ments.....	97.3	95.7	97.6	100.6	101.5	103.1	104.4	101.3	95.6	94.2	93.4	92.4
Net interest paid.....	124.8	126.4	130.1	127.1	132.5	138.5	142.5	145.7	145.9	146.0	146.2	146.4
Subsidies less current surplus of Govern- ment enterprises.....	18.5	21.9	20.9	15.9	26.6	20.0	19.2	18.2	26.2	23.7	22.2	20.5
Wage disbursements less accruals.....	— .6	— .1	1.0									
Total expenditures.....	934.7	952.4	964.0	992.0	1,023.4	1,017.5	1,008.3	1,014.3	1,028.0	1,041.9	1,050.5	1,055.4
Deficit (—).....	—192.7	—162.6	—209.1	—201.3	—214.1	—200.4	—175.8	—167.0	—158.3	—150.5	—136.3	—118.3

Note.—Because of the methods normally used to seasonally adjust NIPA data, the average of seasonally adjusted data for the 4 quarters of a fiscal year may not be equal to the unadjusted fiscal year total.

Relationship of the Budget to the Federal Sector, NIPA

Table B-10 shows the major differences between the budget and the Federal sector in the NIPA. The budgetary totals in the table include the receipts and outlays of the Federal Old-Age and Survivors Insurance and the Federal Disability Insurance trust funds (social security), which were moved off-budget by the Balanced Budget and Emergency Deficit Control Act of 1985. Since social security receipts and outlays are included in the NIPA transactions, it is simpler and clearer to bridge from the Federal totals (including social security) than from the on-budget totals. The budgetary totals in the table also include the outlays of the previously off-budget Federal entities (primarily the Federal Financing Bank), which were moved on-budget by the Balanced Budget and Emergency Deficit Control Act of 1985. Their inclusion raises the budget totals by an amount equal to off-budget outlays, but has no effect on Federal sector estimates since the NIPA have always included the transactions of the off-budget Federal entities. Adjustments required to reconcile the budget to the Federal sector in the NIPA are explained below.

Table B-10. RELATIONSHIP OF THE BUDGET TO THE FEDERAL SECTOR, NIPA

(In billions of dollars)

Description	1983 actual	1984 actual	1985 actual	1986 estimate	1987 estimate
RECEIPTS					
Total receipts ¹	600.6	666.5	734.1	777.1	850.4
Government contributions for employee retirement (grossing) ..	28.3	29.7	32.4	33.9	36.0
Other netting and grossing	9.7	13.0	14.6	13.7	17.4
Timing adjustments	7.1	2.5	-6.4	.3	3.2
Geographic exclusions	-1.3	-1.5	-1.9	-1.9	-1.9
Other .....	.2	-.1	.3	.1	.1
Federal sector, NIA receipts	644.6	710.1	773.1	823.2	905.2
EXPENDITURES					
Total outlays ¹	808.3	851.8	946.3	979.9	994.0
Lending and financial transactions	-15.7	-17.6	-25.3	-10.5	-6.3
Government contribution for employee retirement (grossing) ...	28.3	29.7	32.4	33.9	36.0
Other netting and grossing	9.7	13.0	14.6	13.7	17.4
Defense timing adjustment	1.0	2.7	1.3	3.5	7.0
Bonuses on Outer Continental Shelf land leases	7.5	3.4	2.0	1.9	1.6
Geographic exclusions	-4.8	-5.0	-5.3	-5.4	-5.4
Other	-.8	-2.3	-2.8	-1.1	-.6
Federal sector, NIA expenditures	833.5	875.6	963.2	1,015.9	1,043.7

¹ Includes off-budget as well as budget totals.

Lending and financial transactions.—The NIPA conceptually measure the Nation's current income and production, and therefore do not include transactions, such as loans, that are an ex-

change of existing assets and liabilities rather than current income or production. Loan transactions have a significant economic impact, affecting the allocation and distribution of income and output, but they are analyzed more appropriately within a financial market framework, such as that provided by the flow-of-funds data of the Federal Reserve Board. Special Analysis E (Borrowing and Debt) and Special Analysis F (Federal Credit Programs) both contain information on the financial market implications of the budget.

Most of the lending and financial transactions included in Table B-10 are shown in Special Analysis F. However, this total differs from the total for direct loans shown in Special Analysis F because: (a) the NIPA record nonrecourse agricultural commodity loans as purchases rather than loans; and (b) capital contributions to international financial institutions are not loans, but are financial transactions excluded from the NIPA.

The sharp increase in lending and financial transactions in 1985 is largely due to lending for the Public and Indian Housing Authorities. Changes in tax law in the Deficit Reduction Act of 1984 raised questions about the tax-exempt status of these loans. As a consequence, tax-exempt financing was suspended and replaced by direct Federal lending until the Internal Revenue Service ruled that the tax-exempt status was not jeopardized by this act. The exclusion for lending declines in 1986 and 1987, reflecting the administration's commitment to reduce direct Federal lending.

Government contributions for employee retirement.—The contributions of Government agencies to the retirement trust funds of their employees constitute the largest netting and grossing adjustment. Since, these contributions are made by Government accounts to other Government accounts, they are not included in the budget totals, which conceptually measure the Government's current transactions with the public. While the contributions are recorded as outlays of the agencies, they are offset by an intragovernmental deduction. However, the NIPA have long counted Government payments for civilian 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. Contributions for employee retirement by Government enterprises such as the Postal Service are recorded as an increase in the current deficit of enterprises. Contributions by other non-military accounts are recorded as purchases of goods and services. The receipt of these retirement contributions is treated in the NIPA as contributions for social insurance. Since receipts and expenditures are increased by identical amounts, this treatment has no net effect on the surplus or deficit. Around 80% of these payments go

to the civil service retirement trust fund, while most of the remainder is for social security and medicare.

Due to a conceptual change incorporated in the benchmark revision issued in December 1985, the NIPA treatment of Government contributions for military retirement is now similar to the treatment of contributions for civilian employees. In 1985, the budget began financing military retirement on an accrual basis akin to the financing of civil service retirement. A trust fund was created to pay retirement benefits to current and future military retirees. Benefits are financed by payments to the retirement trust fund from three sources: employing agencies, for services currently rendered (the "accrual charge"); the general fund, to cover the unfunded liability that existed when the new retirement trust fund was created; and the interest earned on trust fund balances. These payments are not included in the budget totals since they are offset by intragovernmental deductions. In the revised NIPA, a new social insurance fund and an employer contribution for military retirement are imputed. The imputed contribution is equal to benefits paid. Since an equal amount is added to both receipts and expenditures, imputed accruals have no impact on the surplus or deficit. However, the contributions imputed in the NIPA differ significantly from the budget accruals in many years. The budget estimates are based on benefits earned in the time period when service was rendered, while the NIPA use the cash benefits paid in one period as a proxy for the contributions required to fund benefits earned in that period but paid in a succeeding period.

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 is normally shown as offsets against outlays. For instance, receipts from social insurance programs operated by the Veterans Administration (such as the National Service Life Insurance and U.S. Government Life Insurance) are netted against outlays in the budget since these programs are voluntary, commercial-type activities. However, in the NIPA these insurance premiums are treated as social insurance receipts just as are receipts from compulsory Government programs. Likewise, noncompulsory insurance premiums under the supplementary medical insurance program and similar but much smaller noncompulsory hospital insurance premiums are classified as offsetting collections (negative outlays) in the budget, but are classified as social insurance contributions in the NIPA.

Other netting and grossing includes some imputed contributions for social insurance for Federal employees for unemployment compensation (which adds an equal amount to purchases of goods and services) and workers' compensation (which adds an equal amount

to domestic transfer payments). As part of the conceptual changes introduced in the NIPA benchmark revisions, social insurance contributions are now imputed for medical care for military personnel and their dependents and for unemployment benefits for former military personnel.

One major element of netting and grossing in recent years has been due to budgetary collections arising from the Outer Continental Shelf leases. All such collections are recorded in the budget as negative outlays. The rents and royalties component—but not the bonuses—are recorded in the NIPA as indirect business nontaxes; this converts the collections from an offset to outlays in the budget to a receipt in the NIPA.

All netting and grossing items, including Government contributions for employee retirement, have an equal impact on receipts and expenditures, so they have no effect on the calculation of the NIPA deficit.

Timing adjustments.—The budget records receipts at the time the cash is collected regardless of when the liability is incurred. In contrast, the NIPA attempt to record most receipts from the business sector in the time period in which the liability is incurred rather than when taxes are actually collected, while personal income taxes and social insurance contributions are recorded at the time of payment by the individual taxpayer rather than when the liability is incurred or the cash is received by Treasury. Hence, receipts recorded in the budget for one fiscal year are sometimes recorded in the prior fiscal year in the NIPA due to the lags between the time when liability is incurred or payment made and time of collection. The timing adjustments made to budget receipts attempt to account for these time lags.

The principal timing adjustment made to expenditures is for defense purchases. The major defense timing adjustment normally involves procurement items (such as missiles and airplanes) purchased under most fixed-price contracts. The Federal Government normally makes progress payments for work in process for major procurement programs. Progress payments are excluded from NIPA Federal sector expenditures, because work in progress is counted in the NIPA as part of private business inventories until the goods are completed and delivered to the Government, when they are recorded as defense purchases. An additional defense timing adjustment is made to convert foreign military sales, which are recorded on a cash basis in the unified budget, to a basis consistent with net exports in the NIPA. In addition, some accounting adjustments are included with the defense timing adjustment in this translation. Nondefense timing adjustments are normally small and are included in the “other” category in Table B-10.

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 NIPA. As already noted, the budget records these bonuses as proprietary receipts and, therefore, deducts them from budget outlays. The NIPA exclude these transactions as being a transfer of assets, because the payments are not included in calculating book profits under current corporate accounting practice.

Geographic exclusions.—Geographic exclusions arise because Puerto Rico, the Virgin Islands, and other U.S. territories are not included in the United States for purposes of computing the GNP and related data series (such as social insurance taxes, domestic transfer payments, and grants-in-aid) but also are not treated as foreign for purposes of producing data on exports, imports, and foreign transfer payments. Since the budget includes receipts from and payments to persons and local governments in these territories, and the NIPA exclude such transactions, this constitutes a major reconciliation item between the two data series.

Other.—This category contains miscellaneous adjustments, such as foreign currency transactions that are included in the NIPA but not in the budget.

Table B-11. FEDERAL TRANSACTIONS IN THE NATIONAL INCOME AND PRODUCT ACCOUNTS, 1976-87

(In billions of dollars)

Description	Actual										Estimate	
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
RECEIPTS, NIPA BASIS												
Personal tax and nontax receipts.....	137.1	165.9	186.5	222.9	250.7	289.6	310.0	292.9	304.0	345.2	360.1	392.1
Corporate profits tax accruals.....	52.1	59.0	67.8	75.7	70.2	69.4	52.1	54.5	73.6	67.6	84.8	104.1
Indirect business tax and nontax ac- cruals.....	24.2	24.5	27.1	29.0	35.3	53.4	50.0	50.2	54.9	56.4	55.8	60.7
Contributions for social insurance.....	109.1	125.4	142.9	163.6	182.3	211.4	231.1	247.0	277.6	304.0	322.5	348.3
Total receipts, national income basis.....	322.6	374.7	424.3	491.2	538.6	623.8	643.3	644.6	710.1	773.1	823.2	905.2
EXPENDITURES, NIPA BASIS												
Purchases of goods and services.....	132.2	146.8	158.6	173.1	199.9	231.8	264.4	288.2	299.5	342.2	358.6	372.7
Defense.....	(91.5)	(99.2)	(106.3)	(117.7)	(137.2)	(160.7)	(187.3)	(211.3)	(230.8)	(255.7)	(269.9)	(289.4)
Nondefense.....	(40.8)	(47.6)	(52.2)	(55.5)	(62.8)	(71.1)	(77.1)	(76.9)	(68.7)	(86.5)	(88.7)	(83.3)
Transfer payments.....	158.0	171.2	183.6	203.5	241.1	281.3	312.8	347.4	352.2	373.0	393.9	407.9
Domestic.....	(154.3)	(167.1)	(179.3)	(198.5)	(235.4)	(274.6)	(305.6)	(339.7)	(342.3)	(359.9)	(378.4)	(393.8)
Foreign.....	(3.7)	(4.1)	(4.4)	(5.1)	(5.8)	(6.7)	(7.2)	(7.7)	(9.9)	(13.1)	(15.5)	(14.1)
Grants-in-aid to State and local govern- ments.....	57.5	66.3	74.7	79.1	86.7	90.1	83.4	85.7	90.7	97.8	102.6	93.9
Net interest paid.....	25.1	28.5	33.5	40.7	50.8	66.7	82.2	90.6	109.7	128.7	139.8	146.1
Subsidies less current surplus of Govern- ment enterprises.....	6.2	6.9	9.7	9.9	10.4	12.5	13.0	21.2	23.5	21.4	21.0	23.1
Wage disbursements less accruals.....	-.1	-.1	-.1	*		-.1	*	.4	-.1	.1		
Total expenditures, NIPA basis..	378.9	419.6	459.9	506.4	589.0	682.4	755.9	833.5	875.6	963.2	1,015.9	1,043.7
Excess of receipts (+) or expendi- tures (-), NIPA basis.....	-56.3	-44.8	-35.6	-15.2	-50.4	-58.5	-112.6	-188.9	-165.5	-190.1	-192.7	-138.6

* \$50 million or less.

Note.—Excludes the transition quarter. The estimates for 1986 and 1987 are preliminary; any revisions will be published in the February 1986 issue of the *Survey of Current Business*.

PART 2

**ANALYSES OF
THE TOTALS**

2-1

INTRODUCTION

Part 2 provides analyses and tabulations of the totals that cover the Federal Government's finances and operations as a whole, and reflect the ways in which Government finances affect the economy. The data include both on-budget and off-budget amounts (i.e., transactions of the Federal old-age, survivors, and disability insurance trust funds). These special analyses are designated C through I.

Special Analysis C (Funds in the Budget) classifies on-budget and off-budget information by Federal fund and trust fund categories.

Special Analysis D (Federal Investment and Operating Outlays) classifies outlays in terms of the duration and nature of the benefits provided, distinguishing those of an investment or developmental type from those that primarily yield current benefits.

Special Analysis E (Borrowing and Debt) describes current developments and past trends in Federal borrowing and debt. It also considers interest on the Federal debt, investment by Government accounts in Federal securities, the statutory debt limit, and the total of Federal and federally assisted borrowing from the public.

Special Analysis F (Federal Credit Programs) analyzes direct loan and loan guarantee programs from the perspective of the credit budget. It presents detailed data on these programs, and describes the activities of Government-sponsored enterprises and the Federal Financing Bank. It also analyzes credit subsidies, loan asset sales, defaults and tax-exempt financing.

Special Analysis G (Tax Expenditures) provides a list and discussion of 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 H (Federal Aid to State and Local Governments) contains information on Federal grants to State and local governments and assistance provided through loans and tax expenditures. It shows Federal aid for past years and compares it to the finances of both the Federal Government and State and local governments. This analysis provides a profile of Federal grants by region, a description of the State and local government sector of the national income accounts, and an identification of other grant information sources.

Special Analysis I (Civilian Employment in the Executive Branch) deals with the levels of civilian employment in the executive branch and the systems used to control civilian employment. It also contains data on total Federal personnel costs (including military personnel).

SPECIAL ANALYSIS C

FUNDS IN THE BUDGET

This analysis provides information on transactions of the Federal Government in terms of Federal funds and trust funds, the two major fund groups. Data are provided on receipts, outlays, and surpluses or deficits as well as net obligations and balances.

Federal funds are composed of the general fund, special funds, public enterprise revolving funds, and intragovernmental management and revolving funds. Trust funds are composed of regular (non-revolving) trust funds and trust revolving funds.

All income of a business-type nature (interest, loan repayments, sale of property or services, etc.) is offset against outlays (spending) rather than included in receipts. Similarly, any income to any Federal Government account arising from the spending by any Federal Government account is also offset against Federal Government outlays. This approach means that governmental receipts represent payments by the public that result from exercise of the Government's sovereign powers (i.e., taxes and similar payments) and that outlays measure the net payments to the public that must be financed by taxes or borrowing.

When the budget is disaggregated by fund group, any payments by accounts within a fund group to receipt accounts within the same fund group ("intrafund transactions") continue to be deducted before arriving at total receipts and outlays for the fund group. However, when payments are made by Federal fund accounts to trust fund receipt accounts, and from trust fund accounts to Federal fund receipt accounts ("interfund transactions"), the income is normally included on the receipts side of the collecting fund group. As a result of this treatment, when Federal fund and trust fund receipts are aggregated to arrive at total receipts, these interfund transactions must be deducted to arrive at a figure of total (governmental) receipts from the public. Likewise, when the Federal fund and trust fund outlays are aggregated to arrive at total outlays, the interfund transactions must be deducted to avoid double-counting. These deductions are shown in table C-1.

The Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177)¹ eliminated the off-budget status of formerly off-budget Federal entities, but it also required that the receipts and outlays of the two social security trust funds (the Federal old-age and survivors insurance and the Federal disability insurance trust funds) be moved off-budget. These changes have been made retroactively for all years presented in the tables of this analysis, so that the data are comparable over time.

The movement of the previously off-budget Federal entities on-budget means that all Federal funds are on-budget. However, the movement of the two trust funds off-budget means that there are now off-budget as well as on-budget trust funds. As a result, there are:

- trust intrafund payments from off-budget to on-budget accounts;
- interfund payments from on-budget Federal funds to off-budget trust funds; and
- interfund payments from off-budget trust funds to on-budget Federal funds.

All of these amounts now are included in the gross receipts of the receiving group, then deducted from the receipts and offset against the outlays of that group. Consequently, the on- and off-budget receipts and the on- and off-budget outlays, respectively, can be added together with no further deductions to arrive at total Federal Government receipts and outlays. These transactions, gross and net, are shown in table C-1.

In addition, the Balanced Budget and Emergency Deficit Control Act of 1985 provides emergency powers (known as sequestration) to eliminate deficits in excess of a maximum deficit amount. The sequestration of 1986 funds, if any, under this Act is reflected in this analysis by providing data that are net of sequestration.

¹ The Balanced Budget and Emergency Deficit Control Act of 1985 (commonly known as the Gramm-Rudman-Hollings Act) was enacted on December 12, 1985. Section 261(a)(1)(E) of this Act moved off-budget the receipts and disbursements of the Federal Old-Age and Survivors Insurance Trust Fund and the Federal Disability Insurance Trust Fund, and the taxes imposed under sections 1401(a), 3101(a), and 3111(a) of the Internal Revenue Code of 1954.

Table C-1. FEDERAL GOVERNMENT RECEIPTS AND OUTLAYS BY FUND GROUP

(In millions of dollars)

Description	1985 actual	1986 estimate	1987 estimate
RECEIPTS			
On-budget:			
Federal funds:			
Total in fund accounts	500,748	525,992	576,499
Intrafund transactions	-22,040	-21,081	-22,305
Interfund receipts from off-budget	-791	-684	-660
Proprietary receipts from the public	-18,428	-19,072	-20,242
Subtotal, Federal fund receipts	459,488	485,155	533,293
Trust funds:			
Total in fund accounts	218,163	228,498	240,033
Intrafund receipts from on-budget	-24	-11	-2
Intrafund receipts from off-budget	-3,560	-3,068	-2,813
Proprietary receipts from the public	-16,830	-18,223	-20,529
Subtotal, trust fund receipts	197,749	207,196	216,689
Interfund transactions	-109,352	-113,149	-113,884
Total on-budget receipts	547,886	579,201	636,097
Off-budget:			
Trust funds:			
Total in fund accounts	200,349	214,498	228,531
Intrafund transactions	-365	-182	-
Interfund receipts from on-budget	-13,814	-16,378	-14,256
Total off-budget (trust fund) receipts ¹	186,171	197,938	214,275
Total receipts	734,057	777,139	850,372
OUTLAYS			
On-budget:			
Federal funds:			
Total in fund accounts	767,396	791,786	794,995
Intrafund transactions	-22,040	-21,081	-22,305
Interfund receipts from off-budget	-791	-684	-660
Proprietary receipts from the public	-18,428	-19,072	-20,242
Subtotal, Federal fund outlays	726,137	750,949	751,789
Trust funds:			
Total in fund accounts	173,144	178,688	180,825
Intrafund receipts from on-budget	-24	-11	-2
Intrafund receipts from off-budget	-3,560	-3,068	-2,813
Proprietary receipts from the public	-16,830	-18,223	-20,529
Subtotal trust fund outlays	152,730	157,386	157,481
Interfund transactions	-109,352	-113,149	-113,884
Total on-budget outlays	769,515	795,185	795,386
Off-budget:			
Trust funds:			
Total in fund accounts	190,986	201,303	212,873
Intrafund transactions	-365	-182	-
Interfund receipts from on-budget	-13,814	-16,378	-14,256
Total off-budget (trust fund) outlays ¹	176,807	184,743	198,617
Total outlays	946,323	979,928	994,002

Table C-1. **FEDERAL GOVERNMENT RECEIPTS AND OUTLAYS BY FUND GROUP—Continued**

(In millions of dollars)

Description	1985 actual	1986 estimate	1987 estimate
Surplus or deficit (—):			
On-budget:			
Federal funds	— 266,648	— 265,794	— 218,496
Trust funds	45,019	49,810	59,208
Total on-budget deficit	— 221,629	— 215,984	— 159,288
Off-budget (trust funds) surplus	9,363	13,195	15,658
Total deficit	— 212,266	— 202,789	— 143,630

¹ Net of \$126 thousand of proprietary receipts from the public in 1985.

FEDERAL FUNDS

The Federal fund group is composed of the *general fund*, *special fund*, *public enterprise (revolving) fund*, and *intragovernmental fund accounts*. Intragovernmental funds include intragovernmental revolving funds and management funds. With the exception of revolving fund accounts, collections received by these accounts are normally deposited in receipt accounts, and outlays are made from expenditure accounts. In the case of revolving funds, collections are credited directly to the revolving funds. Thus, for revolving funds, outlays are reported net of receipts at the account level. The five types of appropriation (expenditure or fund) accounts and two types of receipt accounts associated with the Federal fund group are described as follows:

- General fund expenditure accounts—Appropriation accounts established to record amounts appropriated by law for the general support of Federal Government activities and the subsequent outlay of these funds.
- General fund receipt accounts—Receipt accounts credited with all collections not earmarked by law for a specific purpose. These include: taxes, customs duties, and miscellaneous receipts.
- Special fund expenditure accounts—Appropriation accounts established to record special fund amounts appropriated by law for specific programs and the subsequent outlay of the fund. Generally, if the purpose of the fund is to carry out a cycle of business-type operations, primarily with the public, it will be classified instead as a “public enterprise fund.”
- Special fund receipt accounts—Receipt accounts credited with collections that are earmarked by law for a specific purpose.
- Public enterprise revolving fund accounts—Appropriation accounts authorized to be credited with collections, primarily from outside the Government, that are earmarked to finance a continuing cycle of business-type operations.

- Intragovernmental revolving fund accounts—Appropriation accounts authorized to be credited with collections, primarily from other agencies and accounts, that are earmarked to finance a continuing cycle of business-type operations, for example: working capital funds, industrial funds, stock funds, and supply funds.
- Management fund accounts—Appropriation accounts authorized by law to credit collections from two or more appropriations to carry a common purpose or project not involving a continuing cycle of business-type operations. These accounts facilitate the administration and accounting for intergovernmental activities.

Federal fund receipts and outlays.—In 1987, the Federal fund receipts are estimated at \$533 billion and outlays are estimated at \$752 billion. Table C-2 presents the distribution of receipts by source and outlays by agency for the Federal fund group; all Federal funds are on-budget.

The Federal fund receipts shown in the table are composed of the amounts collected by the general and special funds that are governmental in nature, plus interfund receipts from on-budget trust funds. The interfund receipts included in the table are all in the category entitled “miscellaneous receipts.” Proprietary receipts from the public of the general and special funds arise from market-oriented transactions and thus are offsetting collections rather than governmental receipts.

Table C-2. FEDERAL FUND RECEIPTS AND OUTLAYS

(In millions of dollars)

Description	1985 actual	1986 estimate	1987 estimate
RECEIPTS BY SOURCE			
Individual income taxes.....	334,531	353,738	385,984
Corporation income taxes.....	61,331	70,865	86,729
Excise taxes.....	19,097	17,426	16,233
Estate and gift taxes.....	6,422	6,073	5,661
Customs duties.....	12,049	12,374	12,907
Miscellaneous receipts.....	26,058	24,679	25,779
Total receipts, Federal funds.....	459,488	485,155	533,293
OUTLAYS BY AGENCY			
Legislative branch.....	1,607	1,943	1,982
The Judiciary.....	962	1,059	1,199
Executive Office of the President.....	111	111	113
Funds appropriated to the President.....	11,905	12,766	13,998
Agriculture.....	55,375	54,148	44,600
Commerce ¹	2,110	1,975	2,000
Defense—Military ²	245,401	258,385	274,222
Defense—Civil.....	12,521	13,350	14,011
Education.....	16,682	17,840	15,442
Energy.....	10,612	10,071	10,205

Table C-2. FEDERAL FUND RECEIPTS AND OUTLAYS—Continued

(In millions of dollars)

Description	1985 actual	1986 estimate	1987 estimate
Health and Human Services, except social security.....	86,727	91,741	88,321
Housing and Urban Development	28,720	15,154	13,864
Interior	4,874	4,701	4,129
Justice.....	3,589	3,847	4,121
Labor.....	6,161	5,121	4,567
State.....	2,810	3,059	3,633
Transportation	9,198	9,519	6,252
Treasury ¹	165,879	184,550	189,160
Environmental Protection Agency	4,181	4,522	3,827
General Services Administration	— 218	40	— 39
National Aeronautics and Space Administration.....	7,251	7,341	7,478
Office of Personnel Management.....	17,700	17,345	17,653
Small Business Administration ¹	680	935	141
Veterans' Administration	25,917	26,136	25,767
Other independent agencies.....	10,925	12,240	10,870
Allowances ³			754
Undistributed offsetting receipts:			
Other interest	— 2	— 300	
Rents and royalties on the Outer Continental Shelf	— 5,542	— 5,450	— 5,280
Sale of major physical assets		— 1,200	— 1,200
Total outlays, Federal funds.....	726,137	750,949	751,789
Excess of outlays (—)	— 266,648	— 265,794	— 218,496

¹ Reflects proposed abolishment of the Small Business Administration and transfer of activities to the Departments of Commerce and Treasury in 1987.

² Includes allowances for civilian and military pay raises and other legislation for the Department of Defense.

³ Includes allowances for civilian agency pay raises, increased employing agency payments for employee retirement, and military pay raises for the Coast Guard.

Obligations.—The obligations (net) for Federal funds are estimated at \$783 billion for 1987, as set forth in table C-3. These transactions flow largely from budget authority for Federal funds of \$784 billion for the year, although some flow from prior years' budget authority.

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

(In millions of dollars)

Department or other unit	1985 actual	1986 estimate	1987 estimate
Legislative branch	1,738	1,965	2,006
The Judiciary	998	1,071	1,222
Executive Office of the President	113	108	115
Funds appropriated to the President	15,290	14,050	13,722
Agriculture	53,488	54,410	41,856
Commerce ¹	2,320	1,855	1,705
Defense—Military ²	276,937	277,989	311,119
Defense—Civil	12,457	13,440	14,191
Education	18,163	17,037	14,766
Energy.....	10,223	10,599	10,632
Health and Human Services, except social security.....	87,149	91,425	88,185
Housing and Urban Development	29,109	12,884	10,913
Interior	4,883	4,459	3,815
Justice.....	3,741	3,948	4,262

Table C-3. OBLIGATIONS INCURRED, NET, IN FEDERAL FUNDS—Continued

(In millions of dollars)

Department or other unit	1985 actual	1986 estimate	1987 estimate
Labor.....	6,627	4,877	4,436
State.....	2,960	4,176	4,431
Transportation.....	9,098	9,691	4,503
Treasury ¹	166,095	184,492	188,891
Environmental Protection Agency.....	3,993	3,138	3,893
General Services Administration.....	— 16	70	366
National Aeronautics and Space Administration.....	7,568	7,445	7,740
Office of Personnel Management.....	17,662	17,350	17,677
Small Business Administration ¹	764	868	96
Veterans Administration.....	26,049	26,470	26,333
Other independent agencies:			
Export-Import Bank.....	— 1,034	— 458	— 1,689
Federal Home Loan Bank Board.....	857	1,670	1,060
U.S. Postal Service.....	2,272	3,888	3,376
Railroad Retirement Board.....	3,336	3,689	2,916
All other independent agencies.....	5,966	6,919	6,439
Allowances:			
Coast Guard military pay raises.....			36
Civilian agency pay raises.....			403
Increased employing agency payments for employee retirement.....			331
Undistributed offsetting receipts:			
Other interest.....	— 2	— 300	
Rents and royalties on the Outer Continental Shelf.....	— 5,542	— 5,450	— 5,280
Sale of major physical assets.....		— 1,200	— 1,200
Total.....	763,263	772,574	783,265

¹ Reflects proposed abolishment of the Small Business Administration and transfer of activities to the Departments of Commerce and Treasury in 1987.

² Includes allowances for civilian and military pay raises and other legislation for the Department of Defense.

Balances of Federal fund budget authority.—Table C-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 (obligated balances) may be carried over into the next year. Unobligated balances may be carried forward in accordance with specific provisions of law, usually in order to permit completion of major procurement or construction programs that are fully funded, to provide for activities of a continuing nature (such as research and development), for loan programs, for standby emergency purposes or for reserves for losses and debt redemption.

Table C-4. FEDERAL FUND BALANCES OF BUDGET AUTHORITY

(In millions of dollars)

Department or other unit	Start 1985		End 1985		End 1986		End 1987	
	Obligated	Unobligated	Obligated	Unobligated	Obligated	Unobligated	Obligated	Unobligated
Legislative branch.....	329	448	411	390	432	218	456	193
The Judiciary.....	101	5	124	40	136	1	159	
Executive Office of the President.....	21	*	21	*	17	*	19	*

Table C-4. **FEDERAL FUND BALANCES OF BUDGET AUTHORITY—Continued**

(In millions of dollars)

Department or other unit	Start 1985		End 1985		End 1986		End 1987	
	Obligated	Unobligated	Obligated	Unobligated	Obligated	Unobligated	Obligated	Unobligated
Funds appropriated to the President.....	23,086	30,957	27,216	31,211	28,436	29,742	28,097	29,649
Agriculture.....	18,338	1,374	19,529	1,625	19,791	987	17,047	1,827
Commerce ¹	1,480	366	1,636	351	1,516	282	1,211	274
Defense—Military ²	153,253	51,526	182,564	61,390	202,168	59,847	239,065	60,258
Defense—Civil.....	767	496	699	418	789	183	969	38
Education.....	12,271	1,236	13,683	1,993	12,771	1,605	12,075	1,344
Energy.....	8,281	2,113	7,854	2,450	7,959	2,047	8,348	988
Health and Human Services, except social security.....	6,682	2,036	7,229	4,654	6,913	202	6,777	184
Housing and Urban Development.....	213,045	58,013	213,301	58,476	186,155	56,203	177,044	49,210
Interior.....	2,437	668	2,300	823	2,058	500	1,744	380
Justice.....	593	385	729	439	828	265	965	311
Labor.....	3,906	5,056	4,213	1,780	3,951	1,512	3,805	1,527
State.....	597	259	702	535	1,819	53	2,617	72
Transportation.....	9,327	2,461	8,870	2,471	9,042	1,261	7,292	211
Treasury ¹	704	28,233	905	23,654	847	15,931	942	16,093
Environmental Protection Agency.....	10,375	686	9,706	947	8,321	1,938	8,387	1,234
General Services Administration.....	839	934	970	1,244	990	1,390	1,395	392
National Aeronautics and Space Administration.....	1,321	1,001	1,631	912	1,735	766	1,996	642
Office of Personnel Management.....	151	266	113	141	118	168	143	157
Small Business Administration ¹	180	1,417	260	1,774	193	1,637	10	.....
Veterans Administration.....	3,306	2,321	3,397	2,617	3,731	2,207	4,297	1,503
Other independent agencies:								
Export-Import Bank.....	4,956	.....	3,109	439	1,977	61	687	732
Federal Home Loan Bank Board.....	1,664	4,577	1,907	3,920	3,121	2,248	4,378	1,188
Railroad Retirement Board.....	.....	6	.....	7	.....	*	.....	*
All other independent agencies.....	10,979	2,374	11,801	3,206	14,358	3,203	15,067	3,389
Allowances ³.....	.....	.....	.....	.....	.....	.....	16	.....
Total.....	488,987	199,214	524,879	207,910	520,170	184,461	545,010	171,796

*500 thousand or less.

¹ Reflects proposed abolishment of the Small Business Administration and transfer of activities to the Departments of Commerce and Treasury in 1987.² Includes balances of allowances for civilian and military pay raises and other legislation for the Department of Defense.³ Includes balances of allowances for civilian agency pay raises.

Public enterprise revolving funds.—The public enterprise funds conduct a cycle of business-type operations, primarily with the public, on behalf of the Government. These funds are usually supplied with capital from the general fund, and in a few cases they may borrow from the public or from the Federal Financing Bank (FFB). These funds also obtain capital by selling financial assets to the FFB. The transactions of the FFB are shown in intragovern-

mental revolving funds, but the FFB conducts lending on behalf of a number of the public enterprise revolving funds shown in table C-5. A table summarizing FFB transactions is published in the Treasury Department chapter of the Budget Appendix. Details of the transactions are found in the Appendix chapters for the agencies that use the FFB to finance their programs, and information on the FFB's operating expenses is included in the Treasury Department chapter.

Data on public enterprise funds are included net of collections in tables C-1 through C-4. Additional information on the gross outlays and applicable collections are shown in table C-5. Collections of public enterprise funds are estimated at \$89 billion in 1987, and gross outlays are planned to total \$113 billion, resulting in net outlays of \$25 billion.

Table C-5. PUBLIC ENTERPRISE FUND TRANSACTIONS

(In millions of dollars)

Description	Applicable collections			Gross outlays		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
Funds appropriated to the President:						
Foreign assistance	372	678	765	762	808	801
Agriculture:						
Commodity Credit Corporation	10,944	15,082	17,207	28,627	35,430	33,393
Farmers Home Administration:						
Rural housing insurance fund	6,469	3,415	3,143	8,854	6,340	4,959
Agricultural credit insurance fund	10,341	7,189	5,073	13,123	9,315	6,952
Rural development insurance fund	1,627	990	738	2,351	1,752	1,739
Federal Crop Insurance Corporation	343	333	492	644	676	607
Rural Electrification Administration	1,511	1,595	1,392	1,511	1,634	1,373
Commerce ¹	104	116	88	166	73	50
Education	319	199	772	155	194	179
Energy	3,010	3,068	3,234	2,679	2,978	3,011
Health and Human Services, except social security	58	60	48	74	84	83
Housing and Urban Development:						
Public and Indian Housing Program	930	721		14,815	1,601	1,862
Federal Housing Administration fund	3,910	4,799	5,062	3,256	3,365	3,152
Other	2,208	2,083	1,949	1,788	1,748	1,545
Interior	402	395	422	399	400	428
Transportation	329	480	283	572	1,024	383
Treasury ¹	972	165	170	415	10	3,679
General Services Administration	349	298	256	110	26	38
Small Business Administration ¹	1,589	1,391		1,604	1,674	
Veterans Administration	2,697	2,818	3,105	2,906	3,115	3,109
Other independent agencies:						
Export-Import Bank	3,654	3,385	3,449	3,270	3,229	2,494
Federal Emergency Management Agency	372	419	539	267	493	518
Federal Savings and Loan Insurance Corporation fund	3,320	1,881	1,944	3,934	2,338	1,747
Federal Home Loan Bank Board	64	38	40	64	37	40
National Credit Union Administration	1,174	561	591	319	302	298
Tennessee Valley Authority	4,669	4,789	5,103	5,584	5,207	5,636

Table C-5. PUBLIC ENTERPRISE FUND TRANSACTIONS—Continued

(In millions of dollars)

Description	Applicable collections			Gross outlays		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
All other not included above	29,998	31,858	32,754	30,026	32,219	35,208
Total	91,735	88,806	88,619	128,275	116,072	113,284
Offsetting collections from the public....	-71,406	-78,762	-83,930			
Offsetting collections from other accounts	-20,329	-10,044	-4,689			

¹ Reflects proposed abolishment of the Small Business Administration and transfer of activities to the Departments of Commerce and Treasury in 1987.

TRUST FUNDS

The trust fund group is composed of the regular *trust funds* and a few *trust revolving funds*. The regular trust funds collect certain taxes and other receipts for specified purposes, such as payment of social security benefits, in accordance with the terms of a statute or trust agreement. The two types of appropriation accounts and one type of receipt account associated with the trust fund are as follows:

- Trust fund expenditure accounts—Appropriation accounts established to record appropriated trust fund amounts that finance specific purposes or programs.
- Trust fund receipt accounts—Receipt accounts credited with collections generated by statute or the terms of a trust agreement.
- Trust revolving fund accounts—Appropriation accounts authorized to be credited with collections and used to carry out a cycle of business-type operations in accordance with a statute.

Trust revolving funds are similar to intragovernmental revolving funds and public enterprise revolving funds in that they conduct a cycle of business-type operations and their outlays are normally stated net of collections. Trust fund receipts, outlays and balances are presented in tables C-6 through C-9. Both on-budget and off-budget (social security) trust funds are shown.

Cash operations.—Trust fund receipts are estimated at \$431 billion in 1987, with outlays planned at \$356 billion, as shown in tables C-1 and C-6. This includes \$214 billion in receipts and \$199 billion in outlays for transactions of the Federal old-age and survivors insurance and disability insurance funds that are off-budget.

In fiscal years 1985-87, trust funds have excesses of receipts of the following amounts (in millions of dollars):

	1985 actual	1986 estimate	1987 estimate
Total receipts, trust funds	383,920	405,134	430,964
On-budget	(197,749)	(207,196)	(216,689)
Off-budget	(186,171)	(197,938)	(214,275)
Total outlays, trust funds	329,538	342,129	356,098
On-budget	(152,730)	(157,386)	(157,481)
Off-budget	(176,807)	(184,743)	(198,617)
Excess of receipts or outlays (—), trust funds	54,382	63,005	74,866
On-budget	(45,019)	(49,810)	(59,208)
Off-budget	(9,363)	(13,195)	(15,658)

Trust fund receipts.—Table C-7 presents information classifying the trust fund receipts by major fund, and by source for each such fund.

Trust fund outlays.—Corresponding information on trust fund outlays, classifying the data for the larger funds, is found in table C-8.

Trust fund balances.—Total balances of the trust funds continue to increase, as shown by the following figures:

	1984 actual	1985 actual	1986 estimate	1987 estimate
Open book balances	19,077	22,803	4,499	13,331
On-budget	(18,476)	(19,746)	(3,897)	(12,729)
Off-budget	(601)	(3,057)	(602)	(602)
Investments in U.S. securities:				
Public debt	241,527	292,069	372,390	439,361
On-budget	(209,647)	(255,398)	(330,656)	(381,369)
Off-budget	(31,879)	(36,671)	(41,733)	(57,992)
Agency debt	765	765	765	715
Total	261,369	315,637	377,654	453,407

A summary of the balances by fund is presented in table C-9. Included are amounts on deposit with the Treasury (open-book balances) and investments in U.S. securities. These balances include both obligated and unobligated balances. The balances on a budget authority basis differ from the cash balances because, for a few accounts, contract authority (a form of budget authority) has been provided to a trust fund in advance of receiving moneys while unappropriated receipts are included in the cash balances but are not a part of the balances of budget authority. The note to table C-9 lists these accounts and reconciles the balances on a budget authority basis with the cash balances.

For 1987, the largest net investments are expected to be those of the Federal employees retirement funds.

Table C-6. OUTLAYS AND RECEIPTS OF TRUST FUNDS

(In millions of dollars)

Description	Outlays			Receipts		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
On-budget:						
Railroad retirement trust funds.....	7,893	8,203	8,818	9,106	10,017	9,894
Black lung disability trust fund	898	959	1,010	918	957	1,010
Veterans life insurance trust funds....	1,002	1,111	1,212	1,326	1,380	1,410
Federal employees retirement funds....	23,305	24,304	24,997	40,911	42,643	46,093
Military retirement fund.....	15,789	17,644	18,014	27,426	30,955	33,702
Unemployment trust fund.....	23,826	20,803	19,971	28,592	25,400	25,411
Health insurance trust funds	71,398	74,432	77,528	75,504	81,672	89,559
Highway trust funds.....	13,263	14,649	14,472	14,328	14,423	15,080
Airport and airway trust fund.....	2,613	2,193	4,015	3,598	3,717	3,247
State and local government fiscal assistance trust fund	4,584	4,433		4,567	3,425	
Foreign military sales trust fund.....	9,792	10,500	11,100	9,649	10,800	11,300
Other trust funds (nonrevolving)	1,776	2,131	2,866	2,239	3,109	3,327
Trust revolving funds.....	-2,995	-2,675	-3,176			
Subtotal.....	173,144	178,688	180,825	218,163	228,498	240,033
Intrafund receipts from on-budget	-24	-11	-2	-24	-11	-2
Intrafund receipts from off-budget.....	-3,560	-3,068	-2,813	-3,560	-3,068	-2,813
Proprietary receipts from the public ..	-16,830	-18,223	-20,529	-16,830	-18,223	-20,529
Total on-budget	152,730	157,386	157,481	197,749	207,196	216,689
Off-budget:						
Federal old-age, survivors, and dis- ability insurance trust funds	190,986	201,303	212,873	200,349	214,498	228,531
Intrafund transactions.....	-365	-182		-365	-182	
Interfund receipts from on-budget	-13,814	-16,378	-14,256	-13,814	-16,378	-14,256
Total off-budget ¹	176,807	184,743	198,617	186,171	197,938	214,275
Total.....	329,538	342,129	356,098	383,920	405,134	430,964

¹ Net of \$126 thousand of proprietary receipts from the public in 1985.

Trust revolving funds.—The activities of the trust revolving fund subgroup are shown in table C-10. The largest of these funds are those used by the Office of Personnel Management to buy insurance for Government employees.

Trust fund obligations.—The obligations (net) for trust funds are estimated at \$360 billion for 1987, as set forth in table C-11. This includes \$200 billion in obligations (net) for transactions of the Federal old-age, survivors, and disability insurance trust funds that are off-budget.

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

[Amounts under proposed legislation are shown separately]

Description	1985 actual	1986 estimate	1987 estimate
On-budget:			
Railroad retirement trust funds:			
Social insurance taxes and contributions.....	3,605	3,535	3,633
Railroad debt repayment.....			91
Interest on Federal securities.....	191	472	560
Receipts from other trust funds.....	2,353	2,685	2,813
Other (mainly receipts of advances and Federal payments).....	2,958	3,325	2,642
Proposed legislation.....			155
Subtotal, railroad retirement trust funds....	9,106	10,017	9,894
Black lung disability trust fund:			
Excise taxes.....	581	546	580
Advances from general fund.....	336	411	448
Other receipts.....	1	*	*
Proposed legislation.....			-18
Subtotal, black lung disability trust fund....	918	957	1,010
Veterans life insurance trust funds:			
Interest on Federal securities.....	904	942	972
Other receipts.....	423	438	438
Subtotal, veterans life insurance trust funds.....	1,326	1,380	1,410
Federal employees retirement funds:			
Social insurance taxes and contributions.....	4,759	4,743	4,700
Interest on Federal securities.....	13,413	14,760	15,932
Federal payment as employer for employee retirement (including payment on prior year liabilities).....	22,737	23,137	23,425
Other receipts.....	2	2	2
Proposed legislation.....			2,034
Subtotal Federal employees retirement funds.....	40,911	42,643	46,093
Military retirement fund:			
Federal payment as employer for employee retirement.....	16,964	18,034	19,069
Federal contribution.....	9,500	10,500	11,200
Interest on Federal securities.....	962	2,421	3,433
Subtotal, military retirement fund.....	27,426	30,955	33,702
Unemployment trust fund:			
Social Security insurance taxes and contri- butions.....	25,758	23,581	23,213
Interest on Federal securities.....	1,242	1,571	1,809
Advances from the general fund.....	1,592	248	278
Proposed legislation.....			111
Subtotal, unemployment trust fund.....	28,592	25,400	25,411
Health insurance trust funds:			
Social Security insurance taxes and contri- butions.....	44,871	50,641	55,655
Premiums and other charges.....	5,562	5,771	6,569

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

(Amounts under proposed legislation are shown separately)

Description	1985 actual	1986 estimate	1987 estimate
Interest on Federal securities	3,170	4,147	5,275
Federal payment as employer for employee retirement	1,449	1,597	1,711
Other (mainly receipts of special Federal payments)	20,453	19,514	20,787
Proposed legislation		2	-438
Subtotal, health insurance trust funds	75,504	81,672	89,559
Highway trust funds:			
Excise taxes	13,015	13,022	13,191
Interest on Federal securities	1,313	1,401	1,266
Proposed legislation			623
Subtotal, highway trust funds	14,328	14,423	15,080
Airport and airway trust fund:			
Excise taxes	2,851	2,954	3,247
Interest on Federal securities	746	763	862
Proposed legislation			-862
Subtotal, airport and airway trust fund	3,598	3,717	3,247
State and local government fiscal assistance trust fund: Deposits for general revenue sharing:			
Current law	4,567	4,185	
Proposed legislation		-760	
Subtotal, state and local government fiscal assistance trust fund	4,567	3,425	
Foreign military sales trust fund	9,649	10,800	11,300
Other trust funds (nonrevolving):			
Current law	2,239	2,339	2,318
Proposed legislation		770	1,009
Subtotal	218,163	228,498	240,033
Intrafund receipts from on-budget	-24	-11	-2
Intrafund receipts from off-budget	-3,560	-3,068	-2,813
Proprietary receipts from the public	-16,830	-18,223	-20,529
Total on-budget receipts	197,749	207,196	216,689
Off-budget:			
Federal old-age, survivors, and disability insur- ance trust funds:			
Social insurance taxes and contributions	186,171	197,938	213,963
Interest on Federal securities	4,118	4,418	4,711
Federal payment as employer for employee retirement	2,509	2,843	3,177
Other (mainly receipts of special Federal payments)	7,552	9,299	6,363
Proposed legislation			317
Subtotal, Federal old-age, survivors, and disability insurance trust funds	200,349	214,498	228,531
Intrafund transactions	-365	-182	

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

[Amounts under proposed legislation are shown separately]

Description	1985 actual	1986 estimate	1987 estimate
Interfund receipts from on-budget	— 13,814	— 16,378	— 14,256
Total off-budget receipts ¹	186,171	197,938	214,275
Total receipts	383,920	405,134	430,964
On-budget	(197,749)	(207,196)	(216,689)
Off-budget	(186,171)	(197,938)	(214,275)

* \$500 thousand or less.

¹ Net of \$126 thousand of proprietary receipts from the public in 1985.Table C-8. **TRUST FUND OUTLAYS (in millions of dollars)**

[Amounts under proposed legislation are shown separately]

Description	1985 actual	1986 estimate	1987 estimate
On-budget:			
Railroad retirement trust funds:			
Benefit payments and claims	5,815	6,036	6,276
Repayment of benefit advances	2,029	2,110	2,411
Administrative expenses and other	49	57	56
Proposed legislation			74
Subtotal, railroad retirement trust funds	7,893	8,203	8,818
Black lung disability trust fund:			
Benefit payments	583	602	626
Federal administrative expenses	40	44	49
Interest on advances	275	313	353
Proposed legislation			— 18
Subtotal, black lung disability trust fund	898	959	1,010
Veterans life insurance trust funds	1,002	1,111	1,212
Federal employees retirement:			
Benefit payments and claims	22,698	23,594	24,910
Refunds to former employees	562	666	716
Administrative expenses and other	45	44	45
Proposed legislation			— 674
Subtotal, Federal employees retirement	23,305	24,304	24,997
Military retirement fund:			
Payments to beneficiaries	15,789	17,644	18,514
Proposed legislation			— 500
Subtotal, military retirement fund	15,789	17,644	18,014
Unemployment trust fund:			
Withdrawals for benefit payments	16,075	14,999	15,308
Repayment of advances from general fund	5,121	3,170	1,885
Administrative expenses and other	2,630	2,635	2,780
Proposed legislation			1
Supplemental now requested		— 1	— 3
Subtotal, unemployment trust fund	23,826	20,803	19,971
Health insurance trust funds:			
Benefit payments	69,518	72,592	77,797

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

[Amounts under proposed legislation are shown separately]

Description	1985 actual	1986 estimate	1987 estimate
Administrative expenses and other.....	1,880	1,862	1,958
Proposed legislation		-15	-2,225
Supplemental now requested.....		-6	-2
Subtotal, health insurance trust funds.....	71,398	74,432	77,528
Highway trust funds (mainly grants to States):			
Current.....	13,263	14,675	14,576
Rescission proposal		-26	-104
Subtotal, highway trust funds	13,263	14,649	14,472
Airport and airway trust fund.....	2,613	2,193	4,015
State and local government fiscal assistance trust fund: Payments for general revenue sharing:			
Current.....	4,584	4,433	760
Proposed legislation			-760
Subtotal, State and local government fiscal assistance trust fund.....	4,584	4,433	
Foreign military sales trust fund.....	9,792	10,500	11,100
Other trust funds (nonrevolving):			
Current law.....	1,776	2,131	2,683
Proposed legislation			183
Subtotal, other trust funds (nonrevolving)	1,776	2,131	2,866
Trust revolving funds:			
Current law.....	-2,995	-3,145	-2,430
Proposed legislation			-880
Rescission proposal		470	134
Subtotal, trust revolving funds	-2,995	-2,675	-3,176
Subtotal.....	173,144	178,688	180,825
Intrafund receipts from on-budget	-24	-11	-2
Intrafund receipts from off-budget.....	-3,560	-3,068	-2,813
Proprietary receipts from the public	-16,830	-18,223	-20,529
Total on-budget outlays	152,730	157,386	157,481
Off-budget:			
Federal old-age, survivors, and disability insurance trust funds:			
Benefit payments.....	184,076	194,881	206,818
Payments to other trust funds	3,924	3,250	2,813
Administrative expenses and other.....	2,985	3,172	3,242
Subtotal, Federal old-age, survivors, and disability insurance trust funds.....	190,986	201,303	212,873
Intrafund transactions.....	-365	-182	
Interfund receipts from on-budget	-13,814	-16,378	-14,256
Total off-budget outlays ¹	176,807	184,743	198,617

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

(Amounts under proposed legislation are shown separately)

Description	1985 actual	1986 estimate	1987 estimate
Total outlays	329,538	342,129	356,098
On-budget	(152,730)	(157,386)	(157,481)
Off-budget	(176,807)	(184,743)	(198,617)

¹ Net of \$126 thousand of proprietary receipts from the public in 1985.

Table C-9. TRUST FUND BALANCES

(In millions of dollars)

Description	As of Sept. 30			
	1984 actual	1985 actual	1986 estimate	1987 estimate
Federal old-age, survivors, and disability insurance trust funds (off-budget)	32,213	39,753	42,334	57,993
Railroad retirement trust funds	3,077	4,138	5,952	7,148
Black lung disability trust fund	2	2		
Veterans life insurance funds	9,393	9,718	9,982	10,181
Federal employees retirement funds	125,878	143,483	161,822	182,919
Military retirement fund		11,637	24,948	40,636
Unemployment trust fund	13,899	18,688	23,285	28,605
Health insurance trust funds	26,036	31,967	49,016	61,047
Highway trust funds	11,822	12,886	12,660	13,268
Airport and airway trust fund	6,441	7,426	8,949	8,181
State and local government fiscal assistance trust fund	1,205	1,188		
Foreign military sales trust fund	5,634	5,491	5,791	5,991
Other trust funds (nonrevolving)	3,421	3,919	4,898	6,247
Trust revolving funds	22,348	25,342	28,017	31,192
Total	261,369	315,637	377,654	453,407
On-budget	(229,156)	(275,885)	(335,320)	(395,414)
Off-budget	(32,213)	(39,753)	(42,334)	(57,993)

Note.—The following table reconciles balances on a budget authority basis with the cash balances shown above:

	1984	1985	1986	1987
Balance available on an authorization basis	286,230	345,593	409,337	484,166
Unfinanced contract authority:				
Airport and airway trust fund	-1,555	-1,728	-2,008	-2,225
Highway trust funds	-26,826	-29,636	-30,218	-28,958
Foreign military sales trust fund	-11,726	-14,588	-16,588	-17,888
Other	-22	-80	-67	-107
Unappropriated receipts:				
Available for appropriation by Congress:				
Soldiers' Home permanent fund	152	162	167	183
Airport and airway trust fund	4,565	4,596	6,034	5,344
Highway trust funds	10,089	10,941	10,516	11,162
Hazardous substance response trust fund	277	51	61	74
Inland waterways trust fund	133	172	245	296
Aquatic resources trust fund	32	128	163	139
Other	12	22	4	6
Balances lapsing			2	
Capital transfers				1,210
Retained as permanent endowment	5	5	5	5
Balance available on a cash basis	261,369	315,637	377,654	453,407

Table C-10. TRUST REVOLVING FUND TRANSACTIONS

(In millions of dollars)

Description	Offsetting collections			Gross outlays		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
Office of Personnel Management (employees' life insurance and health benefits) ..	8,404	8,815	8,952	7,466	7,851	7,712
Federal Deposit Insurance Corporation	4,484	4,655	4,565	2,542	2,997	2,665
All other trust revolving funds	721	767	798	608	715	761
Total trust revolving funds ¹	13,609	14,237	14,315	10,615	11,562	11,138
Receipts from the public	(6,647)	(7,735)	(7,177)			
Receipts from other accounts	(6,963)	(6,502)	(7,137)			

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

Table C-11. OBLIGATIONS INCURRED, NET, IN TRUST FUNDS

(In millions of dollars)

Department or other unit	1985 actual	1986 estimate	1987 estimate
Legislative Branch	3	2	3
The Judiciary	4	4	4
Funds appropriated to the President	2,863	2,013	1,301
Agriculture	1	183	133
Commerce	35	33	85
Defense—Military	82	28	74
Defense—Civil	17,269	17,800	18,136
Education	*	*	*
Energy	5	*	*
Health and Human Services, except social security	64,436	68,963	71,514
Health and Human Services, social security	178,021	185,716	199,751
Housing and Urban Development		*	*
Interior	13	223	243
Justice	—3		
Labor	24,916	21,832	21,061
State	212	233	252
Transportation	18,587	16,636	18,551
Treasury	4,556	3,296	2
Environmental Protection Agency	472	809	1,197
General Services Administration			*
National Aeronautics and Space Administration	*	*	
Office of Personnel Management	22,150	23,207	23,630
Veterans Administration	571	635	835
Federal Deposit Insurance Corporation	—2,351	—2,784	—2,945
Railroad Retirement Board	5,641	5,761	6,179
All Other Independent Agencies	16	19	15
Total	337,500	344,610	360,019
On-budget	(159,479)	(158,894)	(160,268)
Off-budget	(178,021)	(185,716)	(199,751)

*500 thousand or less.

SPECIAL ANALYSIS D

FEDERAL INVESTMENT AND OPERATING OUTLAYS

This analysis classifies Federal spending into two categories: outlays for investment, which yield long-term benefits; and outlays for operating and other purposes, which yield current benefits. In response to considerable interest in public expenditures for physical capital facilities, data on historical trends in Federal physical capital investment are provided in this analysis and are shown in the budget volume entitled *Historical Tables, Budget of the United States Government, Fiscal Year 1987*. In accordance with the requirements of the Federal Capital Investment Program Information Act of 1984 (Title II of Public Law 98-501), a supplement to this special analysis is being prepared for separate transmittal to the Congress. This supplement presents 10-year projections of Federal physical investment spending and a review of recent assessments of civilian investment needs for selected purposes.¹

This special analysis focuses on Federal outlays of an investment nature, particularly for the years 1985 through 1987. Federal investment-type outlays are made for many purposes. They range from lending, which yields a monetary return; to the acquisition of physical assets, which yield a stream of services over a period of years; to expenditures for human capital in the form of research, education, and training, which provide less tangible long-term benefits. This analysis also presents historical data on long-run trends in Federal outlays for public physical capital investment.

While the data in this analysis are shown in considerable detail, classification problems are sufficiently complex that these data are only approximate. There are several reasons for this imprecision:

- For some grants to State and local governments, the recipient jurisdiction, not the Federal Government, ultimately determines whether the grant is used to finance investment-type or current account programs. This analysis classifies all of the outlays in the category where the recipient jurisdictions are expected to spend most of the money. Hence, general revenue sharing is classified as "current" spending, although some may be spent by recipient jurisdictions on physical capital investments, whereas community development block grants are classified as investment.

¹ The "Supplement to Special Analysis D" can be obtained from Government Printing Office bookstores.

- Some spending could be classified into more than one subcategory. For example, grants for construction of education facilities finance the acquisition of physical assets, but they also contribute to the provision of education and training. To avoid double counting, the outlays are classified in the subcategory that is considered most "capital-like." Consequently, the conduct of education and training does not include the cost of education facilities, because these facilities are included in the construction and rehabilitation of physical assets category.

The order of presentation of outlays for investment begins with outlays for loans, followed by construction and rehabilitation, acquisition of major equipment, conduct of research and development, conduct of education and training, and other investments. Table D-1 summarizes Federal outlays that are classified as being of an investment nature.

Table D-1. SUMMARY OF TOTAL FEDERAL INVESTMENT-TYPE OUTLAYS, 1984-87

(In billions of dollars)

	1984	1985	1986 estimate	1987 estimate
Loans and financial investments	5.2	32.5	20.5	9.7
Construction and rehabilitation:				
National defense	4.7	5.4	5.8	5.9
Nondefense:				
Grants to State and local governments	22.7	24.4	26.0	24.1
Other	6.8	8.1	8.6	9.0
Subtotal	34.1	38.0	40.4	38.9
Acquisition of major equipment:				
National defense	63.8	72.6	78.1	79.2
Nondefense	2.6	3.6	3.9	3.8
Subtotal	66.5	76.2	82.0	83.0
Conduct of research and development:				
National defense	25.8	30.4	32.1	35.3
Nondefense	15.2	16.9	16.4	16.3
Subtotal	41.0	47.2	48.5	51.6
Conduct of education and training:				
Grants to State and local governments	10.6	11.4	11.9	11.2
Other	11.5	11.6	12.0	10.5
Subtotal	22.1	23.0	24.0	21.7
Other (including commodity inventories):				
National defense	1.1	1.2	1.0	1.2
Nondefense	6.0	6.4	4.9	0.8
Subtotal	7.2	7.6	5.9	2.0
Total	176.1	224.5	221.3	206.9

COMPOSITION OF FEDERAL INVESTMENT

Lending and financial investments.—The Federal Government conducts a wide variety of credit activities including both direct loans and loan guarantees. Federal direct loans are a form of investment because the Government acquires an income-yielding asset. However, most Federal loans are not intended to be profitable; indeed, they result in large-scale, taxpayer-financed subsidies to the loan recipients. The large reductions in net lending reflects the administration's policy of reducing the role of the Government in favor of private market lending efficiency. Direct loans are discussed in detail in both Part 5 and Part 6c of the Budget and in Special Analysis F, "Federal Credit Programs." Other financial investment includes funding for such programs as international financial institutions and acquisition of enterprise capital stock. This category also contains the expected \$1.2 billion proceeds from the sale of Conrail stock.

Construction and rehabilitation of physical assets is one of the largest components of Federal investment spending. As Table D-1 shows, the bulk of Federal outlays in this category is in the form of grants to State and local governments to finance construction or rehabilitation of physical assets, such as highways and mass transportation facilities, rather than being for assets acquired by the Federal Government itself. Special Analysis H, "Federal Aid to State and Local Governments," contains a detailed analysis of all Federal grants.

The administration proposes large-scale sales of physical assets beginning in 1987 as part of the privatization initiative. The proceeds from these sales are recorded as offsets in the *other investment* category when they are expected to occur.

Acquisition of major equipment is composed almost entirely of investment in national defense weapons systems. National defense spending is discussed in greater detail in the national defense section in Part 5 of the Budget.

Federal outlays for the *conduct of research and development* are devoted to increasing our basic scientific knowledge and meeting related Federal needs. These outlays are designed to increase our national security, to improve the marginal productivity of capital and labor for both public and private purposes, and to improve the quality of life. In recent years the defense share of these outlays has been increasing. The national defense component is estimated to rise to 68% of the total by 1987. Over the past two decades development of space-related technology has been the largest component of nondefense outlays for the conduct of research and development, but in 1982 it was overtaken by health research. The decline in outlays for space research is largely due to the conclusion of the major research and development phase for the space

shuttle. Major research and development programs are discussed in the appropriate functions in Part 5 of the Budget, and Special Analysis K, "Research and Development," discusses Federal research and development in its entirety.

Federal outlays for the *conduct of education and training* are intended to increase the knowledge and skills of our people. Most of these outlays are either grants to State and local governments to assist in the operation of educational institutions or income transfers to students under the student assistance and veterans readjustment benefits programs. Federal outlays for education and training are discussed in Part 5 of the Budget.

The *other investment* category is composed of an assortment of activities, primarily the acquisition and disposition of major commodity inventories such as agricultural products for the farm price support program and oil for the strategic petroleum reserve. The administration proposes the sale of the naval petroleum reserve and the power marketing administrations. The sale of the naval petroleum reserve is slated to begin in 1987, while the power marketing administration's sale will start in 1988. Other programs include Census Bureau activities designed to develop our national information base and foreign assistance programs designed to promote international development.

FEDERAL INVESTMENT IN PUBLIC WORKS AND RELATED ASSETS

The budget documents have traditionally contained a significant amount of historical information that could be used to analyze major trends affecting specialized segments of Federal investment-type spending. For example, historical data for education and training outlays are available as part of the functional tabulations, historical data on credit are shown in Special Analysis F, historical data on grants appear in Special Analysis H, and historical data on research and development are published in Special Analysis K.

This section includes material from the historical data base on Federal outlays for public physical capital investment. Table D-2 shows Federal outlays for public physical investment at 5-year intervals from 1960 to 1980 and annually from 1980 to 1987; Table D-3 displays the same data in constant 1982 prices and as a percent of the gross national product (GNP). These tables include almost all Federal outlays for construction and rehabilitation and for acquisition of major equipment. However, they are limited to providing data on public physical capital acquisition. Therefore, they exclude investment in commodity inventories and the relatively small amount of outlays (such as ship construction subsidies) that is used for private physical investment.

The data in these tables indicate that:

- National defense physical capital investment is estimated to continue to increase through 1987 in current dollars but in real terms (adjusted for inflation) defense physical capital investment peaks in 1986. The constant dollar totals are now well above the lowest levels immediately before and after the Vietnam War and in 1986 are projected to surpass the levels immediately after the Korean War.
- Direct Federal investment in nondefense physical assets is at relatively high historical levels, but expected to decline in 1987. A major reason for the decline is the expected sale of the naval petroleum reserve.
- Grants for physical capital investment grew rapidly in real terms and as a percent of GNP between 1950 and 1965. Between 1965 and 1980 grants for this purpose grew overall in real terms and were roughly level as a percent of GNP. However, the composition shifted significantly. Transportation grants were roughly constant in real terms while declining as a percent of GNP; in contrast, other grants grew rapidly. Starting in 1983 there was a major increase in transportation grants due to enactment of the Surface Transportation Assistance Act of 1982. Grants for physical capital investment are also expected to peak in 1986 and decline in 1987.

Table D-2. FEDERAL OUTLAYS FOR MAJOR PUBLIC PHYSICAL CAPITAL INVESTMENT ¹

(In billions of dollars)

	1960	1965	1970	1975	1980	1981	1982	1983	1984	1985	1986 estimate	1987 estimate
Assets acquired by the Federal Government:												
National defense:												
Military procurement.....	13.3	11.8	21.6	16.0	29.0	35.2	43.3	53.6	61.9	70.3	75.7	76.7
Military construction and family housing.....	2.1	1.3	1.3	1.8	2.4	2.4	2.9	3.4	3.6	4.4	4.7	4.8
Atomic energy defense.....	1.7	1.1	0.7	0.9	1.5	2.0	2.6	3.1	3.9	4.5	4.5	4.8
Subtotal, national defense.....	17.2	14.2	23.6	18.7	33.0	39.6	48.8	60.1	69.4	79.2	84.9	86.3
Nondefense:												
Construction and rehabilitation:												
Water and power projects.....	1.0	1.4	1.5	3.0	4.6	4.9	4.4	4.6	3.9	4.6	4.7	5.0
Other.....	0.8	1.4	0.8	1.4	2.7	2.8	2.8	2.5	3.3	3.5	4.0	4.0
Acquisition of major equipment.....	0.1	0.2	0.2	0.4	0.7	1.0	1.3	0.8	2.6	3.6	3.8	3.8
Sale of physical assets.....												-1.2
Subtotal, nondefense.....	1.9	3.0	2.5	4.8	8.1	8.8	8.5	8.0	9.8	11.7	12.5	11.6
Total Federal assets.....	19.1	17.3	26.1	23.5	41.1	48.3	57.2	68.1	79.2	91.0	97.4	97.8
Grants to State and local governments for physical capital investment:												
Transportation:												
Highways.....	2.9	4.0	4.3	4.6	9.0	8.8	7.7	8.8	10.4	12.7	13.7	13.2
Urban mass transportation and airports.....	0.1	0.1	0.2	1.0	2.6	3.1	2.9	3.2	3.8	3.2	4.0	3.7
Community and regional development.....	0.1	0.6	1.6	2.5	5.8	5.6	5.2	4.7	4.9	5.0	4.9	4.2
Natural resources and environment:												
Pollution control facilities.....	*	0.1	0.2	1.9	4.3	3.9	3.8	3.0	2.6	2.9	2.9	2.5
Other.....	*	0.1	0.2	0.3	0.6	0.6	0.3	0.6	0.7	0.7	0.6	0.6
All other ²	0.1	0.2	0.6	0.5	0.2	0.2	0.3	0.2	0.3	0.4	0.4	0.3
Total grants for physical capital investment ²	3.3	5.0	7.1	10.9	22.5	22.1	20.2	20.5	22.7	24.9	26.4	24.5

Total public assets financed by the Federal Government	22.4	22.3	33.2	34.4	63.5	70.5	77.4	88.6	101.9	115.9	123.9	122.3
Memorandum												
National defense.....	17.2	14.2	23.6	18.7	33.1	39.6	48.8	60.2	69.4	79.3	85.0	86.3
Nondefense.....	5.2	8.0	9.6	15.7	30.5	30.9	28.6	28.5	32.5	36.6	38.9	36.0

¹ Excludes outlays for private asset acquisition (such as ship construction subsidies) and major commodity inventories (agricultural commodities and the strategic petroleum reserve).

² Includes National Guard shelters and civil defense grants classified in the national defense function.

*\$50 million or less.

Table D-3. SUMMARY COMPARISONS OF FEDERAL OUTLAYS FOR MAJOR PUBLIC PHYSICAL CAPITAL INVESTMENTS

	1960	1965	1970	1975	1980	1981	1982	1983	1984	1985	1986 estimate	1987 estimate
In billions of constant (fiscal year 1982) dollars												
Assets acquired by the Federal Government:												
National defense.....	51.7	40.4	55.8	33.1	40.2	43.3	48.8	57.5	64.5	72.3	75.4	73.9
Nondefense.....	5.9	8.7	6.1	8.2	9.1	9.3	8.5	8.0	9.8	11.6	12.0	10.7
Subtotal.....	57.6	49.1	61.9	41.3	49.4	52.6	57.2	65.5	74.3	83.9	87.4	84.6
Grants to State and local governments for physical capital investment:												
Transportation	11.0	14.2	12.4	9.4	12.7	12.2	10.7	11.9	13.7	14.6	15.7	14.4
Community and regional development	0.4	2.0	4.5	4.2	6.3	5.7	5.2	4.7	4.7	4.6	4.3	3.6
Natural resources and environment	0.3	0.6	1.0	3.8	5.4	4.6	4.1	3.5	3.2	3.3	3.1	2.6
All other	0.5	0.5	1.5	0.9	0.3	0.3	0.2	0.2	0.2	0.4	0.4	0.3
Subtotal grants.....	12.2	17.3	19.4	18.3	24.6	22.7	20.2	20.3	22.0	22.9	23.5	20.9
Total	69.8	66.4	81.3	59.6	73.9	75.4	77.4	85.8	96.3	106.8	110.8	105.5

Table D-3. SUMMARY COMPARISONS OF FEDERAL OUTLAYS FOR MAJOR PUBLIC PHYSICAL CAPITAL INVESTMENTS—Continued

	1960	1965	1970	1975	1980	1981	1982	1983	1984	1985	1986 estimate	1987 estimate
As a percent of Gross National Product												
Assets acquired by the Federal Government:												
National defense.....	3.38	2.11	2.38	1.23	1.24	1.32	1.55	1.81	1.88	2.01	2.03	1.90
Nondefense.....	0.38	0.45	0.26	0.32	0.30	0.29	0.27	0.24	0.27	0.30	0.30	0.28
Subtotal.....	3.76	2.56	2.64	1.55	1.54	1.61	1.82	2.05	2.15	2.31	2.33	2.18
Grants to State and local governments for physical capital investment:												
Transportation.....	0.59	0.61	0.46	0.37	0.43	0.40	0.34	0.36	0.38	0.40	0.42	0.37
Community and regional development.....	0.02	0.09	0.16	0.16	0.22	0.19	0.16	0.14	0.13	0.13	0.12	0.09
Natural resources and environment.....	0.02	0.02	0.04	0.15	0.18	0.15	0.13	0.11	0.09	0.09	0.08	0.07
All other.....	0.03	0.02	0.06	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Subtotal.....	0.65	0.74	0.71	0.71	0.84	0.74	0.64	0.62	0.61	0.63	0.63	0.54
Total.....	4.41	3.31	3.35	2.26	2.38	2.36	2.46	2.67	2.76	2.94	2.95	2.72

CALCULATIONS OF NET FEDERAL AND FEDERALLY FINANCED
NONDEFENSE PUBLIC PHYSICAL CAPITAL INVESTMENT

For many years, data on the estimated value of most forms of both public and private physical capital—roads, factories, housing, etc.—have been developed by the Department of Commerce and published in the *Survey of Current Business*. (See, for example, pp. 54–59 of the August 1984 issue.) However, the Commerce data on the net capital stock and net investment are not directly linked to the Federal budget and do not include estimates for the years covered by the budget. In response to requests that the budget provide data on net public investment, the historical data base for Federal nondefense physical capital investment and grants to State and local governments for physical capital investment was extended back to 1915 by broad category. These data were then converted to constant prices to approximate replacement costs and depreciated by the straight-line basis. The end product is a price adjusted estimate of federally financed public net investment.

The data for nondefense public investment spending are in two categories: direct Federal investment and investment financed by grants to State and local governments. Direct investment results in Federal ownership of real property, while most investment made through Federal grants is owned by the State or local governments receiving the grants.

The historical data were adjusted to constant fiscal year 1986 dollars using price deflators for Federal nondefense capital purchases. The 1970–87 portion of the resulting constant dollar series is shown as new investment in Table D-4. These constant dollar historical data were then depreciated on a straight-line basis over the following assumed useful lives: 40 years for investments financed by grants; 46 years for direct investment in water and power projects; 30 years for all other nondefense construction and rehabilitation; and 16 years for major equipment.

Table D-4 shows the capital depreciation that results from these life-spans. The difference between new investment and depreciation is shown as net investment. Because of space constraints, only net figures are shown for some of the components.

Table D-4. COMPOSITION OF NEW AND NET FEDERAL AND FEDERALLY FINANCED INVESTMENT IN NONDEFENSE PUBLIC PHYSICAL CAPITAL IN CONSTANT (1986) PRICES

(In billions of dollars)

Year	Total investment			Net direct Federal investment			Investment financed from Federal grants-in-aid						
	New	Depreciation	Net	Total	Water and power	Other	New	Depreciation	Net	Composition of net investment			
										Transportation (mainly highways)	Community and regional development	Natural resources and environment	Other
1970	23.9	11.5	12.4	1.3	1.1	0.2	17.6	-6.5	11.1	6.9	3.0	0.2	1.0
1971	25.6	12.0	13.6	1.9	1.6	0.3	18.6	-6.9	11.7	6.8	3.4	0.8	0.7
1972	27.1	12.6	14.5	2.9	1.9	1.0	19.0	-7.4	11.6	6.4	3.9	0.6	0.6
1973	29.0	13.2	15.8	3.1	1.7	1.5	20.5	-7.8	12.6	7.0	3.9	1.3	0.4
1974	30.0	13.9	16.1	3.0	1.9	1.1	21.4	-8.3	13.1	5.9	3.7	3.1	0.5
1975	27.8	14.4	13.3	2.7	2.2	0.5	19.2	-8.6	10.6	4.4	2.8	3.1	0.4
1976	31.2	14.9	16.2	2.7	2.2	0.5	22.5	-8.9	13.5	6.5	3.0	3.6	0.3
TQ	8.8	3.9	4.9	0.7	0.6	0.1	6.5	-2.3	4.2	1.6	1.1	1.4	0.1
1977	34.8	15.5	19.3	3.0	2.7	0.3	25.6	-9.3	16.3	6.0	4.9	5.1	0.2
1978	37.6	16.2	21.5	3.7	2.9	0.9	27.5	-9.8	17.7	5.6	8.0	4.3	-0.1
1979	38.1	16.8	21.3	4.1	3.0	1.0	27.4	-10.2	17.2	6.3	6.4	4.7	-0.2
1980	36.1	17.4	18.7	2.8	1.8	0.9	26.5	-10.7	15.9	6.9	4.8	4.6	-0.4
1981	34.3	18.2	16.1	2.8	1.7	1.1	24.6	-11.2	13.3	6.1	4.0	3.6	-0.4
1982	29.9	18.8	11.0	1.8	0.8	1.0	21.0	-11.8	9.3	3.7	3.1	2.8	-0.4
1983	29.7	19.5	10.3	1.1	1.0	0.2	21.4	-12.3	9.1	4.8	2.5	2.2	-0.4
1984	33.7	20.2	13.5	2.8	0.1	2.6	23.5	-12.8	10.7	6.7	2.6	1.8	-0.3
1985	37.7	20.2	16.5	4.4	0.8	3.6	25.6	-13.4	12.1	8.0	2.5	2.0	-0.3
1986	38.9	22.1	16.7	4.4	0.6	3.8	26.4	-14.0	12.3	8.8	2.1	1.7	-0.3
1987	35.9	22.9	13.0	4.0	0.8	3.2	23.6	-14.6	9.0	7.0	1.2	1.1	-0.3

D-10

THE BUDGET FOR FISCAL YEAR 1987

These data have a substantial margin of estimating error. The sources of error include:

- *The extended historical outlay series.*—The historical data series was extended back from 1940 to 1915 using data from published budget documents. There are no specific outlay data on nondefense physical capital investment for this period, and estimates were made on the basis of program authorizations.
- *Replacement cost estimates.*—The replacement cost of the Federal stock of nondefense physical capital has increased through time. Unfortunately, the rate of increase is not known exactly. For this presentation, an estimate of replacement costs in 1986 prices was made through the application of a deflator series for Federal purchases of durables and structures indexed to 1986 prices. There are no specific price indexes for Federal purchases of durables and structures for 1915 through 1929, and estimates were made on the basis of Census Bureau historical statistics on constant price public capital formation.
- *Depreciation estimates.*—The assumed useful lives for each of the categories of nondefense physical capital investment are necessarily very uncertain. Since they are for broad classes of investment, they do not apply to specific cases. Also, straight-line depreciation may not be the most accurate method to apply to the different categories of Federal nondefense physical capital investment.

Hence, the data should be viewed as approximations only—not precise estimates.

The data in Table D-4 show that net investment, adjusted for inflation, rose between 1970 and 1978 and then declined. They also show that the decline in net investment between 1978 and 1987 greatly exceeds the decline in new investment. This difference is explained by the pattern in the depreciation column. With the passage of time, the capital stock is larger and depreciation is correspondingly larger. Depreciation is especially affected by the relatively high investment years of the 1970's and early 1980's. In previous years, depreciation was largely based on the relatively low investments of the 1940's and 1950's. In 1983 for example, while new investment in constant prices was 24% higher than the 1970 total, net investment was 17% lower.

The division between direct Federal physical capital investment and grants for investment—both on a gross and a net basis—has changed substantially over time. Before the mid-1950's, new direct nondefense investment exceeded grants for investment, but by the decade between 1970 and 1980, grants-in-aid for investment exceeded nondefense investment by a ratio of 2.6 to 1. As a consequence of the much slower rate of growth of direct investments, for the

period during 1970 to 1987, the net capital formation (new investments less depreciation) financed by grants-in-aid was about four times greater than the net capital formation for stocks directly owned by the Federal Government.

Federal grants for transportation facilities and equipment—predominantly highway but also mass transit and airport grants—were the most prevalent form of Federal grants-in-aid for physical facilities. Over the period from 1970 to 1981, transportation grants were 39% of total new investment. Both new and net grants for transportation increase substantially from 1982 to 1986 due largely to the expansion financed by the Surface Transportation Assistance Act of 1982, which expires at the end of 1986. The administration proposes reauthorization legislation that limits budget authority and planned obligations to anticipated highway user fee receipts from the public and thus reduces new transportation grants by \$1.3 billion in 1987. The constant dollar decline in all other grants for physical facilities is attributable to the general policy of fiscal restraint proposed by the administration.

DETAILED DATA PRESENTATION

The succeeding tables in this analysis distribute total Federal Government outlays into a number of different classifications, focusing on the size and composition of investment-type spending but also showing the composition of non-investment outlays. They provide two basic displays of Federal spending. Table D-5 is a summary table showing the data split between national defense spending and civil (i.e., nondefense) spending (Table D-7 provides detailed data for the same categories). Table D-6 is a summary table identifying the grants and loans to State and local governments separately from all other Federal outlays (Table D-8 provides details).

The classification structure used in compiling this information is designed primarily to distinguish investment-type outlays from current outlays and to disaggregate the investment-type spending. Consequently, it does not provide information for other purposes, such as the total outlays or other forms of assistance affecting particular sectors of the economy. For example, the category “aids to agriculture, commerce, and transportation” includes current benefits, such as subsidies for operating expenses of air, water, and rail transportation; it does not include related subsidies for the construction of private merchant ships, which are investment-type outlays included under “acquisition of major equipment.” Nor does it include assistance provided by the Federal Government through loan guarantees, tax expenditures, other provisions of the tax code, or the privately owned, Government-sponsored enterprises. Although they are not quantified in this analysis, these tools are also methods by which the Federal Government affects the amount and

composition of public and private investment. Federally guaranteed loans, for example, are substitutes for direct loans and can result in the creation of certain assets in place of others.²

CURRENT PROGRAM TRENDS

Investment-type programs.—Investment-type outlays are estimated to decrease from \$224.5 billion in 1985 to \$221.3 billion in 1986 and decline further to \$206.9 billion in 1987. A total of \$9.7 billion in 1987 outlays are for loans and financial investments, \$121.9 billion are for the acquisition, construction, or rehabilitation of physical assets, and \$75.3 billion are for the conduct of education, training, research, and development and for other investment-type programs. Defense investment-type outlays, which account for 59% of total investment-type outlays in 1987, are primarily for the acquisition of major equipment and other physical assets and for the conduct of research and development. Civil programs are primarily for construction and rehabilitation of physical assets, the conduct of education and training, and the conduct of research and development.

Loans and financial investments.—A loan involves a disbursement of cash or an increase in liabilities in exchange for financial assets. If the loans are made at competitive market rates, the market value of the assets is equal to the outlays. Federal loans are made at lower rates than comparable private lending, although the budget proposes to significantly narrow this gap for some programs. Therefore, the non-Federal borrowing is subsidized, and the outlay exceeds the value of the asset created. See Special Analysis F, "Federal Credit Programs" for a discussion of Federal credit subsidies and estimates of the amount of subsidy by program in 1985. For domestic loans, the Government's asset is matched by the liability of the private sector—but to the extent that the loan is subsidized, the asset is worth less than its face value (or cost). Hence, when Federal loan assets are sold, they frequently are heavily discounted to cover the subsidy loss. Most Federal domestic loans finance the acquisition or improvement of either physical assets or human capital. Loans to foreign borrowers are an increase in financial assets held by the United States. Most foreign loans are for economic development programs or for the promotion of U.S. exports, including military equipment and farm commodities. In 1985, loan volume was enlarged by a one-time changeover of financing for low-rent public housing that converted large scale loan guarantees into direct loans. The category "other financial investments" includes an estimated collection of \$1.2 billion in proceeds from the sale of Conrail in 1986.

² See Special Analysis F, "Federal Credit Programs."

Table D-5. SUMMARY OF INVESTMENT, OPERATING, AND OTHER FEDERAL OUTLAYS

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
National defense:			
Investment-type programs:			
Construction and rehabilitation.....	5,396	5,797	5,853
Acquisition of major equipment and other physical assets.....	73,692	78,904	80,295
Conduct of research and development.....	30,360	32,131	35,282
Other investment-type programs.....	1,481	627	151
Subtotal, investment-type programs.....	110,929	117,459	121,581
Current programs:			
Provision of benefits.....	99	101	126
Repair, maintenance, and operation of physical assets.....	74,820	76,376	83,117
Other current programs.....	66,874	72,078	77,606
Subtotal, current programs.....	141,793	148,555	160,849
Unclassified.....	26	-187	-191
Total, national defense.....	252,748	265,827	282,238
Civil:			
Investment-type programs:			
Loans and financial investments.....	31,142	20,096	9,763
Construction and rehabilitation.....	32,564	34,606	33,062
Acquisition of major equipment.....	3,611	3,851	3,755
Conduct of research and development.....	16,855	16,365	16,272
Conduct of education and training.....	22,995	23,951	21,695
Commodity inventories and other physical assets.....	2,093	674	-3,127
Other investment-type programs.....	4,291	4,273	3,926
Subtotal, investment-type programs.....	113,552	103,816	85,346
Current programs:			
Provision of benefits:			
On-budget.....	(231,796)	(240,175)	(242,451)
Off-budget.....	(185,648)	(195,446)	(206,818)
Subtotal, provision of benefits.....	417,444	435,621	449,269
Administrative expenses of benefit programs:			
On-budget.....	(10,429)	(10,686)	(11,410)
Off-budget.....	(2,187)	(2,472)	(2,566)
Subtotal, administrative expense.....	12,616	13,158	13,976
Social services and related programs.....	8,345	8,211	7,970
Aids to agriculture, commerce, and transportation.....	23,484	21,766	26,593
Repair, maintenance, and operation of physical assets.....	1,795	2,470	2,903
General purpose fiscal assistance.....	6,861	6,472	1,973
Regulation, control, and law enforcement.....	9,564	10,490	9,397
Net interest:			
On-budget.....	(133,554)	(147,158)	(152,713)
Off-budget.....	(-4,118)	(-4,418)	(-4,716)
Subtotal, net interest.....	129,436	142,740	147,996
Other current programs.....	11,984	11,673	11,843
Subtotal, current programs.....	621,529	652,600	671,919
Unclassified:			
On-budget.....	(-39,778)	(-41,592)	(-45,137)
Off-budget.....	(-1,728)	(-723)	(-364)
Subtotal, unclassified.....	-41,506	-42,315	-45,501
Total, civil.....	693,575	714,101	711,764

Table D-5. SUMMARY OF INVESTMENT, OPERATING, AND OTHER FEDERAL OUTLAYS—Continued

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Outlay total	946,323	979,928	994,002
<i>On-budget</i>	(769,515)	(795,185)	(795,386)
<i>Off-budget</i>	(176,807)	(184,743)	(198,617)

Physical assets.—The benefits provided by the *construction and rehabilitation of physical assets* and by the *acquisition of major equipment* are of a long-term nature, while *commodity inventories* are for reserves or stockpiles rather than direct current use. Federal outlays designed specifically to finance the purchase of such assets are treated as investment-type outlays regardless of whether the asset is purchased by the Federal Government or by State, local, or private entities. Total outlays for physical assets—including acquisition of major commodity inventories—are estimated at \$119.8 billion in 1987; of that amount \$86.1 billion is for national defense. Most national defense outlays for physical assets are for the procurement of military equipment. About two-thirds of estimated Federal outlays for nondefense physical assets in 1987 are in the form of grants-in-aid to State and local governments, especially for construction programs such as for highways, mass transit, and pollution control facilities. The *other physical assets* category includes an estimated \$1.2 billion offsetting collection from the sale of the naval petroleum reserve in 1987.

Since the purpose of Tables D-2 and D-3 is to provide information about outlays for investment in public physical assets, to the extent feasible the data on investment in private physical assets were excluded from these tables. Commodity inventories include crops acquired as part of the farm price support program and also oil purchases for the strategic petroleum reserve. As noted above, these inventories are also excluded from the investment data in Tables D-2 and D-3.

Conduct of research and development.—Research and development increases the Nation's base of information and knowledge. Outlays are estimated at \$51.6 billion in 1987. The entire increase in 1987 over 1986 is for national defense. Nondefense outlays for the conduct of research and development decline by 2 percentage points from 1986 to 1987, and account for 32% of all research and development outlays in 1987. Within the total spending for research and development there is a continuing increase in 1987 for basic research, with emphasis on the support of research in the physical sciences. See Special Analysis K, "Research and Development" for additional details.

Table D-6. SUMMARY OF FEDERAL OUTLAYS FOR GRANTS-IN-AID, LOANS, AND DIRECT FEDERAL PROGRAMS

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Grants-in-aid:			
Investment-type programs:			
Construction, rehabilitation, and acquisition of physical assets	24,875	26,443	24,516
Conduct of education and training	11,447	11,918	11,189
Other investment-type programs	239	213	163
Subtotal, investment-type programs	36,560	38,573	35,867
Current programs:			
Provision of benefits	46,989	48,791	46,050
Administrative expenses of benefit programs	5,662	5,891	6,473
Social service and related programs	7,518	7,253	7,055
Aids to agriculture, commerce, and transportation	1,075	453	584
General purpose fiscal assistance	6,948	6,556	2,040
Regulation, control, and law enforcement	499	584	596
Other current programs	646	700	430
Subtotal, current programs	69,337	70,229	63,228
Total, grants-in-aid	105,897	108,802	99,094
Direct Federal programs:			
Investment-type programs:			
Loans and financial investments	32,458	20,540	9,739
Construction and rehabilitation of physical assets	13,473	14,386	14,798
Acquisition of major equipment	76,205	81,952	82,998
Acquisition of commodity inventories and other physical assets	2,803	1,051	- 2,473
Conduct of research and development	47,000	48,284	51,392
Conduct of education and training	11,564	12,046	10,514
Other investment-type programs	4,417	4,443	4,093
Subtotal, investment-type programs	187,920	182,702	171,060
Current programs:			
Provision of benefits:			
On-budget	(184,923)	(191,494)	(196,526)
Off-budget	(185,648)	(195,446)	(206,818)
Subtotal, provision of benefits	370,570	386,940	403,344
Administrative expenses of benefit programs:			
On-budget	(4,767)	(4,796)	(4,937)
Off-budget	(2,187)	(2,472)	(2,566)
Subtotal, administrative expenses of benefit programs	6,954	7,268	7,503
Social services and related programs	811	949	915
Aids to agriculture, commerce, and transportation	22,409	21,312	26,009
Repair, maintenance, and operation of physical assets	76,188	78,323	85,685
Regulation, control, and law enforcement	9,066	9,905	8,800
Net interest:			
On-budget	(133,554)	(147,158)	(152,713)
Off-budget	(- 4,118)	(- 4,418)	(- 4,716)
Subtotal, net interest	129,436	142,740	147,996
Other current programs	78,551	83,489	89,287
Subtotal, current programs	693,986	730,926	769,540
Unclassified:			
On-budget	(- 39,753)	(- 41,779)	(- 45,329)
Off-budget	(- 1,728)	(- 723)	(- 364)
Subtotal, unclassified	- 41,480	- 42,502	- 45,693

Table D-6. SUMMARY OF FEDERAL OUTLAYS FOR GRANTS-IN-AID, LOANS, AND DIRECT FEDERAL PROGRAMS—Continued

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Total, direct Federal programs.....	840,426	871,126	894,908
Outlay total.....	946,323	979,928	994,002
<i>On-budget.....</i>	<i>(769,515)</i>	<i>(795,185)</i>	<i>(795,386)</i>
<i>Off-budget.....</i>	<i>(176,807)</i>	<i>(184,743)</i>	<i>(198,617)</i>

Conduct of education and training.—Outlays classified in this category are designed to add to the stock of human capital by developing a more skilled and productive labor force. These outlays are largely for direct payments to individuals, such as income transfers to post-secondary students and for grants to institutions and to State and local governments. Outlays are estimated at \$21.7 billion in 1987, of which \$11.2 billion are grants to State and local governments.

Collection of information.—This category includes outlays for collection of information, such as censuses and topographic or other natural resource surveys. Outlays are estimated at \$1.6 billion in 1987.

International development.—Foreign assistance for general international economic development, other than loans, is included in this category. These outlays, which are expected to benefit U.S. interests by enhancing the economic development of friendly foreign nations, are estimated to be \$2.4 billion in 1987.

Current programs.—Programs that provide benefits in the current year are divided into several subcategories as briefly discussed below. Some outlays classified as current may in part be used by their recipients for investment-type purposes. However, the principal effect of these outlays—such as unemployment compensation and retirement payments—is to provide benefits that will be used for current purposes such as consumption and operating expenses rather than for future purposes. Total outlays for current programs are 84% of 1987 estimated outlays, with \$160.8 billion for defense programs and \$671.9 billion for civil programs.

“Provision of benefits” is the largest of current outlay category. Total outlays in this category are estimated to increase from \$435.7 billion in 1986 to \$449.4 billion in 1987. Social security and disability benefits, which are now off-budget, constitute the largest element in this category; they are estimated to total \$206.8 billion in 1987. The Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177) shifted all of the formerly off-budget

entities on-budget and converted the Federal old age and survivors insurance and disability insurance trust funds to off-budget. Other major outlays in this category include medicaid, medicare, civil service and military retirement, veterans disability, unemployment compensation, and food and nutrition programs.

Current outlays for "social services and related programs" are those for human development and child welfare services and employment programs. Outlays in 1987 are estimated to be \$8.0 billion, of which \$7.1 billion are for grants to State and local governments.

"Aids to agriculture, commerce, and transportation" include price support subsidies and small business and transportation programs. Outlays for these programs are estimated to decrease from \$23.5 billion in 1985 to \$21.8 billion in 1986 and then rise to \$26.6 billion in 1987.

Other current outlays are largely for operation of the Federal Government, including the repair, maintenance, and operation of physical assets (primarily defense related); regulation and law enforcement; net interest; and other administrative or operating expenses. These outlays are \$334.8 billion or an estimated 34% of budget outlays in 1987. Because proprietary receipts from the public—such as receipts from the sale of electric power, the sale of publications and reproductions, and the sale of timber and other natural land products—are offsets against the outlays to which they most nearly apply, net outlays are negative in some cases.

Unclassified.—The unclassified category includes much of the undistributed offsetting receipts, most payments from the Government to itself, and the associated offsetting collections. Outlays for this category are estimated to be —\$45.7 billion in 1987.

Table D-7. INVESTMENT, OPERATING, AND OTHER FEDERAL OUTLAYS

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
National defense investment-type programs			
Construction and rehabilitation of physical assets:			
Military construction	4,135	4,402	4,454
Family housing	321	357	402
Atomic energy defense activities	940	1,038	996
Subtotal, construction and rehabilitation of physical assets	5,396	5,797	5,853
Acquisition of major equipment:			
Procurement	70,325	75,702	76,652
Atomic energy defense activities and other	2,269	2,399	2,590
Subtotal, acquisition of major equipment	72,594	78,101	79,242
Other physical assets	1,098	803	1,053
Conduct of research and development:			
Defense military	28,165	29,831	32,763
Atomic energy and other	2,195	2,300	2,519
Subtotal, research and development	30,360	32,131	35,282
Other investment-type programs	1,481	627	151
Subtotal, investment-type programs	110,929	117,459	121,581
National defense current programs			
Provision of benefits	99	101	126
Repair, maintenance, and operation of physical assets:			
Department of Defense, Military	74,536	76,085	82,810
Other	284	291	306
Subtotal, repair, maintenance, and operation of physical assets	74,820	76,376	83,117
Other current programs:			
Military personnel	66,782	70,311	72,466
Other national defense	92	1,767	5,140
Subtotal, other current programs	66,874	72,078	77,606
Subtotal, current programs	141,793	148,555	160,849
Unclassified	26	- 187	- 191
Total, national defense	252,748	265,827	282,238
Civil investment-type programs			
Loans:			
International affairs	4,673	4,973	6,749
Agriculture	8,600	10,282	2,579
Mortgage credit and deposit insurance	2,198	1,839	- 327
Aids to commerce	357	352	- 776
Transportation	317	430	111
Disaster relief	- 397	- 280	- 1,282
Other community and regional development	486	363	83
Education	772	974	- 252
Other	13,184	1,134	1,269

Table D-7. INVESTMENT, OPERATING, AND OTHER FEDERAL OUTLAYS—Continued

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Subtotal, loans.....	30,191	20,066	8,152
Other financial investments:			
International development.....	881	1,189	1,574
Other.....	71	-1,159	36
Subtotal, other financial investments.....	951	30	1,610
Construction and rehabilitation of physical assets:			
Highways.....	12,689	13,691	13,186
Mass transportation.....	2,420	3,177	2,876
Rail transportation.....	181	209	135
Air transportation.....	870	840	855
Water transportation.....	230	230	165
Community development block grants.....	3,817	3,575	3,099
Urban development action grants.....	497	488	413
Other community and regional development.....	834	965	823
Pollution control and abatement.....	3,112	3,100	2,900
Water resources.....	2,170	2,187	2,323
Other natural resources and environment.....	985	929	868
Energy.....	2,611	2,611	2,753
Veterans hospitals and other health facilities.....	757	791	884
Other.....	1,393	1,812	1,783
Subtotal, construction and rehabilitation of physical assets.....	32,564	34,606	33,062
Acquisition of major equipment:			
Transportation.....	801	1,037	1,152
Space flight, control and data communications.....	1,555	1,128	956
General science and basic research.....	123	119	137
Postal Service.....	300	499	471
Other.....	832	1,068	1,038
Subtotal, acquisition of major equipment.....	3,611	3,851	3,755
Commodity inventories and other physical assets:			
Commodity inventories:			
Agriculture.....	-2,075	-2,051	-3,574
Other.....	1,651	281	16
Subtotal, commodity inventories.....	-423	-1,769	-3,558
Other physical assets.....	2,517	2,444	431
Subtotal, commodity inventories and other physical assets.....	2,093	674	-3,127
Conduct of research and development:			
General science, space and technology:			
NASA.....	2,410	2,968	3,176
NSF.....	1,182	1,343	1,460
Other general science.....	510	520	600
Subtotal, general science, space, technology.....	4,102	4,831	5,236
Department of Energy.....	4,249	2,384	2,002
Transportation:			
Department of Transportation.....	467	471	408
NASA.....	559	537	571

Table D-7. INVESTMENT, OPERATING, AND OTHER FEDERAL OUTLAYS—Continued

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Subtotal, transportation	1,027	1,007	980
Health:			
NIH	4,412	4,907	4,745
All other health	719	750	929
Subtotal, health	5,131	5,657	5,674
Agriculture	775	794	794
Natural resources and environment	883	873	797
All other research and development	689	818	789
Subtotal, conduct of research and development	16,855	16,365	16,272
Conduct of education and training:			
Department of Education:			
Higher education	7,446	7,964	7,036
Elementary, secondary, and vocational education	7,255	6,937	7,001
Other	194	236	203
Subtotal, Department of Education	14,895	15,137	14,241
Veterans readjustment benefits	1,143	892	731
Training and employment programs	3,445	3,723	3,168
Health training	913	897	826
Other education and training	2,599	3,302	2,730
Subtotal, conduct of education and training	22,995	23,951	21,695
Other investment-type programs:			
Collection of information	1,684	1,678	1,618
International development	2,607	2,595	2,308
Subtotal, other investment-type programs	4,291	4,273	3,926
Subtotal, investment-type programs	113,552	103,816	85,346
Civil current programs			
Provision of benefits:			
Retirement, survivor, and disability benefits:			
Social Security (off-budget):			
Retirement and survivor benefits	166,993	175,873	186,637
Disability benefits	18,654	19,573	20,181
Subtotal, Social Security (off-budget)	185,648	195,446	206,818
Civil Service:			
Retirement and survivor benefits	18,376	18,991	19,345
Disability benefits	4,041	4,295	4,561
Subtotal, Civil Service	22,417	23,286	23,906
Military retirement	15,801	17,649	18,016
Railroad retirement including social security equivalent benefits	5,230	5,165	6,252
Veterans disability benefits	10,402	10,624	10,822
Other retirement and disability benefits	1,742	1,926	2,049
Subtotal, retirement, survivor, and disability benefits	241,239	254,096	267,863

Table D-7. INVESTMENT, OPERATING, AND OTHER FEDERAL OUTLAYS—Continued

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Other provisions of benefits:			
Veterans pension benefits	3,842	3,835	3,825
Medicare	69,531	72,576	75,567
Medicaid	21,393	23,401	23,360
Other health benefits	1,052	1,166	1,027
Unemployment compensation	16,147	15,043	15,320
Housing programs	11,302	11,327	10,258
Food and nutrition programs	18,972	18,550	17,706
Supplemental security income	8,648	9,174	9,555
Assistance payments program	7,649	8,034	6,922
Other	8,770	9,185	8,903
Subtotal, other provisions of benefits	167,305	172,291	172,443
Direct provision of services:			
Hospital and medical care for veterans	7,718	8,029	7,855
Other health services	1,124	1,084	1,009
Other	57	121	98
Subtotal, direct provision of services	8,899	9,234	8,962
Subtotal, provision of benefits	417,444	435,621	449,269
Administrative expenses:			
Social Security retirement and disability (off-budget)	2,187	2,472	2,566
Medicare and medicaid	2,997	2,973	3,131
Unemployment compensation, assistance payments, and other	7,432	7,713	8,279
Subtotal, administrative expenses	12,616	13,158	13,976
Social services and related programs:			
Human development services	1,845	1,851	1,889
Employment programs	1,522	1,492	1,294
Social services block grant	2,743	2,604	2,693
Other	2,236	2,264	2,093
Subtotal, social services and related programs	8,345	8,211	7,970
Aids to agriculture, commerce, and transportation:			
Agriculture	15,578	14,649	18,012
Postal Service	432	94	1,484
Small business assistance	535	671	— 28
Mortgage credit and thrift insurance	— 417	— 388	— 426
Ground transportation	1,786	1,105	606
Air transportation	2,549	2,386	2,474
Water transportation and waterways	2,008	1,944	1,919
Other	1,013	1,303	2,552
Subtotal, aids to agriculture, commerce, and transportation	23,484	21,766	26,593
Repair, maintenance, and operation of physical assets:			
Natural resources:			
Water resources	773	658	330
Conservation and land management	— 932	— 1,324	— 1,268
Recreation resources and other	941	646	896
Subtotal, natural resources	782	— 20	— 42
Energy (net of offsetting receipts)	— 4,279	— 3,335	— 3,005

Table D-7. INVESTMENT, OPERATING, AND OTHER FEDERAL OUTLAYS—Continued

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Other (net)	5,291	5,825	5,950
Subtotal, repair, maintenance, and operation of physical assets	1,795	2,470	2,903
General purpose fiscal assistance:			
General revenue sharing	4,584	4,433	
Other general purpose grants-in-aid	680	654	677
Shared revenues	1,597	1,384	1,296
Subtotal, general purpose fiscal assistance	6,861	6,472	1,973
Regulation, control, and law enforcement:			
Regulatory and inspection activities:			
Natural resources and environment	1,166	1,236	1,223
Transportation	1,001	977	1,042
Health	1,074	1,065	755
Energy	544	497	453
Agriculture	323	329	234
Savings institutions	-2,430	-2,036	-2,907
Tax collections	1,058	1,091	1,125
Other	727	886	814
Subtotal, regulatory and inspection activities	3,464	4,046	2,738
Law enforcement activities:			
Federal law enforcement	3,477	3,608	3,765
Federal litigative and judicial	2,043	2,179	2,171
Federal correctional activities	489	527	576
Other law enforcement assistance	92	130	146
Subtotal, law enforcement activities	6,100	6,444	6,658
Subtotal, regulation, control, and law enforcement	9,564	10,490	9,397
Net interest:			
Interest on the public debt	179,063	196,095	206,855
Interest received by on-budget trust funds	-22,071	-26,654	-29,631
Interest received by off-budget trust funds	-4,118	-4,418	-4,716
Other interest	-23,438	-22,283	-24,511
Subtotal, net interest	129,436	142,740	147,996
General Administration:			
International affairs	2,442	2,750	3,537
Legislative branch	1,416	1,532	1,691
Other general government	3,518	3,662	3,331
Other	429	556	266
Subtotal, general administration	7,805	8,499	8,824
Other current programs:			
International security assistance	5,547	5,287	4,742
Other	-1,368	-2,114	-1,724
Subtotal, other current programs	4,179	3,174	3,018
Subtotal, current programs	621,529	652,600	671,919

Table D-7. INVESTMENT, OPERATING, AND OTHER FEDERAL OUTLAYS—Continued

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Unclassified:			
Employer share, employee retirement:			
On-budget	(-24,708)	(-26,283)	(-28,471)
Off-budget	(-2,509)	(-2,843)	(-3,177)
Subtotal, employer share, employee retirement	-27,217	-29,126	-31,648
Offshore oil receipts	-5,542	-5,450	-5,280
Other unclassified	-8,747	-7,740	-8,573
Subtotal, unclassified	-41,506	-42,315	-45,501
Total, civil	693,575	714,101	711,764
Outlay total	946,323	979,928	994,002
On-budget	(769,515)	(795,185)	(795,386)
Off-budget	(176,807)	(184,743)	(198,617)

Table D-8. TOTAL OUTLAYS FOR GRANTS-IN-AID, AND DIRECT FEDERAL PROGRAMS

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Grants-in-aid			
Investment-type programs:			
Construction and rehabilitation of physical assets:			
Highways	12,685	13,671	13,172
Mass transportation	2,420	3,177	2,876
Rail transportation	27	25	26
Air transportation	789	776	828
Pollution control and abatement.....	2,932	2,892	2,514
Other natural resources and environment.....	296	203	176
Community development block grants.....	3,817	3,575	3,099
Urban development action grants.....	497	488	413
Other community and regional development....	681	825	713
Other construction.....	343	385	299
Subtotal, construction and rehabilitation of physical assets	24,487	26,017	24,117
Acquisition of equipment and other physical assets	388	426	399
Conduct of research and development	215	213	163
Conduct of education and training:			
Employment and training assistance	2,757	3,005	2,661
Elementary and secondary education.....	7,029	6,683	6,770
Other.....	1,660	2,230	1,757
Subtotal, conduct of education and training	11,447	11,918	11,189
Collection of information	24	*	
Subtotal, investment-type programs	36,560	38,573	35,867
Current programs:			
Provision of benefits:			
Medicaid	21,393	23,401	23,360
Nutrition and food programs	8,068	7,753	7,251
Assistance payments.....	7,649	8,034	6,922
Housing payments and subsidies.....	8,573	8,208	7,268
Other.....	1,307	1,395	1,249
Subtotal, provision of benefits	46,989	48,791	46,050
Administrative expenses:			
Unemployment compensation	1,576	1,579	1,742
Medicaid	1,262	1,285	1,348
Other administrative expenses.....	2,247	2,384	2,676
Subtotal, administrative expenses.....	5,085	5,249	5,766
Social services and related programs:			
Employment programs.....	1,236	1,198	1,015
Human development services	1,772	1,782	1,819
Social services and child welfare services.....	3,476	3,416	3,503
Other.....	1,611	1,499	1,425

Table D-8. TOTAL OUTLAYS FOR GRANTS-IN-AID, AND DIRECT FEDERAL PROGRAMS—Continued

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Subtotal, social services and related programs	8,095	7,895	7,762
Aids to agriculture, commerce, and transportation:			
Transportation	1,073	451	582
Other	2	2	2
Subtotal, aids to agriculture, commerce, and transportation	1,075	453	584
Repair, maintenance, and operation of physical assets	427	522	335
General purpose fiscal assistance:			
General revenue sharing	4,584	4,433	
Shared revenues	1,597	1,384	1,296
Other	767	739	744
Subtotal, general purpose fiscal assistance	6,948	6,556	2,040
Regulation, control, and law enforcement	499	584	596
Other current programs	220	178	95
Subtotal, current programs	69,337	70,229	63,228
Total, grants-in-aid	105,897	108,802	99,094
Direct Federal Programs			
Loans and financial investments:			
International affairs	4,673	4,973	6,749
Energy supply	239	1,154	1,116
Agriculture	8,600	10,282	2,579
Commerce and housing credit	357	352	- 776
Mortgage credit and deposit insurance	2,198	1,839	- 327
Transportation	317	430	111
SBA disaster loan fund	- 397	- 280	- 1,282
Education	772	974	- 252
Veterans	123	139	137
Low-rent public housing	13,479	18	79
Other	1,145	631	- 3
Subtotal, loans	31,506	20,510	8,129
Financial investments	951	30	1,610
Subtotal, loans and financial investments	32,458	20,540	9,739
Investment-type programs:			
Construction and rehabilitation of physical assets:			
National defense	5,333	5,738	5,799
Water resource projects	2,009	2,053	2,205
Other natural resources and environment	1,029	1,069	1,196
Energy	2,611	2,611	2,753
Transportation	468	498	315
Veterans hospitals and other health facilities	737	772	861
Postal Service	606	736	718

Table D-8. TOTAL OUTLAYS FOR GRANTS-IN-AID, AND DIRECT FEDERAL PROGRAMS—Continued

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Other construction.....	680	909	951
Subtotal, construction and rehabilitation of physical assets	13,473	14,386	14,798
Acquisition of major equipment:			
National defense	72,594	78,101	79,242
NASA, nondefense	1,555	1,128	956
Postal Service	300	499	471
Other.....	1,756	2,224	2,328
Subtotal, acquisition of major equipment.....	76,205	81,952	82,998
Commodity inventories:			
Atomic energy defense activities.....	1,339	1,075	1,217
Strategic Petroleum Reserve	1,636	281	16
Commodity Credit Corporation.....	-2,075	-2,051	-3,574
Other commodity inventories.....	-225	-273	-164
Subtotal, commodity inventories	675	-967	-2,505
Other physical assets.....	2,128	2,018	32
Conduct of research and development	47,000	48,284	51,392
Conduct of education and training:			
Assistance to veterans	1,207	983	771
Higher education	7,338	7,912	7,025
Elementary and secondary education.....	521	552	477
Employment and training assistance	637	662	448
Health training	905	895	827
Other.....	956	1,042	966
Subtotal, conduct of education and train- ing	11,564	12,046	10,514
Collection of information.....	1,684	1,705	1,647
International development	2,733	2,738	2,446
Subtotal, investment-type programs	187,920	182,702	171,060
Current programs:			
Provision of benefits:			
Social Security retirement and disability (off-budget)	166,993	175,873	186,637
Other retirement and disability benefits	78,187	82,159	85,177
Medicare	69,531	72,576	75,567
Medical care for veterans	7,718	8,029	7,855
Other health	1,132	1,093	1,018
Unemployment compensation	16,147	15,043	15,320
Food and nutrition programs	10,974	10,887	10,455
Housing payments and subsidies.....	7,207	7,629	7,305
Supplemental security income	8,648	9,174	9,555
Earned income tax credit	1,100	1,283	1,228
Other.....	2,917	3,185	3,228
Subtotal, provision of benefits.....	370,554	386,931	403,344

Table D-8. TOTAL OUTLAYS FOR GRANTS-IN-AID, AND DIRECT FEDERAL PROGRAMS—Continued

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Administrative expenses:			
Social Security retirement and disability (off-budget)	2,187	2,472	2,566
Medicare	1,735	1,688	1,783
Unemployment compensation, assistance payments and other	3,032	3,107	3,154
Subtotal, administrative expenses	6,954	7,268	7,503
Social services and related programs	827	958	915
Aids to agriculture, commerce, and transportation:			
Agriculture	15,578	14,649	18,012
Postal Service	432	94	1,484
Small business assistance	535	671	— 28
Mortgage credit and thrift insurance	— 417	— 388	— 426
Ground transportation	718	658	28
Air transportation	2,549	2,386	2,474
Water transportation and waterways	2,008	1,944	1,919
Other	1,007	1,297	2,546
Subtotal, aids to agriculture, commerce, and transportation	22,409	21,312	26,009
Repair, maintenance, and operation of physical assets:			
National defense	74,820	76,376	83,117
Other (includes offsetting collections)	1,368	1,947	2,568
Subtotal, repair, maintenance, and operation of physical assets	76,188	78,323	85,685
Regulation, control, and law enforcement	9,066	9,905	8,800
Net interest:			
On-budget	(133,554)	(147,158)	(152,713)
Off-budget	(— 4,118)	(— 4,418)	(— 4,716)
Subtotal, net interest	129,436	142,740	147,996
Other current programs:			
Military personnel	66,782	70,311	72,466
Allowance for Department of Defense pay raises			3,272
Other national defense	5	1,683	1,801
Allowance for civilian agency pay raises			423
Other	11,764	11,495	11,325
Subtotal, other current programs	78,551	83,489	89,287
Subtotal, current programs	693,986	730,926	769,540
Unclassified:			
Employer share, employee retirement:			
On-budget	(— 24,708)	(— 26,283)	(— 28,471)
Off-budget	(— 2,509)	(— 2,843)	(— 3,177)
Subtotal, employer share, employee retirement	— 27,217	— 29,126	— 31,648

Table D-8. **TOTAL OUTLAYS FOR GRANTS-IN-AID, AND DIRECT FEDERAL PROGRAMS—Continued**

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Offshore oil receipts	— 5,542	— 5,450	— 5,280
Other unclassified	— 8,721	— 7,927	— 8,765
Subtotal, unclassified	— 41,480	— 42,502	— 45,693
Total, direct Federal programs	840,426	871,126	894,908
Outlay total	946,323	979,928	994,002
<i>On-budget</i>	<i>(769,515)</i>	<i>(795,185)</i>	<i>(795,386)</i>
<i>Off-budget</i>	<i>(176,807)</i>	<i>(184,743)</i>	<i>(198,617)</i>

*\$500 thousand or less.

SPECIAL ANALYSIS E

BORROWING AND DEBT

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

- borrowing cash to meet outlays not covered by receipts and to refinance maturing debt;
- investing balances that trust funds and other Government accounts do not currently need for outlays; and
- providing guarantees and other types of assistance to certain borrowing by the public.

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, the amount of U.S. Government debt held by foreign residents, agency borrowing, investment in Federal securities by Government accounts, the statutory debt limitation, Government-guaranteed borrowing, 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 the total borrowing by the nonfinancial sector of 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 and employee retirement.¹ Supplementary data on debt since 1940 are published in a separate volume, *Historical Tables, Budget of the United States Government, Fiscal Year 1987*.

Special Analysis F, "Federal Credit Programs," examines the related subject of Federal credit programs, which provide direct loans, loan guarantees, and loans by Government-sponsored enterprises. The factors discussed in both Special Analyses E and F are significant in appraising the impact on financial markets and the economy of the programs contained in the 1987 Federal budget.

¹ Data on many of these liabilities are contained in "Statement of Liabilities and Other Financial Commitments of the United States Government," an annual report prepared by the Financial Management Service of the Department of the Treasury and published in the *Treasury Bulletin*. The 1984 data were published in the winter (1st quarter) issue, 1985, pp. 193-205.

BORROWING AND REPAYING DEBT

The Federal Government issues debt for two principal reasons. First, it issues debt to the public, largely in order to finance the Federal deficit. Second, it issues debt to those Government accounts, primarily trust funds, that accumulate surpluses that are required by law to be invested in Federal securities. Nearly all of the 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."²

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 is consequently an important concern of Federal fiscal policy. Borrowing from the public includes borrowing from the Federal Reserve Banks as well as borrowing from commercial banks, foreign central banks, other financial institutions and businesses, and individuals. The term "borrowing from the Federal Reserve Banks" does not imply that the Treasury sells debt securities directly to the Federal Reserve. Instead, the Federal Reserve normally buys securities in the open market. In the past the Federal Reserve was able to buy securities directly from the Treasury only under exceptional circumstances and in amounts limited by statute. The statutory authority for even these exceptions expired in 1981.

For most purposes borrowing from the Federal Reserve Banks 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 Banks 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 Banks is returned to the Treasury as receipts, called deposits of earnings, so the Federal Reserve holdings of debt have only a small effect on the budget surplus or deficit. The estimates in this analysis for the current and future years do not divide the debt held by the public between the Federal Reserve Banks and the rest of the public, despite the significance of this distinction, because the Federal Reserve's open market operations depend on future economic developments and on policy decisions not yet made.

² 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 E-7 but also certain Government-guaranteed securities and the debt of the Government-sponsored enterprises listed in table E-11.

Table E-1 summarizes Federal borrowing from 1985 through 1991. In 1985 the total Federal borrowing (net of the refunding of securities that matured)—i.e., the rise in gross Federal debt—was \$250.7 billion. The issue of debt to Government accounts was \$53.5 billion, and the sale of debt to the public was \$197.3 billion. The Federal Reserve Banks increased their holdings of Federal debt by \$14.7 billion, so the increase in debt held by the rest of the public was \$182.6 billion. As a result of this borrowing, Federal debt held by the public increased to \$1,509.9 billion at the end of 1985. Gross Federal debt was \$1,827.5 billion.

Table E-1. FEDERAL BORROWING

(In billions of dollars)

Description	Borrowing or repayment (—) of debt							Debt outstanding, end of year	
	1985 actual	1986 estimate	1987 estimate	1988 estimate	1989 estimate	1990 estimate	1991 estimate	1987 estimate	1991 estimate
Gross Federal debt:									
Treasury debt	250.8	284.7	208.9	190.3	175.4	157.0	135.4	2,316.7	2,974.7
Agency debt	— 0.1	— 0.2	— 0.3	— 2.0	— *	— *	— *	4.0	2.0
Gross Federal debt	250.7	284.5	208.6	188.3	175.4	157.0	135.4	2,320.6	2,976.7
Less debt held by Gov. accounts:									
Treasury debt	53.5	80.4	67.0	NA	NA	NA	NA	463.9	NA
Agency debt	— *	— *	— 0.1	NA	NA	NA	NA	1.0	NA
Debt held by Gov. accounts ¹	53.5	80.4	66.9	95.4	108.6	122.1	137.6	464.9	928.6
Total, debt held by public	197.3	204.2	141.7	93.0	66.8	34.9	— 2.2	1,855.7	2,048.1
Composed of:									
Debt held by the Federal Reserve Banks	14.7	NA	NA	NA	NA	NA	NA	NA	NA
Debt held by others	182.6	NA	NA	NA	NA	NA	NA	NA	NA

* \$50 million or less.

¹ Investment by Government accounts during 1988–91 is estimated as approximately equal to the total trust fund surplus.

NA = Not available.

Borrowing from the public has fluctuated widely in the past in response to fluctuations in the economy. Recently, from 1981 to 1983, it increased substantially from \$79.3 billion to \$212.3 billion. This was due to both the temporary effects of recession and disinflation and a more lasting, structural imbalance between receipts and outlays. In the past two years the rapid recovery has helped to restrain the level of borrowing, but it has not diminished much.

The decline in real gross national product (GNP) during the recession of 1981–82 reduced money incomes, which decreased income and social security tax receipts almost immediately; the associated rise in unemployment raised outlays for unemployment compensation and certain other programs. The decrease in the rate of inflation, which was unusually sharp, reduced both receipts and outlays, but receipts fell more quickly. Tax collections fell almost

immediately below what they otherwise would have been, because the lower inflation reduced the money incomes on which most taxes are based. In contrast, for example, cost-of-living adjustments to benefit programs occur at fixed intervals and are not made until some months after the price changes that determine them; and lower interest rates in response to lower inflation do not reduce interest outlays on existing debt securities. Therefore, the lower real GNP and the disinflation both widened the Federal deficit. These effects are an example of the sensitivity of the budget to economic conditions, which is discussed in Part 2 of the *Budget*.

With strong economic recovery starting in early 1983 and with a more stable rate of inflation, these factors ceased to widen the Federal deficit and borrowing. Instead, the rapid expansion of real GNP and the sharp decline in the unemployment rate increased receipts, reduced outlays, and thus decreased the Federal deficit and borrowing. However, the effects of the still remaining unemployed resources continue to keep the deficit and borrowing at greater levels than they would be at high employment.

The present large deficit and borrowing are also due to causes that do not go away with the steady and strong economic expansion assumed in this budget. Although the estimated total unemployment rate falls to 5.6% by 1991, a deficit of \$103.8 billion nevertheless remains under these conditions of high employment unless policy actions are taken to diminish it. The effect is shown in table E-2 by the estimated borrowing from the public based on the current services estimates of the deficit.

Table E-2. COMPARISON OF CURRENT SERVICES AND POLICY ESTIMATES OF BORROWING AND DEBT

(Dollar amounts in billions)

Description	1986 estimate	1987 estimate	1988 estimate	1989 estimate	1990 estimate	1991 estimate
Borrowing from the public:						
Current services.....	206.9	179.9	149.4	138.2	125.4	103.0
Policy.....	204.2	141.7	93.0	66.8	34.9	-2.2
Debt held by the public:						
Current services.....	1,716.8	1,896.7	2,046.0	2,184.2	2,309.7	2,412.6
Policy.....	1,714.0	1,855.7	1,948.7	2,015.4	2,050.3	2,048.1
Debt held by the public as percentage of GNP:						
Current services.....	41.0	41.8	41.7	41.5	41.1	40.5
Policy.....	40.9	40.9	39.7	38.3	36.5	34.4

The current services estimates of the budget, as explained in Special Analysis A, "Current Services Estimates," show the receipts, outlays, and deficit that would be realized under existing policies with regard to spending programs and taxes (and under the same economic assumptions as used for the budget). As shown in table E-2, they imply large continued borrowing through 1991, though with a significant downward trend, despite the continual improvement in economic conditions.

In contrast, the policies proposed in this budget are estimated to eliminate the deficit and borrowing from the public in accordance with the targets set forth in the Balanced Budget and Emergency Deficit Control Act of 1985 (the Gramm-Rudman-Hollings Act). As shown in tables E-1 and E-2, borrowing from the public under these policies is estimated to decrease steadily from its 1986 level of \$204.2 billion, falling to \$141.7 billion in 1987 and turning into a \$2.2 billion repayment of debt in 1991. As a result, the debt held by the public under the policies proposed by the Administration is \$2,048.1 billion in 1991, which is \$364.5 billion less (or 15.1% less) than the debt under the current services estimates.

The economic assumptions behind these estimates are presented in Part 2 of the *Budget*. The assumptions for 1986 and 1987 are a forecast of the economy. In contrast, the assumptions for later years are not exact forecasts of future economic conditions. Instead, they are extrapolations of trends, based on the assumption that the fiscal policy proposed in this budget will be enacted and that the Federal Reserve will pursue a policy of gradually reducing the rate of growth of the monetary aggregates. Thus, they assume steady progress in sustaining economic growth and in reducing inflation, interest rates, and unemployment. The receipts and outlay estimates also assume that the taxation and expenditure proposals in this budget are enacted and implemented.

BORROWING AND GOVERNMENT DEFICITS

Table E-3 shows the relationship between borrowing from the public and the Federal deficit. The total deficit of the Federal Government includes not only the budget deficit but also the surplus or deficit of the off-budget Federal entities, which have been excluded from the budget by law. Under present law the off-budget Federal entities are the old-age and survivors insurance trust fund and the disability insurance trust fund.³ Since they had a combined surplus in 1985 and are estimated to continue having surpluses during 1986-91, they currently reduce the requirements for Treasury to borrow from the public.

The total Federal deficit is financed either by borrowing from the public or by several other means. The other means of financing are:

- a decrease in Treasury's operating cash balance;
- an increase in monetary liabilities for checks outstanding, accrued interest payable on debt held by the public, etc.;

³ Off-budget Federal entities are discussed in the *Budget of the United States Government, Fiscal Year 1987*, Part 6a. A technical analysis of the budgetary relationship between on-budget and off-budget accounts is presented in Special Analysis C, "Funds in the Budget."

Table E-3. MEANS OF FINANCING THE DEFICIT ¹

(In millions of dollars)

Description	1985 actual	1986 estimate	1987 estimate	1988 estimate	1989 estimate	1990 estimate	1991 estimate
Surplus or deficit (—)	— 212,266	— 202,789	— 143,630	— 93,585	— 67,504	— 35,752	1,323
On-budget	— 221,629	— 215,984	— 159,288	— 126,765	— 111,304	— 90,134	— 65,650
Off-budget ²	9,363	13,195	15,658	33,179	43,799	54,382	66,973
Means of financing other than borrowing from the public:							
Decrease or increase (—) in Treasury operating cash balance	13,367	— 2,940					
Increase or decrease (—) in:							
Checks outstanding, etc. ³	— 979	428	1,511				
Deposit fund balances ⁴	2,093	711	— 105				
Seigniorage on coins	516	439	544	622	752	837	906
Total, means of financing other than borrowing from the public	14,997	— 1,362	1,950	622	752	837	906
Total, requirements for borrowing from the public	— 197,269	— 204,151	— 141,680	— 92,963	— 66,752	— 34,915	2,229
Change in debt held by the public	197,269	204,151	141,680	92,963	66,752	34,915	— 2,229

¹ Several amounts have been assumed to be zero during 1987-91 because they are usually small and cannot be estimated accurately.² The off-budget Federal entities consist of the old-age and survivors insurance trust fund and the disability insurance trust fund.³ Besides checks outstanding, includes accrual of interest payable on Treasury debt, miscellaneous liability accounts, allocations of special drawing rights, and, as an offset, cash and monetary assets other than the Treasury operating cash balance, miscellaneous asset accounts, and profit on sale of gold.⁴ Does not include investment in Federal debt by deposit funds classified as part of the public.

- an increase in deposit fund balances, which are discussed on pages E-23 and E-24, together with their effect on the means of financing; and
- seigniorage, which is the face value of minted coins less the cost of their production.

All of these other means of financing except seigniorage are changes in the Government's balance sheet—either its asset or its liability accounts—and so may be either positive or negative. In most years they add up to a positive total amount, in which case they finance part of the deficit. Sometimes, however, they add up to a negative total amount, in which case they, like the deficit, must themselves be financed by borrowing from the public. In 1985 the Federal deficit was \$212.3 billion. The greater part of this amount, \$197.3 billion, was borrowed from the public, and the remaining \$15.0 billion was financed by other means.

The other means of financing are normally small relative to borrowing from the public. This is because they are limited by their own nature. Decreases in cash balances, for example, are necessarily limited by past accumulations, which themselves required financing when they were built up. Thus, the extent to which means other than borrowing can finance a deficit are limited in any single year and are still more limited over a longer period of time. When the total Government deficit is sizable, it is necessarily the principal determinant of borrowing from the public.

Nevertheless, as a whole, these other accounts did finance an unusually large amount of the deficit in 1985. Almost all of this was due to the decrease in the Treasury operating cash balance. At the end of 1984 the cash balance was \$30.4 billion, which was \$10.4 billion above the normal end-of-year target of \$20 billion. Since cash at the end of 1985 was \$17.1 billion, the decrease in cash balance during 1985 financed \$13.4 billion of the Federal deficit.

In contrast, the cash balance is estimated to increase in 1986 in order to restore the end-of-year target. This is the primary reason why Federal borrowing is required to finance these accounts as well as the deficit. As a result, the means of financing other than borrowing are \$16.4 billion less in 1986 than in 1985. Consequently, Federal borrowing is estimated to increase in 1986 despite a decrease in the deficit.

The structure of table E-3 demonstrates that the off-budget Federal entities affect borrowing from the public in exactly the same way as the on-budget entities. Thus, balancing the budget as defined under current law is not enough to prevent an increase in the Federal debt held by the public, if the off-budget entities have a deficit. Likewise, a budget deficit does not require borrowing from the public so long as the off-budget Federal entities have a surplus that is as large as the budget deficit or larger. The outlays of the entire Government must be in balance with receipts in order for

the Government not to have to borrow from the public, regardless of whether particular Federal entities are defined as being included in the budget totals (aside from the relatively small effect of the other means of financing).

The amount of debt issued to Government accounts depends largely on the surpluses of the trust funds, both on-budget and off-budget, which own over nine-tenths of the total Federal debt held by Government accounts. Investment by these accounts in Federal securities and the total trust fund surplus during 1984-87 are compared in the table below (in billions of dollars):

	<i>1984 actual</i>	<i>1985 actual</i>	<i>1986 estimate</i>	<i>1987 estimate</i>
Investment by Government accounts in Federal debt	24.0	53.5	80.4	66.9
Total trust fund surplus.....	32.9	54.4	63.0	74.9

Investment in Federal securities by Government accounts is roughly similar in size to the total trust fund surplus throughout this period. This relationship has historically been close, with the small differences accounted for by two factors. Certain accounts other than trust funds buy or sell Federal debt, as shown in table E-8, and the trust funds may change the amount of their cash assets not currently invested in debt.⁴ This relationship is less close than normal in 1984 and 1986, due to the effect of the debt limit on the investment of the civil service retirement and disability trust fund (as explained on pages E-20 and E-22). The effects in these two years, however, are offsetting. The relationship is less close than normal in 1987 due to the proposed disinvestment of the airport and airway trust fund (as explained on page E-22).

SIZE AND GROWTH OF FEDERAL DEBT

Gross Federal debt has risen substantially over the past half century, from \$16.9 billion in 1929 to \$1,827.5 billion at the end of 1985. Table E-4 compares the trends since 1954 in gross Federal debt and the amounts of debt held by Government accounts, the public (including the Federal Reserve Banks), and the Federal Reserve Banks. During this period the gross Federal debt increased by nearly seven times, and the amount of debt held in Federal Government accounts (primarily trust funds) rose by a similar proportion. The average annual growth rates of gross Federal debt, debt held by the public, and debt held by the public apart from the Federal Reserve Banks were all about the same: around 6.3%. In the latter part of the period, the growth of debt accelerated. Whereas the debt held by the public increased at an average annual rate of 2.8% from 1954 to 1975, it grew at a rate of 11.9% from 1975 to 1980 and at a rate of 16.1% from 1980 to 1985.

⁴ These "open book balances" are very small relative to trust fund holdings of Federal debt, as shown in Special Analysis C, "Funds in the Budget."

Table E-4. TRENDS IN FEDERAL DEBT ¹

(Dollar amounts in billions)

Fiscal year	Debt outstanding, end of year					GNP	Debt held by public as percent of GNP
	Gross Federal debt	Held by					
		Federal Government accounts	The public				
			Total	Federal Reserve Banks	Other		
1954.....	270.8	46.3	224.5	25.0	199.5	369.4	60.8
1955.....	274.4	47.8	226.6	23.6	203.0	387.6	58.5
1956.....	272.8	50.5	222.2	23.8	198.5	418.0	53.2
1957.....	272.4	52.9	219.4	23.0	196.4	441.2	49.7
1958.....	279.7	53.3	226.4	25.4	200.9	449.8	50.3
1959.....	287.8	52.8	235.0	26.0	209.0	479.5	49.0
1960.....	290.9	53.7	237.2	26.5	210.7	507.7	46.7
1961.....	292.9	54.3	238.6	27.3	211.4	519.0	46.0
1962.....	303.3	54.9	248.4	29.7	218.7	556.6	44.6
1963.....	310.8	56.3	254.5	32.0	222.4	588.6	43.2
1964.....	316.8	59.2	257.6	34.8	222.8	629.4	40.9
1965.....	323.2	61.5	261.6	39.1	222.5	673.6	38.8
1966.....	329.5	64.8	264.7	42.2	222.5	740.5	35.7
1967.....	341.3	73.8	267.5	46.7	220.8	793.5	33.7
1968.....	369.8	79.1	290.6	52.2	238.4	852.4	34.1
1969 ²	367.1	87.7	279.5	54.1	225.4	929.5	30.1
1970 ³	382.6	97.7	284.9	57.7	227.2	990.5	28.8
1971.....	409.5	105.1	304.3	65.5	238.8	1,057.1	28.8
1972.....	437.3	113.6	323.8	71.4	252.3	1,151.2	28.1
1973 ⁴	468.4	125.4	343.0	75.2	267.9	1,285.5	26.7
1974.....	486.2	140.2	346.1	80.6	265.4	1,417.0	24.4
1975.....	544.1	147.2	396.9	85.0	311.9	1,523.5	26.1
1976 ⁵	631.9	151.6	480.3	94.7	385.6	1,699.6	28.3
TQ.....	646.4	148.1	498.3	96.7	401.6	1,794.7	27.8
1977.....	709.1	157.3	551.8	105.0	446.8	1,935.8	28.5
1978.....	780.4	169.5	610.9	115.5	495.5	2,173.4	28.1
1979.....	833.8	189.2	644.6	115.6	529.0	2,452.2	26.3
1980.....	914.3	199.2	715.1	120.8	594.3	2,667.6	26.8
1981.....	1,003.9	209.5	794.4	124.5	670.0	2,986.2	26.6
1982.....	1,147.0	217.6	929.4	134.5	794.9	3,141.5	29.6
1983.....	1,381.9	240.1	1,141.8	155.5	986.2	3,320.9	34.4
1984.....	1,576.7	264.2	1,312.6	155.1	1,157.5	3,695.3	35.5
1985.....	1,827.5	317.6	1,509.9	169.8	1,340.1	3,936.8	38.4
1986 estimate.....	2,112.0	398.0	1,714.0	NA	NA	4,192.2	40.9
1987 estimate.....	2,320.6	464.9	1,855.7	NA	NA	4,538.1	40.9
1988 estimate.....	2,509.0	560.3	1,948.7	NA	NA	4,902.9	39.7
1989 estimate.....	2,684.3	668.9	2,015.4	NA	NA	5,268.9	38.3
1990 estimate.....	2,841.4	791.0	2,050.3	NA	NA	5,623.4	36.5
1991 estimate.....	2,976.7	928.6	2,048.1	NA	NA	5,955.2	34.4

¹ Data from 1940 to 1991 in millions of dollars are published in *Historical Tables, Budget of the United States Government, Fiscal Year 1987*, section 7. Earlier historical data are presented on a different basis in *Statistical Appendix to Annual Report of the Secretary of the Treasury on the State of the Finances, Fiscal Year 1980*, table 19.

² 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.

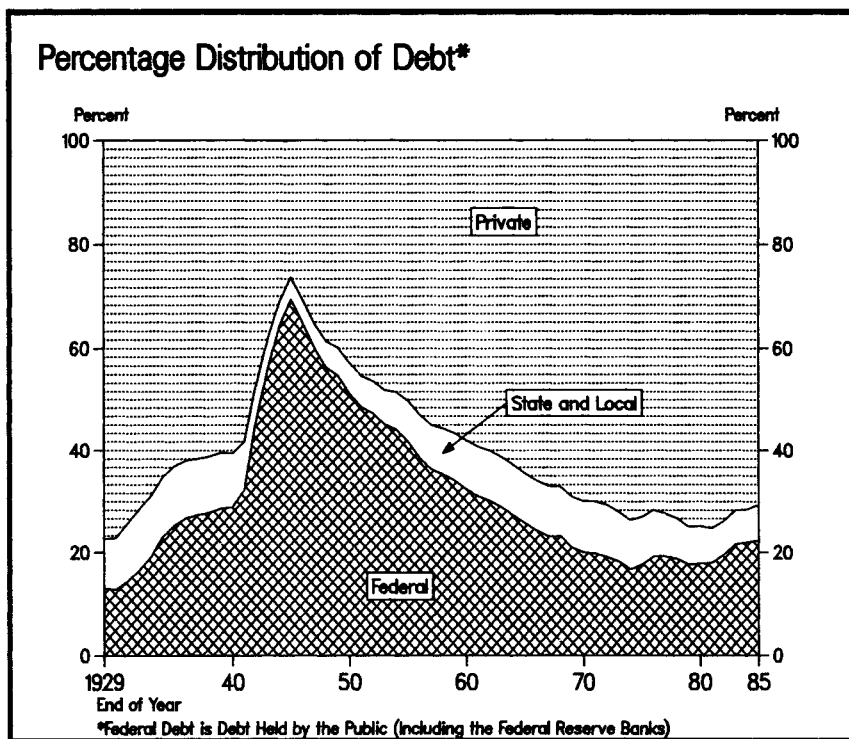
³ Gross Federal debt and debt held by the public increased \$1.6 billion due to a reclassification of the Commodity Credit Corporation certificates of interest from loan assets to debt.

⁴ 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.

⁵ Gross Federal debt and debt held by the public increased \$0.5 billion due to a retroactive reclassification of the Export-Import Bank certificates of beneficial interest from loan assets to debt.

NA = Not available.

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 chart below, as a proportion of the total credit market debt owed by nonfinancial sectors of the economy: Federal, State and local, and private.⁵ Whereas Federal debt held by the public was only 13% of total debt at the end of calendar year 1929, it had risen to 69% by the end of calendar year 1945. Federal borrowing was large during these years, especially 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.



From 1945 to 1974, however, in every single year but one, private debt increased as a proportion of total credit market debt and Federal debt held by the public decreased as a proportion. During this period the average annual rate of growth was 1.1% for Federal debt held by the public, 10.0% for State and local debt, and 9.7% for private credit market debt. By 1974, Federal debt held by the public had declined to 16.7% of total credit market debt, and

⁵ The estimates for 1946 to the present are from the Federal Reserve Board flow-of-funds accounts; the estimates for earlier years are from the Bureau of Economic Analysis of the Department of Commerce and are linked to the flow-of-funds estimates on the basis of their respective 1946 levels. The data are for calendar years during 1929-51 and for fiscal years thereafter. The private sector debt includes debt of foreigners incurred in U.S. credit markets.

private debt had risen to 73.6% of the total. As a result of these trends, Federal debt, though still important, became a relatively much smaller part of the financial markets than it had been at the end of World War II.

This trend ended in 1975. A recession caused large Federal deficits in 1975 and 1976, and as a result the Federal debt held by the public rose as a percentage of total credit market debt in both years. After a brief decline and a short period of stability, Federal debt held by the public increased year-by-year from 17.8% of credit market debt in 1980 to 22.4% in 1985. This is the highest percentage since 1968. The counterpart to a higher proportion of Federal debt in the last five years has been a lower proportion of private debt.

During the same period following World War II, Federal debt decreased relative to GNP. Debt held by the public was 110.7% of GNP at the end of 1945 but, as shown in table E-4, declined to 60.8% of GNP by the end of 1954 and 24.4% by the end of 1974. For several years thereafter debt held by the public fluctuated as a percentage of GNP in about the same way as it fluctuated as a percentage of total credit market debt. In 1982, however, debt held by the public rose sharply from 26.6% of GNP to 29.6%, and by 1985 it had risen to 38.4%. This percentage is higher than in any other year since 1965.

Because of the reasons outlined in a preceding section, Federal borrowing is estimated to remain very large in 1986 before starting to decrease sharply in 1987. As a result, debt held by the public is estimated to rise further to 40.9% of GNP in 1987 and 1988 before gradually but steadily declining to 34.4% in 1991. This decline could not occur, however, without policy measures to cut the deficit very greatly. Under the current services estimates for the budget, as shown in table E-2, Federal borrowing from the public would be much larger. Debt held by the public as a percentage of GNP would rise to 41.8% of GNP in 1987 and then decline only slightly in the following years.

The interest cost of the debt is more significant than the amount of the debt for some types of comparison designed to measure the importance of Federal indebtedness. Interest payments on the debt must be financed by either higher taxes or more borrowing, and more borrowing raises still further the debt and therefore the amount of interest that must be paid in the future. The 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. The interest rate on 91-day Treasury bills, for example, averaged 2.0% in the 1950's, 4.0% in the 1960's, and 6.3% in the 1970's. It then averaged 12.1% in calendar years 1980-82 before

falling to 8.6% in 1983, 9.6% in 1984, and 7.5% in 1985. Consequently, whereas the Federal debt held by the public increased by nearly seven times between 1954 and 1985, table E-5 shows that the interest paid on this debt increased by twenty-nine times.

Table E-5. TRENDS IN INTEREST ON FEDERAL DEBT

(Dollar amounts in billions)

Fiscal year	Interest on the gross Federal debt					Interest on debt held by the public as a percent of	
	Total ¹	Paid to					
		Federal Government ac- counts	The public			GNP	Out- lays ³
			Total	Federal Reserve Banks ²	Other		
1954.....	6.4	1.3	5.2	0.5	4.7	1.40	7.29
1955.....	6.4	1.2	5.2	.4	4.8	1.34	7.56
1956.....	6.8	1.3	5.6	.5	5.1	1.33	7.90
1957.....	7.3	1.4	5.9	.7	5.3	1.34	7.73
1958.....	7.8	1.4	6.3	.7	5.6	1.41	7.68
1959.....	7.8	1.4	6.4	.8	5.6	1.34	6.96
1960.....	9.5	1.5	8.1	1.0	7.1	1.59	8.73
1961.....	9.3	1.5	7.8	1.0	6.8	1.50	7.96
1962.....	9.5	1.6	7.9	1.0	6.9	1.42	7.40
1963.....	10.3	1.6	8.7	1.1	7.6	1.47	7.78
1964.....	11.0	1.8	9.2	1.2	8.0	1.47	7.80
1965.....	11.8	2.0	9.8	1.4	8.4	1.46	8.29
1966.....	12.6	2.1	10.4	1.7	8.7	1.41	7.75
1967.....	14.2	2.6	11.6	2.0	9.6	1.47	7.39
1968.....	15.6	3.0	12.6	2.4	10.2	1.48	7.09
1969.....	17.6	3.5	14.1	2.9	11.2	1.52	7.70
1970.....	20.0	4.4	15.6	3.5	12.2	1.58	7.99
1971.....	21.6	5.3	16.3	3.7	12.6	1.55	7.78
1972.....	22.5	5.8	16.6	3.7	12.9	1.44	7.20
1973.....	24.8	6.3	18.5	4.3	14.2	1.44	7.53
1974.....	30.0	7.7	22.4	5.5	16.9	1.58	8.30
1975.....	33.5	8.8	24.7	6.1	18.6	1.62	7.42
1976.....	37.7	9.0	28.7	6.3	22.5	1.69	7.73
TQ.....	8.3	.6	7.6	NA	NA	1.70	7.96
1977.....	42.6	9.6	33.0	6.8	26.2	1.71	8.07
1978.....	49.3	10.2	39.2	8.0	31.2	1.80	8.54
1979.....	60.3	12.1	48.3	9.6	38.6	1.97	9.59
1980.....	75.2	14.8	60.4	12.5	47.9	2.26	10.22
1981.....	96.0	17.1	78.9	13.4	65.5	2.64	11.63
1982.....	117.5	19.9	97.7	15.4	82.4	3.11	13.10
1983.....	128.9	21.3	107.7	15.3	92.3	3.24	13.32
1984.....	154.1	25.2	129.0	16.3	112.7	3.49	15.14
1985.....	179.4	31.3	148.1	17.7	130.4	3.76	15.65
1986 estimate.....	196.4	36.7	159.6	NA	NA	3.81	16.29
1987 estimate.....	207.1	40.2	166.9	NA	NA	3.68	16.80

¹ Total interest on gross Federal debt is significantly larger than the outlays for the net interest function in the budget, because the net interest function includes as deductions the interest paid to trust funds and Government collections of interest.

² These figures are approximate. They are estimated as the average of calendar year amounts or as an adjustment to deposits of earnings. The 1985 estimate is preliminary.

³ Includes off-budget outlays. Historical series of outlays are published in the *Budget*, Part 6e, tables 22 and 23.

NA = Not available.

As a result, interest payments to the public have tended to grow faster than GNP over this entire period, despite the decline of debt as a percentage of GNP until the middle 1970's. In the middle and late 1950's, interest paid to the public was equal to about 1.4% of GNP, whereas by 1970 it had risen to 1.6% and by 1980 to 2.3%. By 1985, interest paid on debt held by the public had risen to 3.8% of GNP, which is twice as high a proportion as in 1978. This was due in very large part to the rapid expansion of debt, which increased sharply the ratio of debt to GNP. Interest as a percentage of GNP is estimated to remain about the same in 1986 and decline only slightly in 1987, despite decreases in market interest rates, because of the large borrowing necessary to finance the Federal deficit.

Interest paid to the public as a percentage of total Federal outlays does not show the same sustained trend over the period as a whole. From 1954 to the middle 1970's, interest averaged 7.7% of total outlays and tended neither to increase nor to decrease. The percentage of outlays paid in interest then began to increase, however, both steadily and substantially. It rose rapidly to 10.2% in 1980, 13.3% in 1983, and 15.6% in 1985. By 1987 this percentage is estimated to increase still further to 16.8%. Thus, the importance of interest on the debt relative to either GNP or Federal outlays is now considerably more than in earlier years. Under the current services estimates of the budget, as defined on page E-4, it would be greater than shown in this table for 1986 and 1987 because of the larger debt.

Since the end of World War II the composition of the Federal debt has changed. Until some years ago an increasingly large proportion of marketable securities had a short maturity. One contributing factor was the statutory ceiling of 4¼% that has been maintained since 1918 on the interest rate for Treasury bonds. Long-term market rates exceeded 4¼% after 1965, so after that year the ceiling prevented the Treasury from selling long-term obligations.

This restriction on Treasury borrowing has been relaxed in two ways. One method has been to increase the maximum maturity of notes, which are not subject to the interest rate ceiling. The maximum maturity was raised by law from 5 to 7 years in 1967 and to 10 years in 1976. As of December 31, 1985, the amount of notes outstanding with an original maturity over 5 years was \$365.4 billion, of which \$243.2 billion had an original maturity over 7 years.

The other method of relaxing the restriction has been to allow limited amounts of bonds to be sold at interest rates above the ceiling. In 1971 the Treasury was allowed by law to issue up to \$10 billion of bonds at interest rates above 4¼%. In 1973 those bonds held by Government accounts and the Federal Reserve Banks were exempted from the interest rate limit, and since 1976 the amount of the exemption for other bonds has been raised in 10 steps. The

last increase to the exemption was from \$150 to \$200 billion, enacted in May 1984. As of December 31, 1985, \$207.4 billion of the bonds outstanding had been sold since the change of law in 1971, whereas only \$3.7 billion of bonds issued in earlier years were still outstanding. The public exclusive of the Federal Reserve Banks held \$179.8 billion of the bonds issued since 1971. The effective interest rate on bonds issued since 1971 has ranged from 6.1% to 15.8%.

Notwithstanding the initial relaxations of the interest rate ceiling, the average maturity of privately held, marketable Treasury debt decreased steadily from about 5 years at the end of 1967 to about 2½ years at the end of 1975. Since then, however, as the restriction has been relaxed further, the average maturity has gradually lengthened to about 5 years.

DEBT HELD BY FOREIGN RESIDENTS

During most of American history the debt of the Federal Government was held almost entirely by individuals and institutions within the United States. In 1946, just after World War II, the debt held in foreign official balances and international accounts was about \$2 billion, less than 1.0% of the total debt held by the public. In the following years the debt held by foreign residents tended to grow gradually, and, as shown in table E-6, rose to just over \$10.0 billion by the late 1960's. This was still less than 5% of the total Federal debt held by the public. Interest paid to foreign residents was a correspondingly small proportion of the total interest paid on debt held by the public.

Foreign holdings began to grow much faster starting in 1970. This change arose in part out of decisions by foreign monetary institutions to intervene in foreign exchange markets. Because of the role of the dollar as an international currency, large amounts of the official reserves and other financial assets of foreign nations are held in dollar-denominated form. Thus, the exchange market intervention by foreign monetary institutions often acted to increase their official reserves of dollars. U.S. Government securities are the safest and one of the most liquid forms of holding dollar assets. Consequently, as foreign countries acquired more dollar-denominated official reserves, they purchased a large amount of U.S. Government securities.

The second principal reason for the growth of foreign holdings was the massive current account surpluses of some countries, particularly the OPEC nations, beginning in 1974. The counterpart to their surpluses was their acquisition of financial assets, and the financial assets acquired in the United States largely took the form of U.S. Government securities.

Table E-6. FOREIGN HOLDINGS OF FEDERAL DEBT

(In billions of dollars)

Fiscal year	Debt held by the public		Borrowing from the public		Interest on debt held by the public	
	Total	Foreign ¹	Total ²	Foreign	Total	Foreign ³
1965.....	261.6	12.3	4.1	0.3	9.8	0.5
1966.....	264.7	11.6	3.1	— .7	10.4	.5
1967.....	267.5	11.4	2.8	— .2	11.6	.6
1968.....	290.6	10.7	23.1	— .7	12.6	.7
1969.....	279.5	10.3	— 1.0	— .4	14.1	.7
1970.....	284.9	14.0	3.8	3.8	15.6	.8
1971.....	304.3	31.8	19.4	17.8	16.3	1.3
1972.....	323.8	49.2	19.4	17.3	16.6	2.4
1973.....	343.0	59.4	19.3	10.3	18.5	3.2
1974.....	346.1	56.8	3.0	— 2.6	22.4	4.1
1975.....	396.9	66.0	50.9	9.2	24.7	4.5
1976.....	480.3	69.8	82.9	3.8	28.7	4.4
TQ.....	498.3	74.6	18.0	4.9	7.6	1.2
1977.....	551.8	95.5	53.5	20.9	33.0	5.1
1978.....	610.9	121.0	59.1	25.5	39.2	7.9
1979 ⁴	644.6	120.3	33.6	— .7	48.3	10.8
1980.....	715.1	121.7	70.5	1.4	60.4	12.0
1981.....	794.4	130.7	79.3	9.0	78.9	16.1
1982.....	929.4	140.6	135.0	9.9	97.7	17.9
1983.....	1,141.8	160.1	212.3	19.5	107.7	18.0
1984.....	1,312.6	175.5	170.8	15.4	129.0	19.0
1985.....	1,509.9	210.2	197.3	34.7	148.1	21.2

¹ Estimated by Treasury Department. These estimates exclude agency debt, the holdings of which are believed to be small.

² Borrowing from the public is defined as equal to the change in debt held by the public from the beginning of the year to the end, except to the extent that the amount of debt is changed by reclassification. Reclassifications are identified in the footnotes to table E-4.

³ Estimated by Bureau of Economic Analysis, Department of Commerce. These estimates include small amounts of interest from other sources, including the debt of Government-sponsored enterprises, which are not part of the Federal Government.

⁴ A benchmark revision as of December 1978 reduced the estimated foreign holdings of Federal debt. As a result, the data on foreign holdings for 1965-78 are not fully comparable with the data for later years, and the estimated "borrowing" from foreign residents in 1979 reflects the benchmark revision as well as transactions in Federal debt securities.

Both of these factors were subsequently reversed. Many foreign countries have drawn down their dollar reserves from time to time to finance intervention in the foreign exchange market, and the aggregate OPEC current account surplus shifted into a deficit. However, these reversals have been more than offset by the large amount of private capital inflow that has accompanied the appreciation of the dollar and the growing deficit in the U.S. current account. The net result has been a large increase in holdings of dollar assets by foreigners, and this is reflected in the further increase in the Federal debt held by foreigners.

The increase in foreign holdings of U.S. Government securities since 1970 has therefore been primarily the product of foreign decisions rather than the direct marketing of these securities to foreign residents. By the end of fiscal year 1985 foreign holdings of Treasury debt had reached \$210.2 billion, which was 14% of the total debt held by the public. This was a somewhat smaller proportion of total debt held by the public than during most of the 1970's

and the early 1980's, due to the rapid growth recently in total Federal debt. Because of the rising interest rates until recent years, the interest paid on foreign holdings of debt grew faster than did the foreign holdings themselves over the period as a whole.

In the years before 1970, when debt held by foreign residents was relatively small, borrowing from the public was approximately the same as borrowing from the domestic public. Since 1970, though, borrowing from the domestic public has in some years been quite different from total borrowing. As table E-6 shows, borrowing from foreign residents was nearly all or a major part of total borrowing from the public during some years of the 1970's. For the period since 1970 as a whole, borrowing from foreign residents has been 16% of borrowing from the public. This percentage was higher during the 1970's than the 1980's, however, being 30% in the earlier period compared to 10% later. In 1985, despite the \$34.7 billion purchased by foreign residents, the largest amount in any year, the total Federal borrowing was so large that foreign purchases equalled only 18% of borrowing from the public. This does not measure the full impact of the capital inflow on the market for Federal debt securities, however, since the capital inflow supplied additional funds to the securities market generally and included deposits in U.S. financial intermediaries that themselves buy Federal debt.

About three-quarters of the Federal debt held by foreign residents is owned by foreign central banks or other official financial institutions, and all of it is currently denominated in dollars. During 1985, however, holdings by private foreign investors grew especially fast. This was consistent with two related steps taken by the Government in 1984 that directly made Treasury securities more attractive to foreign investors. First, the Deficit Reduction Act repealed the 30% withholding tax on interest paid to non-resident aliens on portfolio debt, which increased the after-tax rate of return on regular Treasury securities (and also corporate securities) held by foreign investors. Second, the Treasury began to sell dollar-denominated notes that were targeted to foreign private investors. These notes can be held by foreign financial institutions without telling the Treasury the identity of the ultimate holder, provided the institution certifies that the initial purchaser and any subsequent recipient of interest is not a U.S. person. As of December 31, 1985, \$2.5 billion of these notes were outstanding. In addition, during 1985 Treasury began to sell certain notes and bonds under the STRIPS program (Separate Trading of Registered Interest and Principal on Securities). This enabled investors to buy zero-coupon Treasury securities and has been very attractive to some private foreign residents.

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, and the disbursement of the proceeds from net borrowing is an outlay.

Agency borrowing was shown in total in table E-1 and is shown by agency in table E-7 for 1985-87. In all three years more debt is repaid than is newly borrowed, and over the period as a whole total agency debt decreases by \$0.5 billion. The agency debt outstanding is less than 1.0% of gross Federal debt.

As implied by the addendum to table E-7, the amount of agency borrowing has been profoundly affected by the Federal Financing Bank (FFB).⁶ The FFB was created in December 1973 under the Treasury Department and began financial operations in May 1974. Its purposes are to assist and coordinate agency borrowing and guaranteed borrowing and to reduce the cost to the Government of some of its borrowing operations. It has the authority to purchase agency debt, to purchase agency loan assets, and, with an agency guarantee, to make direct loans to the public; in turn, it finances these transactions by borrowing from the Treasury. With the approval of the Secretary of the Treasury, the FFB is authorized to borrow from the Treasury without a statutory limit on the amount.⁷ Since the FFB can borrow from the Treasury at lower interest rates than other agencies would have to pay in the market, this practice reduces the cost of agency borrowing. The FFB thus serves as a conduit for agency borrowing, and Treasury 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 triple counting to add together the agency borrowing from the FFB, the FFB borrowing from Treasury, and the Treasury borrowing from the public that was necessary to provide the FFB with funds to lend to the agencies.

As a result of the FFB, several agencies that would otherwise borrow mostly in the investment securities market borrowed \$1.2 billion from the FFB in 1985 and are estimated to borrow \$1.3 billion in 1986 and \$0.9 billion in 1987. Because these agencies now borrow almost exclusively from the FFB instead of the public, almost no new agency borrowing in the market took place in the last 11 years or is scheduled to take place in the future. The change in agency debt outstanding is therefore determined almost

⁶ The operations of the FFB are discussed in some detail in Special Analysis F.

⁷ The FFB also is authorized to have outstanding up to \$15 billion of publicly issued debt. Treasury classifies this as public debt rather than agency debt. The FFB borrowed \$1.5 billion in 8-month bills from the public in July 1974. All of its other borrowing with one exception has been from Treasury, because Treasury can borrow from the public at slightly lower interest rates than FFB would have to pay and therefore no further FFB borrowing from the public is planned. However, as explained on page E-29, because of the debt limit problem the FFB issued \$14.2 billion of securities to the civil service retirement and disability trust fund in October and November 1985. These securities will mature on June 30, 1986.

Table E-7. AGENCY BORROWING ¹

(In millions of dollars)

Description	Borrowing or repayment (—) of debt			Debt end 1987 estimate
	1985 actual	1986 estimate	1987 estimate	
Borrowing from the public:				
Agriculture: Farmers Home Administration ²				141
Defense	— 74	— 46	— 21	15
Education:				
College housing loans ²			— 4	239
Higher education facilities ²			— 16	45
Health and Human Services, except social security ²				5
Housing and Urban Development:				
Federal Housing Administration	— 11	7	8	44
Housing for elderly or handicapped ²				52
Government National Mortgage Assoc. ²			— 43	197
Revolving fund (liquidating programs) ²			— 13	31
Interior	3	*	*	18
Transportation: Coast Guard	— *			
Small Business Administration ²			— 75	18
Veterans Administration ²				309
Export-Import Bank	— 25	— 9		
Postal Service				250
Tennessee Valley Authority		— 100	— 45	1,580
Total, borrowing from the public.	— 107	— 147	— 208	2,944
Borrowing from other funds:				
Agriculture: Farmers Home Administration ²				118
Defense	— 1	— 1		*
Education:				
College housing loans ²			— 1	208
Higher education facilities ²			— 5	42
Health and Human Services, except social security ²				5
Housing and Urban Development:				
Federal Housing Administration	— 7	— 3	— 2	83
Housing for elderly or handicapped ²				45
Government National Mortgage Assoc. ²			— 14	174
Revolving fund (liquidating programs) ²			— 4	29
Small Business Administration ²			— 25	38
Veterans Administration ²				269
Total, borrowing from other funds.	— 7	— 4	— 52	1,012
Total, agency borrowing included in gross Federal debt	— 115	— 151	— 260	3,956
ADDENDUM				
Borrowing from Federal Financing Bank:				
Export-Import Bank	— 281	— 292	— 890	14,227
National Credit Union Central Liquidity Facility	— 47	— 20	— 22	180
Postal Service	603	1,228	1,248	4,166
Tennessee Valley Authority	896	350	577	15,308
United States Railway Association	4	6	7	92
Total, agency borrowing from Federal Financing Bank.	1,176	1,273	919	33,972

^{*} \$500 thousand or less.¹ Excludes agency borrowing from Treasury.² Certificates of participation in loans issued by the Government National Mortgage Association on behalf of several agencies.

entirely by the repayment of maturing debt and consequently is negative each year. If the FFB had not been created, the agency component of gross Federal debt would be much greater than it is now. The Treasury component would be correspondingly less.

By the end of 1987, \$1.8 billion of agency debt, or over two-fifths of the total, will be obligations of two of the five agencies listed in table E-7 that in recent years have borrowed almost exclusively from the FFB: the Postal Service and Tennessee Valley Authority. In contrast, \$33.7 billion in debt will be owed to the FFB by these two agencies together with the Export-Import Bank, which is estimated to have repaid all its borrowings from the public before that date. A total of \$2.0 billion, or one-half 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 E-7. These certificates have not been issued since 1968, and those still outstanding will all mature in 1987 and 1988. A further \$15 million of agency debt will be family housing mortgages assumed by the Department of Defense under two programs, much the larger of which was terminated about two decades ago.

The remaining agency debt will have been issued by two agencies whose borrowing from the public is inherent in the way they operate certain programs. Both agencies may issue special instruments in lieu of cash as a means of paying specified bills. As a rule, outlays are recorded when cash is used to pay the Government's bills for wages and salaries, equipment, social security benefits, etc. In these two cases, where the payments are instead in the form of special instruments, outlays are likewise recorded because the payments likewise pay the Government's bills.⁸ The instruments themselves are classified as agency debt. Neither agency has any occasion to sell these debt instruments to the FFB.

One of these agencies, the Federal Housing Administration (FHA), may issue either checks or debentures in paying claims to the public that arise from defaults on FHA-insured mortgages. The FHA will have \$127 million of debentures outstanding at the end of 1987 (3% of total agency debt). The other agency is the Interior Department. Under two recently enacted statutes, it is authorized to acquire certain lands and mineral rights from the public in exchange for a type of instrument generically termed "monetary credits." The recipients of monetary credits can use them for specified purposes such as payments for Federal coal or mineral leases. An estimated \$18 million of monetary credits will be outstanding at the end of 1987.

The Treasury supplies capital to business-type Government enterprises in return for both capital stock and debt. The 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

⁸ The definition of outlays and its relationship to obligations and budget authority are discussed in Part 6b of the *Budget*.

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 the figures on agency borrowing and debt and from the discussion of this subject both in this special analysis and in all other parts of the budget documents.

INVESTMENT BY GOVERNMENT ACCOUNTS IN FEDERAL SECURITIES

Trust funds and some public enterprise funds (revolving funds) accumulate cash in excess of current requirements in order to meet future claims and demands. These cash surpluses are invested mostly in Treasury debt and, to a very small extent, in agency debt. Since this investment is a debt transaction, purchases are not counted as outlays for the account or for the budget, and redemptions are not counted as receipts.

Net investment by trust funds and other Federal accounts declined from \$17.9 billion in 1979 to a range of \$8 to \$10 billion per year during 1980-82, due both to recessions and also to structural problems in social security financing. In 1983, as the result of the Social Security Amendments of 1983, investment by Government accounts increased to \$22.6 billion, the largest amount ever reached as of that time; and in 1984 it rose to \$24.0 billion. As shown in table E-7, it increased to \$53.5 billion in 1985 and is estimated to increase further to \$80.4 billion in 1986 and then decrease to \$66.9 billion in 1987. The year-to-year change in investment is thus \$29.4 billion in 1985, \$26.9 billion in 1986, and -\$13.5 billion in 1987.

This unusual pattern of investment—extraordinary increases in 1985 and 1986 followed by a sharp decrease in 1987—is primarily due to two reasons. The first is the effect of the debt limit on the investment of the civil service retirement and disability trust fund. The general fund paid \$15.4 billion to this trust fund on the last day of September 1984 as the annual payment to finance the current year's costs of unfunded liability. This amount would ordinarily have been invested in Federal securities immediately. However, as explained on page E-28, the Federal debt was nearly at the statutory limit. As a result, about \$11.8 billion of this amount could not be invested on the same day without exceeding the limit, and, indeed, was not fully invested until the limit was raised by Congress on October 13. Since the end of September was also the end of the fiscal year, investment by the civil service retirement and disability trust fund in 1984 was \$11.8 billion less than it would otherwise have been. The counterpart to this was an equal increase in investment during early 1985 above the amount that would be normal.

Table E-8. INVESTMENT BY GOVERNMENT ACCOUNTS IN FEDERAL SECURITIES

(In millions of dollars)

Description	Investment or disinvestment (—)			Holdings end of 1987 estimate
	1985 actual	1986 estimate	1987 estimate	
Investment in Treasury debt:				
Overseas Private Investment Corporation.....	106	111	115	1,155
Defense—Civil: Military retirement trust fund.....	11,635	13,311	15,688	40,634
Energy: Nuclear waste fund.....	1,366	— 25	— 181	1,160
Health and Human Services:				
Federal old-age and survivors insurance trust fund ¹	3,744	2,916	17,101	50,985
Federal disability insurance trust fund ¹	1,048	2,146	— 843	7,007
Federal hospital insurance trust fund.....	4,194	17,481	12,766	50,968
Federal supplementary medical insurance trust fund.....	1,620	— 382	— 735	9,620
Housing and Urban Development:				
Federal Housing Administration.....	718	1,364	1,603	6,750
Government National Mortgage Association.....	312	152	— 111	2,129
Other.....	980	— 296	138	1,623
Interior: Outer Continental Shelf deposit funds.....	894	— 274	699	7,845
Labor: Unemployment trust fund.....	4,611	3,961	5,142	26,111
State: Foreign Service retirement and disability trust fund.....	484	523	404	3,388
Transportation:				
Highway trust fund.....	1,102	718	608	13,268
Airport and airway trust fund.....	977	1,529	— 8,939	
Treasury: Exchange stabilization fund.....	— 1,170	154	156	2,383
Environmental Protection Agency: Hazardous response trust fund.....	8	400	290	1,373
Office of Personnel Management:				
Civil Service retirement and disability trust fund.....	15,449	31,221	20,726	179,225
Other trust funds.....	939	1,019	30	8,868
Veterans Administration:				
National service life insurance trust fund.....	336	293	221	9,810
Other trust funds.....	51	47	42	1,317
Other Federal funds.....	3	— 63	— 31	541
Federal Deposit Insurance Corp.: Trust fund.....	1,934	1,658	1,900	19,687
Federal Home Loan Bank Board: FSLIC.....	— 414	— 457	197	5,498
National Credit Union Adm.: Share insurance fund.....	813	232	267	1,627
Postal Service fund.....	85	548	— 1,380	1,530
Railroad Retirement Board trust funds:				
Railroad social security equivalent benefit account.....	214	271	166	652
Rail Industry Pension Fund.....	921	1,338	1,030	6,386
Other Federal funds.....	249	144	38	1,178
Other trust funds.....	246	356	— 118	1,183
Other deposit funds ²	6			28
Total, investment in Treasury debt.....	53,461	80,395	66,990	463,930
Investment in agency debt:				
Health and Human Services, except social security:				
Federal hospital insurance trust fund.....				455
Housing and Urban Development:				
Federal Housing Administration.....	— 5	— 1		134
Government National Mortgage Association.....	— 3	— 3	— 2	96
Office of Personnel Management: Civil Service retirement and disability trust fund.....			— 50	125
Veterans Adm.: National service life insurance trust fund.....				135
Federal Home Loan Bank Board: FSLIC.....				67
Total, investment in agency debt.....	— 7	— 4	— 52	1,012
Total, investment in Federal debt.....	53,453	80,391	66,938	464,942
MEMORANDUM				
Investment by Federal funds.....	2,011	344	— 682	16,992
Investment by trust funds (on-budget).....	45,750	75,259	50,663	382,084
Investment by off-budget Federal entities (trust funds).....	4,792	5,062	16,258	57,992
Investment by deposit funds ²	900	— 274	699	7,873

¹ Off-budget Federal entity.² Only those deposit funds classified as Government accounts.

The same kind of event occurred at the end of September 1985, as explained on page E-29. Because of the debt limit, about \$13.4 billion of payments from the general fund and the Postal Service fund could not be invested that day and were not entirely invested until November 14. This reduced 1985 investment by \$13.4 billion and, as a counterpart, increased 1986 investment by the same amount.

The net effect of the delayed investment in these two years was to decrease investment by the civil service retirement and disability trust fund by \$11.8 billion in 1984, to decrease investment by \$1.6 billion in 1985, and to increase investment by \$13.4 billion in 1986. The fluctuating year-to-year pattern of the fund is apparent in table E-7. Thus, the debt limit made the year-to-year change in total investment by Government accounts very uneven and temporarily loosened the normally tight relationship between trust fund surpluses and trust fund investment.

The second reason for the unusual pattern of investment by Government accounts is the proposed disinvestment of the airport and airway trust fund as of October 1, 1986. The purpose of this legislative proposal is to recoup the shortfall in the trust fund's use of its balances during the last four years. This proposal would directly reduce the trust fund's investment—and the total investment by Government accounts—by an estimated \$8.9 billion in 1987. Like the effect of the debt limit, this temporarily loosens the usually tight relationship between the trust fund surplus and trust fund investment.

The civil service retirement and disability trust fund accounts for one-third of the estimated investment by Government accounts during 1985-87, which is substantially more than any other Government account. Among the other accounts, the most important sources of investment are the military retirement trust fund, which is responsible for one-fifth of the estimated investment, and the three trust funds financed by the social security payroll tax, which in combination are responsible for almost as much as civil service. These trust funds altogether make 84% of the total estimated investment.

The military retirement trust fund was established in 1985 in accordance with the defense authorization bill for 1984. The cash benefits for military retirees will be paid out of the trust fund, while the costs of the benefits that are currently accruing are paid to the trust fund from the defense budget. The new trust fund has put the funding of military pensions on a basis roughly akin to the funding of Federal pensions for civilian employees. As table E-8 shows, this adds considerably to investment by Government accounts.⁹

The three trust funds financed by the social security payroll tax—old-age and survivors insurance (OASI), disability insurance

⁹ The military retirement trust fund is explained further in Part 6 of the 1986 *Budget*, pp. 6-40 to 6-43.

(DI), and hospital insurance (HI)—had positive net investment as a whole in 1983 for the first time since 1975. This was due to the cash resources provided by the Social Security Amendments of 1983. As a result of this act and the improving economy, these trust funds as a whole continue to run large surpluses and to invest increasing amounts—a cumulative total of \$60.6 billion during 1985, 1986, and 1987. During 1985 OASI repaid \$4.4 billion that it had borrowed from DI and HI in 1983, and during 1986 it is estimated to repay the remaining \$13.2 billion. Consequently, the amounts of investment displayed in table E-8 for the individual funds during 1985 and 1986 do not reflect the underlying financial conditions of the respective funds.

As a result of the large investment by these trust funds and the effect of the lower unemployment rate on the finances of the unemployment trust fund, total holdings of Federal securities by Government accounts will reach an estimated \$464.9 billion by the end of 1987. This will comprise 20% of the gross Federal debt. One major trust fund—the civil service retirement and disability trust fund—will account for two-fifths of total holdings. All the trust funds together will account for 95% of the holdings. Nearly all of the holdings in Government accounts will be Treasury debt, and the holdings of agency debt will continue to decline by small amounts.

A comparatively small amount of Federal debt is held by deposit funds. Deposit funds are amounts held by the Federal Government as an agent for others (such as State income taxes withheld from Federal employees' salaries and not yet paid to the States); cash collections awaiting determination as to their final disposition; and other sums held temporarily before being refunded or paid into some other fund. Deposit fund balances are thus not the property of the Federal Government. Therefore, changes in deposit fund balances are not included in the budget totals and do not affect the Federal deficit.

Most deposit funds consist of uninvested balances, but a few funds are invested in Treasury debt and collect interest on their investments. Since a deposit fund is not Federal property, its holding of Federal debt is normally treated as debt held by the public rather than as debt held by a Government account. However, the investments of three deposit funds are classified as debt held by Government accounts rather than as debt held by the public. One of these is a relatively small account. The other two deposit funds contain receipts from rents and royalties on the Outer Continental Shelf, the title to which is in dispute between the Federal Government and the States. Until title is settled, these amounts are being held in deposit funds. The balances of these funds were first invested in Federal debt in 1980. They have continued to acquire funds,

and, as shown in table E-8, they are estimated to hold \$7.8 billion at the end of 1987. The Treasury concluded that the Federal claim on these receipts is sufficiently strong that it would be more accurate to classify them as Government holdings of Federal debt rather than as debt held by the public.

Since increases in deposit funds raise Treasury cash balances, they are a means of financing the Government deficit. When the deposit funds are not invested in Federal debt, an increase in deposit fund balances appears as one of the "means of financing other than borrowing from the public" in table E-3. The increase in deposit fund balances thus enables Treasury to reduce its borrowing from the public.

When the deposit funds are invested in Federal debt, their treatment depends on whether they are classified as part of the public or as Government accounts. Under the normal rule, according to which they are treated as part of the public, deposit fund investment in Federal debt is defined to be borrowing from the public. The counterpart to the increase in Federal debt held by the public is a decrease in the deposit fund balances available to finance the deficit by means other than borrowing from the public. This is shown as a decrease in the liabilities of the Government for deposit fund balances in table E-3. The ultimate effect of the increase in the deposit funds is thus for the Treasury borrowing from the public to come from the deposit funds rather than from some other sector of the public, with no net change in the means of financing other than borrowing from the public.

On the other hand, when deposit funds are classified as Government accounts, the investment of deposit fund balances in Federal debt is defined to be an increase in debt held by Government accounts rather than an increase in debt held by the public. Since the debt held by the public does not increase, this investment does not reduce the amount of deposit fund balances (as shown in table E-3) that are available to finance the deficit by means other than borrowing from the public. This investment does, however, increase the gross Federal debt and the debt subject to statutory limit (as shown in table E-10).

LIMITATIONS ON FEDERAL DEBT

Statutory limitations have normally been placed on Federal debt. Until World War I, the Congress ordinarily authorized a specific amount of debt for each separate issue. Beginning with the Second Liberty Bond Act of 1917, however, the nature of the limitation was modified in several steps until it developed into a ceiling on the total amount of most Federal debt outstanding. The latter type

of limitation has been in effect since 1941.¹⁰ 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 fiscal year 1968 under the Participation Sales Act of 1966; and
- other debt issued by Federal agencies that, according to explicit statute, is guaranteed as to principal and interest by the United States.

The debt subject to statutory limit¹¹ includes virtually all Treasury debt. The small amount of Treasury debt not subject to limit is shown in table E-9. It consists almost entirely of currencies no longer being issued, such as silver certificates and national bank notes, which were generally reclassified as Federal debt some time after being discontinued.

The major part of agency debt is not subject to the general statutory limit. The only categories now included are the debentures issued by the Federal Housing Administration and the participation certificates sold in 1968. These securities comprise nearly one-third of all agency debt. However, most other agency debt is subject to special statutory limits. For example, the Tennessee Valley Authority was first authorized to issue revenue bonds to finance power facilities in 1959. The limit was \$750 million. Subsequently, in order to enable TVA to finance additional facilities, Congress raised the limit several times. It is now \$30 billion. The Postal Service is limited to \$10 billion of securities outstanding and \$2 billion of annual borrowing.

The only other debt subject to the general statutory limit is a very small amount of matured principal and interest. This is not classified as part of gross Federal debt. To derive the debt subject to limit from the gross Federal debt also requires a very small accounting adjustment.

The amount of debt subject to limit is compared in table E-9 with the gross Federal debt and the Federal debt held by the public. The debt subject to limit was \$1,823.8 billion at the end of 1985 and is estimated to rise to \$2,317.4 billion by the end of 1987. As shown in table E-9, the debt subject to limit is much larger than the debt held by the public and is almost as large as the gross Federal debt. The debt subject to limit is so much larger than the debt held by the public because it includes Federal debt held by

¹⁰ The legislation on the level of the statutory limit since 1940 and the amount of debt subject to statutory limitation are shown in *Historical Tables, Budget of the United States Government, Fiscal Year 1987*, section 7. The legislation beginning in 1917 is shown in *Statistical Appendix to Annual Report of the Secretary of the Treasury on the State of the Finances, Fiscal Year 1980*, table 32.

¹¹ The statutory debt limit is sometimes called the public debt limit. However, as explained in the text, the limit does not apply to all public debt and does apply to some debt other than public debt.

Table E-9. DEBT SUBJECT TO STATUTORY LIMIT

(In millions of dollars)

Descriptions	End of year		
	1985 actual	1986 estimate	1987 estimate
Federal debt held by the public.....	1,509,857	1,714,008	1,855,688
Federal debt held by Government agencies.....	317,612	398,003	464,942
Total, gross Federal debt.....	1,827,470	2,112,011	2,320,630
Deduct:			
Treasury debt not subject to limit.....	602	602	602
Agency debt not subject to the general limit:			
Department of Defense.....	83	37	15
Department of Interior.....	17	18	18
Export-Import Bank.....	9		
Postal Service.....	250	250	250
Tennessee Valley Authority.....	1,725	1,625	1,580
Participation certificates ¹	1,030	1,030	830
Coast Guard.....	*		
Total, Federal debt not subject to limit.....	3,716	3,561	3,295
Gross Federal debt subject to statutory limit.....	1,823,754	2,108,450	2,317,335
Other debt subject to limit, and adjustments.....	22	22	22
Total, debt subject to statutory limit.....	1,823,775	2,108,471	2,317,356

* \$500 thousand or less.

¹ Certificates of participation in loans issued by the Government National Mortgage Association on behalf of several agencies (these amounts exclude the certificates issued during 1968, which are subject to the debt limitation).

Government accounts. The small difference between debt subject to limit and gross Federal debt is mostly accounted for by agency debt not subject to the general limitation.

The level of the statutory limit on the Federal debt has frequently been changed by Congress. During the 1960's Congress passed 13 separate acts to raise the limit or to extend the duration of a temporary increase in the limit, and during the 1970's Congress passed 18 such acts. During 1980-85 Congress passed two to four such acts each year.

These frequent changes have come about both because the Federal debt has grown steadily and substantially and because of the nature of the debt limit legislation. From 1971 to 1983 the statutory debt limit consisted of a permanent limit of \$400 billion plus a temporary increment that was usually scheduled to expire in a year or less. Because the debt subject to limit was more than \$400 billion, new legislation was required no later than the date when each temporary increment expired. Several times the temporary increment expired without having been extended, so for a few days on each occasion the Federal debt exceeded the statutory limit. The validity of debt issued prior to the expiration of the temporary ceiling was not affected, but the Treasury Department had to suspend all auctions of new securities and all sales of savings bonds.

Such a situation created uncertainty in the securities market and forced the Treasury to take costly administrative actions.

In May 1983 Congress changed the nature of the debt limitation. The permanent limit of \$400 billion and the temporary increment to that limit were combined into a single, higher limit without an expiration date. This prevents the Federal debt from exceeding the statutory limit, since Treasury would stop issuing new securities before that event would occur. The new type of limitation does not, however, avoid the costs of market uncertainty and administrative actions that formerly arose whenever the debt limit fell to below the actual level of debt. The same costs arise when the amount of debt approaches close to the limit and the timing of congressional action to raise the limit is uncertain. Treasury then has to take steps to avoid exceeding the limit, and the market is uncertain what will happen. The principal difference is that under the new type of limitation Treasury can ordinarily refund maturing securities from the proceeds of selling new securities, since this does not increase the amount of debt outstanding;¹² whereas under the former type of limitation Treasury had to use up its existing cash balances to pay off maturing securities once the temporary increment to the debt limit had expired, since it could not sell new securities at all. In the short time that the new procedure has operated the debt limit has usually been set at amounts expected to be reached within a few months, so frequent increases in the limit still have been needed.

The statutory debt limit was formerly raised only by normal legislative procedures. In September 1979, however, an alternative method of enacting debt limits was established by statute. The purpose of the change was for the House of Representatives to vote on the debt limit as a part of the congressional budget process. The congressional budget resolutions establish targets or ceilings for outlays, receipts, and the deficit and also recommend an appropriate level for the debt subject to limit. The recommendation as to the appropriate level of debt had not previously had the effect of law, nor had it been part of the direct process whereby the debt limit was established.

However, beginning with the resolutions adopted in calendar year 1980, the budget resolution that is adopted by the Congress has about half the time been a part of the process that establishes a debt limit. The vote in the House of Representatives is deemed to have been a vote in favor of a joint resolution setting the statutory limit. The joint resolution, having been deemed to have passed the

¹² However, Treasury cannot refund maturing securities by selling new issues if it does not have sufficient cash to make its other payments on the same day. This is because the proceeds from selling the new securities cannot be earmarked for paying off the debt that matures, and under these circumstances Treasury does not have sufficient cash to meet all of its legal obligations at the same time.

House, is transmitted to the Senate for further legislative action.¹³ Upon final passage, it is sent to the President for his signature. This new procedure relates the decision on the debt limit to the congressional decision on the Federal deficit and the other factors, explained in the following section, that determine the change in the debt subject to limit. The debt limit may still be changed by ordinary legislation, with one exception recently imposed by the Balanced Budget and Emergency Deficit Control Act of 1985 (the Gramm-Rudman-Hollings Act). It is not in order for either House to consider a change in the debt limit for a fiscal year until after the congressional budget resolution for that year has been adopted. Both methods of changing the debt limit have been used since the new procedure went into effect.

The statutory debt limit was raised to \$1,573 billion by ordinary legislation on July 6, 1984. This increase was sufficient for fiscal year 1984, but the Congress did not enact any higher level of debt limit until after it had completed action on the congressional budget resolution for 1985. This resolution, which was passed on September 26, 1984, declared that the appropriate level of debt for fiscal year 1985 was \$1,823.8 billion. This provision was deemed to have passed the House as a joint resolution as of October 1, 1984, but was not finally enacted until October 13.

By the time the congressional budget resolution was passed, Treasury had been unable to fully invest all trust funds on the intended date. At the beginning of September those receipts of the social security trust funds (old-age and survivors insurance and disability insurance) that are normally transferred to these funds at the beginning of the month were transferred but were not invested for several days. On the last day of September \$15.4 billion was supposed to have been invested for the civil service retirement and disability trust fund; during the first days of October investment was supposed to have been made for the military retirement trust fund, the social security trust funds, and the supplementary medical insurance trust fund. The total of all these latter amounts was \$38.5 billion, but because of the debt limit most of the investment had to be delayed. The funds were not fully invested until the debt limit was increased, and all of them lost interest. During early October the Treasury also made small changes in its weekly bill auctions because of the debt limit problem, and two auctions of notes and bonds were postponed.

The new debt limit was adequate for Treasury's needs through most of fiscal year 1985. Near the end of that year, on August 1, 1985, the Congress adopted a congressional budget resolution for fiscal year 1986 containing a provision that declared the appropri-

¹³ The Senate has not adopted the same procedure as the House, so the Senate must approve changes in the debt limit separately from its approval of the congressional budget resolution.

ate level of debt to be \$1,847.8 billion or, as of October 1, \$2,078.7 billion. This provision was deemed to have passed the House, but no further action was immediately taken.

At the beginning of September, Treasury could not fully invest the receipts of the social security trust funds that are normally transferred at the beginning of the month, because that would have raised the amount of debt over the limit. By the end of the month the debt was still at the limit, social security had been only partially invested further, Treasury had postponed or limited the normal auctions for some of its securities, and Treasury had not been able to keep the Exchange Stabilization Fund fully invested. On the last day of September, \$17.4 billion was supposed to have been invested for the civil service retirement and disability trust fund; during the first days of October investment was supposed to have been made for the social security trust funds, the military retirement trust fund, and the supplementary medical insurance trust fund. The total of these latter amounts was \$42.5 billion, but because of the debt limit most of the investment had to be delayed, as it had been the year before.

By this time the debt limit bill had become the vehicle for the Gramm-Rudman-Hollings proposal to eliminate the deficit in a series of steps over several years. This proposal, which set deficit targets and created a mechanism to enforce them, was offered as an amendment to the debt limit bill. This amendment became the principal issue before the Congress until December 12, 1985, when the debt limit bill was enacted incorporating a revised version of the amendment designated the Balanced Budget and Emergency Deficit Control Act of 1985.

As a result, the amount of debt remained at the limit, and several extraordinary steps were taken to prevent a default on the Government's various obligations. The first such step was taken on October 9, the day after Treasury's cash balance became virtually exhausted, when use was made of the Federal Financing Bank (FFB). FFB debt is not subject to the general statutory debt limit, so Treasury reduced the amount of debt subject to limit by issuing \$5 billion of FFB securities to the civil service retirement and disability trust fund in place of Treasury securities. This enabled Treasury to raise \$5 billion of cash by selling securities to the public that were subject to the debt limit. A total of \$14.2 billion of FFB securities was eventually issued to the civil service retirement and disability trust fund, nearly reaching the FFB's own \$15 billion special limit.¹⁴

By the beginning of November further steps were needed in order for Treasury to finance the outlays for social security and other purposes that are always very large at the start of the month. Treasury temporarily reduced the debt held in Government accounts by disinvesting the social security trust funds, the civil

¹⁴ These securities have the same interest rates and date of maturity (June 30, 1986) as the Treasury securities that they replaced.

service retirement and disability trust fund, and the railroad retirement account (i.e., by accelerating the redemption of certain securities they held by up to seven days earlier than normal). This decreased the debt subject to limit, which enabled Treasury to obtain cash by selling debt securities to the public that were subject to the limit.

The next critical problem was large payments due on November 15. Treasury was scheduled to pay \$16 billion of cash interest on its debt but did not have enough cash to do this (on November 14 it had a cash balance of only \$7.3 billion). In addition, \$10 billion of notes were scheduled to mature, and Treasury could not sell new securities to refund them because the proceeds could not be earmarked for that purpose. Inability to meet its obligations would have caused an unprecedented default on the interest and principal of U.S. Government securities. To avoid this, on November 14 the Congress temporarily raised the debt limit to \$1,903.8 billion for the period ending December 6. Treasury immediately sold sufficient securities to meet its obligations and fully invested all the trust funds.

By December 5 the debt was at the level of the temporary limit, so when the limit returned to \$1,823.8 billion on December 7 the amount of debt exceeded the limit. For the next several days Treasury was forced to postpone its normal auction of bills, to suspend sales of savings bonds and State and local government special issues, and to cease investing trust funds. On December 12, 1985, however, the debt bill was enacted, raising the limit to \$2,078.7 billion and including as a separate title the Balanced Budget and Emergency Deficit Control Act of 1985. Treasury immediately sold securities to the public and fully invested the trust funds.

The trust funds had lost interest during this period for several reasons stemming from Treasury's inability to keep them fully invested. As part of the Balanced Budget and Emergency Deficit Control Act, the Congress provided that the trust funds be made whole. The debt securities they held were changed so that they would be the same as if the debt limit had been enacted before September, and funds were appropriated to pay the interest they had lost. The Act also made the social security trust funds whole for the losses they had incurred as a result of similar circumstances in September and October 1984. Other trust funds were not made whole for their losses in 1984, however, and no trust fund was made whole for losses in earlier years. Treasury completed the required transactions as of December 31, 1985 (except for possible adjustments later in 1986 that depend on future interest rates). A total of \$494 million was paid to the trust funds, of which \$382 million was paid to social security (old-age and survivors insurance and disability insurance) and \$78 million was paid to the civil service

retirement and disability trust fund. The payment to the social security trust funds consisted of \$373 million to make them whole for the disruption in calendar year 1984 and \$9 million for calendar year 1985.

The new limit of \$2,078.7 billion is under the \$2,108.5 billion of debt subject to statutory limit that is estimated to be outstanding at the end of 1986. Therefore, a further increase in the limit will be necessary before September 30, 1986, in order for the Federal Government to meet its obligations.

FEDERAL FUNDS FINANCING AND THE CHANGE IN DEBT SUBJECT TO STATUTORY LIMIT

The year-to-year change in debt subject to limit, unlike the change in debt held by the public, is not determined principally by the size of the total deficit of the Federal Government. This is because the trust fund surplus or deficit, which makes up part of the total surplus or deficit of the Federal Government, has no essential effect on the amount of debt that is subject to limit. The reason is explained below in a discussion that is more technical than the rest of this special analysis.

The budget consists of two major groups of funds: Federal funds and trust funds.¹⁵ The Federal funds are derived mainly from tax receipts and borrowing and are used for the general purposes of the Government. The trust funds, on the other hand, collect certain taxes and other receipts to be used for specified purposes, such as paying social security or unemployment insurance benefits. The social security trust funds (old-age and survivors insurance and disability insurance) are now excluded from the budget by law and consequently classified as off-budget Federal entities. The budgetary classification of these trust funds does not affect the following discussion.

When the Federal funds have a deficit, it must generally be financed by borrowing. The borrowing is necessary regardless of whether the trust funds have a surplus. This is because the trust fund surpluses are mostly invested in securities issued by Federal funds, and these securities are classified as Federal debt. For instance, if the trust funds receive \$1 billion more of tax receipts, the Treasury needs to sell \$1 billion less of debt to the public in order to obtain cash to finance the Government's outlays; but Treasury also needs to issue \$1 billion more of debt to the trust funds in order to keep the trust funds fully invested. Therefore, total Federal debt is unchanged. The trust fund surplus thus does not reduce the need for the Federal funds to issue debt in order to finance the Federal funds deficit (even though it does reduce borrowing from the public).

¹⁵ Data for Federal funds and trust funds are presented in Special Analysis C, "Funds in the Budget."

Federal funds borrowing consists almost exclusively of the Treasury selling debt securities that are subject to the statutory limit. As a result, almost all of the debt that is used to finance the Federal funds deficit is subject to the statutory limit. While most of this debt is sold to the public or issued to trust funds, a comparatively small amount is issued to certain Federal revolving funds and deposit funds.

Table E-10 shows in detail the relationship of the change in debt subject to limit to the Federal funds deficit. This deficit is an amount that has to be financed. Some relatively small portion may be financed by means other than borrowing, such as seigniorage and a decrease in cash held by Federal funds (however, if the sum of these other means of financing is negative, then these other means are a further amount that has to be financed.)¹⁶ A small portion may be financed by certain Federal funds (or certain deposit funds¹⁷) selling their holdings of Federal debt. Another small portion may be financed by certain Federal funds issuing debt that is not subject to the statutory limit. The remainder of the amount to be financed can only be financed by selling debt subject to the statutory limit. This ordinarily comprises most of the total. Thus, the Federal funds deficit approximately determines the increase in debt subject to statutory limit.

In 1985, for example, the total Federal funds deficit to be financed was \$266.6 billion. The "means of financing other than borrowing" financed \$19.9 billion of this amount, primarily, as discussed earlier, because of the decrease in Treasury cash balances. Certain Federal funds and deposit funds increased their holdings of Federal debt by \$3.9 billion, which had to be financed by still further borrowing; and they decreased their debt outstanding that was not subject to limit by \$0.1 billion, which had to be replaced by an equal amount of debt that was subject to limit. Therefore, a total of \$250.8 billion had to be borrowed subject to the debt limit.

The trust fund surplus, whether on-budget or off-budget, does not have an explicit effect in table E-10. If the trust fund surplus were exactly invested in Federal debt securities subject to the statutory limit, it would have no effect at all on the amount of debt subject to limit. However, to the extent that trust fund surpluses are uninvested—i.e., used to increase the trust fund holdings of cash assets—the debt subject to limit is reduced. This is because the uninvested balances provide cash that can be used to finance Federal funds outlays without recording an increase in Federal debt.

¹⁶ The amounts for means of financing other than borrowing exclude the amounts attributable to trust funds. It is not known how the trust fund open book balances (cash assets not currently invested) are divided between cash and the grouping labeled "checks outstanding, etc." In table E-10 they are all assumed to be in checks outstanding, etc.

¹⁷ Only those deposit funds classified as Government accounts.

Table E-10. FEDERAL FUNDS FINANCING AND CHANGE IN DEBT SUBJECT TO STATUTORY LIMIT ¹

(In millions of dollars)

Description	1985 actual	1986 estimate	1987 estimate	1988 estimate	1989 estimate	1990 estimate	1991 estimate
Federal funds surplus or deficit (—)	—266,648	—265,794	—218,496	—189,546	—176,420	—157,883	—135,856
Means of financing other than borrowing:							
Decrease or increase (—) in Treasury operating cash balance..	13,367	—2,940					
Increase or decrease (—) in:							
Checks outstanding, etc. ²	3,885	—16,888	9,456	600	300		—400
Deposit fund balances ³	2,093	711	—105				
Seigniorage on coins.....	516	439	544	622	752	837	906
Total, means of financing other than borrowing..	19,861	—18,678	9,895	1,222	1,052	837	506
Decrease or increase (—) in Federal debt held by Federal funds and deposit funds ⁴	—3,935	—70	—17				
Increase or decrease (—) in Federal funds debt not subject to limit.....	—97	—155	—266	—835	—3	—2	—1
Total, requirements for borrowing subject to debt limit.....	—250,820	—284,696	—208,885	—189,160	—175,371	—157,048	—135,351
Change in debt subject to limit but not part of Federal debt, and in adjustment.....	—20						
Change in debt subject to limit.....	250,800	284,696	208,885	189,160	175,371	157,048	135,351
ADDENDUM							
Debt subject to statutory limit.....	1,823,775	2,108,471	2,317,356	2,506,516	2,681,887	2,838,935	2,974,286

^{*} \$50 million or less.¹ Several amounts have been assumed to be zero during 1987-91 because they are usually small and cannot be estimated accurately.² Besides checks outstanding, includes accrual of interest payable on Treasury debt, miscellaneous liability accounts, allocations of special drawing rights, and, as an offset, cash and monetary assets other than the Treasury operating cash balance, miscellaneous asset accounts, and profit on sale of gold.³ Does not include investment in Federal debt securities by deposit funds classified as part of the public.⁴ Only those deposit funds classified as Government accounts.

The increase in uninvested cash assets of the trust funds is recorded in table E-10 as an increase in the liabilities of the Federal funds for checks outstanding, etc. (i.e., an increase in the liabilities of Federal funds to trust funds). This increases the “means of financing other than borrowing” for the Federal funds, which in turn reduces the requirement for borrowing subject to the statuto-

ry limit. The uninvested cash assets of the trust funds do not usually change a great deal from year to year, and by law the trust fund surpluses must generally be invested in Federal debt. Consequently, the effect of the trust fund surplus on debt subject to limit is normally minor.

As discussed in the two previous sections, however, the investment of the civil service retirement and disability trust fund was not normal at the ends of 1984 and 1985, and under proposed legislation it will not be normal for the airport and airway trust fund in 1987. The statutory debt limit prevented Treasury from fully investing the civil service retirement and disability trust fund on the last day of 1984 for the payment that it received that day from the general fund (part of the Federal funds); and this occurred again on the last day of 1985. As a result, the trust fund's cash balance was abnormally high by about \$11.8 billion at the end of 1984 and about \$13.4 billion at the end of 1985. Consequently, the debt subject to limit at the end of 1984 was \$11.8 billion lower than it would have been under normal circumstances, and the Federal funds deficit was larger than the increase in debt subject to limit by an additional \$11.8 billion. As was displayed in table E-10 for 1984 (in Special Analysis E for 1986), the uninvested trust fund surplus raised checks outstanding, etc., by \$11.8 billion, which provided \$11.8 billion to finance the Federal deficit by means other than borrowing.

The full investment of the trust fund occurred by mid-October 1984 and required financing by the issuance of securities subject to the debt limit. This caused a decrease in checks outstanding, etc., by \$11.8 billion during fiscal year 1985 compared to the amount it would have been under normal circumstances. However, the inability of Treasury to fully invest the trust fund on the last day of 1985 provided \$13.4 billion to finance the Federal funds deficit by an increase in checks outstanding, etc., instead of borrowing. Because of this offset, the net effect of trust fund transactions on checks outstanding, etc. (and consequently on the means of financing other than borrowing) was relatively small in 1985. However, this offset also meant that the amount of debt subject to limit at the end of 1985 was \$13.4 billion less than it would have been under normal circumstances.

The full investment of this \$13.4 billion occurred by mid-November 1985 and required financing by the issuance of securities subject to the debt limit. For fiscal year 1986 this causes a decrease in checks outstanding, etc., by \$13.4 billion from the amount it would otherwise have been. Thus, as in 1984, the difference between the Federal funds deficit and the increase in debt subject to limit is estimated to be abnormally large, but it is in the opposite direction. The increase in debt is larger than the Federal funds deficit. The

estimated amount of debt at the end of 1986 is not affected by the delays in fully investing the civil service retirement and disability trust fund at the ends of the two previous years.

The proposed disinvestment of the airport and airway trust fund in 1987 directly reduces the estimated debt subject to limit by \$8.9 billion and thereby provides \$8.9 billion to finance the Federal funds deficit by means other than borrowing. As a result, the increase in debt subject to limit during 1987 is a further \$8.9 billion less than the Federal fund deficit.

Since the trust fund holdings of Federal debt are included almost entirely in debt subject to limit, but not in debt held by the public, the amount of debt held by the public is much less than the amount of debt subject to limit. Since the trust funds as a group almost always have a surplus, the change in debt held by the public from one year to the next is almost always less than the change in debt subject to limit. As can be calculated from table E-9, during 1986 and 1987 the debt subject to limit is estimated to increase by \$493.6 billion, whereas the debt held by the public is estimated to increase by \$345.8 billion.

The present analysis helps to demonstrate the difficulty in preventing a continual rise in the Federal debt subject to statutory limit. Table E-10 shows that the debt subject to statutory limit may continue to rise even if the total Federal Government deficit (including both on-budget and off-budget accounts) is exactly zero and, as a result, the debt held by the public remains constant (as an approximation, aside from the relatively small effect of the means of financing other than borrowing). In order for the debt subject to limit to remain constant, table E-10 shows that (as an approximation) the Federal funds portion of the budget must be in balance. If this condition is met, the amount to be financed in table E-10 is zero, and (as an approximation) the requirements for borrowing subject to the debt limit are zero.

However, the trust funds almost always have a surplus. Therefore, a zero Federal Government deficit would imply that there would still be a deficit in the Federal funds and, as a result, that the debt subject to statutory limit would still increase. As a result, it is more difficult to have a balance in the Federal funds alone than it is to have a balance for the Government as a whole; and, in consequence, it is more difficult to prevent a rise in the debt subject to statutory limit than in the debt held by the public.

This is demonstrated by comparing the estimated financing requirements for 1991 that are shown in tables E-3 and E-10. In 1991 the Federal Government as a whole has a \$1.3 billion surplus, which allows it to repay \$2.2 billion of debt held by the public. Nevertheless, the debt subject to limit increases by \$135.4 billion. The reason is that the Federal funds have a deficit of \$135.9 billion.

The Federal Government as a whole is able to have a small surplus despite the large Federal funds deficit, because the trust funds have a surplus of \$137.2 billion, which is even larger.

The same conclusion can alternatively be illustrated by comparing the trends in borrowing from the public and borrowing subject to the debt limit. From 1985 to 1991, Table E-3 shows that borrowing from the public decreases by \$199.5 billion, in line with the movement from a large total Government deficit to a small surplus. Table E-10 shows, however, that borrowing subject to the debt limit decreases only by \$115.4 billion. This difference of \$84.0 billion is mostly because of an \$82.8 billion increase in the trust fund surplus. The rise in the trust fund surplus reduces borrowing from the public by an equal amount but does not reduce the need to issue debt subject to the statutory limit.

This analysis also applies to the difficulty in preventing a continual rise in the gross Federal debt. Gross Federal debt is nearly the same as debt subject to statutory limit, as explained in the previous section. Therefore, in order to prevent a continual rise in gross Federal debt, the Federal funds portion of the budget must be in balance (as an approximation).

FEDERALLY ASSISTED BORROWING

The effect of the Government on borrowing in the credit market arises not only from its own borrowing to finance Federal operations but also from its assistance to certain borrowing by the public. Federally assisted borrowing is of two principal types: Government-guaranteed borrowing, and borrowing by Government-sponsored enterprises.

Guaranteed borrowing is another term for guaranteed lending. It consists of loans for which the Federal Government guarantees (or insures) the payment of the principal and/or interest in whole or in part. Guaranteed loans have diverse characteristics. The loans may be made to individuals, businesses, State and local governments, or foreign governments. The guaranteed obligation may be a loan made by a bank or other institutional lender, or it may be a security sold in the capital market.

Loan guarantees are designed to allocate economic resources toward particular uses by providing credit at more favorable terms than would otherwise be available in the private market. The major use of loan guarantees is to support housing, but they are also used for many other purposes. As shown subsequently in table E-12, primary guaranteed borrowing (which excludes double counting) was \$21.6 billion in 1985 and is estimated to be \$40.2 billion in 1986 and \$30.8 billion in 1987. Special Analysis F, "Federal Credit Programs," presents detailed data on guaranteed loans and estimates the subsidies that are provided by loan guarantees.

The other type of federally assisted borrowing is borrowing by Government-sponsored enterprises, which are discussed in more detail in Special Analysis F. These enterprises were established and chartered by the Federal Government to perform specific credit functions but are now entirely privately owned. The rule governing the budget treatment of these enterprises was established in 1967 in accordance with a recommendation by the President's Commission on Budget Concepts. The Commission, whose report led to the adoption of the unified budget, recommended that the budget exclude those Government-sponsored enterprises that are entirely privately owned.¹⁸ Therefore the transactions of these enterprises are not included within the Federal budget, and their debt is not part of gross Federal debt.

The seven Government-sponsored credit enterprises are financial intermediaries. They borrow in the securities market and lend their borrowed funds for specifically authorized purposes either directly or by purchasing loans originated by the private groups that they were established to assist. The borrowing programs of these 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 Federal National Mortgage Association, the Federal Home Loan Banks, and the Student Loan Marketing Association (SLMA) are required to obtain Treasury approval of the terms and timing of specific offerings. SLMA borrowed exclusively from the Federal Financing Bank from the time of FFB's establishment until May 1981.¹⁹ SLMA now borrows new funds from the public, without any guarantee. The three enterprises regulated by the Farm Credit Administration—the Banks for Cooperatives, Federal Intermediate Credit Banks, and Federal Land Banks—borrow by issuing consolidated Farm Credit bonds and notes rather than securities under their separate names.

Government sponsorship of these enterprises has given them various direct benefits. These benefits differ from one enterprise to another and from one type of debt security to another. In most cases, but not all, they include such advantages as the following: their debt securities can be held by federally regulated financial institutions in a number of cases where other private securities or State and local securities are not eligible; they are exempt from Federal, State, and local income taxation; the interest on their debt securities is exempt from State and local income taxation; and some of them have lines of credit with the Federal Government

¹⁸ *Report of the President's Commission on Budget Concepts* (Washington: U.S. Government Printing Office, 1967), pp. 29–30.

¹⁹ SLMA was the only Government-sponsored enterprise whose new securities could be guaranteed by the Government and therefore bought by the FFB. The Secretary of Education had authority to guarantee SLMA securities issued prior to October 1, 1984.

that range up to \$4 billion. Because of these specific advantages and the overall Federal sponsorship, the enterprises are perceived by the securities market to have a special relationship with the Federal Government. As a result, and despite the absence of Federal guarantees, the Government-sponsored enterprises borrow at lower interest rates than they would otherwise have to pay.

In consequence of these privileges, the budget proposes that fees be imposed on new borrowings (including mortgage-backed securities) of the Government-sponsored enterprises. With certain qualifications, the fee is to apply annually to the net new securities issued after 1986. Depending on the particular Government-sponsored enterprise and the type of security, the rate is to range from 0.01% to 0.10% in 1987 and is thereafter to rise in a number of steps to a range of 0.10-0.50%.

The operations of the Government-sponsored enterprises are not subject to the Federal budget review process; and the economic assumptions on which their borrowing estimates are based for 1986-87 are not necessarily the same as the Administration's economic forecast, which is used for the budget. In order to show the borrowing by this sector as a whole from the rest of the market, the total borrowing figures in table E-11 are calculated net of the borrowing by one Government-sponsored enterprise from another. Most of this adjustment is accounted for by the Federal Home Loan Mortgage Corporation repaying its debt to the Federal Home Loan Banks.

Borrowing by Government-sponsored enterprises has risen to much higher levels in the last few years than it was before. Until 1978 the largest amount of borrowing by this sector as a whole had been \$14.9 billion in 1974. Borrowing increased sharply to \$24 to \$27 billion during 1978-80, however, and then expanded with only one interruption to \$49.7 billion in 1984. Borrowing increased significantly again in 1985, reaching \$64.1 billion. The Government-sponsored enterprises estimate that it will average \$67.5 billion during 1986-87.

The major Government-sponsored borrowers during 1984-87 are the two enterprises that borrow in order to support housing through the purchase of mortgages: the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC). In 1984 they borrowed \$31.2 billion altogether; during 1985-87 they borrowed or are estimated to borrow a steady \$55 to \$59 billion each year. This is 87% of total Government-sponsored borrowing. These high levels of borrowing and lending are primarily being carried out through their programs of mortgage-backed securities. Both of these programs purchase conventional mortgages and finance the purchases by packaging the mortgages into pools and selling participation certificates in the pools to

Table E-11. **BORROWING BY GOVERNMENT-SPONSORED ENTERPRISES**

(In millions of dollars)

Description	Borrowing or repayment (—)				Debt outstanding end 1987 estimate
	1984 actual	1985 actual	1986 estimate	1987 estimate	
Education: Student Loan Marketing Association	1,774	2,671	2,465	2,741	17,876
Housing and Urban Development: Federal National Mortgage Association.....	17,934	27,451	22,110	25,562	188,134
Farm Credit Administration: ¹					
Banks for cooperatives	159	— 258	19	457	8,542
Federal intermediate credit banks	— 688	— 2,745	— 2,318	— 743	12,461
Federal land banks	739	— 1,382	— 2,161	— 2,029	42,059
Federal Home Loan Bank Board:					
Federal home loan banks	15,633	6,168	11,426	11,000	96,000
Federal Home Loan Mortgage Corporation	13,269	31,581	36,813	29,222	171,850
Total	48,820	63,486	68,355	66,209	536,923
Less increase in holdings of debt issued by Government-sponsored enterprises	— 865	— 626	— 84	— 298	1,051
Total, borrowing by Government-sponsored enterprises	49,686	64,112	68,439	66,507	535,872

¹ The debt represented by consolidated notes and bonds is attributed to the respective Farm Credit banks.

the public. By the end of 1987, FNMA and FHLMC are estimated to have raised their combined share of total Government-sponsored debt from 42% in 1980 to 67%.

Although the borrowing by FNMA and FHLMC is currently dominant in the Government-sponsored sector, the borrowing by the Federal Home Loan Banks is also very large. They are estimated to continue increasing their debt in order to finance loans to savings and loan associations and other thrift institutions, nearly doubling their debt outstanding during 1984-87. Their operations also support the housing sector. In contrast, the three Government-sponsored enterprises that comprise the Farm Credit System—the Banks for Cooperatives, the Federal Intermediate Credit Banks, and the Federal Land Banks—contracted their net lending and borrowing in 1985 and, as a group, are estimated to contract it further in 1986 and 1987. This reflects in part the current economic difficulties of the farm sector.

The Federal Government provides a different kind of assistance to State and local government borrowing than it does to other borrowers through loan guarantees and Government-sponsored enterprises. It exempts the interest on State and local debt from Federal income tax. This reduces the interest rate these governments have to pay and thereby encourages them to borrow larger amounts. Tax exemption has also been extended to certain bonds nominally issued by a State or local government to raise funds for private purposes. These private purpose bonds, such as industrial development bonds, now comprise over half of all new long-term,

tax-exempt issues. In 1985 the total tax-exempt borrowing (net of repayments) estimated in the Federal Reserve flow-of-funds accounts was \$108.2 billion. In its tax reform proposals, the Administration has recommended removing the tax exemption of most newly issued private purpose bonds. Tax-exempt borrowing is discussed further in Special Analysis F, "Federal Credit Programs," and, from a different perspective, in Special Analysis G, "Tax Expenditures."

TOTAL FEDERAL AND FEDERALLY ASSISTED BORROWING

Table E-12 summarizes Federal and federally assisted borrowing. Federal borrowing from the public is presented in total. Guaranteed borrowing and borrowing by Government-sponsored enterprises are presented both as total amounts for the sector as a whole and as net amounts. The net amounts contain adjustments that were made in order to remove double counting in the aggregation of total Federal and federally assisted borrowing. Double counting would otherwise occur when a Federal agency or a Government-sponsored enterprise bought (or sold) a Federal or federally assisted debt security. This is because borrowing would occur both when the security was initially sold and when the Federal agency or Government-sponsored enterprise borrowed in order to finance its purchase.

Federal borrowing from the public to finance the deficit dominates the total of Federal and federally assisted borrowing each year during 1985-87. Federal borrowing comprises 66% of the total for the whole period, with the share declining from 71% in 1985 to 60% in 1987. This decrease is due to both a decrease in Federal borrowing and an increase in federally assisted borrowing. At the end of 1987 Federal debt held by the public is 66% of the total Federal and federally assisted debt outstanding.

The following chart depicts the trends in Federal and federally assisted borrowing from 1966 to 1987. The series are volatile, and the fluctuations are usually dominated by Federal borrowing, which is driven primarily by the Federal deficit. The fluctuations in the Federal deficit, in turn, are strongly related to the pattern of recession and recovery. Total Federal and federally assisted borrowing increased steadily and substantially from \$80.8 billion in 1979 to \$280.5 billion in 1983. With a subsequent reduction in the deficit and with federally assisted borrowing not rising very much, the total was lower in 1984 and 1985. However, the significant increases estimated in both guaranteed and Government-sponsored borrowing in 1986, together with a small rise in Federal borrowing, are estimated to produce a record \$312.2 billion of Federal and federally assisted borrowing in 1986. In 1987, though, sharp decreases in Federal and

guaranteed borrowing are estimated to reduce the total by \$74.4 billion or 24%.

Table E-12. NET BORROWING BY GOVERNMENT, GOVERNMENT-GUARANTEED BORROWERS, AND GOVERNMENT-SPONSORED ENTERPRISES

(In billions of dollars)

Description	Borrowing or repayment (—)			Debt outstanding end 1987 estimate
	1985 actual	1986 estimate	1987 estimate	
Federal borrowing from the public ¹	197.3	204.2	141.7	1,855.7
Guaranteed borrowing (net) ^{2 3}	20.8	39.5	30.2	481.8
Less increase in guaranteed loans held by Federal agencies: ³				
Government National Mortgage Association	— .7	— .7	— .6	.4
Primary guaranteed borrowing ⁴	21.6	40.2	30.8	481.4
Borrowing by Government-sponsored enterprises ⁵	64.1	68.4	66.5	535.9
Less increase in holdings of Federal debt .....	.5	— .6	— .1	2.1
Less increase in Government-sponsored debt held by Federal agencies:				
Federal Financing Bank			— *	5.0
Tennessee Valley Authority .....				.1
Less increase in holdings of guaranteed loans:				
Student Loan Marketing Association ⁶	2.1	2.4	2.6	11.6
Federal National Mortgage Association	1.8	— 1.6	— 1.5	28.0
Farm Credit Banks	— *	.1	— *	.1
Federal Home Loan Banks .....	.8	.4	.3	3.1
Federal Home Loan Mortgage Corporation	1.0	— .1	— .1	1.7
Net Government-sponsored borrowing	57.9	67.9	65.3	484.2
Total, Federal and federally assisted borrowing	276.7	312.2	237.8	2,821.3

* \$50 million or less.

¹ See table E-1.

² "Guaranteed-borrowing (net)" is the same as "guaranteed loans (net)" in table F-20 of Special Analysis F. To avoid double counting, it is calculated net of guarantees of loans previously guaranteed and guarantees of Federal agency debt.

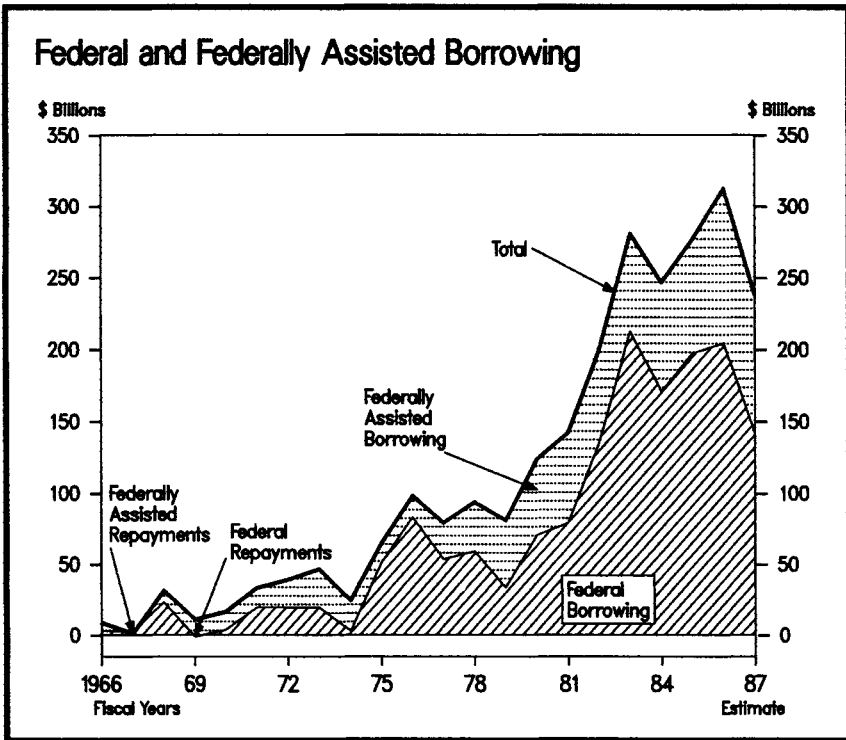
³ The increase in guaranteed loans held by the FFB is netted out in deriving guaranteed borrowing (net).

⁴ "Primary guaranteed borrowing" in this table is the same as "primary guaranteed loans" in table F-20.

⁵ From table E-11.

⁶ The increase in holdings of guaranteed loans by the Student Loan Marketing Association is subtracted out on this line only to the extent that SLMA borrows from the public. To the extent that SLMA borrows from the FFB, the increase in holdings of guaranteed loans is ultimately financed by Federal borrowing and the loans are therefore classified as direct loans rather than guaranteed loans. This amount is subtracted out above as an increase in Government-sponsored debt held by Federal agencies.

As the chart shows, Federal and federally assisted borrowing is now a great deal higher than a decade ago. Much of the increase parallels the growth in the economy and in the total funds borrowed by the non-financial sector in the credit market. However, total Federal and federally assisted borrowing has increased as a proportion of the total funds borrowed. This proportion increased from 17% during 1960-69 to 21% during the first half of the 1970's and 27% during the second half. During 1980-85 the proportion was higher still, averaging 41%. Thus, Government programs have recently been a larger proportion of funds borrowed in credit markets than they were in the preceding years. However, in 1984 and 1985 the proportion (36% in both years) was down sharply from the proportions in 1982 (50%) and 1983 (55%). This result, and the



estimated decrease of Federal and federally assisted borrowing in 1987, suggest that the upward trend of relative Federal participation in the credit market may no longer be continuing.

Table 6. **FEDERAL GOVERNMENT FINANCING AND DEBT**

(In billions of dollars)

FINANCING

	1985 actual	Estimate					
		1986	1987	1988	1989	1990	1991
Surplus or deficit (—)	—212.3	—202.8	—143.6	—93.6	—67.5	—35.8	1.3
On-budget	(—221.6)	(—216.0)	(—159.3)	(—126.8)	(—111.3)	(—90.1)	(—65.6)
Off-budget	(9.4)	(13.2)	(15.7)	(33.2)	(43.8)	(54.4)	(67.0)
Means of financing other than borrowing from the public:							
Decrease or increase (—) in Treasury operating cash balance	13.4	—2.9					
Increase or decrease (—) in:							
Checks outstanding, etc. ¹	—1.0	.4	1.5				
Deposit fund balances	2.1	.7	—1				
Seigniorage on coins .....	.5	.4	.5	.6	.8	.8	.9
Total, means of financing other than borrowing from the public	15.0	—1.4	2.0	.6	.8	.8	.9
Total, requirements for borrowing from the public	—197.3	—204.2	—141.7	—93.0	—66.8	—34.9	2.2
Change in debt held by the public	197.3	204.2	141.7	93.0	66.8	34.9	2.2

DEBT, END OF YEAR

Gross Federal debt:							
Debt issued by Treasury	1,823.1	2,107.8	2,316.7	2,507.0	2,682.3	2,839.4	2,974.7
Debt issued by other agencies	4.4	4.2	4.0	2.0	2.0	2.0	2.0
Total, gross Federal debt	1,827.5	2,112.0	2,320.6	2,509.0	2,684.3	2,841.4	2,976.7
Held by:							
Government accounts	317.6	398.0	464.9	560.3	668.9	791.0	928.6
The public	1,509.9	1,714.0	1,855.7	1,948.7	2,015.4	2,050.3	2,048.1
Federal Reserve System	169.8						
Others	1,340.1						

Table 6. FEDERAL GOVERNMENT FINANCING AND DEBT—Continued

(In billions of dollars)

DEBT SUBJECT TO STATUTORY LIMITATION, END OF YEAR

	1985 actual	Estimate					
		1986	1987	1988	1989	1990	1991
Debt issued by Treasury	1,823.1	2,107.8	2,316.7	2,507.0	2,682.3	2,839.4	2,974.7
Treasury debt not subject to limitation (—)	— .6	— .6	— .6	— .6	— .6	— .6	— .6
Agency debt subject to limitation	1.3	1.3	1.3	.1	.1	.1	.1
Total, debt subject to statutory limitation ²	1,823.8	2,108.5	2,317.4	2,506.5	2,681.9	2,838.9	2,974.3

¹ Besides checks outstanding, includes accrued interest payable on Treasury debt, miscellaneous liability accounts, allocations of special drawing rights, and, as an offset, cash and monetary assets other than the Treasury operating cash balance, miscellaneous asset accounts, and profit on sale of gold.

² The statutory debt limit is \$2,078.7 billion (Public Law 99-177).

SPECIAL ANALYSIS F

TABLE OF CONTENTS

	Page
I. Introduction	F-3
II. Controlling Federal Credit Programs	F-5
III. The Credit Budget	F-7
A. Credit Budget Concepts	F-7
B. Appropriation Act Limitations	F-9
C. Impact of Gramm-Rudman-Hollings	F-14
D. Direct Loans	F-14
E. Loan Guarantees	F-18
IV. Government-Sponsored Enterprises	F-21
V. Changes in the Quantity and Price of Federal Credit	F-28
VI. Federal Credit Subsidies	F-31
VII. Defaults	F-38
VIII. Federal Financing Bank	F-40
IX. Loan Asset Sales and Repurchases	F-42
X. Contingent Liabilities	F-43
XI. Federal Deposit Insurance	F-46
XII. Leasing	F-47
XIII. Tax-Exempt Credit	F-48
XIV. Summary	F-53
XV. Appendix	F-53

TABLES AND CHARTS

	Page
Chart F-1 Total Federal Credit Budget	F-4
Table F-1 Contingent Liability for Guaranteed Loans Outstanding.....	F-8
Table F-2 The Credit Budget Totals.....	F-9
Table F-3 Credit Budget Programs Subject to and Exempt from Appropriation Act Limitation	F-10
Table F-4 Credit Appropriation Act Limitations.....	F-12
Chart F-2 Used and Unused Balance of Enacted Limitations—Eximbank.....	F-11
Table F-5 Comparison of Requested and Enacted Limitations with Actual Loan Levels for Selected Programs	F-13
Table F-6 Summary of Direct Loan Transactions	F-15
Table F-7 Summary of Primary Guaranteed Loan Transactions.....	F-20
Table F-8 Summary of Lending and Borrowing by Government-Sponsored Enterprises	F-22
Chart F-3 Government-Sponsored Enterprises and A-Rated Bonds: Spread Above Treasuries.....	F-23
Table F-9 Benefits Enjoyed by Government-Sponsored Enterprises.....	F-23
Chart F-4 Federal Participation in Domestic Credit Markets	F-30
Table F-10 Summary of Outstanding Federal and Federally Assisted Credit..	F-31
Table F-11 Subsidy Values of 1985 Direct Loan Obligations.....	F-33
Table F-12 Subsidy Values of 1985 Guaranteed Loan Commitments.....	F-36
Table F-13 Direct Loan Write-offs and Guaranteed Loan Commitments	F-39
Table F-14 Summary of Federal Financing Bank Activity	F-41
Table F-15 Loan Asset Sales and Repurchases	F-44
Table F-16 Contingent Liabilities	F-45
Table F-17 Federal Deposit Insurance.....	F-46
Table F-18 Tax-Exempt Financing	F-52
Table F-19 Direct Loan Transactions.....	F-55
Table F-20 Guaranteed Loan Transactions	F-67
Table F-21 Lending and Borrowing by Government-Sponsored Enterprises	F-73
Table F-22 Federal Financing Bank Acquisitions	F-76
Table F-23 Federal Participation in Domestic Credit Markets	F-80

SPECIAL ANALYSIS F

FEDERAL CREDIT PROGRAMS

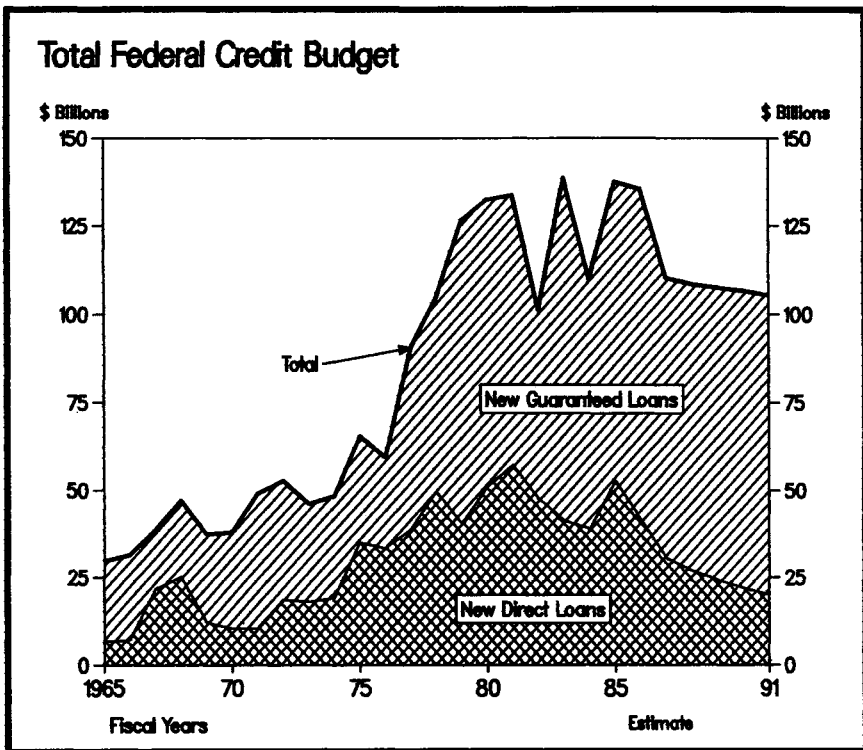
I. INTRODUCTION

The Federal Government is the Nation's largest financial intermediary. At the end of 1985, it held \$257 billion in its loan portfolio, which was about 30% larger than the loan assets of the two largest U.S. commercial banks combined. The Federal Government also had guaranteed loans with an outstanding balance of \$410 billion at the end of 1985. Through direct loans and loan guarantees, the Federal Government allocates credit and credit subsidies to farmers, homeowners, small businesses, exporters, utilities, shipbuilders, and State, local, and foreign governments. Until this administration, the volume of new credit offered by the Government had grown substantially for 15 years. The following chart compares the pattern of growth over that period with the most recent patterns and the estimates of future growth through 1991.¹

Federal credit is designed to meet various social or economic goals that, for whatever reason, the private sector does not meet. Meeting these goals may entail the provision of a subsidy to a favored borrower or the correction of a perceived capital market imperfection. The problems in directing or controlling Federal credit are enormous and systemic.

The discipline that the private market would impose on private financial intermediaries is absent. The discipline that the budget process imposes on most Federal agencies is not fully effective in controlling Federal credit programs. The Federal credit budget, while an improvement over sole reliance on the unified budget for credit programs, does not capture explicitly the most important aspect of Federal credit—the economic subsidy offered to favored borrowers. Moreover, Federal credit programs are not immune from the credit quality problems suffered by private intermediaries in lending to homeowners, farmers and some foreign governments. The Federal Government's disproportionately high share of the loans owed by these groups, and its role as lender of last resort to poor credit risks, means that it endures losses that would bankrupt a private financial institution of the same size. These losses are ultimately borne by taxpayers.

¹ See also the *Economic Report of the President*, Chapter 6 "Credit Markets."



This analysis provides estimates of the subsidies provided by direct loan and loan guarantee programs in Tables F-11 and F-12. These estimates compare the interest rates, loan fees, maturities, and repayment schedules of Federal direct and guaranteed loans to the terms of an alternative private loan in order to estimate the Federal subsidy. This information will allow the Congress and Federal agencies to make better decisions about credit programs. These estimates, which are conservative, show that subsidies for direct loans obligated in 1985 were \$9.8 billion and subsidies for guaranteed loan commitments in 1985 were \$6.1 billion. Comparable estimates for 1986 are \$9.2 billion and \$6.2 billion; for 1987, they are \$7.1 billion and \$5.1 billion. The economic costs of these subsidies should be compared to the benefits of Federal credit programs to evaluate the worth of the programs.

This special analysis presents basic information on the broad spectrum of Government credit programs and policies from 1985 through 1991. It describes recent credit policy, and explains the credit budget and its relationship to appropriation act limitations on direct loan obligations and guaranteed loan commitments and discusses the impact of the Balanced Budget and Emergency Defi-

cit Control Act of 1985, commonly known as Gramm-Rudman-Hollings (GRH). It describes the credit activity of Government-sponsored enterprises (GSEs), and presents in detail the direct loans and guaranteed loans of the Federal Government. It also discusses trends in Federal credit, Federal credit subsidies, and other special topics. This special analysis supplements the credit data and discussions found elsewhere in the budget documents (see Appendix A of this analysis).

II. CONTROLLING FEDERAL CREDIT PROGRAMS

Comparisons with private financial intermediaries.—The objectives of Federal credit programs are different from those of private financial institutions. The purpose is to offer terms and conditions to selected borrowers that are more favorable than those otherwise available from private lenders. Compared to fully private loans, these terms and conditions may include lower interest rates or loan guarantee fees, less stringent credit risk thresholds in making credit available, or more generous grace periods or repayment schedules. Legislation frequently defines the eligible pool of applicants, specifies the lending terms that an agency or program may offer, and otherwise restricts the discretion of Federal program managers in a manner that never occurs for private lenders.

In addition to these differences in purpose, there are also differences in procedures between public and private financial intermediaries. Unlike a private financial intermediary, a Federal direct loan or loan guarantee program has no standard measure of performance, such as profit, for assessing its success. Federal credit programs were created to subsidize favored borrowers to varying degrees. Therefore, net income does not measure success. In many cases, income is not even measured correctly since there is no well-defined cost of capital for credit programs. The lack of a measurement tool creates large difficulties in efficiently allocating resources to Federal credit (and noncredit) programs.

Moreover, the norms of the marketplace that restrict the growth and size of private lenders do not apply to Federal credit programs. Unlike commercial banks, Federal agencies need not worry about constraints on the volume or quality of new lending imposed by the inadequacy of primary capital. Federal agencies can continue to lend even if they have little or no equity. Federal lending agencies need not be concerned with the standards imposed on private banks by Federal regulatory agencies for assessing and reporting on the quality of loan portfolios. This makes alternative forms of discipline all the more important if Federal credit is to be directed in the most efficient manner.

The unified budget.—The unified budget, with its focus on budget authority, outlays, and receipts, is an incomplete mechanism for controlling Federal credit programs. First, it was not designed to measure the full volume of new credit extended for direct loans. The largest direct loan programs are financed by revolving funds in which repayments on existing loans offset disbursements for new direct loans. Congressional appropriations of budget authority for these revolving funds are generally only necessary when new disbursements exceed repayments. Thus, the unified budget cannot directly control the amount of new direct loans extended.

Second, guaranteed loan commitments² were excluded when the unified budget was established in 1967 and are specifically excluded from the definition of budget authority by the Congressional Budget Act of 1974. The reason for the exclusion is that the loan guarantee, by itself, does not affect budget outlays and the deficit. The loan guarantee is only a contingent liability of the Government. However, by assuming that contingent liability, the Government induces lenders to invest in particular loans, and thereby allocates capital for federally determined purposes. In this manner, a guaranteed loan commitment may provide as large a subsidy and redirect capital as effectively as a direct loan obligation.

A third important shortcoming of the unified budget for credit programs is that it neither measures nor controls the most salient aspect of Federal credit—the size of the subsidy offered the borrower. Since a primary purpose of Federal credit programs is to provide borrowers with a subsidy, this is a serious omission in effective budgetary control. Without some means of measuring and controlling this subsidy, neither the executive branch nor the Congress can make informed decisions about Federal credit programs, either in comparing one with the other, or in comparing them with non-credit expenditure programs.

The Federal credit budget.—In January 1980, a significant step in redressing some of the inadequacies of the unified budget was made with the introduction of the Federal credit budget. The Federal credit budget measures the direct loan obligations and guaranteed loan commitments, and, through the use of language in appropriation acts, limits these credit activities. Although it is a step forward, the credit budget does not restrain the total volume of Federal credit effectively. Only about 55% of the credit budget totals for 1985 were capped by appropriation act limitations. Moreover, the credit budget does not measure the subsidy costs, nor does it place any direct restriction on the level of subsidy that a program offers the borrower.

² Guaranteed loan commitments are synonymous with loan guarantee commitments, the term used by Congress.

OMB Circular No. A-70.—One means of controlling Federal credit more effectively is to control the price at which it is offered to the public. As a step toward this goal, the Office of Management and Budget (OMB) reissued Circular No. A-70, "Policies and Guidelines for Federal Credit Programs," on August 24, 1984. OMB circulars are directives that are binding upon the executive agencies as a matter of Presidential policy and are generally enforceable through administrative procedures. Circular A-70 was approved by the President prior to its release.

The A-70 guidelines apply to proposed and existing Federal direct loan and loan guarantee programs. The guidelines place two sets of requirements on agencies. The first is to provide information on the costs and benefits of Federal credit programs. This includes, for example, estimates of the credit available from relevant private financial institutions, subsidies, and net default costs.

The second is to require agencies to propose new legislation or policies for credit programs that are consistent with sound credit policies. Should current legislation not permit this, agencies are generally required to prepare proposals to change that legislation so the programs will conform to A-70 guidelines.

A second OMB circular, No. A-129, "Managing Federal Credit Programs," expands on many of A-70's principles. It contains comprehensive guidance on servicing and collecting all Government receivables, including those arising from direct and guaranteed loans, grants and contracts. It also prescribes policies and standards encompassing credit extension, write-off and close-out of accounts, as well as overall credit program management, accounting and reporting.

The administration has focused on directing agency implementation of the requirements of the Debt Collection Act and OMB credit policies. This focus helps ensure that all financial assistance programs are administered according to consistent credit and management policy standards, which will result in improved collections and reduced delinquencies.

III. THE CREDIT BUDGET

A. CREDIT BUDGET CONCEPTS

The credit budget is the annual measure of direct loan obligations and guaranteed loan commitments. It is the sum of the credit authority offered by the Federal Government. The credit budget is based on three concepts. First, it is intended to measure new credit at the point that the Government legally contracts to provide a loan or a loan guarantee. Usually, this is when a loan agreement or loan guarantee agreement is signed. The credit budget does not measure the tentative or preliminary offers of credit assistance

that Government agencies may make prior to the loan or loan guarantee contract, nor does it measure the subsequent acts of loan disbursements, either by the Federal agency or by the guaranteed private lender.

Second, the credit budget reflects all new offers of credit. Credit authority is measured on a gross basis and does not reflect repayments of loans. This concept differs from the unified budget where budget authority is required only when collections are insufficient to finance new budgetary obligations. The concept of credit authority is necessary because subsidies are provided to all new recipients of direct loans and loan guarantees, regardless of the extent to which borrowers are repaying other loans previously made.

Third, guaranteed loan commitments are measured as the full principal of the loan, even if the Government's contingent liability is less than the full loan principal. The full principal is included in the commitment because the entire loan, even if only partially guaranteed, is assisted by the guarantee. Moreover, in some programs that offer partial guarantees, the private lender is at risk only when the value of the collateral and the guarantee combined are less than the full loan principal.

There are a number of programs in which less than the full principal of the loan is guaranteed. The major agency that nominally offers guarantees significantly below full loan principal is the Veterans Administration.³ In the aggregate, of the \$410 billion of guaranteed loans outstanding in 1985, the Government's contingent liability was \$333 billion or 81%. Excluding the VA, the contingent liability was \$273 billion for \$280 billion of guaranteed loans outstanding, or 97%.

The contingent liability and full principal of all guaranteed loans outstanding are shown in Table F-1.

Table F-1. CONTINGENT LIABILITY FOR GUARANTEED LOANS OUTSTANDING

(In millions of dollars)

	1985 actual	1986 estimate	1987 estimate
Veterans Administration mortgage guarantees:			
Contingent liability	60,080	62,772	66,425
Full principal	130,591	136,392	144,325
All other loan guarantee programs:			
Contingent liability	272,680	306,440	328,434
Full principal	279,851	314,224	337,087
Total outstanding:			
Contingent liability	332,760	369,212	394,859
Full principal	410,442	450,616	481,412

³ The contingent liability for VA guarantees is the first 60% of the mortgage amount, to a maximum of \$27,500. The legislation providing the guarantee effectively turns the guarantee into a 100% guarantee in most cases because the lender's loss on foreclosure seldom exceeds 60% of the mortgage amount.

The credit budget totals.—Table F-2 provides the credit budget totals for 1983 through 1988. It also shows the six largest direct loan programs and loan guarantee programs.

Table F-2. THE CREDIT BUDGET TOTALS

(In billions of dollars)

	1983 actual	1984 actual	1985 actual	1986 estimate	1987 estimate	1988 estimate
Direct loan obligations:						
Commodity Credit Corporation	13.9	5.5	10.4	16.6	11.5	10.9
Farmers Home Administration	6.7	7.2	7.9	5.0	1.5	1.0
Rural Electrification Administration	4.5	2.1	4.0	3.4	2.4	1.9
Foreign military sales	5.1	5.7	4.9	5.0	5.7	5.8
Export-Import Bank	0.8	1.5	0.7	1.1		
Low-rent public housing	0.2	1.4	14.1	1.5	1.7	1.1
All other	10.2	15.7	10.8	9.0	7.8	7.3
Total obligations ¹	41.4	39.1	52.8	41.6	30.6	28.0
Guaranteed loan commitments:						
Federal Housing Administration	44.6	17.1	47.4	49.3	37.2	37.2
Low rent public housing	14.3	13.7				
Guaranteed student loans	7.3	7.6	8.9	9.3	9.8	11.4
Veterans Administration housing	14.7	16.5	12.1	12.3	14.7	14.6
Export-Import Bank	8.5	7.1	7.8	11.5	12.0	12.0
Commodity Credit Corporation	4.7	4.2	2.7	5.3	3.0	3.0
All other	3.1	4.6	5.8	6.1	3.1	3.5
Total commitments ²	97.2	70.8	84.7	93.8	79.8	81.7
Total credit budget	138.6	109.9	137.6	135.5	110.3	109.7
ADDENDUM						
Secondary guaranteed loan commitments	64.2	39.7	54.6	60.5	55.4	51.9

¹ Includes loans with an agency guarantee that are disbursed by the Federal Financing Bank.

² Excludes commitments for guarantees of loans previously guaranteed (secondary guarantees) and for guarantees by one Government account of direct loans made by another Government account. Totals for the former are shown in the addendum. Totals for the latter are included as direct loans.

The 1986 credit budget is below the 1985 credit budget because of a one-time increase in public housing direct loans during 1985, from \$1.4 billion in 1984 to \$14.1 billion in 1985 and down to \$1.5 billion in 1986. For 1987, the administration is proposing that the credit budget decrease by \$25 billion, or 19% below the 1986 totals. The programmatic reasons for the changes in the credit budget totals since 1985 are discussed below in the sections on direct loans and guaranteed loans.

B. APPROPRIATION ACT LIMITATIONS

One of the key features of the credit budget is the enforcement mechanism provided through the enactment of limitations on credit activity in annual appropriation acts. The administration proposes limitations annually on direct loan obligations and guaranteed loan commitments for most credit programs. The limitations act as ceilings on the volume of new credit that may be offered by the account. The limitation is specified in the appropria-

tion language for individual budget accounts that include credit activity.

The President's 1987 Budget proposes limitations for programs amounting to 55% of the credit budget totals. Approximately 27% of direct loan obligations and 65% of guaranteed loans are proposed for limitation. The remainder are programs controlled through other mechanisms. Table F-3 indicates the breakdown of loans subject to, and exempt from, appropriations act limitation.

Table F-3. CREDIT BUDGET PROGRAMS SUBJECT TO AND EXEMPT FROM
APPROPRIATION ACT LIMITATION

(In billions of dollars)

	Direct loan obligations			Guaranteed loan commitments		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
Limitations enacted/proposed.....	21.1	13.9	8.8	62.8	71.5	65.7
Less: Unused balance of limitation, expiring	-4.9	-0.5	-0.5	-5.9	-8.1	-13.7
Loans subject to appropriation act limitation	16.3	13.4	8.3	56.9	63.4	51.9
Loans subject to limitation under P.L. 99-177		18.7			19.9	
Loans exempt from limitation.....	36.6	9.6	22.2	27.9	10.5	27.8
Total	52.8	41.6	30.6	84.7	93.8	79.8
ADDENDUM						
Secondary guarantees subject to limitation				54.6	60.5	55.4

The first stage of congressional action on the credit budget is the budget resolution. Although not required by the Congressional Budget Act, recent budget resolutions have generally included guideline levels for credit programs. The budget resolution for 1986 included credit targets by function for 1985 through 1988. The functional allocations specified direct loan obligations, primary loan guarantee commitments, and secondary loan guarantee commitments.

Gramm-Rudman-Hollings incorporates credit authority more fully into the congressional budget process. It requires allocations to the Appropriations Committee and its subcommittees to include new direct loan obligations and new loan guarantee commitments.

After the budget is submitted to the Congress, the House and Senate Appropriations Committees begin working on the 13 appropriation bills. Four bills contain 15 of the 22 requested limitations: Agriculture, Commerce/Justice/State, Foreign Assistance, and Housing and Urban Development/Independent Agencies. Over the past several years, Congress has enacted limitations in most of the programs for which limitations were requested. The administration continues to urge the Congress to enact limitations on guaranteed loans on the basis of the full principal amount of the loan rather than the contingent liability.

In general, limitation language in appropriation acts:

- is a *one-year* limitation;
- sets a *ceiling* on direct loan obligations and/or guaranteed loan commitments; and
- applies to an individual account, although limitations on specific programs within an account may also be provided.

Table F-4 identifies the enacted and proposed limitations for credit programs between 1985 and 1987.

While the appropriation act limitation is an effective control mechanism for new lending by some programs, there are many programs in which the actual demand for Federal credit assistance has been consistently less than the level enacted in annual appropriation bills. For example, the enacted limitations on direct and guaranteed loans of the Export-Import Bank (Eximbank) have consistently exceeded the actual demand for loans since 1982. Chart F-2 illustrates the used and unused portions of the enacted limitations for 1982-1985.

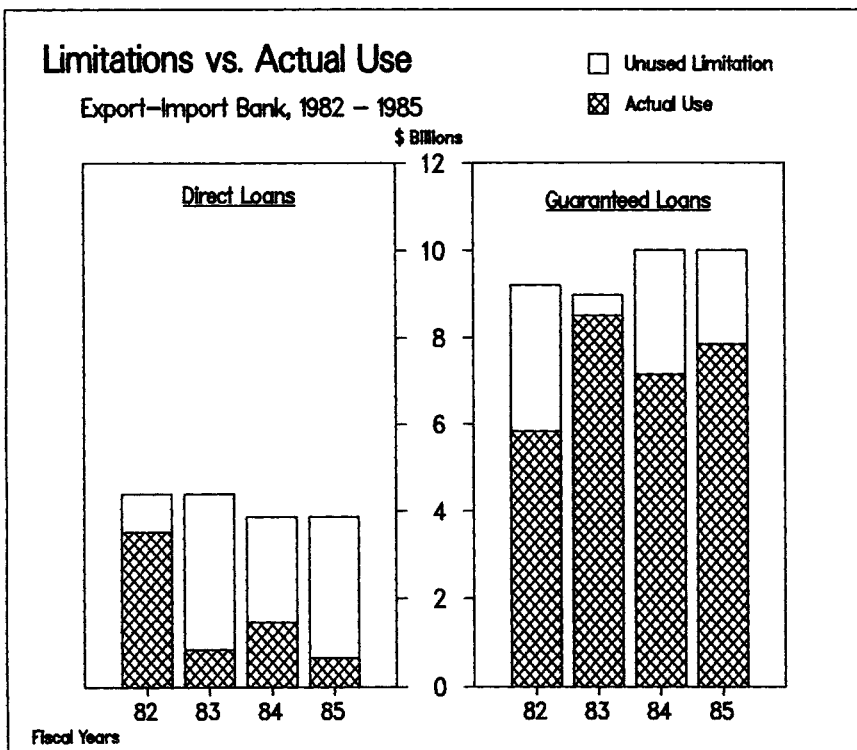


Table F-4. CREDIT APPROPRIATION ACT LIMITATIONS

(In millions of dollars)

	1985 actual	1986 ¹ estimate	1987 estimate
Limitations on direct loan obligations:			
Foreign military sales credit.....	4,940	4,967	5,661
AID, Private sector revolving fund.....	0	17	15
Overseas Private Investment Corporation.....	15	14	15
Agricultural credit insurance fund.....	4,292	3,198	1,500
Rural housing insurance fund.....	3,238	1,336	0
Rural development insurance fund.....	455	421	0
Rural electrification and telephone revolving fund ³	1,100	861	435
REA, FFB direct loans ³	1,325	933	225
Rural telephone bank ³	185	177	139
Self-help housing land development fund.....	3	0	0
International Trade Administration, Operations and administration.....	6	1	0
College housing loans.....	40	0	0
Bonneville Power Administration fund.....	40	20	20
Health resources and services.....	1	1	1
Nonprofit sponsor assistance.....	2	*	0
Federal Housing Administration fund.....	65	84	74
Housing for the elderly or handicapped fund.....	600	55	30
Community development grants: FFB direct loans ²	225	50	0
Bureau of Reclamation, Loan program.....	68	46	46
National Park Service, Construction.....	0	2	0
Bureau of Indian Affairs, Revolving fund for loans.....	19	16	16
Federal Highway Administration, Right-of-way revolving fund.....	50	48	50
Railroad rehabilitation and improvement financing funds: FFB direct loans ²	6	4	0
VA, Direct loan revolving fund.....	1	1	0
Export-Import Bank.....	3,865	1,062	0
National Credit Union Administration, Central liquidity fund.....	600	568	600
Total, limitations on direct loan obligations.....	21,141	13,882	8,827
Limitations on guaranteed loan commitments:			
AID, Housing and other credit guaranty programs.....	160	145	0
Overseas Private Investment Corporation.....	150	136	150
Agricultural credit insurance fund.....	1,246	1,872	2,500
Rural development insurance fund.....	150	96	0
Economic development assistance programs ⁴	167	30	0
International Trade Administration, Operations and administration ⁴	17	0	0
Health professions graduate student loan insurance fund.....	0	275	100
Federal Housing Administration fund.....	50,900	57,420	50,900
Bureau of Indian Affairs, Indian loan guaranty and insurance fund.....	0	0	30
Export-Import Bank.....	10,000	11,484	12,000
Total, limitations on guaranteed loan commitments.....	62,790	71,459	65,680
ADDENDUM			
Secondary guaranteed loan commitments:			
GNMA, Guarantees of mortgage-backed securities.....	68,250	65,315	68,250

* \$50,000 or less.

Note.—This table excludes de facto limitations imposed in 1986 by Public Law 99-177.

¹ Includes President's budget proposals for changes in enacted limitations and reductions pursuant to Public Law 99-177.² In this table, loans disbursed by the FFB are shown as direct loans. The limitation applies to the guaranteed loan commitments of the originating agency.³ Enacted limitations reflect the loan floor.⁴ These limitations were enacted on the basis of contingent liability. The full principal amount is reflected here.

There are a variety of programs, in addition to Eximbank, for which demand is often below the enacted limitation. Table F-5

compares the proposed and enacted limitations to the actual level of direct loan obligations and guaranteed loan commitments in 1985 for the largest credit programs with shortfalls from limitations.

Table F-5. COMPARISON OF REQUESTED AND ENACTED LIMITATIONS WITH ACTUAL LOAN LEVELS
FOR SELECTED PROGRAMS IN 1985

(In millions of dollars)

	Proposed limitation	Enacted limitation	Actual loan level	Unused balance of limitation
Direct loan obligations:				
Rural housing insurance fund.....	2,320	3,238	2,718	520
Rural electrification and telephone revolving fund.....	575	1,100	765	335
Rural telephone bank	185	185	168	17
Bureau of Reclamation, loan program	66	68	55	13
Export-Import Bank	3,830	3,865	660	3,205
Guaranteed loan commitments:				
Rural development insurance fund		150	61	89
Federal Housing Administration fund.....	50,900	50,900	47,441	3,459
GNMA, Guarantees of mortgage-backed securities	68,250	68,250	54,597	13,653
Export-Import Bank	10,000	10,000	7,849	2,151

After enactment of appropriation bills, direct and guaranteed loan activity subject to limitation is controlled through the apportionment process. This is the mechanism by which the executive branch controls the rate at which new loans are obligated or guaranteed. While limitations are generally apportioned quarterly, a few are apportioned on an annual or project basis.

For some programs, an appropriation act limitation on annual activity is deemed unsuitable for any of several reasons, and control is provided through other mechanisms. First, limitations are not proposed for programs in which the authorizing legislation provides a clear entitlement to qualified applicants, such as farm price support loans and credit assistance to veterans. These programs are similar to those expenditure programs considered relatively uncontrollable, and the levels of new credit are determined by substantive law.

Second, direct loans that arise from payment of claims on defaulted guaranteed loans are exempt from appropriation act limitation. Payment of these default claims is mandatory, as in the FHA mortgage insurance and the guaranteed student loan program. Therefore, the effective point of control is earlier, at the time of the original guaranteed loan commitment.

Third, some programs are exempt from appropriation act limitation when additional control through limitations would inhibit the effective operation of a program. For example, in several foreign assistance programs, such as the economic support fund, AID development assistance, and P.L. 480 food assistance, appropriated budget

authority governs both the loan and the grant activity. A specific direct loan limitation is therefore an unnecessary duplication of existing congressional controls.

C. IMPACT OF GRAMM-RUDMAN-HOLLINGS

Gramm-Rudman-Hollings establishes ceilings on the deficit for the next 6 years with a balanced budget required by 1991. Parts 2 and 6 of the Budget provide a discussion of this law.

Gramm-Rudman-Hollings contains several provisions that affect credit programs. It defines direct loan obligations and loan guarantee commitments as "credit authority," and it subjects credit authority to the same restrictions as budget authority and other budgetary resources. When sequestration of budgetary resources is required to meet deficit ceilings, credit authority will also be sequestered. In 1986, new direct loan obligations and guaranteed loan commitments have been reduced by the general non-defense sequestration percentage of 4.3%. For those programs with enacted limitations in appropriations acts, the limitation has been lowered by this percentage. For direct loan obligations and guaranteed loan commitments not previously subject to limitation, the estimated level has served as a ceiling which will also be lowered. The lower level constitutes a de facto limitation.

Several loan programs are granted special treatment by GRH. Three programs, Bonneville Power Administration fund, health professions graduate student loan insurance fund, and power programs of the Tennessee Valley Authority, are totally exempt from reductions. Others are exempt to the extent they have prior legal obligations, including the Pension Benefit Guaranty Corporation fund, the Federal Deposit Insurance Corporation, and the Federal Savings and Loan Insurance Corporation fund. In addition, direct loans that result from defaults on guaranteed loans are generally exempt. The Commodity Credit Corporation and guaranteed student loans are the subject of specific provisions in the law.

Except for some programs with special rules, the only immediate source of outlay reductions due to the GRH effect on credit programs results from the sequestration of direct loan obligations. The immediate outlay impact of reduced direct loan obligations differs from program to program, because of lags between obligation and actual loan disbursement, just as the immediate outlay effect of reduced budget authority differs among other spending programs.

D. DIRECT LOANS

Direct loans are financed from a variety of sources including appropriations, borrowing, and repayments of previous loans. Direct loan programs are designed to redirect economic resources to particular uses by providing credit on more favorable terms than

would otherwise be available from private sources. A direct loan is best justified when the Federal objective could not be met with financing from private sources, even with a Government guarantee. The objectives of a direct loan program, for example, may require financing at interest rates that are lower than those available from private lenders, or loan maturities that are longer than otherwise available. Direct loans are made available to individuals, businesses, and State, local, and foreign governments. Direct loan tables attribute loans that are made by the FFB and guaranteed by an agency to the agency responsible for guaranteeing the loans. The credit activity between the Federal Government and the public in these transactions is a direct loan, not a guarantee.

Direct loan obligations in a given year do not result in an equal volume of new direct loan disbursements in the same year for several reasons. First, there is often a lag between the time of obligation and the actual disbursement of the loan. For example, prospective borrowers may seek financing for a project when it is in the design stage, but the financing will not be needed until the next year or even the next several years. As a result, some agencies, such as the Export-Import Bank and the Rural Electrification Administration, disburse loans 2 years or more after the time of the direct loan obligation. Second, some prospective borrowers will never convert the direct loan obligations into borrowing because the projects for which financing had been sought are subsequently cancelled or postponed.

Loan disbursements are payments of loans to the public. They are mostly to make new loans, but they also include some loan guarantee claims. The change in loans outstanding equals new loan disbursements less repayments of loans, loan write-offs, and other adjustments.

As shown in Table F-6, direct loan obligations are proposed to decline between 1985 and 1987 from \$52.8 billion to \$30.6 billion. The agricultural and business sectors will receive 48.5% and 35.2%, respectively, of the 1987 credit budget. The major changes from 1985 to 1987 in direct loan obligations are discussed below.

Table F-6. SUMMARY OF DIRECT LOAN TRANSACTIONS

(In billions of dollars)

	Actual		Estimate					
	1984	1985	1986	1987	1988	1989	1990	1991
Obligations	39.1	52.8	41.6	30.6	28.0	24.8	22.3	20.1
Loan disbursements	41.4	64.4	47.3	34.4	31.0	26.3	23.4	21.1
<i>Change in outstandings</i>	<i>6.3</i>	<i>28.0</i>	<i>-4.1</i>	<i>-4.4</i>	<i>-3.2</i>	<i>-5.7</i>	<i>-7.1</i>	<i>-4.6</i>
Outstandings	229.3	257.4	253.3	248.9	245.7	239.9	232.9	228.3

The Commodity Credit Corporation (CCC) provides short-term non-recourse loans to producers of agricultural commodities. The loans provide subsidized financing for production costs and set a minimum price for individual commodities, since the farmer may turn his crop over to the Government rather than repay the loan. The demand for CCC price support loans, therefore, depends on the market price of the crop compared to the price in the loan rate. When market prices are below the threshold price in the loan rate, farmers borrow large amounts from the CCC, forfeiting the crop as repayment to the Government if market prices have not risen by harvest time. Demand for CCC price support loans rose from \$10.2 billion in 1985 to an estimated \$16 billion in 1986, mainly due to an increase in agricultural production that resulted in lower crop prices, which in turn led to increased need for Government price supports.

The Food Security Act of 1985 (known as the farm bill) gives the Secretary of Agriculture the discretion to set commodity prices implicit in CCC loans more closely to market prices. This will help make U.S. agricultural exports more competitive on world markets. This should eventually reduce the need for Government price supports; however, continued Federal credit support for farmers may be necessary as they adjust to a market-based system.

The Farmers Home Administration (FmHA) makes loans for purchasing and operating farms, improving rural housing, and developing rural community facilities. Total FmHA direct loan obligations are proposed to decline significantly in 1987, to a level of \$1.5 billion. This level reflects a shift in Federal loan activity from direct loans to guarantees of private loans in the Agricultural Credit Insurance Fund, and the administration's proposals to terminate both FmHA housing and rural development programs in favor of providing such assistance through the Department of Housing and Urban Development (HUD).

The Rural Electrification Administration (REA) was designed to be a lending agency responsible for rural electrification and for furnishing electricity and telephone service to rural areas not receiving central station service. REA direct loan obligations declined from \$4.0 billion in 1985 to \$3.4 billion in 1986. This reflects a decline in construction created by lower demand for electricity and the related surplus of electric generating capacity.

REA direct loan activity is proposed to decline to \$2.4 billion in 1987. This decrease is due to the administration's plan to encourage rural electric systems to rely more on private financing for needed credit. Over the next 5 years, the Federal share is proposed to be phased out and replaced by private financing.

Foreign Military Sales (FMS) credit provides financing to foreign governments and international organizations so that they can pro-

cure U.S. military equipment and services. The increase from \$4.9 billion in 1985 to \$5.0 billion in 1986 reflects a slight increase in U.S. exports. FMS credit direct loan obligations will increase by \$0.7 billion in 1987. This 14% increase will permit the Government to finance the procurement of additional military equipment and services by countries whose security is threatened by military forces hostile to U.S. interests. The bulk of the requested increase will be provided to Egypt and Israel, with Turkey, Greece and Spain continuing to receive large amounts of credit. In order to reduce the debt service burden of these countries, 55% of the program is requested as loans that will be forgiven and 14% is requested on concessional terms.

Export-Import Bank (Eximbank) direct loan obligations were \$0.7 billion in 1985. This is significantly below past levels because of the high value of the U.S. dollar relative to other currencies, the worldwide economic recession and its effect on U.S. exports of commercial aircraft, nuclear plants, and other large capital equipment. The administration is proposing the elimination of new Eximbank loans in 1987 and their replacement by a \$100 million interest rate subsidy program and an increase to \$12 billion in guarantees. For that reason, no direct loan obligations are shown after 1986. New disbursements that occur after 1986 are the result of loans obligated before 1987.

The Small Business Administration credit programs are proposed to be terminated in 1987. Under the budget proposal, new direct loan obligations offered by SBA after 1986 would be the result of commitments made in prior years or previously guaranteed loans that are expected to default. The existing loan portfolio would be transferred to the Treasury Department for servicing and liquidation. The Treasury Department would also sell the existing loan assets to investors, without Federal guarantee or recourse, beginning in 1987. Some of the issues involved in loan asset sales are discussed in Section IX of this analysis.

Direct loan obligations of the low-rent public housing program increased from \$1.4 billion in 1984 to \$14.1 billion in 1985 and are expected to decrease to \$1.5 billion in 1986. Prior to the enactment of the Deficit Reduction Act of 1984, housing construction was financed with tax-exempt obligations issued by the Public and Indian Housing Authorities (PHAs and IHAs) and secured by 20- to 30-year Federal commitments to repay the full principal amount. DEFRA however, raised questions about the tax-exempt status of PHA and IHA obligations. Consequently, tax-exempt financing for these construction activities was suspended. It was replaced by direct loans extended by HUD to PHAs and IHAs. These loans in turn will be forgiven. As a consequence, the Federal Government would be relieved of associated long-term commitments to amortize

the forgiven loans. Beginning in 1986, new PHA and IHA capital expenditures are funded annually.

Table F-19 shows detailed data for Federal direct loan programs from 1985 through 1991.

E. LOAN GUARANTEES

Guaranteed loan commitments are agreements in which the Government guarantees the payment of the principal and interest of the loan in whole or in part in the event of default. Insurance is a type of guarantee in which a Government agency operates a program of pooled risks, pledging the use of accumulated insurance premiums to secure a lender against default on the part of a borrower. For the purposes of the credit budget, the term "guaranteed loan" includes insured loans.

A loan guarantee transfers some or all of the risk of default from the lender to the Government. In cases where the Government guarantees the timely payment of 100% of the loan principal and interest against all risk, it transforms a private loan into a near-Government direct loan financed by a near-Government security. The guaranteed loan will have essentially the same economic effects as a Government direct loan offered at moderate premiums above Treasury yields, but it will not have all the attributes of a Government direct loan because private lenders will negotiate different financial terms and conditions (e.g., fees) than would a Government agency.

The guaranteed loan will not have all of the attributes of a U.S. Treasury security either, since it will be less liquid and will involve higher transaction costs. The great volume of Treasury securities, their regular issuance in a range of maturities, and the specialized institutions and trading facilities that deal in those securities, all produce an efficient market that cannot be matched by the market for guaranteed loans. The Government guarantee, for example, may not be transferred from one lender to another as readily as a U.S. Treasury security may be traded. Legal counsel may be required to determine the extent to which a lender is assured of repayment and under what circumstances. This requirement is a transaction cost not associated with a U.S. Treasury security. For these and other reasons, guaranteed loans bear interest rates above the yields on otherwise comparable U.S. Treasury securities.

Loan guarantees, like direct loans, redirect economic resources by providing credit to borrowers at more favorable terms than would otherwise be available in the private market. The degree to which the guarantee reallocates credit will depend on the degree of

the subsidy.⁴ At one extreme, the potential transaction being financed may be considered so risky that no financing would be available without the guarantee. For example, it is unlikely that private lenders would make student loans generally available without guarantees because of the inherent, and significant, uncertainty about any particular borrower's future income stream. In this case, the subsidy will be quite large and will have a dramatic effect on the reallocation of credit.

At the other extreme, the guarantee may result in only a small subsidy and, other conditions being equal, may not significantly change the allocation of credit. Some beneficiaries of loan guarantee programs would have been able to secure the funds privately—without Government support—albeit at a higher cost. For example, guaranteed mortgage credit might be used to finance, at a lower cost, a house that would have been purchased even in the absence of a Federal guarantee. In such a case, the borrower benefits from a small subsidy and the guarantee does not significantly alter the allocation of credit resources.

In both cases, although to different degrees, the guarantee reallocates credit toward federally selected uses, increasing the total volume of credit channeled into these uses. This leaves a smaller supply of credit available to those potential borrowers who do not receive assistance, and increases the interest rates on financing available to these borrowers.

Loan guarantees are used in a wide variety of programs. Guaranteed loans may be made to individuals, to businesses, and to State, local, and foreign governments. The guaranteed loan commitment may be used for a loan made by a bank or other institutional lender or an investment security sold in the capital market. Guaranteed loans, for the purposes of the credit budget, do not include other contractual agreements, such as guarantees of private leases, contracts to make subsidy payments over extended periods, or debt service grants that the recipients may use as collateral for borrowing.

Data for guaranteed loans for 1985 through 1991 are summarized in Table F-7. The guaranteed loan commitments in a given year do not always result in new guaranteed loans in that year, for the same reasons that direct loan obligations in a given year do not necessarily lead to disbursements in that year. The change in outstandings is equal to the amount of new guaranteed loans less repayments and other adjustments. Table F-20 provides detailed data for guaranteed loan programs for 1985 through 1991.

⁴ The degree of credit reallocation will also depend on the price elasticity of demand of the good being financed. A small change in the price (i.e., the subsidy) of the good being financed may result in a considerable change in the amount of the good actually bought and sold. This special analysis does not consider demand and supply elasticity effects.

Table F-7. SUMMARY OF PRIMARY GUARANTEED LOAN TRANSACTIONS

(In billions of dollars)

	Actual		Estimate					
	1984	1985	1986	1987	1988	1989	1990	1991
Commitments.....	70.8	84.7	93.8	79.8	81.7	83.3	84.8	85.4
New guaranteed loans.....	73.3	55.5	73.6	68.2	67.7	70.9	73.6	75.6
Change in outstandings.....	20.1	21.6	40.2	30.8	25.9	24.0	24.7	24.7
Outstandings.....	386.7	410.4	450.6	481.4	507.3	531.3	556.0	580.7

As noted in the previous section, direct loans disbursed by the Federal Financing Bank (FFB), which are guaranteed by a Federal agency are excluded from guaranteed loans and included in Table F-6. As shown above in Table F-7, primary guaranteed loan commitments are expected to decrease from \$84.7 billion in 1985, to \$79.8 billion in 1987. Housing programs accounted for 67% of guaranteed loan commitments in 1985, and are expected to remain at that level through 1987. The major programmatic changes from 1984 through 1987 are discussed below.

Guaranteed loan commitments in 1985 for the Federal Housing Administration (FHA) rose by 175% over 1984, the result of falling interest rates and a healthy housing environment. Commitments, which equaled \$47.4 billion in 1985 compared to \$17.1 billion in 1984, are expected to peak in 1986 at \$49.3 billion and decline to \$37.2 billion thereafter. The Veterans Administration (VA) offers a mortgage guarantee that is similar in effect to the FHA mortgage insurance program, but does not require veterans to make down-payments on their housing purchases. For 1986, guaranteed loan commitments by VA are estimated to be \$12.3 billion, rising to \$14.7 billion in 1987.

The Commodity Credit Corporation (CCC) provides loan guarantees for export sales that would not otherwise occur without Federal credit assistance. CCC guaranteed loan commitments for U.S. exports fell by \$1.5 billion from 1984 to 1985. This decline is attributable to a strong U.S. dollar compared to foreign currencies and a subsequent drop in demand from foreign buyers for U.S. Government-subsidized credit. Annual guaranteed loan commitments of \$3.0 billion are requested for 1987 reflecting the proposed legislation which reduces CCC's export credit program to levels reflecting free market needs.

The guaranteed student loan program (GSL) provides guarantees of education loans to graduate and undergraduate students. Commitments for the program increased by \$1.3 billion from 1984 to 1985 as participation increased by 17%. The level of GSL commitments is estimated at \$9.3 billion in 1986, an increase of \$400 million, or 4%, from 1985.

The Export-Import Bank provides guarantees to facilitate U.S. exports. Guaranteed loan commitments increased from \$7.1 billion to \$7.8 billion between 1984 and 1985. In 1986, it is estimated that Eximbank commitments will be \$11.5 billion, as risk protection continues to be important to U.S. exporters. The proposed level in 1987 and beyond is \$12 billion, \$1.8 billion of which will be available for the interest rate subsidy program.

Public and Indian housing programs had no new guaranteed loan commitments in 1985. The absence of guaranteed loans is the result of the extension of direct loans to PHAs and IHAs that are necessary since the enactment of DEFRA and the suspension of private market financing. The direct loans thereby eliminate the need for new guarantee commitments. (The proposal to reform the financing of public and Indian housing is described under Chapter III C: Direct Loans.)

The Small Business Administration credit programs, as noted in the section on direct loans, are proposed to be terminated in 1987. For that reason, no new guaranteed loan commitments are proposed after 1986. Outstanding guaranteed loans with a balance of \$9.5 billion in 1986 will be serviced by the Treasury Department.

About 90% of all single-family mortgages insured by FHA or VA are sold subsequently in the secondary mortgage market using the Government National Mortgage Association (GNMA) mortgage-backed securities program. This program provides guarantees for securities issued by private mortgage originators and backed by pools of FHA-insured and VA-guaranteed mortgages. The GNMA guarantees enhance the liquidity of trading these securities. GNMA's issuance of new securities is closely tied to the amount of FHA insurance and VA mortgage guarantees. Commitments for GNMA mortgage-backed securities therefore rose from \$39.7 billion in 1984 to \$54.6 billion in 1985. An increase to \$55.4 billion is estimated in 1987. The 1987 budget proposes to increase the fee that GNMA charges for its guarantee, from 6 basis points (a basis point is 1/100 of a percent), to 15 basis points in 1987 and to 20 basis points thereafter. This increase is estimated to raise \$15 million in new revenue in 1987, and \$547 million over the period 1987 to 1991.

IV. GOVERNMENT-SPONSORED ENTERPRISES

Over the last 70 years, the Federal Government established five financial intermediaries, whose purpose is to direct funds to particular sectors of the economy. These entities, generically known as Government-sponsored enterprises (GSEs), are:

- Federal Home Loan Banks;
- Federal Home Loan Mortgage Corporation;
- Federal National Mortgage Association;

- Student Loan Marketing Association;
- Farm Credit System, composed of Banks for Cooperatives, Federal Intermediate Credit Banks, and Federal Land Banks.

While most of the GSEs were created as Government institutions, all have been privately owned since 1969 and are not included in either the unified budget or the credit budget. However, since they were designed for the furtherance of Government objectives and since they continue to enjoy special benefits not received by other private financial intermediaries, their financial statements are shown in the Budget Appendix (Part IV). Table F-8 summarizes the lending and borrowing of the GSEs for 1985-1987; Table F-21 in the back of this special analysis presents details of their activity.

Table F-8. SUMMARY OF LENDING AND BORROWING BY GOVERNMENT-SPONSORED ENTERPRISES

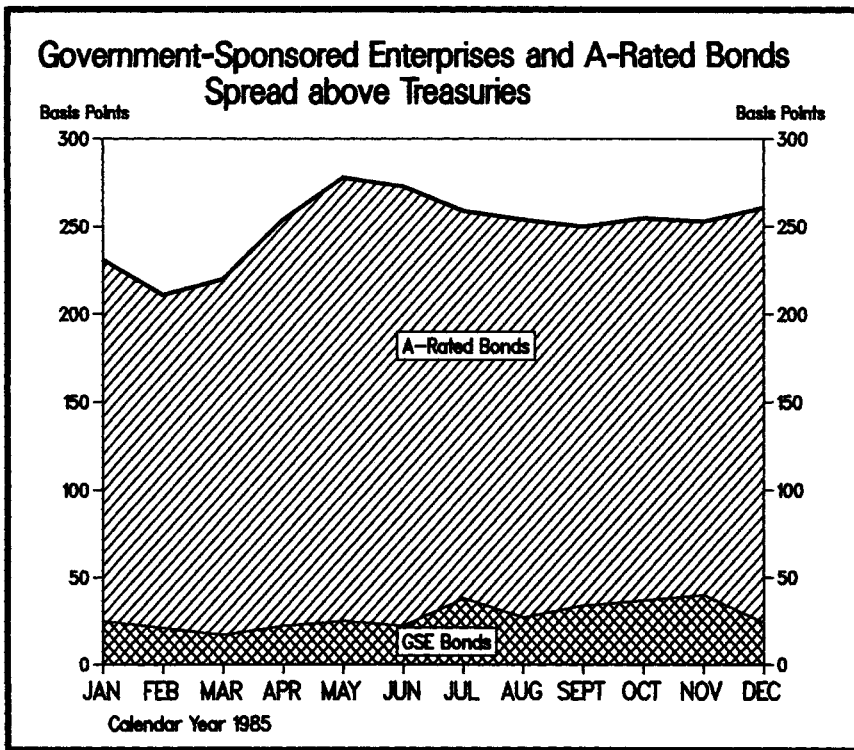
(In billions of dollars)

	Actual 1985	Estimate	
		1986	1987
Total net lending:			
Obligations	259,984	233,505	238,822
New transactions	251,958	228,517	237,201
Net change	60,741	62,416	64,098
Outstandings	369,940	432,358	496,456
Total borrowing:			
Net change	57,884	67,871	65,325
Outstandings	351,612	418,885	484,208

GSEs make capital available for housing, agriculture, and education. They seek to direct credit to these favored sectors of the economy by acting as financial intermediaries that stimulate greater amounts of lending to these sectors. Their goals are accomplished by creating a secondary market that increases the liquidity of direct lenders in housing and education, and by direct lending in agriculture. Over the last 5 years, outstanding GSE debt grew by 142%, from \$153 billion in 1980 to \$370 billion in 1985. By comparison, loans outstanding to private businesses and corporations grew 45% over the same period. In general, sectors that do not benefit from the presence of a GSE will have less financing allocated to them, and the financing that is available will be more expensive because there is less of it.

Securities offered by GSEs in the financial market are not guaranteed by the U.S. Government. Nonetheless, these securities usually have yields of 50 to 300 basis points below medium-rated corporate debt. In fact, as seen in Chart F-3, GSE instruments historically carried only slight premiums above the yields of Treasury securities of comparable maturity; these premiums have ranged from 10 to 50 basis points during 1985, with the notable

exception of Farm Credit System debt instruments, which are discussed below.



The relatively small premiums above Treasuries are explained by the perception of a "special relationship" between the GSEs and the Federal Government. While the specialness of this relationship arises in part from the intangible nature of Government sponsorship, it also reflects real benefits enjoyed by these enterprises. Table F-9 lists some of the benefits available to GSEs.

Table F-9. BENEFITS ENJOYED BY GOVERNMENT-SPONSORED ENTERPRISES

Type of Benefit	FHLB	FHLMC	FNMA	FCS	SLMA
Line of credit at Treasury	Yes	Yes ¹	Yes	Yes	Yes
Exemption of corporate earnings from Federal income	Yes	No	No	Yes ²	No
Exemption of interest income of investors from State and local income taxes	Yes	No	No	Yes	Yes
Eligibility for Federal Reserve open market purchases	Yes	Yes	Yes	Yes	Yes
Equal standing with Treasury debt as investments for most banks	Yes	Yes	Yes	Yes	Yes
Exemption from SEC registration and various State banking laws	Yes	Yes	Yes	Yes	Yes
Eligibility as collateral for public deposits	Yes	Yes	Yes	Yes	Yes

¹ Indirect line of credit through the FHLBs.

² Federal Land Banks, Federal Intermediate Credit Banks, and Federal Land Bank Associations.

As a means of reimbursing the Federal Government for some of these benefits, and to place these GSEs on a more equal plane with private financial intermediaries, the administration has proposed an annual user fee on new borrowings, including the issuances of mortgage-backed securities and participation certificates. The fees are proposed for the various GSEs starting in 1987. The fees will differ by GSE to reflect the borrowing advantage each enjoys in its respective market, and would be phased in over the next few years. For example, the Federal Home Loan Mortgage Corporation would be charged a fee on its new debt issues of 10 basis points in 1987, 12.5 basis points in 1988, and 15 basis points in 1989; the Federal National Mortgage Association would be assessed a fee on its new debt issues of 10 basis points in 1987, 30 basis points in 1988, and 50 basis points in 1989.

The operations of the five GSEs are discussed individually below.⁵

Federal Home Loan Bank System.—The Federal Home Loan Bank System was established in 1932 as the first permanent Government-sponsored intermediary for housing. Its original charter was to supervise federally chartered savings and loans associations and to promote home ownership through the extension of credit to savings and other home financing institutions. The Federal Home Loan Bank Board (FHLBB), which serves primarily as a regulatory agency, and twelve regional Federal Home Loan Banks (FHLBs) comprised the original system. Subsequently, the Federal Savings and Loan Insurance Corporation (FSLIC) and the Federal Home Loan Mortgage Corporation (Freddie Mac) were added to the system in 1934 and 1970, respectively.

The Federal Home Loan Banks support the residential mortgage market by providing a central source of housing credit to thrift institutions through loans or “advances” to members. The FHL banks provide member thrifts with access to national capital markets and eliminate regional barriers to the flow of mortgage funds. Advances are an attractive source of funds for members largely because they are the cheapest funds available after savings deposits. Each of the 12 FHL banks is regulated by the FHLBB but establishes its own policies with FHLBB guidelines. FHL banks finance their advances primarily by selling debt securities in the money and capital markets and, to a lesser extent, by accepting both demand and time deposits from member institutions.

Federal Home Loan Mortgage Corporation.—FHLMC (Freddie Mac) is a subsidiary of the FHL banks and their member thrifts. It

⁵ For additional information on GSEs, see also: Michael J. Moran, “The Federally Sponsored Credit Agencies: An Overview,” Federal Reserve Bulletin, June 1985; and Congressional Budget Office, “Government-Sponsored Enterprises and Their Implicit Federal Subsidy: The Case of Sallie Mae,” December 1985.

was created in 1970 to increase the availability of mortgage credit and liquidity in the residential mortgage market. Performing a different function from that of its parent, Freddie Mac provides a secondary market for conventional mortgage loans, which are not insured by the Federal Housing Administration or guaranteed by the Veterans Administration. Typically, Freddie Mac purchases mortgages originating from mortgage bankers, savings institutions, commercial banks, and other primary lenders. These institutions sell mortgages to enhance the liquidity of their assets.

Freddie Mac finances its purchases of mortgage loans by issuing debt, pooling the mortgages together, and issuing pass-through certificates backed by these loans. By issuing pass-through certificates, the ownership of the underlying mortgage pool is transferred to a trustee thereby removing the loans from Freddie Mac's balance sheet. Thus, generally accepted accounting principles for private businesses greatly understate Freddie Mac's participation in the secondary market.

As a financial intermediary, Freddie Mac is vulnerable to interest rate fluctuations but has developed innovative financing transactions in an effort to guard against unforeseen interest rate swings. The company's most recent financing innovation is the collateralized mortgage obligation (CMO). This financing method is a debt instrument backed with mortgages or mortgage-backed securities, designed to reduce the major disadvantage of uncertainty about maturity that is associated with mortgage pass-through certificates.

Federal National Mortgage Association.—FNMA (Fannie Mae) was established by Congress in 1938 to provide a secondary market for federally underwritten mortgages. In 1968, it became a privately-owned corporation, and its stock is now traded on the New York Stock Exchange.

Fannie Mae is the largest single investor in home loans in the United States. The company increases the liquidity of mortgage bankers, savings institutions and commercial banks by purchasing from them both conventional loans and loans insured by the Federal Housing Administration and guaranteed by the Veterans Administration. Fannie Mae finances its purchases by issuing debt and mortgage-backed pass-through securities similar to those issued by Freddie Mac. As a financial intermediary, Fannie Mae's profitability is sensitive to movements in interest rates. In recent years, the company has attempted to decrease its sensitivity to interest rate fluctuations by increasing fee income, issuing zero-coupon bonds and other debt in the Eurobond market, issuing yen-denominated securities abroad, and by participating in currency swaps.

Fannie Mae, Freddie Mac, and the Government National Mortgage Association (Ginnie Mae) have long dominated the secondary market for mortgages, particularly the mortgage-backed security portion of the market. Recently, however, totally private institutions have begun to issue mortgage-backed securities, in part because of regulatory and administrative changes implemented by the administration. Recent legislation has enabled private firms to compete more effectively with Fannie Mae and Freddie Mac.

Beginning in 1986, however, both Fannie Mae and Freddie Mac will expand their markets to single-family home mortgages with a ceiling level of \$133,250 compared to the current "conforming rate" of \$115,300. This 15.6% increase is much larger than the 1.1% increase in the ceiling level achieved last year. This new market is expected to translate into an estimated \$16 billion in new loans available for purchase and pooling into agency pass-throughs in 1986, and another estimated \$30 billion in existing loans.

Student Loan Marketing Association.—SLMA (Sallie Mae) was created in 1972 to expand the amount of funds available for insured student loans. It does so by providing liquidity to lenders, which include savings and loan associations, commercial banks, mutual savings banks, educational institutions, and State and non-profit agencies.

Sallie Mae provides liquidity by operating a secondary market for student loans and by providing "warehousing" advances. Sallie Mae's secondary market involves the purchase of existing insured student loans from lenders. When this occurs, Sallie Mae gets title to the loans and is repaid directly by the borrowers. Warehousing advances are Sallie Mae loans to lenders that are secured by student loans or certain types of obligations guaranteed by the Government. In such cases, the lenders continue to hold title to the loans and pay Sallie Mae interest on the funds borrowed. Advances are also available to State student loan agencies as a taxable source of funds for their operations. In 1987, Sallie Mae will purchase student loans estimated at \$2.0 billion, and will make warehousing advances estimated at \$1.8 billion.

Starting in 1974, Sallie Mae operations were financed entirely through borrowing from the FFB. Sallie Mae stopped new borrowing from the FFB in January 1982; since then, it has done all its new borrowing in private credit markets. It will borrow an estimated \$2.5 billion in 1986. Sallie Mae is able to borrow at rates only slightly higher than Treasury bills, and virtually all of the student loans that it holds as assets are federally insured. Sallie Mae's overall cost of funds in 1985 was about 35 basis points over 91-day Treasury bills, while student loans are guaranteed to yield the holder of the loan 350 basis points over the Treasury bill rate. As a result, Sallie Mae has maintained a profitable interest rate spread

on its student loan portfolio even after its expenses in servicing student loans are taken into account. Sallie Mae's profit margins on its warehousing advances are considerably lower.

The continued profitability of Sallie Mae's operations ought to attract competitors to Sallie Mae's market and eventually drive down the yield associated with guaranteed student loans. However, such competition has not developed, as is well discussed in the Congressional Budget Office study of Sallie Mae referenced above. The dominance of Sallie Mae in the secondary market for guaranteed student loans can be attributed mainly to the low-cost source of funds it enjoys as a GSE.

Farm Credit System.—The FCS is a system of cooperatives that provide credit to farmers and ranchers, their cooperatives, farm-related businesses, commercial fishermen, and rural homeowners. The FCS is supervised by the Farm Credit Administration (FCA), an independent Federal agency. The FCS obtains funds through the sale of securities to investors in the private credit markets. These securities are "joint and several," which means that default by one FCS institution requires all others to honor the obligations of the security.

The goals of the FCS are accomplished through its component parts: Federal Land Banks (FLBs) and Federal Land Bank Associations (FLBAs); Federal Intermediate Credit Banks (FICBs) and Production Credit Associations (PCAs); and the Banks for Cooperatives (BCs).

The year 1985 was difficult for farmers and all financial institutions that serve them. The cash flow of many farmers was reduced due to depressed commodity prices, and large numbers of borrowers defaulted on their loans. Land prices continued to decline in many areas of the country, reducing the value of collateral pledged for bank loans. These factors combined to make 1985 the worst year in the history of the FCS since the Great Depression.

The 37 banks that make up the FCS anticipated an estimated net loss of \$2.5 billion for calendar year 1985, compared to net income of \$442 million for 1984. Total capital of FCS banks at year-end stood at an estimated \$6.5 billion, a drop of \$2.7 billion from the level of a year earlier. The provision for loan losses for 1985 was an estimated \$2.7 billion while net loan write-offs during the year amounted to an estimated \$1.5 billion. Comparable figures for 1984 were \$121 million and \$127 million.

Published accounts of FCS woes inevitably affected the yields of FCS bonds. Prior to 1985, system securities were priced at only 5 to 10 basis points above Treasury instruments of comparable maturity; that spread grew to 17 to 31 basis points by April 1985, and 35 to 114 basis points by September 1985. The spread fell back to 30 to

50 basis points by December 1985 mainly because of changes made in FCS that are discussed below.

The financial crisis of the Nation's farmers and its impact on FCS led the administration and the Congress to seek changes in the structure and operations of the system. The Farm Credit Amendments Act of 1985 was signed into law by the President on December 23, 1985. The new law provides the basis for reestablishing FCS as a reliable source of financing for American agriculture.

There are three main parts to the Act: it creates the FCS Capital Corporation; it reorganizes the FCA into a stronger, arms-length financial regulator of FCS institutions; and it gives the Secretary of the Treasury the discretion to provide financial assistance to the FCS under limited circumstances and with proper appropriation of funds.

The FCS Capital Corporation has the power to mobilize the earned surplus of all FCS entities, purchase bad loans at market value and restructure those loans, and assess FCS members to cover the corporation's service costs and losses. The administration believes this ability to draw on system-wide reserves will provide adequate support for the FCS as a whole.

Granting FCA stronger regulatory powers, similar to those already held by other Federal regulators of financial institutions, will help to ensure the long-term health of FCS. The Act creates a new three-member board to administer the FCA, which will be authorized to establish and enforce capital requirements and fiduciary regulations on member units. The FCS will also adopt generally accepted accounting principles and have member banks publicly audited.

Finally, the Secretary of the Treasury will have the discretion to purchase the obligations of the corporation, subject to the availability of appropriations provided specially for this purpose by the Congress, under circumstances specified in the Act. The administration does not expect that any such public funds will be needed.

V. CHANGES IN THE QUANTITY AND PRICE OF FEDERAL CREDIT

This section discusses some of the trends and policy initiatives in Federal credit activity that cut across programs. The first part of this section discusses the general quantity of new Federal and federally assisted credit, including that of GSEs. The second part of this section discusses an administration proposal to raise the price of Federal and federally assisted credit by charging higher interest rates and fees.

Changes in the quantity.—The flow-of-funds accounts measure total net lending and borrowing between various sectors of the U.S. economy. These accounts are estimated by the Federal Reserve

Board, and provide one context in which to analyze the flow of Federal credit. A comparison of net Federal and federally assisted lending to total net lending in the U.S. economy allows an estimate to be made of the total amount of net lending directly influenced by Federal programs. It also allows a comparison to be made of changes in the degree of Federal influence over time.

Chart F-4 summarizes these relationships during the last decade. Federal and federally assisted lending in a given year is the difference between the amount of direct, guaranteed and GSE loans outstanding at the beginning and end of year. The net amount of Federal and federally assisted lending was \$110.3 billion in 1985. The supply of credit is the net increase in the holdings of various investor groups. In 1985, this was \$768.6 billion. The participation ratio of Federal and federally assisted lending to total lending, therefore, was 14.4% in 1985. This is below the peak for this decade of 22.5% in 1980 and higher than the 1984 ratio of 11.6%. Table F-23 provides additional details on the participation ratios.

These ratios should be used with caution for two reasons. First, and most importantly, the participation ratios do not indicate the full extent of Federal influence in allocating credit to favored borrowers. That influence is reflected in a more meaningful way by the degree of subsidy. A loan guarantee with a small degree of subsidy does not allocate capital to the same degree as a direct loan with a high degree of subsidy. Yet the lending participation ratios do not distinguish between a dollar of guaranteed loans and a dollar of direct loans; they weigh both dollars equally.

Second, the participation ratios are shown on an aggregate basis for the entire economy and so do not reveal the Federal influence on borrowing by particular sectors, such as households, corporate businesses, or farms. This means that some sectors may be more affected by changes in Federal credit program levels than others, even when the overall lending participation ratio remains the same.

The Federal Government not only lends to various sectors of the economy, but it also borrows. The scope and details of Federal borrowing are discussed in Special Analysis E ("Borrowing and Debt"). The net annual amount of Federal and federally assisted borrowing in 1985 was \$276.8 billion. The borrowing participation ratio, therefore, was 36.2% in 1985. As shown in Chart F-4, the borrowing participation ratio is more volatile than the lending participation ratio, ranging from 19% to 56% of total borrowing between 1975 and 1983. The volatility is due primarily to swings in the budget deficit. Again, a cautionary note is in order. The full impact of Federal borrowing on the U.S. economy and the credit markets depends on competing demands from other borrowing sectors, as well as changes in the supply of credit available for borrow-

ing. Table F-23 at the back of this special analysis provides additional details on participation ratios.

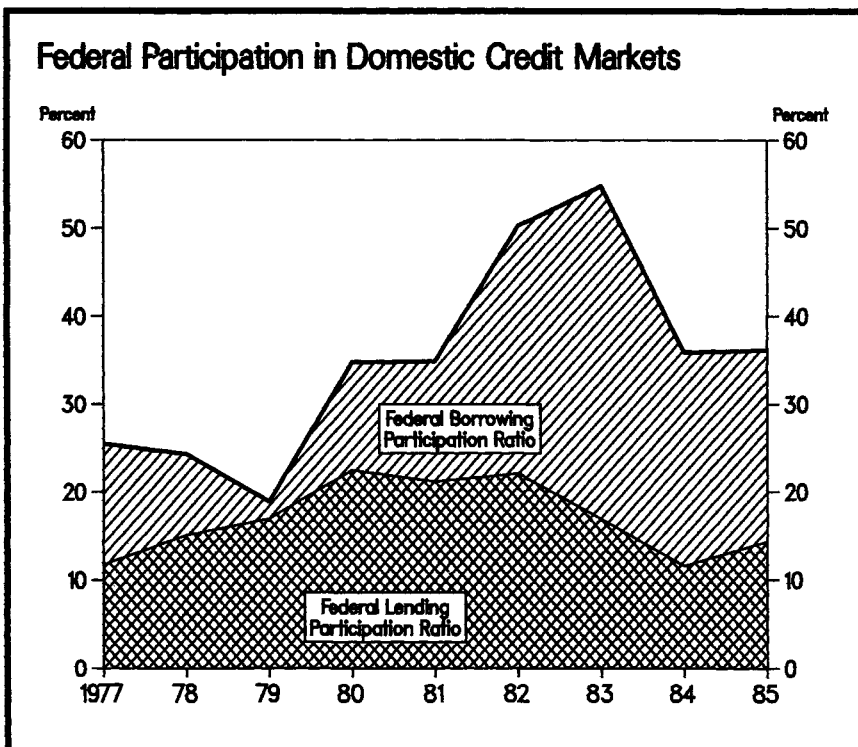


Table F-10 summarizes outstanding Federal and federally assisted loans from 1984 to 1987. Total direct loans outstanding at the end of 1985 were \$257.4 billion and total guaranteed loans outstanding were \$410.4 billion. In 1985, Federal and federally assisted loans outstanding increased by 11.6% over 1984. Increases of 9.5% in 1986 and 8.0% in 1987 are estimated.

Changes in the price.—The second trend in Federal credit policy has been to increase interest rates and fees. Interest rates and guarantee fees are frequently set in legislation. Neither the interest rates nor the loan guarantee fees cover all the costs to the Federal Government of many credit programs. These costs include default risks for both direct and guaranteed loans, as well as servicing and administrative costs.

The 1987 budget proposes to charge borrowers from several loan programs interest rates and loan guarantee fees that more ade-

Table F-10. SUMMARY OF OUTSTANDING FEDERAL AND FEDERALLY ASSISTED CREDIT

(In billions of dollars)

	Actual		Estimate	
	1984	1985	1986	1987
Direct loans.....	229.3	257.4	253.3	248.9
Primary guaranteed loans.....	386.7	410.4	450.6	481.4
Loans by Government-sponsored enterprises.....	314.1	370.0	432.4	496.5
Total, Federal and federally assisted loans.....	930.1	1,037.8	1,136.3	1,226.8
Federal debt held by the public.....	1,312.6	1,509.9	1,714.0	1,855.7
Primary guaranteed debt (same as guaranteed loans above).....	386.7	410.4	450.6	481.4
Debt of Government-sponsored enterprises.....	294.8	351.6	418.9	484.2
Total, Federal and federally assisted debt.....	1,994.1	2,271.9	2,583.5	2,821.3

quately compensate the Government for the risks it bears. These higher interest rates and fees are proposed to help offset the cost to the Federal Government of defaults and delayed repayments, as well as the servicing and administrative costs. The higher interest rates and fees will differ by program depending on the credit risks specific to that program. These higher interest rates and fees will also reduce the subsidies provided by the affected programs. In most cases, the remaining subsidy will still be substantial.

In addition, as discussed in Section IV, it is proposed that Government-sponsored enterprises pay an annual fee on the gross amount of their securities issued after 1986. This fee will raise an estimated \$2.5 billion over the period 1987-1991.

VI. FEDERAL CREDIT SUBSIDIES

Federal credit programs provide more favorable terms than those otherwise obtained in the private market and thus result in a subsidy, often of significant magnitude, to the borrower. For direct loans, a subsidy results when one or all of the following terms of Federal credit are in place:

- Interest rates below commercial levels.
- Longer maturities than fully private loans.
- Deferral of interest.
- Allowance of grace periods.
- Waiver or reduction of loan fees.
- Higher loan amount in relation to the value of the underlying enterprise than a fully private loan.
- Availability of funds to borrowers for purposes for which the private sector would not lend—at virtually any interest rate under virtually any repayment terms.

For guaranteed loans, an interest rate subsidy occurs because the Government guarantee removes some or all risk of default or loss facing the lender and because the Government does not charge

what a private insurer would charge for the same degree of guarantee. The lender is therefore willing to lend to the guaranteed borrower at rates lower than the market rate since no premium for default risk is required.

In many cases, large interest rate subsidies may be intended, for a direct loan program may be established with an objective that explicitly requires a below-market interest rate. The Economic Support Fund, for example, extends loans at interest rates of about 3% per annum in order to meet its objective of aiding foreign countries. In other cases, the extent of the subsidy may be unintentional, as when a direct loan program's interest rate is initially set at a level comparable to a market interest rate but is never changed to keep pace with changes in market interest rates over time. For example, Congress in 1944 set the interest rate on some loans of the Rural Electrification Administration at 2%, which was slightly higher than the cost of Treasury borrowing at that time. Last year, the cost of long-term Treasury borrowing was over 11%, but REA's lending rate had been increased only to 5%.

Neither the unified budget nor the credit budget captures the subsidy that result from interest rate spreads and other loan terms characteristic of Government credit. However, the cash outlays of the direct loan or loan guarantee program are reflected in the unified budget, while the new levels of annual loan activity (both direct loan obligations and guaranteed loan commitments) are summarized in the credit budget. A full evaluation of the cost of any direct or guaranteed loan program to the Government must include an analysis of both the economic cost via estimated subsidy values and the actual cash outlay.

This section presents estimates of the subsidies provided by Federal direct loan and loan guarantee programs in 1985. The direct loan subsidy is calculated as the discounted value (or present value) of the additional payments, that the borrower would have been required to pay for the loan if it had been a purely private loan. This method requires an estimation of the interest rate and other costs a representative borrower would have had to pay to a private lender absent the Government loan. It is not possible to determine this rate of return with precision, since the terms of a loan depend on such conditions as the purpose of the loan, the creditworthiness of the borrower, the competition among lenders, and specific circumstances facing the borrower and lender at the time the loan agreement is negotiated. These conditions differ greatly among loans. Therefore, hypothetical representative private loans have been used for comparison.

To derive the rate of return on a representative private loan, estimates have been made of the private loan terms according to the purpose of the loan (e.g., to buy a house or to provide a small

business with working capital) and the type of borrower (e.g., a high-risk company versus a low-risk company) typically associated with the particular direct loan programs. The estimates take into account not only the differences in interest rates, but also the differences in loan fees, maturities, and repayment schedules that would normally be expected for the type of loan being compared.

The subsidy estimates do not take into account several nonquantifiable variables such as different legal covenants in loan contracts. A simplifying assumption used in these calculations is that all loans in a given program bear a similar degree of risk. This assumption is not always true. Several programs (e.g., the Export-Import Bank or the Small Business Administration) make loans to a variety of borrowers with widely dissimilar risk characteristics.

The discount rate used to evaluate the present values of the Government and private loan is the rate of return on the private loan. This rate is a more appropriate discount rate than the interest rate on the private loan, because that interest rate does not reflect the return that lenders receive from commitment commissions and other loan fees, nor does it reflect the maturity and repayment schedule.

Table F-11 shows subsidy values for 99% of the direct loans obligated in 1985. The present value of the total subsidy is \$9.8 billion.

Table F-11. SUBSIDY VALUES OF 1985 DIRECT LOAN OBLIGATIONS

Agency and programs	Interest rate (in percent)		Loan maturity (in years)		Present value of subsidy	
	Average Government loan	Assumed private loan	Average Government loan	Assumed private loan	Percent of direct loan obligations	Millions of dollars
Funds Appropriated to the President:						
AID functional development assistance	3.0	14.6	30.0	20.0	65.4	206
Economic support fund	5.0	13.6	15.0	15.0	62.0	156
Foreign military sales credit:						
Forgiven	0.0	14.7	NA	1.0	100.0	2,717
Concessional	5.0	13.2	7.0	7.0	37.7	261
Treasury rate (FFB)	11.6	13.6	20.0	20.0	10.3	157
Agriculture:						
ACIF:						
Emergency disaster	5.0	13.5	40.0	7.0	48.2	237
Farm operating	8.4	14.0	7.0	5.0	14.0	511
Farm ownership	8.9	14.0	40.0	25.0	28.0	183
Other	10.8	14.0	40.0	25.0	20.4	3
RHIF:						
Farm labor housing	1.0	12.1	50.0	5.0	75.9	13
Home ownership	3.0	12.1	33.0	25.0	54.4	968
Rental housing	1.0	12.1	50.0	5.0	13.4	610
Other	1.0	12.1	20.0	15.0	76.0	12
RDIF:						
Community facilities ¹	8.0	12.2	40.0	20.0	27.8	32
Water and waste ¹	8.0	12.2	40.0	20.0	32.5	110
CCC:						
Commodity loans ²	9.5	14.0	.75	.75	1.6	164
Export loans	10.2	11.5	3.0	1.0	2.8	2

Table F-11. SUBSIDY VALUES OF 1985 DIRECT LOAN OBLIGATIONS—Continued

Agency and programs	Interest rate (in percent)		Loan maturity (in years)		Present value of subsidy	
	Average Government loan	Assumed private loan	Average Government loan	Assumed private loan	Percent of direct loan obligations	Millions of dollars
Rescheduled loans.....	10.7	11.8	5.0	5.0	3.0	6
Public Law 480.....	3.0	14.6	30.0	20.0	68.6	668
REA:						
Electric.....	5.0	13.5	35.0	15.0	49.6	279
Electric (FFB).....	10.5	13.5	35.0	15.0	17.2	355
Telephone.....	5.0	12.7	35.0	15.0	44.9	101
Rural Telephone Bank.....	9.0	12.7	35.0	15.0	42.2	71
Education:						
Guaranteed student loan defaults.....	4.0	20.0	14.5	10.0	80.8	821
National direct student loans.....	5.0	15.0	10.0	10.0	66.1	132
College housing.....	3.0	15.5	10.0	10.0	36.5	15
Housing and Urban Development:						
Community development grants (FFB).....	11.2	11.5	6.0	6.0	1.6	3
FHA fund.....	11.8	12.1	30.0	30.0	0.9	1
Housing for the elderly and handicapped.....	9.0	13.0	40.0	10.0	24.8	138
Low-rent public housing.....	8.3	13.0	1.0	2.0	2.8	399
Rehabilitation loan fund.....	4.5	14.1	20.0	15.0	42.6	32
Interior:						
Bureau of Reclamation.....	2.0	14.4	33.0	30.0	65.5	36
Transportation:						
MarAd Federal ship financing fund defaults.....	10.8	14.5	5.0	3.0	9.5	32
Highway right-of-way loans.....		12.9	10.0	20.0	60.6	30
Veterans Administration:						
Vendee loans and loans acquired.....	11.0	11.5	30.0	30.0	5.6	45
National service life insurance.....	9.3	11.1	4.0	4.0	3.0	3
Export-Import Bank.....	11.0	13.1	7.5	7.5	6.4	42
NCUA.....	8.2	10.5	.5	.5	1.4	1
Small business assistance:						
Business assistance.....	11.3	13.8	14.0	10.0	14.2	74
Business loan and investment fund.....	12.3	16.5	7.0	2.0	16.9	118
Disaster.....	6.6	16.5			22.0	70
Tennessee Valley Authority (Seven States).....	10.8	13.7	5.0	5.0	5.4	11
Total—Selected direct loan subsidies.....						9,827

¹ The borrower's alternative to the Federal loan could be a federally tax-exempt instrument. Using a tax-exempt rate as an alternative borrowing rate for the purposes of these calculations, however, would understate the economic subsidy since part of the subsidy would be the loss of tax revenue. In these cases, therefore, the private market interest rate is the tax-exempt rate adjusted for taxes. The tax-exempt rate is assumed to be 75% of the taxable rate.

² The subsidy calculations for CCC commodity loans take into account only the difference between the Federal and private loan terms. The calculations do not measure the additional subsidy received by farmers in the form of target price deficiency payments. Further, the calculations do not take into account the effect of these commodity price loans on ultimate commodity market prices (i.e., that the loans help set a floor for the commodity market prices.)

Note: The comparative loan terms shown above are for illustrative purposes. The present value of the subsidies shown in the right hand columns take into account fees, grace periods, and amortization schedules, which are not shown.

Table F-11 also shows the degree of subsidy measured as the amount of subsidy compared to the amount of direct loan obligations. The greater the difference between the Government loan terms and private loan terms, the higher the degree of subsidy. In 1985, the programs that had the largest degree of subsidy were the FMS credit forgiven loans, and the RHIF rental housing program.

The calculation method used in Table F-11 measures the value of the subsidy to the borrower. Another common approach meas-

ures the cost of the subsidy to the Government. Under this approach, the Treasury borrowing rate is used instead of a comparable private market interest rate. This method shows a lower subsidy because the Government can raise funds more cheaply than the private sector.

The latter approach does not accurately measure the true cost of the loan subsidy to the economy, nor does it measure the full benefit of the subsidy to the borrower. The Treasury borrowing rate is a risk-free rate on extremely liquid securities, while all of the loans made by the Government to the public bear some risk and incur greater transaction costs. Using the Treasury rate as a proxy for private market interest rates may lead to startling results. Government loans with interest rates slightly above the Treasury rate will appear to have negative subsidies, although the loans will offer borrowers a considerable subsidy benefit compared to the credit terms they could obtain in the private market. A case in point is the Foreign Military Sales Credit program, which normally charges foreign government borrowers an interest rate one-eighth percentage point above the U.S. Treasury borrowing rate. Under the Treasury cost-of-money assumption, the program and its borrowers would appear to involve no subsidies—indeed the foreign borrower would appear to be subsidizing the U.S. Government. However, the assumed private lending rate shown in Table F-11 is 13.6%, and the calculated present value of the subsidy of this program is \$157 million. Clearly, foreign governments would not borrow under this program if they could obtain better terms elsewhere.

Guaranteed loan subsidies are calculated by the same method as direct loan subsidies. The guaranteed loan subsidy is the present value of the additional payments that borrowers would have paid if the loan had not been guaranteed by a Federal agency. In some cases, private insurance or guarantee coverage of a type offered by Federal programs is available from private insurers. An example is private mortgage insurance, which is comparable to the mortgage insurance or guarantees offered by the FHA and VA. In these cases, one means of estimating the subsidy is to calculate the present value of the difference in fees charged by Federal and private insurers. In other cases, private insurers simply do not offer insurance or guarantee coverage that is similar to that offered by Federal programs. The absence of private insurance may be because the credit risks of the guaranteed loans are so large or so immeasurable that private insurers will not undertake to offer guarantees or it may be because potential private insurance has been preempted by a Federal guarantee program, which inherently has an immensely larger capacity to bear risk and to charge guarantee fees below what the private insurer would charge. In these

cases, the subsidy is calculated in terms of the interest rate and fees a private lender might have charged the borrower in the absence of a Federal guarantee.

Table F-12 presents these subsidy calculations by major loan guarantee program for 1985 guaranteed loan commitments. The present value of the total estimated subsidies is \$6.1 billion.

Table F-12. SUBSIDY VALUES OF 1985 GUARANTEED LOAN COMMITMENTS

Agency and programs	Interest rate (in percent) ¹		Loan maturity (in years)		Guarantee fees (in percent) ²		Present value of subsidy	
	Average Government guaranteed loan	Assumed private loan	Average Government guaranteed loan	Assumed private loan	Average Government guaranteed loan	Assumed private loan	Percent of guaranteed loan commitments	Millions of dollars
Funds Appropriated to the President:								
AID housing and other credit.....	10.9	14.6	30.0	20.0	2.0	.....	20.1	32
Overseas Private Investment Corporation.....	10.4	14.6	10.0	7.0	2.0	.....	13.6	20
Agriculture:								
ACIF:								
Farm operating.....	12.8	14.0	7.0	5.0	.....	.....	6.0	67
Farm ownership.....	12.1	14.0	40.0	25.0	1.0	.....	15.0	10
RDIF:								
Industrial development.....	10.5	12.2	30.0	15.0	1.0	.....	12.1	7
CCC export credits.....	10.2	13.5	3.0	1.0	.33	.....	4.5	112
Education:								
Guaranteed student loans.....	8.0	15.0	10.0	10.0	7.5	13.5	47.6	4,232
Health:								
Health professions graduate student insurance.....	11.4	15.0	16.5	10.0	2.0	13.5	37.6	102
Housing and Urban Development:								
FHA:								
Single-family.....	11.8	12.4	30.0	30.0	3.8	.....	0.4	196
Multi-family.....	12.5	12.4	40.0	10.0	.....	2	3.3	133
Transportation:								
MarAd Federal ship financing fund.....	11.2	13.5	20.0	10.0	.6	.....	12.0	5
Veterans Administration:								
Loan guaranty revolving fund...	10.5	11.0	30.0	30.0	1	3	5.6	642
Export-Import Bank:								
Financial guarantees.....	10.4	12.4	5.0	5.0	.....	.....	3.8	38
Other guarantees and insurance.....	10.4	12.4	1.5	1.5	.....	.....	1.3	91
Small business assistance:								
General business.....	12.5	15.5	9.0	2.0	1.0	1.0	16.4	460
Total—Selected guaranteed loan subsidies.....								6,147

¹ Includes annual fees.

² Flat fees only.

Note.—The comparative guaranteed loan terms shown above are for the most frequent type of loan guaranteed by the program, and are shown for illustrative purposes. The present value of the subsidies shown in the right hand columns take into account all of the types of loans guaranteed by the program, and include grace periods and amortization schedules, which are not shown.

Table F-12, like Table F-11, measures the value of the subsidy to the borrower, not the cost of the subsidy to the Government. This

cost would be the difference between the loan guarantee fee revenue and the net costs of default payments for each loan. A subsidy calculated on this basis would be much lower than the \$6.1 billion "value of the subsidy to the borrower." It would be inappropriate to use such a "cost to Government" basis for calculating economic subsidies, since it would not measure the cost of the loan guarantee to the economy. This could lead to the mistaken perception that a program was economically self-sustaining when, in fact, it was not. The Government need not worry, for example, that it will be forced out of business should it miscalculate the credit risk of guaranteeing a large loan.

Several qualifications should be kept in mind when reviewing the estimates of Federal credit subsidies.

First, the subsidy calculation measures the economic cost of a given direct loan program, but it does not compare the cost to the benefit. This special analysis does not attempt to measure the benefits of credit programs and therefore cannot judge their justifications. Despite the absence of such measurements, it should be clear that the value of a particular credit program cannot be determined without making such a comparison. For the same reasons, of course, the outlays for a regular expenditure program provide a measure of the costs but not of the benefits.

Second, the subsidy estimates in Tables F-11 and F-12 are sensitive to changes in assumptions. As an example, if the appropriate private interest rate for rural housing is 20.0%, rather than 12.1% as shown in Table F-11, the present value of the subsidy will increase from \$968 million to \$1,182 million.

Third, the theoretical difficulties of calculating Federal credit subsidies are enormous, and the subsidy values shown in Tables F-11 and F-12 do not overcome all of them. For example, private investors might wish to have more detailed financial information about the borrower than the Federal Government might possess. The private sector would therefore reflect these higher transaction costs in its charges for loans and loan guarantees. The OMB subsidy estimates do not take account of such transaction costs.

Finally, the subsidies shown are almost certainly underestimated because they are calculated on a marginal price basis. The implicit assumption is that the Federal program is not large enough to affect the price of the unguaranteed loans. This is not true for some programs. The large size and pervasive nature of some Federal programs, especially in the housing sector, means that the Federal supply of credit is so large that the market clearing price of that credit is probably lower than it would otherwise be. This means that the private lenders in that sector may charge less than they otherwise would, thereby lowering the subsidy estimate.

Naturally, lenders in other economic sectors are charging more than they otherwise would—since credit has been directed away to other sectors—thereby raising the subsidy estimate for other programs. Since all sectors of the economy are not equally represented by Federal credit programs, the total estimates of credit subsidies are probably understated. For large credit programs in housing and agriculture, the marginal credit subsidies shown in Tables F-11 and F-12 are almost certainly lower than the subsidies that would be calculated if these programs were smaller.

Although economic subsidy values are important in evaluating the merits of Federal credit programs, it is equally important to know the actual cash cost of loan and loan guarantee programs to the Government, since this will affect Government outlays and the deficit. For direct loans, these costs will be the difference between the interest income on the loans compared to interest expense, the default costs and the servicing costs. For loan guarantees it will be the difference between the revenue from guarantee fees and the net costs of default. Most loan guarantee programs in 1985 paid default claims that were higher than the fee revenue they received. As mentioned in Section V, in order to place loan and loan guarantee programs on a sounder actuarial basis, the administration proposes to raise the level of the interest rates and fees they charge borrowers. Raising interest rates and fees does reduce the subsidy to favored borrowers, but in all cases, the programs still provide subsidies to favored borrowers.

VII. DEFAULTS

Federal credit programs have markedly different objectives than private lending institutions, which seek profits. Several Government credit programs, such as the Small Business Administration, are designed to play the role of “lender of last resort.” Federal loans, therefore, often bear more risk than private lenders are willing to bear. Partially as a result, some Government loan programs have high default rates. The diverse characteristics of Federal credit programs, each with its own legislative mandate, and the variety of different borrowers make it difficult to compare default rates among Federal programs.

Losses from direct loan write-offs appear to have been a miniscule amount of loans outstanding over the last 2 years according to the present system of Government reporting. In great part, however, this reflects the absence of Government-wide standards for writing off direct loans held in the Government’s portfolio. As a result, direct loans are frequently carried in the Government’s portfolio at their nominal value regardless of their true value. The Eximbank, for example, still holds in its portfolio \$81 million in loans made to Cuba between 1951 and 1958. The FmHA holds in its portfolio, at

their full nominal value, several billion dollars of loans that are delinquent by more than a year.

In the past, losses from loan guarantee programs were considered relatively small for two reasons. First, many of the guaranteed loans involved liens on marketable property, particularly houses. Second, due to the absence of Government-wide standards, many loans acquired as a result of defaults on guaranteed loans were never written off. This makes the losses due to Government guarantee programs look smaller than they are.

Table F-13 shows the amount of direct loans written off and the amount of guaranteed loans terminated for defaults. Of all direct loans outstanding, only 0.3% are recorded as write-offs in 1985. Of total guaranteed loans outstanding, 1.5% are reported to be terminated in 1985.

Table F-13. DIRECT LOAN WRITE-OFFS, GUARANTEED LOAN TERMINATIONS FOR DEFAULTS, AND PERCENT OF TOTAL OUTSTANDING LOANS

(In millions of dollars)

	Actual 1985	Estimate		As Percent of Outstanding Loans ¹		
		1986	1987	1985	1986	1987
Direct loans:						
Guaranteed student loans	6	11	230	0.21	0.30	5.45
FmHA agricultural credit insurance fund	114	150	50	0.42	0.52	0.17
Federal Housing Administration	55	79	168	1.31	1.86	4.11
Small business assistance:						
Disaster loan fund	139	122	114	2.92	2.76	3.22
Business loans	360	346	338	7.60	6.89	7.31
Other	98	72	91	0.05	0.03	0.04
Total write-offs	772	780	991	0.32	0.31	0.39
Guaranteed loans:						
Guaranteed student loans	1,018	1,300	1,423	3.00	3.48	3.54
Veterans Administration	1,353	1,410	1,479	1.06	1.06	1.05
Federal Housing Administration	2,234	2,334	2,349	1.22	1.12	1.02
Small business loans	476	540	557	5.30	5.80	6.14
Maritime Administration	321	500	100	4.76	8.28	1.85
Export-Import Bank	258	113	175	4.77	1.95	2.54
Commodity Credit Corporation	185	539	599	3.78	8.63	8.22
Economic development revolving fund	103	23	18	32.09	10.22	9.47
FmHA agricultural insurance fund	26	48	123	2.07	2.35	3.66
Other	103	98	74	0.39	0.45	0.33
Total terminations	6,077	6,905	6,897	1.52	1.60	1.48

¹ Average of loans outstanding over year.

There has been a growing recognition that losses in both direct and loan guarantee programs are higher than reported. In recognition of this problem, the Treasury Department and the Office of Management and Budget are studying means to improve the Government's reporting of and control over defaults.

In addition, the Government is taking tangible steps by:

- automating debt servicing and collections systems to improve the efficiency and effectiveness of these basic operations;
- referring information on severely delinquent accounts to private consumer or commercial credit reporting agencies;
- using private collection agencies to collect severely delinquent debt which may be uncollectable otherwise;
- offsetting delinquent debtors' income tax refunds through the IRS, and Federal employees' salaries for the amounts owed;
- reporting written-off accounts to the IRS as unreported income towards the debtors' tax return, and
- considering creation of a central Federal credit agency.

The Small Business Administration (SBA) and the FmHA agriculture credit insurance fund report the largest write-offs for direct loans in 1985. SBA wrote off \$499 million, or 5.3% of its average outstanding loans in that year. The FHA had the largest dollar amount of guaranteed loan terminations for default. In 1985, FHA terminated \$2.2 billion or 37% of the total amount of guaranteed loan terminations.

VIII. THE FEDERAL FINANCING BANK

The Federal Financing Bank (FFB) began operation in May 1974 and has been a significant factor in financing Federal credit activities. The Bank is administered by the Treasury Department.

The FFB was designed to serve as a financial intermediary for the efficient financing of obligations issued, sold, or guaranteed by Federal agencies. Use of the FFB by Federal agencies leads to lower debt financing costs than if the agencies or the guaranteed borrowers were to sell their obligations individually in the credit market. Agency obligations trade at premiums above Treasury securities due to their relative illiquidity, smaller size of issue, and unique financial terms that distinguish them from Treasury securities and each other. This budget proposes to allow the Secretary of the Treasury to recapture for the U.S. Government these avoided costs by charging borrowers a special premium.

The FFB performs three functions: (1) it purchases guaranteed loan assets from Federal agencies; (2) it disburses loans directly to borrowers when the loans are guaranteed by a Federal agency; and (3) it buys debt of Federal agencies that are otherwise authorized to borrow from the public. In all cases, the servicing of the loans and the operation of the programs remain with the agencies that use the FFB. Prior to Gramm-Rudman-Hollings, the outlays of the first two types of transactions were "off-budget." Gramm-Rudman-Hollings attributes FFB outlays to the agencies that use the FFB. The third type of FFB transaction does not involve outlays since it is an intragovernmental financing transaction.

(1) *Loan asset sales.*—Most loan asset sales are made to the FFB rather than to the public.

(2) *Guaranteed loan originations.*—The FFB disburses loans directly to borrowers when the loan is guaranteed by a Federal agency. The agency's guarantee program thus becomes a program that effectively makes direct loans. The only programs that are proposed to use the FFB in this manner in 1987 are the Rural Electrification Administration and the Tennessee Valley Authority's Seven States Energy Corporation.

(3) *Agency debt.*—Agencies authorized to borrow from the public, such as Eximbank, almost always borrow from the FFB (or the Treasury) instead, since it is less expensive than issuing their own securities and borrowing directly from financial markets. This borrowing has no effect on outlays, since outlays are recorded when the proceeds of borrowing are spent by the agencies.

Legislation will be repropsoed to require that, at the discretion of the Secretary of the Treasury, all 100% federally guaranteed loans of a type ordinarily traded in the investment securities market be processed through the FFB.

Table F-14 summarizes the activities of the FFB for 1985 through 1991. Table F-22 at the end of this special analysis shows the activities of the FFB over the same period by agency and account.

Table F-14. SUMMARY OF FEDERAL FINANCING BANK ACTIVITY

(In billions of dollars)

	Actual 1985	Estimate					
		1986	1987	1988	1989	1990	1991
Purchases of loan assets from Federal agencies:							
New acquisitions.....	11.9	3.2	.....	0.4	0.5	0.1	.....
Net outlays.....	4.8	1.9	-0.6	—*	-4.4	-4.8	-3.6
Outstandings.....	68.2	70.1	69.5	69.5	65.0	60.2	56.7
Guaranteed loan originations:							
New acquisitions.....	6.4	4.3	2.8	2.0	1.6	1.4	1.2
Net outlays.....	2.6	1.8	-1.4	0.1	-0.3	-0.6	-0.7
Outstandings.....	53.4	55.2	53.8	53.9	53.6	53.0	52.3
Total:							
New acquisitions.....	18.3	7.6	2.8	2.4	2.1	1.5	1.2
Net outlays.....	7.4	3.7	-1.9	0.1	-4.7	-5.4	-4.3
Outstandings.....	121.6	125.3	123.3	123.4	118.7	113.3	109.0
ADDENDUM							
Agency Borrowing:							
Net change.....	1.2	1.3	0.9	1.3	0.9	0.4	0.3
Outstandings.....	31.8	33.1	34.0	35.3	36.2	36.6	36.8

* Less than \$50 million.

The proper treatment of FFB transactions has been a major accounting issue with respect to the unified budget. In principle, all outlays of the Federal Government should be reported in the unified budget. The past use of the FFB was the greatest exception to the comprehensive principles of the unified budget. From 1978 to 1985, FFB outlays averaged 96% of all off-budget outlays. The Gramm-Rudman-Hollings Act attributes the budget authority and the outlays that the FFB incurs back to the agency responsible for the transaction.

IX. LOAN ASSET SALES AND REPURCHASES

Loan assets are direct loans that an agency has made to the public and on which repayments are still owed. These loan assets are often sold to either the public or the FFB. In the case of loan asset sales to the FFB, the agency selling the loan assets also guarantees the repayment of the loan of the FFB. In the case of sales to the public, the agencies do not normally guarantee the repayment.

The repurchase of loan assets, occurs when the agency buys back from the FFB or the public the loan assets it previously sold. Although the repurchase agreement requires an agency to incur a budgetary obligation, repurchases of loan assets from the FFB are intragovernmental transactions and do not comprise new credit transactions with the public.

The original method of selling loan assets was to sell the title of the individual loans to the public. Later, various types of certificates representing pools of loans were sold to the public. However, with the creation of the FFB, most loan assets have been sold by agencies to the FFB as a means of financing the program. In 1985, 89% of total loan asset sales were to the FFB. Table F-15 shows data for loan asset sales and repurchases.

Prior to this budget, the largest volume of loan assets sold were certificates of beneficial ownership (CBOs) sold to the FFB by the Farmers Home Administration (FmHA) and Rural Electrification Administration (REA) to support their direct loan programs. The President's Commission on Budget Concepts recommended in 1967 that the sale of such securities be treated as borrowing because there is little difference in substance between (1) an agency selling securities labeled "certificates of beneficial ownership," (2) the same agency selling securities labeled "debt," or (3) the Treasury Department selling securities labeled "debt." While this treatment generally has been applied, legislation requires that the CBO's of FmHA and REA be treated as loan assets rather than debt.

Loan assets sold to the FFB are repurchased by the agency at scheduled intervals. At present, the FmHA is the only agency that

repurchases its loan assets, but REA plans to begin repurchasing loan assets in 1990.

With this budget, the Federal Government is embarking on a pilot program to sell off a portion of its loan portfolio to the public. The pilot program will sell loans with a nominal value of \$4.4 billion and an estimated market value of \$2.0 billion in 1987. Including interest expense, the overall budget deficit will be reduced by \$1.8 billion in 1987. Budget deficits in later years will *increase*, however, because a sale in 1987 means that the Government loses the expected stream of principal repayments and interest income in later years.

Sales of loans without a Federal guarantee to the public are attractive to the Government for several reasons. First, the private purchaser may be more efficient in administering the loan than the Federal agency. Selling the loans allows the Government to reduce its administrative expenses. Second, the discount from the face value of the loans provides an unambiguous measure of the subsidy of the loan. This subsidy can then be compared with the benefits of the loan, and thereby provide the executive branch and Congress with the information necessary to evaluate the relative benefits and costs of such subsidized loans. The table below shows the nominal amount of loans sold to the FFB or the public.

Selling loan assets to the public with a Government guarantee is a form of federally assisted borrowing from the public. The Government incurs a contingent liability in the amount of the loan guarantee. Guaranteed loan asset sales are, however, a more costly means of borrowing for the Government than selling Treasury securities, since purchasers of the guaranteed loan assets frequently will offer prices well below the face value of the loans, despite the Government guarantee. The lower price is offered because the loan assets may be relatively illiquid or have unique characteristics that reduce their value to the purchaser. Yet, because of the Government guarantee, such sales do reduce the demand for the alternative investment of a Treasury security. It is more efficient for the Government to meet its borrowing needs by issuing Treasury securities. For this reason, administration policy is to sell loan assets to the public without a Government guarantee.

X. CONTINGENT LIABILITIES

The Federal Government provides guarantees and insurance against several types of risk for many sectors of the economy. Under certain specified contingencies, such as borrower default or natural disaster, these programs require that the Government assume a liability and so make payments. These contingencies expose the Government to the possibility of loss sometime in the future.

Table F-15. LOAN ASSET SALES AND REPURCHASES

(In millions of dollars)

Agency or program	Transaction	Actual 1985	Estimate	
			1986	1987
FFB loan assets:¹				
Overseas Private Investment Corporation.....	repurchases from FFB.....	5	5	1
Agriculture:				
Rural Electrification Administration	sales to FFB	379	327	.....
	repurchases from FFB.....	191	.....	.....
Agriculture credit insurance fund.....	sales to FFB	6,815	2,172	.....
	repurchases from FFB.....	4,157	1,250	382
Rural housing insurance fund	sales to FFB	3,695	391	.....
	repurchases from FFB.....	2,110	.....	150
Rural development insurance fund.....	sales to FFB	1,010	343	.....
	repurchases from FFB.....	595	30	.....
Health and Human Services:				
Medical facilities.....	repurchases from FFB.....	9	6	6
Health maintenance organizations.....	sales to FFB	3	1	.....
	repurchases from FFB.....	10	5	5
Small business development companies.....	repurchases from FFB.....	7	10	10
Total, FFB loan assets.....	sales to FFB	11,902	3,234	.....
	repurchases from FFB.....	7,084	1,305	554
Other loan assets:²				
Agriculture:				
Rural Electrification Administration	sales to the public .....	.....	.....	70
Rural telephone bank	sales to the public .....	.....	.....	48
Rural development insurance fund.....	sales to the public .....	.....	.....	63
Rural housing insurance fund	sales to the public	25	20	106
Commerce:				
Economic development.....	sales to the public .....	.....	19	.....
Education:				
Student financial assistance.....	sales to the public .....	.....	.....	7
Guaranteed student loans	sales to the public .....	.....	.....	30
Higher education facilities.....	sales to the public .....	.....	.....	.....
College housing loans	sales to the public .....	.....	.....	579
Housing and Urban Development:				
Federal Housing Administration.....	sales to the public .....	.....	15	232
Rehabilitation loans	sales to the public .....	.....	.....	1
Veterans' Administration:				
Loan guarantees	sales to the public	688	730	767
Small business assistance:				
Disaster loans	sales to the public .....	.....	.....	1,100
Business loans	sales to the public .....	.....	.....	1,153
Subtotal, other assets	sales to the public	713	784	4,156
Housing and Urban Development:				
GNMA tandem plan (FHA/VA mort- gages).....	sales to the public	764	635	470
Total, other assets.....	sales to the public	1,477	1,419	4,626

¹ See table F-22 for details of FFB purchases.² "Sales to the public" include sales to government-sponsored enterprises such as FNMA and FHLMC, which are among the principal purchasers of HUD and VA mortgages.

A contingency has been defined by the Financial Accounting Standards Board (FASB) as an existing condition, situation, or set of circumstances involving uncertainty as to possible gain ("gain contingency") or loss ("loss contingency") to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur.⁶ Examples of loss contingencies, the only category applicable to this discussion, include actual or possible claims and assessments and guarantees of indebtedness of others.

Federal accounting practices are not governed by FASB; however, the definition provides a basis for exploring the Government's exposure due to insurance and loan guarantee programs. The data presented in Table F-16 do not represent the Government's expected loss contingency for 1987 alone, as would be presented in an annual corporate financial statement, but rather the overall contingent liability or exposure of the Government resulting from all potential insurance claims and guaranteed loan defaults. As can be seen in the accompanying table, the Government bears risk from a variety of sources, including deposit insurance, loan guarantee programs, flood and crop insurance, and pension insurance.

Table F-16. CONTINGENT LIABILITY OF THE FEDERAL GOVERNMENT

(In millions of dollars)

Program or activity	1984	1985
Federal deposit insurance.....	2,105,000	2,305,000
Loan guarantee programs ¹	565,528	613,101
National flood insurance.....	116,000	133,841
Federal crop insurance.....	4,366	6,656
Pension Benefit Guaranty Corporation	1,376	2,005
Total.....	2,792,270	3,060,603

¹ Gross basis.

The credit budget encompasses all loan guarantee programs, but only a small part of the transactions of Federal deposit insurance programs (see the section on these programs for a more complete discussion), and only the lending activity of the Pension Benefit Guaranty Corporation. Table F-16 also shows other programs that expose the Government to significant risk that are outside the ambit of the credit budget; furthermore, there are other, smaller insurance programs not in the table that increase Federal contingent liability.

The administration is studying the creation of a pilot program to reinsure its guaranteed loans. Such a program would involve purchasing reinsurance policies from private insurance companies that would cover the Federal Government's contingent liability due to the loan guarantees. The cost of reinsurance policies would show up in the budget as an outlay and would reflect in real terms the cost to the Government of its guaranteed loans.

⁶ Financial Accounting Standards Board, "Statement of Financial Accounting Standards No. 5," Stamford, CT.

XI. FEDERAL DEPOSIT INSURANCE

The Federal Government insures depositors through the Federal Deposit Insurance Corporation (FDIC), the Federal Savings and Loan Corporation (FSLIC), and the National Credit Union Administration. Some credit activities of these programs have been reflected in past credit budgets, while other activities have not.

Deposit insurance offered by these programs serves two purposes: (1) it helps stabilize the Nation's monetary and financial system and thereby the economy as a whole; and (2) it protects depositors in the insured financial intermediaries. Table F-17 below shows that the value of insured deposits at the end of 1985 was over \$2.3 trillion.

Table F-17. FEDERAL DEPOSIT INSURANCE

(In billions of dollars)

	1983	1984	1985
Federal Deposit Insurance Corporation.....	1,210	1,322	1,432
Federal Savings and Loan Insurance Corporation.....	608	695	769
National Credit Union Administration.....	78	88	104
Total.....	1,896	2,105	2,305

Federal deposit insurance is not included in the guaranteed loan portion of the credit budget, principally because it does not directly allocate credit to the ultimate borrowers of that credit. Deposit insurance directly affects the liabilities (the deposits) of financial intermediaries but only indirectly their assets (loans). All other Federal guarantee programs are structured to influence the assets or loans of financial intermediaries directly. Nonetheless, as the 1984 *Economic Report of the President* states, Federal deposit insurance does give insured institutions "an incentive to take on more risk than they would otherwise, either by making riskier loans or by increasing leverage" (page 165). To this degree, deposit insurance indirectly allocates credit. It also indirectly affects the allocation and amount of credit by changing depositor behavior as a result of its protection, and by insuring the stability of the financial system and the economy.

Federal deposit insurance programs may assist insured depositors in a variety of ways. When an insured financial institution becomes troubled, deposit insurance programs may (1) liquidate the institution and pay depositors directly; (2) merge the troubled institution with a healthier institution, in some cases providing financial assistance to the acquiring partner in the merger; or (3) provide financial assistance directly to the troubled institution in the expectation that it will recover. Financial assistance to private

financial intermediaries has consisted of equity purchases, purchases of physical assets, and direct loans and loan guarantees.

Direct loans involving disbursements of cash are included in the credit budget. These amounts have typically been small for the FDIC and the FSLIC because the preferred means of helping troubled financial intermediaries was to arrange a merger with a healthy institution. This type of transaction did not normally involve the disbursement of cash and the creation of a loan asset held by the FDIC or FSLIC.

The increase in bank failures, particularly of some larger banks, has increased the amount of FDIC and FSLIC loans to private financial intermediaries. While many of these transactions do not involve the disbursement of cash by a Federal agency to the troubled financial institution, they do involve the acquisition by the Federal agency of both loan assets and liabilities of the troubled institution. The dollar amount of loan assets held by the Federal Government has increased. For that reason, transactions of this type are scored in the 1987 credit budget as direct loan obligations and increases in direct loans outstanding. Direct loan obligations made by deposit insurance programs amounted to \$833 million in 1985.

XII. LEASING

A lease, according to the Financial Accounting Standards Board (FASB), is "an agreement conveying the right to use property, plant or equipment (land and/or depreciable assets) usually for a stated period of time." The Federal Government is both a lessor and a lessee in hundreds of leases involving billions of dollars every year. As a lessor, the Government leases to private entities on-shore and off-shore acreage for oil and gas exploration and lands for grazing and timber harvesting. Total acreage leased is 308 million, which raises \$8 billion in proprietary receipts annually.

As a lessee, the Federal Government leases from private entities office facilities, computers, telecommunications equipment, satellites, ships, cars, planes and other equipment. Federal agencies sign both operating and capital leases. An operating lease is a short-term transaction that does not involve a change in "material ownership interest" in an asset. The lessor holds title to, performs maintenance on, and regains use of the asset after the lease period.

A capital lease (or a financial lease) involves a basic change in the "material ownership interest" in the asset. The lease agreement usually transfers ownership of the asset to the lessee at the end of the lease period. The lease period covers at least 75% of the economic life of the asset, and the present value of the minimum lease payments is at least 90% of the market value of the asset.

Capital leases, in essence, are a means by which lessees can purchase the asset by borrowing from the lessor.

Government-wide guidelines on leasing are set forth in Office of Management and Budget Circular No. A-104 ("Comparable Cost Analysis for Decisions to Lease or Purchase General Purpose Real Property"), which was issued in 1972. This circular is currently undergoing revision in an effort by the administration to refine the decision-making process agencies use in signing operating or capital leases. A capital lease typically results in the purchase of the asset by the lessee at the end of the lease term. This relationship narrows the true financing analysis to a trade-off between purchasing an asset through lease payments or through Treasury securities. In almost every case, it costs the Government less to purchase the asset rather than sign a capital lease for the same asset.

XIII. TAX EXEMPT CREDIT

Interest on State and local government obligations generally has been exempted from the Federal income tax since its adoption in 1913.⁷ Federal tax exemption increases the demand for these obligations, since it results in higher interest rates net of taxes for the lenders and investors. This increase in demand reduces the interest rates of these obligations relative to the pre-tax interest rates of taxable securities. Consequently, tax-exempt interest rates in 1984 have normally been about 75% of taxable interest rates on long-term obligations with similar credit risk.

Tax exemption reallocates scarce credit resources, just as do Federal direct loans and loan guarantees. Borrowers aided by Federal tax-exempt status have access to credit resources at preferential interest rates over competing borrowers without the tax-exempt status. Borrowers who benefit both from tax exemption and Federal guarantees have an advantage over all other borrowers, including the Federal Government, since the interest on Federal Government debt is taxable.

Although tax-exempt financing alters the allocation of credit and has costs similar to other Government financing programs, it is not included in the credit budget for several reasons. First, unlike other credit assistance, the statutory authority for tax-exempt credit generally allows unlimited access that is unilaterally elected by eligible borrowers. Second, tax-exempt credit is not controlled by

⁷ Tax exemption is a tax expenditure. (See Special Analysis G, "Tax Expenditures.") Special Analysis G includes a discussion of revenue losses attributable to special provisions of the tax code, including various types of tax-exempt bonds.

the budget process in the same manner as direct loans or guaranteed loans; effective control of tax-exempt financing can only be achieved through legislated changes to the tax code.

A relatively small portion of tax-exempt financing is guaranteed by the Federal Government and so is included in the credit budget as guaranteed loan commitments. This occurs when the Federal Government guarantees the financial assets that underlie the tax-exempt obligation. Examples include State and local government bonds that finance home mortgages guaranteed by the Federal Housing Administration or the Veterans Administration, or bonds that finance student loans guaranteed by the Department of Education. No complete data exist on the amount of guaranteed loans that are directly or indirectly linked to tax-exempt financing.

This administration and previous ones have believed for several reasons that Federal agencies should not offer direct or indirect guarantees for securities that benefit from tax-exempt status. First, tax-exempt financing is an inefficient means of financing, since the tax loss to the Treasury is greater than the savings from the lower financing costs available to the borrower. Therefore, it should not be stimulated by benefiting from a Government guarantee. Second, the guarantee of tax-exempt financing confers double benefits on investors in those securities: they pay no Federal income tax and they bear no risk. This class of debt obligation is therefore superior to Treasury securities.

OMB's Circular A-70 states explicit prohibitions against the linkage of Federal guarantees with tax-exempt instruments. Congress has generally agreed with this policy. The Deficit Reduction Act of 1984 includes provisions that deny tax-exempt status to obligations that are guaranteed directly or indirectly by the Federal Government, including obligations issued by institutions insured by Federal deposit insurance programs. The Act does allow several exceptions to the rule, including certain bonds to finance mortgages insured by FHA and guaranteed by VA, and student loans guaranteed by the Department of Education. In separate legislation, the Congress has explicitly prevented the SBA from refusing to guarantee tax-exempt bonds under its pollution control bond guarantee program, which the administration again proposes to terminate in 1987.

During the first half century of the income tax, tax-exempt borrowing was mainly for public purposes such as financing roads and schools. From the 1960s on, however, the benefits of tax-exempt financing have increasingly been made available to private businesses. State or local governments typically establish authorities that function as financial institutions in providing tax-exempt fi-

nancing to private borrowers. They use their tax-exempt financing to purchase an asset, which in turn, is purchased from them by the borrower, or lend the proceeds of an issue to a private borrower. In general, the private borrower is solely responsible for the payment of interest and principal even in the event of default. The State or local government, in some cases, can benefit from investment earnings on funds held for temporary periods and from fees paid by borrowers.

Industrial development bonds (IDBs) issued for use by private business were made taxable in the 1968 and 1969 tax acts, but a number of major exceptions were permitted. Tax-exempt IDBs are permitted for pollution control, sewage and waste facilities, multi-family rental housing, facilities financed with "small-issues" of under \$10 million in face amount, and certain other private business projects. In recent years, tax-exempt bonds have also become a common means of financing owner-occupied housing, student loans, and private nonprofit hospitals and educational facilities.

Concerned by the rapid growth of private purpose tax-exempt bonds, Congress recently placed further restrictions on their use. The Omnibus Reconciliation Act of 1980 imposed a number of restrictions on tax-exempt mortgage subsidy bonds for owner-occupied housing, including limitations on the volume issued in each State. The Tax Equity and Fiscal Responsibility Act of 1982 required that IDBs be approved by an elected public official after a public hearing, and that assets of certain IDB-financed projects placed in service after 1982 be depreciated using the straight-line method rather than accelerated depreciation. The 1982 tax act also eliminated the tax exemption for "small issue" IDBs issued after 1986.

The Deficit Reduction Act of 1984 (DEFRA) restricted the annual volume of student loan bonds and most IDBs issued in each State to the greater of \$150 per capita or \$200 million, approximately \$37 billion in 1984. The per capita limitation will be reduced to \$100 in 1987 to reflect the termination of the small-issue exception for non-manufacturing facilities; authority for small-issue IDBs for manufacturing facilities was extended through 1988. DEFRA also required IDB issuers to rebate any excess arbitrage earnings to the Federal Government, and prohibited the use of consumer loan bonds. Although the Act extended the use of mortgage subsidy bonds for 4 years, an optional program for issuers to provide mortgage credits to eligible homebuyers in lieu of tax-exempt bonds was enacted. Finally, volume limits on the use of veterans' housing bonds restricted their use to five States.

Even with these restrictions, the volume of private purpose tax-exempt bonds has continued to increase. Table F-18 shows the growth in the volume of long-term, tax-exempt bonds. Total issues

more than doubled from 1981 to 1984, increasing from \$55 billion to \$116 billion. Over the same time period, the volume of private purpose tax-exempt bonds rose at a somewhat faster rate, increasing from \$31 billion in 1981 to \$74 billion in 1984. In 1976, private purpose tax-exempt bonds accounted for one-third of total tax-exempt, long-term issues. This percentage rose to 60% by 1980, and has remained fairly constant since then.

The President's tax reform proposal of May 1985 would have eliminated tax exemption for nongovernmental bonds, defined as bonds for which more than 1% of the proceeds are used by a nongovernmental person. The Tax Reform Act of 1985 (H.R. 3838), passed by the House in December 1985, also restricts the use of private purpose bonds relative to current law, but by considerably less than the president's proposal. Bonds are defined as nongovernmental if the lesser of 10% or \$10 million of the proceeds are used by nongovernmental persons or if the lesser of 5% or \$5 million are loaned to a nongovernmental person. Nongovernmental bonds that are not specifically exempted are taxable; those that are tax-exempt are generally subject to a volume cap. In the House bill a single volume cap of \$175 per capita or \$200 million would replace the three separate volume caps under current law. The cap would cover all nongovernmental bonds other than airport bonds and in addition cover the nongovernmental part of governmental bonds. The bill also tightens arbitrage profit limitations and restricts advance refunding.

The effective January 1, 1986, date in the House bill, and the consequent rush to market, mainly to avoid the proposed restrictions on arbitrage and advance refunding, helps account for the record \$178 billion in long-term, tax-exempt issuances in 1985. Tax-exempt issuers also took advantage of lower interest rates in order to refinance existing debt. An estimated \$50 billion of long-term tax exempts were issued in 1985 for refunding. A return to the pre-1985 rate of growth in tax-exempt financing is assumed for the 1986 and 1987 volume projections.

Special Analysis G, "Tax Expenditures," shows the annual revenue loss from outstanding tax-exempt bonds issued for various purposes.

Table F-18. TAX EXEMPT FINANCING ¹

(In billions of dollars)

	Calendar years										
	Actual ²									Estimates	
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Private purpose tax-exempts.....	17.4	19.7	28.1	32.5	30.9	49.6	57.3	74.0	88.4	79.2	71.3
Housing bonds.....	4.4	6.9	12.1	14.0	4.8	14.6	17.0	20.5	26.7	22.8	24.3
Single-family mortgage subsidy bonds.....	1.0	3.4	7.8	10.5	2.8	9.0	11.0	12.8	15.3	15.9	17.9
Multi-family rental housing bonds.....	2.9	2.5	2.7	2.2	1.1	5.1	5.3	5.5	10.3	5.8	5.3
Veterans general obligation bonds.....	0.6	1.2	1.6	1.3	0.9	0.5	0.7	2.2	1.1	1.1	1.1
Private exempt entity bonds ³	4.3	2.9	3.2	3.3	4.7	8.5	11.8	11.7	19.4	15.4	17.4
Student loan bonds.....	0.1	0.3	0.6	0.5	1.1	1.8	3.3	1.2	1.1	0.8	0.8
Pollution control industrial development bonds.....	3.0	2.8	2.5	2.5	4.3	5.9	4.5	8.1	7.1	7.1	7.4
Small-issue industrial development bonds.....	2.4	3.6	7.5	9.7	13.3	14.7	14.7	18.3	19.3	18.9	6.0
Other industrial development bonds ⁴	3.2	3.2	2.2	2.5	2.7	4.1	6.0	14.1	14.8	14.2	15.4
Public purpose tax-exempts.....	29.5	29.3	20.3	22.0	24.2	35.3	36.2	41.7	89.8	52.2	57.0
Total new issues, long-term tax exempts.....	46.9	49.1	48.4	54.5	55.1	84.9	93.5	115.7	178.2	131.4	128.3

¹ Includes long-term refunding bonds.² Includes some estimates.³ Private exempt entity bonds are obligations of Internal Revenue Code Section 501(c)(3) organizations, such as private non-profit hospitals and educational facilities.⁴ Other IDB's include obligations for private businesses that qualify for tax exempt activities, such as sewage disposal, airports and docks.

Source: Office of Tax Analysis, Department of Treasury.

XIV. SUMMARY

The need for better control over Federal credit is widely recognized within the executive branch and the Congress. With \$257 billion in direct loans outstanding and \$410 billion in primary guaranteed loans outstanding in 1985, the Federal Government is the single largest financial intermediary in the United States. Its credit policies and practices affect all major segments of the economy.

To gain better control over Federal credit, the President's budget since January 1980 has included a Federal credit control system, composed of the credit budget and credit limitations proposed in individual appropriations bills. This system has been strengthened by Gramm-Rudman-Hollings. The Act requires Congress to establish aggregate limits on new direct loan obligations and guaranteed loan commitments in the budget resolution process and requires that credit authority totals be included in the budget reconciliation process. The management of Federal credit programs should be improved through consistent application of Government-wide standards on loan defaults and write-offs.

These steps, though critical, are only part of the improvements necessary for better control. The subsidy element in Federal credit programs needs to be measured more accurately and targeted more effectively. A key improvement in Federal credit programs would be to state their objectives and the means of achieving those objectives in a straightforward manner. The subsidy costs of operating these programs could then be compared to the economic and social benefits realized in achieving the programs' objectives.

XV. APPENDIX

ADDITIONAL DISCUSSIONS OF FEDERAL CREDIT PROGRAMS AND RELATED ISSUES IN THE 1987 BUDGET DOCUMENTS

- Special Analysis E ("Borrowing and Debt") contains information on Federal borrowing, borrowing by Government-sponsored enterprises, and the Federal Financing Bank.
- Special Analysis G ("Tax Expenditures") contains information on tax-exempt borrowing.
- Special Analysis H ("Federal Aid to State and Local Governments") contains information on Federal loans to State and local governments.
- Part 5 of the Budget ("Meeting National Needs: The Federal Program by Function") contains a discussion of major credit programs by budget function (e.g., Agriculture, Commerce and Housing, International Affairs).
- Part 6c of the Budget ("The Federal Credit Budget") presents a summary of much of the material in this special analysis.

- Part 6e of the Budget (“Summary Tables”) contains summary tables of the credit budget totals (Table 1) and summaries by agency of direct loan obligations and guaranteed loan commitments (Table 5).
- The Budget Appendix contains additional information for each credit program by budget account. Part I of the Appendix (“Detailed Budget Estimates”) provides credit program information by major departments and agencies. Part IV (“Government-Sponsored Enterprises”) provides information on these enterprises.

Table F-19. DIRECT LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
Funds Appropriated to the President:								
Economic support fund	Obligations	252	379	404	411	417	422	427
	Loan disbursements	271	379	404	411	417	422	427
	Change in outstandings	210	309	308	313	317	320	324
	Outstandings	6,222	6,531	6,839	7,151	7,468	7,788	8,112
Foreign military sales	Obligations	4,940	4,967	5,661	5,771	5,870	5,955	6,023
	Loan disbursements	2,275	3,770	6,121	5,916	5,935	5,889	5,969
	Change in outstandings	916	135	3,012	2,666	2,587	1,370	2,225
	Outstandings	1,056	1,191	4,203	6,869	9,455	10,825	13,051
Foreign military sales (loans made by FFB) ¹	Obligations							
	Loan disbursements	1,683	950	473	303	173	147	187
	Change in outstandings	978	187	-306	-440	-613	-720	-728
	Outstandings	18,089	18,275	17,969	17,529	16,916	16,197	15,469
Guarantee reserve fund (foreign military sales defaults)	Obligations	762	808	801	800	800	800	800
	Loan disbursements	762	808	801	800	800	800	800
	Change in outstandings	390	130	36	35	35	35	35
	Outstandings	1,165	1,295	1,332	1,367	1,402	1,437	1,472
Overseas Private Investment Corporation	Obligations	15	14	15	15			
	Loan disbursements	6	6	6	6	6	6	
	Change in outstandings	3	2	1	1	1	1	-5
	Outstandings	36	38	39	40	42	43	38
Overseas Private Investment Corporation (FFB loan assets) ²	Change in outstandings	-5	-5	-1	*			
	Outstandings	6	1	*				
AID functional development assistance	Obligations	315	301	315	315	315	315	315
	Loan disbursements	292	274	223	339	339	340	342
	Change in outstandings	277	258	200	331	331	332	334
	Outstandings	3,117	3,375	3,576	3,906	4,237	4,569	4,903

SPECIAL ANALYSIS F

F-55

Table F-19. DIRECT LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
AID development loans revolving fund	Obligations							
	Loan disbursements							
	Change in outstandings	-288	-300	-295	-276	-276	-282	-279
	Outstandings	8,738	8,438	8,143	7,867	7,591	7,309	7,030
AID private sector revolving fund	Obligations	18	17	15	15	15	15	15
	Loan disbursements	3	8	12	10	10	10	10
	Change in outstandings	3	8	10	4	*	-4	-6
	Outstandings	3	11	21	25	25	20	14
AID housing and other credit guarantees	Obligations	37	45	49	51	59	51	51
	Loan disbursements	37	45	49	51	59	51	51
	Change in outstandings	16	9	9	32	16	7	8
	Outstandings	48	56	65	98	114	121	129
AID miscellaneous appropriations	Obligations							
	Loan disbursements							
	Change in outstandings	-8	-8	-9	-9	-6	-6	-135
	Outstandings	173	165	156	147	141	135	
Agriculture:								
Farmers Home Administration:								
Agricultural credit insurance fund	Obligations	4,757	3,198	1,500	1,000	500		
	Loan disbursements	4,735	3,557	1,635	1,061	-19	26	36
	Change in outstandings	-22	-11	-364	32	1,334	-46	-541
	Outstandings	388	377	12	44	1,378	1,332	791
Agricultural credit insurance fund (FFB loan assets) ²	Change in outstandings	2,658	922	-382	-385	-3,434	-2,620	-2,150
	Outstandings	28,175	29,097	28,715	28,330	24,896	22,276	20,126
Rural housing insurance fund	Obligations	2,718	1,336					
	Loan disbursements	2,935	2,292	1,040	598	231	*	*
	Change in outstandings	-106	448	-382	-415	23	518	-14
	Outstandings	329	777	395	-19	4	521	507

Rural housing insurance fund (FFB loan assets) ²	<i>Change in outstandings</i>	1,585	391	-150		-1,000	-1,990	-1,415
	Outstandings	28,351	28,742	28,592	28,592	27,592	25,602	24,187
Rural development insurance fund	Obligations	455	421					
	Loan disbursements	531	478	415	567	294	148	58
	<i>Change in outstandings</i>	-40	-4	141	-80	-2	21	-141
	Outstandings	65	60	202	122	120	141	*
Rural development insurance fund (FFB loan assets) ²	<i>Change in outstandings</i>	415	313		362		-180	
	Outstandings	7,643	7,956	7,956	8,318	8,318	8,138	8,138
Commodity Credit Corporation:								
Short and medium term export loans	Obligations	72						
	Loan disbursements	72						
	<i>Change in outstandings</i>	-20	-15	-41	-18	*	-38	-46
	Outstandings	803	788	748	730	730	692	646
Commodity loans	Obligations	10,186	15,956	10,840	10,356	8,738	7,289	5,526
	Loan disbursements	10,186	16,116	10,680	10,356	8,738	7,289	5,526
	<i>Change in outstandings</i>	4,378	4,553	-3,662	-2,276	-2,627	-2,413	-1,576
	Outstandings	12,233	16,786	13,125	10,849	8,222	5,809	4,232
Storage facility loans	Obligations	1	*					
	Loan disbursements	1	*					
	<i>Change in outstandings</i>	-318	-264	-105	-29	*		
	Outstandings	398	134	29	*			
Rescheduled guaranteed loans	Obligations	184	614	683	584	574	497	451
	Loan disbursements	184	614	683	584	574	497	451
	<i>Change in outstandings</i>	1,307	777	727	616	583	431	310
	Outstandings	1,671	2,448	3,175	3,791	4,374	4,805	5,115
Public Law 480 long-term export credits	Obligations	975	906	827	843	859	874	887
	Loan disbursements	961	906	827	843	859	874	887
	<i>Change in outstandings</i>	777	671	610	615	625	632	641
	Outstandings	10,046	10,717	11,327	11,942	12,567	13,199	13,840
Rural electrification and telephone revolving fund	Obligations	1,738	1,196	435	290	145		
	Loan disbursements	797	742	489	493	499	488	500

SPECIAL ANALYSIS F

F-57

Table F-19. DIRECT LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
	<i>Change in outstandings</i>	74	-45	-85	-94	-101	-123	-122
	Outstandings	10,237	10,191	10,107	10,012	9,912	9,788	9,666
Rural electrification and telephone revolving fund (loans made by FFB) ¹	Obligations	2,063	2,019	1,815	1,500	1,300	1,100	900
	Loan disbursements	2,063	2,019	1,804	1,493	1,297	1,098	899
	<i>Change in outstandings</i>	1,088	719	1,304	993	797	598	399
	Outstandings	21,675	22,394	23,698	24,691	25,488	26,086	26,485
Rural electrification and telephone revolving fund (FFB loan assets) ²	<i>Change in outstandings</i>	188	327			*		
	Outstandings	3,724	4,051	4,051	4,051	4,051	4,051	4,051
Rural telephone bank	Obligations	168	177	139	93	46		
	Loan disbursements	73	89	88	88	89	89	88
	<i>Change in outstandings</i>	55	71	-31	-33	-35	-38	-122
	Outstandings	1,383	1,454	1,423	1,390	1,355	1,318	1,195
Commerce:								
Economic development revolving fund	Obligations	93	21	16	14	11	9	7
	Loan disbursements	101	24	16	14	11	9	7
	<i>Change in outstandings</i>	7	-49	-38	-16	-13	-11	-9
	Outstandings	631	582	544	528	514	503	495
EDA miscellaneous appropriations	Obligations							
	Loan disbursements	*						
	<i>Change in outstandings</i>	-3	-3	17	-10	-5	-1	-1
	Outstandings	98	95	112	102	97	96	95
ITA operations and administration	Obligations	4	1					
	Loan disbursements	8	-1					
	<i>Change in outstandings</i>	4	-7	-2				
	Outstandings	9	2					
NOAA coastal energy impact fund	Obligations							
	Loan disbursements	*	*	*	*	*	*	*

	<i>Change in outstandings</i>	-2	-2	-2	-2	-2	-2	-2
	Outstandings	94	92	90	88	86	84	82
NOAA Federal ship financing (fishing)	Obligations	6	3					
	Loan disbursements	6	3					
	<i>Change in outstandings</i>	-3	*	-15				
	Outstandings	15	15					
Defense:								
Defense stock fund	Obligations							
	Loan disbursements							
	<i>Change in outstandings</i>							
	Outstandings	1	1	1	1	1	1	1
Production guarantees	Obligations							
	Loan disbursements							
	<i>Change in outstandings</i>			-1				
	Outstandings	1	1					
Production guarantees (loans made by FFB) ¹	Obligations							
	Loan disbursements	3	6	6	2			
	<i>Change in outstandings</i>	3	6	6	2			
	Outstandings	6	12	18	20	20	20	20
Navy industrial fund (loans made by FFB) ¹	Obligations	1,533	495					
	Loan disbursements	1,533	495					
	<i>Change in outstandings</i>	1,313	438	-30	-34	-42	-41	-43
	Outstandings	1,313	1,751	1,721	1,687	1,645	1,603	1,560
Education:								
Guarantees of SLMA obligations (loans made by FFB) ¹	Obligations							
	Loan disbursements							
	<i>Change in outstandings</i>			-30	-30	-30	-30	-30
	Outstandings	5,000	5,000	4,970	4,940	4,910	4,880	4,850
Guaranteed student loans	Obligations	1,076	1,260	1,377	1,476	1,516	1,501	1,466
	Loan disbursements	1,033	1,249	1,372	1,472	1,514	1,502	1,467
	<i>Change in outstandings</i>	738	843	356	457	330	153	-39
	Outstandings	3,203	4,046	4,401	4,858	5,188	5,341	5,302
National direct student loans	Obligations	199	1	190	240	290	340	340
	Loan disbursements	180	170	42	172	239	289	334

SPECIAL ANALYSIS F

F-59

Table F-19. DIRECT LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
	<i>Change in outstandings</i>	159	111	- 47	81	170	228	264
	Outstandings	5,133	5,244	5,197	5,277	5,447	5,675	5,939
College housing loans	Obligations	40						
	Loan disbursements	43	61	61	21			
	<i>Change in outstandings</i>	- 375	- 21	- 1,119	- 990	- 7	- 7	- 6
	Outstandings	2,300	2,280	1,161	171	164	157	151
Higher education	Obligations							
	Loan disbursements							
	<i>Change in outstandings</i>	- 9	- 24	- 18	- 10	- 24		
	Outstandings	77	52	34	24			
Higher education facilities loans and insurance	Obligations							
	Loan disbursements							
	<i>Change in outstandings</i>	- 19	- 17	- 17	- 108	- 98	- 88	- 2
	Outstandings	356	339	322	213	115	27	26
Energy: Alternative fuels (loans made by FFB) ¹	Obligations							
	Loan disbursements	247						
	<i>Change in outstandings</i>	- 1,290						
	Outstandings							
Geothermal resources	Obligations	12	13					
	Loan disbursements	12	13					
	<i>Change in outstandings</i>	12				- 12		
	Outstandings	12	12	12	12			
Geothermal resources (loans made by FFB) ¹	Obligations							
	Loan disbursements	6						
	<i>Change in outstandings</i>	- 6						
	Outstandings							
Bonneville Power Administration	Obligations	*	20	20				

	Loan disbursements	*	20	20				
	Change in outstandings	-4	19	18	-42			
	Outstandings	6	25	42				
Health and Human Services:								
HMOs and medical facilities	Obligations	2	2	2	2	2	2	2
	Loan disbursements	3	3	2	2	2	2	2
	Change in outstandings	-3	1	1	1	1	1	1
	Outstandings	27	29	30	31	32	33	34
HMOs and medical facilities (FFB loan assets) ²	Change in outstandings	-16	-10	-11	-12	-13	-14	-15
	Outstandings	232	222	211	199	186	172	158
Health resources and services	Obligations	1	1	1	1	1	1	1
	Loan disbursements	1	1	1	1	1	1	1
	Change in outstandings	-27	-11	-9	-8	-7	-6	-6
	Outstandings	511	500	492	484	476	470	464
Housing and Urban Development:								
Low-rent public housing	Obligations	14,065	1,459	1,722	1,124	488	251	
	Loan disbursements	14,065	1,459	1,722	1,124	488	251	
	Change in outstandings	13,479	-14,694					
	Outstandings	14,694						
Low-rent public housing (loans made by FFB) ¹	Obligations							
	Loan disbursements							
	Change in outstandings	-32	-35	-37	-39	-42	-44	-47
	Outstandings	2,146	2,111	2,074	2,035	1,993	1,949	1,902
Housing for the elderly or handicapped	Obligations	597	55	30	19	11	7	5
	Loan disbursements	540	531	413	288	191	125	81
	Change in outstandings	511	501	381	254	155	87	41
	Outstandings	5,667	6,167	6,548	6,802	6,957	7,043	7,085
GNMA emergency mortgage purchases	Obligations							
	Loan disbursements	455	351	163				
	Change in outstandings	-748	-653	-606	-218	-115	-5	-4
	Outstandings	1,634	981	375	157	42	37	32
Community development grants (loans made by FFB) ¹	Obligations	133	50					
	Loan disbursements	103	108	73	29	3		

SPECIAL ANALYSIS F

F-61

Table F-19. DIRECT LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
	<i>Change in outstandings</i>	81	46	.....	-53	-76	-68	-57
	Outstandings	289	335	335	282	206	138	81
Federal Housing Administration fund.....	Obligations	330	472	278	405	426	563	804
	Loan disbursements	330	459	257	373	420	563	804
	<i>Change in outstandings</i>	38	96	-423	-94	-46	-40	-22
	Outstandings	4,204	4,301	3,877	3,783	3,737	3,697	3,675
Rehabilitation loan fund	Obligations	75	11	.....	.....	.....	.....	.....
	Loan disbursements	69	79	16	.....	.....	.....	.....
	<i>Change in outstandings</i>	3	-1	-73	-79	-79	-79	-79
	Outstandings	718	716	643	564	485	406	327
Interior:								
Bureau of Reclamation loans	Obligations	55	46	46	37	42	15	6
	Loan disbursements	58	48	49	42	42	33	18
	<i>Change in outstandings</i>	51	38	40	32	31	21	5
	Outstandings	442	480	520	551	583	604	609
BIA revolving fund	Obligations	18	16	16	15	15	15	15
	Loan disbursements	18	18	16	15	15	15	15
	<i>Change in outstandings</i>	13	7	7	4	6	6	6
	Outstandings	105	112	119	124	129	135	140
Transportation:								
Railroad rehabilitation and improvement financing	Obligations	17	.....	.....	.....	.....	.....	.....
	Loan disbursements	9	12	6	.....	.....	.....	.....
	<i>Change in outstandings</i>	8	12	6	-1	-7	-14	-22
	Outstandings	566	578	584	583	576	562	540
Railroad rehabilitation and improvement financing (loans made by FFB) ¹	Obligations	2	4	.....	.....	.....	.....	.....
	Loan disbursements	4	2	4	3	.....	.....	.....
	<i>Change in outstandings</i>	-6	-93	-3	-5	-9	-7	-5
	Outstandings	154	61	57	52	43	36	30
Federal-aid highways trust fund	Obligations	27	*	1	.....	.....	.....	.....

	Loan disbursements	6	1	1				
	Change in outstandings	6	1	1	-38	-19	-19	
	Outstandings	75	75	76	38	19		
Right-of-way revolving fund	Obligations	50	48	50	50	50	50	50
	Loan disbursements	49	48	50	50	50	50	50
	Change in outstandings	-15	-2					
	Outstandings	116	113	113	113	113	113	113
Miscellaneous expired accounts	Obligations							
	Loan disbursements							
	Change in outstandings	-11	-1					
	Outstandings	1						
Aircraft purchase loan guarantees	Obligations	13						
	Loan disbursements	13						
	Change in outstandings	-20	-8	-6	-5	-5	-4	-4
	Outstandings	69	61	55	50	45	41	37
MarAd Federal ship financing fund	Obligations	336	522	117	37	15	15	15
	Loan disbursements	336	522	117	37	15	15	15
	Change in outstandings	327	512	107	27	5	5	5
	Outstandings	597	1,109	1,216	1,243	1,248	1,253	1,258
Environmental Protection Agency:								
Abatement, control, and compliance	Obligations	31	32	2				
	Loan disbursements	2	30	31	3			
	Change in outstandings	2	30	30	1	-2	-2	-2
	Outstandings	2	32	62	63	62	60	58
NASA:								
Space flight, control, and data communications (loans made by FFB) ¹	Obligations							
	Loan disbursements							
	Change in outstandings	-67		-79	-91	-105	-121	-138
	Outstandings	888	888	809	717	612	491	354
Veterans Administration:								
Vendee loans and loans repurchased	Obligations	963	999	1,036	936	845	791	756
	Loan disbursements	963	999	1,036	936	845	791	756
	Change in outstandings	155	229	235	181	162	146	144
	Outstandings	1,221	1,451	1,685	1,866	2,028	2,174	2,318
Direct loan revolving fund	Obligations	2	2	2	1	1	1	1

Table F-19. DIRECT LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
	Loan disbursements	2	3	2	1	1	1	1
	Change in outstandings	-29	-13	-33	-31	-31	-27	-3
	Outstandings	139	126	93	62	31	4	1
National service life insurance fund	Obligations	97	98	101	106	108	118	119
	Loan disbursements	97	98	101	106	108	118	119
	Change in outstandings	-48	-41	-33	-24	-19	-6	-5
	Outstandings	1,065	1,024	991	967	948	942	937
Other veterans insurance funds	Obligations	27	26	27	30	31	34	35
	Loan disbursements	27	26	27	30	31	34	35
	Change in outstandings	-13	-14	-7	-4	-4	-1	-1
	Outstandings	237	222	216	211	208	207	206
District of Columbia:								
Loans to the District of Columbia	Obligations							
	Loan disbursements							
	Change in outstandings	-311	-35	-38	-41	-43	-46	-49
	Outstandings	1,572	1,537	1,498	1,457	1,414	1,367	1,318
Export-Import Bank	Obligations	660	1,062					
	Loan disbursements	1,647	1,575	1,045	490	171	75	20
	Change in outstandings	-644	-676	-1,210	-1,526	-1,898	-2,065	-1,916
	Outstandings	16,860	16,184	14,973	13,447	11,549	9,484	7,568
Federal Deposit Insurance Corporation ^a	Obligations		130	110	150	150	150	150
	Loan disbursements		130	110	150	150	150	150
	Change in outstandings	-305	127	51	111	111	111	111
	Outstandings	3,617	3,744	3,795	3,906	4,017	4,128	4,239
Federal Savings and Loan Insurance Corporation ^a	Obligations	783	500	500	500	500	500	500
	Loan disbursements	783	500	500	500	500	500	500
	Change in outstandings	603	481	495	400	400	400	400
	Outstandings	1,758	2,239	2,735	3,135	3,535	3,935	4,335

National Credit Union Administration:							
Share insurance fund	Obligations	3	2	1	1	1	1
	Loan disbursements	8	5	3	3	3	3
	<i>Change in outstandings</i>	29	-14	-7	-5	-3	-1
	Outstandings	49	35	28	23	20	19
Central liquidity facility	Obligations	47	100	80	150	150	150
	Loan disbursements	47	100	80	150	150	150
	<i>Change in outstandings</i>	-48	-20	-22			
	Outstandings	222	202	180	180	180	180
General Services Administration Federal buildings fund (loans made by FFB) ¹	Obligations						
	Loan disbursements						
	<i>Change in outstandings</i>	-5	-5	-6	-6	-7	-8
	Outstandings	408	403	397	391	384	376
Small business:							
Business and investment loans	Obligations	697	621	491	388	243	182
	Loan disbursements	605	630	491	388	243	182
	<i>Change in outstandings</i>	-119	-66	920	-1,568	-1,441	-1,066
	Outstandings	3,220	3,154	4,074	2,507	1,066	
Small business development companies (FFB loan assets) ²	<i>Change in outstandings</i>	-7	-10	-10	-10	-3	
	Outstandings	33	23	13	3		
Small business assistance (loans made by FFB) ¹	Obligations	525	514	300			
	Loan disbursements	525	514	300			
	<i>Change in outstandings</i>	405	369	-1,989			
	Outstandings	1,620	1,989				
Disaster loans	Obligations	320	342	259			
	Loan disbursements	319	382	259			
	<i>Change in outstandings</i>	-403	-286	-1,462	-1,495	-1,286	-28
	Outstandings	4,557	4,270	2,808	1,314	28	
Tennessee Valley Authority	Obligations	63	66	69	70	67	65
	Loan disbursements	63	66	69	70	67	65
	<i>Change in outstandings</i>	-2	-1	-4	-2	*	1
	Outstandings	262	262	258	257	257	258

SPECIAL ANALYSIS F

F-65

Table F-19. DIRECT LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
Tennessee Valley Authority (loans made by FFB) ¹	Obligations.....	206	248	167	165	145	133	112
	Loan disbursements.....	206	248	167	165	145	133	112
	Change in outstandings.....	96	136	-147	-147	-159	-174	-59
	Outstandings.....	1,651	1,787	1,640	1,493	1,334	1,160	1,101
Payments for Conrail securities.....	Obligations.....							
	Loan disbursements.....							
	Change in outstandings.....		-851					
	Outstandings.....	851						
United States Railway Association.....	Obligations.....							
	Loan disbursements.....							
	Change in outstandings.....	2	6	7	7	8	9	9
	Outstandings.....	78	85	92	99	107	115	125
Other agencies and programs.....	Obligations.....	21	41	42	46	49	51	53
	Loan disbursements.....	40	55	58	53	49	51	53
	Change in outstandings.....	-30	2	-7	-2	-11	-10	-13
	Outstandings.....	624	626	619	617	607	597	584
Other agencies and programs (loans made by FFB) ¹	Obligations.....	60						
	Loan disbursements.....	60						
	Change in outstandings.....	59	-3	-63	-3	-3	-3	-4
	Outstandings.....	157	154	91	88	84	81	77
Grand total, net direct loans.....	Obligations.....	52,847	41,634	30,555	28,006	24,794	22,262	20,141
	Loan disbursements.....	64,396	47,327	34,440	30,971	26,280	23,396	21,084
	Change in outstandings.....	27,991	-4,076	-4,381	-3,249	-5,733	-7,069	-4,609
	Outstandings.....	257,366	253,290	248,910	245,661	239,928	232,860	228,251

* \$500,000 or less.

¹ Loans guaranteed by the agency and disbursed by FFB. They are counted as direct loans in the credit budget.² Loans made by the agency and subsequently sold to FFB. The agency guarantees and repurchases the loans when they mature.³ Direct loan obligations and disbursements for these programs represent increases in their holdings of loan assets rather than cash disbursements.

Table F-20. GUARANTEED LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
Funds Appropriated to the President:								
Foreign military sales.....	Commitments.....							
	New guaranteed loans.....							
	Change in outstandings.....	-20	-20	-20	-20	-20	-20	-20
	Outstandings.....	180	160	140	120	100	80	60
Overseas Private Investment Corporation.....	Commitments.....	150	136	150	150			
	New guaranteed loans.....	31	44	75	100	100	100	100
	Change in outstandings.....	24	4	27	75	75	75	75
	Outstandings.....	223	227	254	329	404	479	554
AID housing and other credit guarantees.....	Commitments.....	160	145					
	New guaranteed loans.....	94	120	120	120	113	100	50
	Change in outstandings.....	70	94	91	91	84	71	21
	Outstandings.....	1,176	1,269	1,360	1,451	1,536	1,607	1,628
Agriculture:								
Rural Electrification Administration.....	Commitments.....							
	New guaranteed loans.....	147	140	140	100	50		
	Change in outstandings.....	135	128	128	88	38	-12	-12
	Outstandings.....	1,045	1,173	1,301	1,389	1,427	1,415	1,403
Farmers Home Administration:								
Agricultural credit insurance fund.....	Commitments.....	1,175	1,872	2,500	3,000	3,500	4,000	4,000
	New guaranteed loans.....	530	1,640	2,122	2,992	3,500	4,000	4,000
	Change in outstandings.....	257	1,309	1,333	2,501	1,054	1,054	1,054
	Outstandings.....	1,385	2,694	4,027	6,528	7,583	8,637	9,691
Rural housing insurance fund.....	Commitments.....							
	New guaranteed loans.....	*						
	Change in outstandings.....	-238	-139	-21	-295	-185	-2	-3
	Outstandings.....	755	616	595	300	116	113	110
Rural development insurance fund.....	Commitments.....	61	96					
	New guaranteed loans.....	176	226	137	97	66	18	
	Change in outstandings.....	-294	-223	-156	-395	-244	-185	-179

SPECIAL ANALYSIS F

F-67

Table F-20. GUARANTEED LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
	Outstandings	2,912	2,689	2,533	2,138	1,893	1,708	1,528
Commodity Credit Corporation export credits	Commitments	2,674	5,264	3,000	3,000	3,000	3,000	3,000
	New guaranteed loans	3,134	5,264	3,000	3,000	3,000	3,000	3,000
	Change in outstandings	404	2,298	-201	-265	-717	-50	-50
	Outstandings	5,094	7,392	7,191	6,926	6,210	6,160	6,110
Commerce:								
Economic development revolving fund	Commitments							
	New guaranteed loans							
	Change in outstandings	-172	-25	-40	-25	-22	-20	-18
	Outstandings	235	210	170	145	123	103	85
ITA operations and administration	Commitments	3						
	New guaranteed loans	11	-3					
	Change in outstandings	2	-10	-14				
	Outstandings	24	14					
National Oceanic and Atmospheric Administration	Commitments	34	33					
	New guaranteed loans	34	33					
	Change in outstandings	2	3	-161				
	Outstandings	158	161					
Education: Guaranteed student loans	Commitments	8,888	9,269	9,756	11,420	12,888	14,033	14,739
	New guaranteed loans	8,454	8,826	9,304	10,893	12,293	13,388	14,064
	Change in outstandings	3,903	3,077	2,608	3,412	3,800	3,801	3,374
	Outstandings	35,807	38,884	41,492	44,904	48,704	52,505	55,879
Energy:								
Geothermal resources development fund	Commitments							
	New guaranteed loans							
	Change in outstandings	-12	-13					
	Outstandings	23	10	10	10	10	10	10
Health and Human Services:								
Medical facilities guarantees and loan fund	Commitments							

	New guaranteed loans						
	Change in outstandings	-95	-63	-66	-67	-67	-67
	Outstandings	995	932	865	798	731	663
Health professions graduate student	Commitments	271	389	100	100	100	100
	New guaranteed loans	271	389	100	100	100	100
	Change in outstandings	111	363	71	68	65	59
	Outstandings	831	1,194	1,265	1,334	1,399	1,461
Housing and Urban Development:							
Low-rent public housing	Commitments						
	New guaranteed loans						
	Change in outstandings	-13,276	-310	-337	-364	-392	-419
	Outstandings	8,887	8,577	8,240	7,876	7,484	7,065
Revolving fund (liquidating)	Commitments						
	New guaranteed loans						
	Change in outstandings	-5	-3	7	-15	-8	-13
	Outstandings	57	54	61	47	38	25
Federal Housing Administration	Commitments	47,441	49,336	37,164	37,164	37,164	37,164
	New guaranteed loans	23,234	36,910	31,788	29,838	31,211	32,436
	Change in outstandings	25,447	25,934	18,831	14,981	14,466	14,677
	Outstandings	195,480	221,413	240,244	255,225	269,691	284,368
GNMA mortgage-backed securities	Commitments	54,597	60,463	55,357	51,875	52,632	52,371
	New guaranteed loans	36,277	43,188	39,541	292,836	318,179	341,411
	Change in outstandings	24,541	33,655	30,778	26,578	26,143	23,231
	Outstandings	201,026	234,681	265,458	292,036	318,179	341,411
Interior:							
Indian loan guaranty and insurance fund	Commitments	42	60	30	25	20	20
	New guaranteed loans	49	60	30	25	20	20
	Change in outstandings	34	50	18	11		
	Outstandings	119	169	187	197	197	197
Transportation:							
MarAd Federal ship financing fund	Commitments	38	67				
	New guaranteed loans	174	90	27	40		
	Change in outstandings	-602	-810	-473	-380	-410	-410
	Outstandings	6,444	5,634	5,161	4,781	4,371	3,961
Aircraft purchase loan guarantees	Commitments						

Table F-20. GUARANTEED LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
	New guaranteed loans							
	Change in outstandings	— 87	— 50	— 46	— 38	— 33	— 29	— 26
	Outstandings	407	357	311	273	239	210	183
Miscellaneous expired accounts	Commitments							
	New guaranteed loans							
	Change in outstandings							
	Outstandings	997	997	997	997	997	997	997
Treasury:	Commitments							
Guarantees of New York City notes	New guaranteed loans							
	Change in outstandings	— 637	— 190					
	Outstandings	190						
Biomass energy development	Commitments							
	New guaranteed loans	300	294	283				
	Change in outstandings	300	287	273	— 12	— 12	— 12	
	Outstandings	512	800	1,072	1,060	1,048	1,036	1,036
Veterans Administration:	Commitments							
Direct loan revolving fund	New guaranteed loans							
	Change in outstandings	— 2	— 2	— 2	— 2	*		
	Outstandings	5	3	2	*			
Loan guarantee revolving fund	Commitments	12,140	12,299	14,715	14,564	14,440	14,307	14,231
	New guaranteed loans	11,452	11,569	13,948	13,857	13,803	13,708	13,658
	Change in outstandings	5,208	5,801	7,933	7,504	7,133	6,688	6,324
	Outstandings	130,591	136,392	144,325	151,828	158,962	165,650	171,974
Export-Import Bank	Commitments	7,849	11,484	12,000	12,000	12,000	12,000	12,000
	New guaranteed loans	4,424	5,123	5,479	6,219	6,440	6,584	6,695
	Change in outstandings	— 555	1,324	862	855	797	768	736
	Outstandings	5,127	6,450	7,312	8,167	8,964	9,733	10,469

Federal Savings and Loan Insurance Corporation	Commitments	900	426	350	278	228	155	130
	New guaranteed loans	900	426	350	278	228	155	130
	Change in outstandings	751	357	263	178	128	55	30
	Outstandings	2,514	2,871	3,134	3,312	3,440	3,495	3,525
National Credit Union Administration	Commitments	*						
	New guaranteed loans	*						
	Change in outstandings	-20	-4					
	Outstandings	4						
Small business:								
Business and investment loan guarantees	Commitments	2,802	2,902					
	New guaranteed loans	2,496	2,685	1,400				
	Change in outstandings	208	345	-852	-2,161	-1,586	-1,214	-955
	Outstandings	8,782	9,127	8,275	6,114	4,528	3,314	2,359
Pollution control equipment guarantees	Commitments	7	48					
	New guaranteed loans	1	48					
	Change in outstandings	1	48					
	Outstandings	327	374	374	374	374	374	374
Disaster loans	Commitments							
	New guaranteed loans							
	Change in outstandings	*	*	*	*	*	*	*
	Outstandings	4	3	3	3	2	2	2
Tennessee Valley Authority	Commitments							
	New guaranteed loans							
	Change in outstandings				-1			
	Outstandings	1	1	1				
Synthetic Fuels Corporation	Commitments	60						
	New guaranteed loans	4	4	12	*	*		
	Change in outstandings	4	4	12	3	-12	-11	
	Outstandings	4	8	20	23	11		
Other agencies and programs	Commitments	15	30	3				
	New guaranteed loans	18	35	35				
	Change in outstandings	-31	-41	124	-72	-65	-68	-71
	Outstandings	783	741	865	793	728	660	589

Table F-20. GUARANTEED LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or Program		Actual 1985	Estimate					
			1986	1987	1988	1989	1990	1991
Subtotal, guaranteed loans (gross)	Commitments	139,308	154,313	135,125	133,577	135,971	137,150	138,723
	New guaranteed loans	92,213	117,110	107,891	360,495	389,104	415,020	439,563
	Change in outstandings	45,357	73,176	60,968	52,234	50,010	47,948	47,310
	Outstandings	613,101	686,277	747,245	799,480	849,490	897,438	944,748
Less secondary guaranteed loans: ¹								
GNMA guarantees of FHA/VA/FmHA pools	Commitments	54,597	60,463	55,357	51,875	52,632	52,371	53,340
	New guaranteed loans	36,277	43,188	39,541	292,836	318,179	341,411	363,984
	Change in outstandings	24,541	33,655	30,778	26,578	26,143	23,231	22,573
	Outstandings	201,026	234,681	265,458	292,036	318,179	341,411	363,984
Subtotal, guaranteed loans (net)	Commitments	84,711	93,850	79,768	81,701	83,339	84,779	85,384
	New guaranteed loans	55,936	73,921	68,350	67,659	70,924	73,609	75,579
	Change in outstandings	20,815	39,521	30,190	25,656	23,867	24,717	24,738
	Outstandings	412,076	451,597	481,787	507,443	531,310	556,027	580,765
Less guaranteed loans held as direct loans: ²								
By GNMA	Commitments							
	New guaranteed loans	455	351	163				
	Change in outstandings	-748	-653	-606	-218	-115	-5	-4
	Outstandings	1,634	981	375	157	42	37	32
Total, primary guaranteed loans	Commitments	84,711	93,850	79,768	81,701	83,339	84,779	85,384
	New guaranteed loans	55,481	73,570	68,187	67,659	70,924	73,609	75,579
	Change in outstandings	21,564	40,174	30,796	25,874	23,982	24,722	24,742
	Outstandings	410,442	450,616	481,412	507,286	531,269	555,991	580,733

* \$500,000 or less.

¹ Loans guaranteed by the Federal Housing Administration, the Veterans Administration, or the Farmers Home Administration are included above. GNMA places a secondary guarantee on these loans, so they are deducted here to avoid double counting.² When guaranteed loans are acquired by a budget account, they are counted as direct loans and shown in the direct loan table. Consequently, they are deducted from the totals in this table.

Table F-21. **LENDING AND BORROWING BY GOVERNMENT-SPONSORED ENTERPRISES**

(In millions of dollars)

Enterprise		Actual 1985	Estimate	
			1986	1987
LENDING				
Student Loan Marketing Association.....	Obligations	3,125	3,437	3,781
	New transactions	3,125	3,437	3,781
	Net Change	2,142	2,356	2,591
	Outstandings.....	11,576	13,932	16,523
Federal National Mortgage Association: Corporation accounts	Obligations	21,795	21,271	19,550
	New transactions	20,328	16,981	17,224
	Net Change	11,919	5,549	7,174
	Outstandings.....	96,769	102,318	109,492
Mortgage-backed securities.....	Obligations	25,789	22,487	23,320
	New transactions	19,230	21,789	24,025
	Net Change	15,881	18,033	19,823
	Outstandings.....	48,769	66,802	86,625
Farm Credit Banks: Banks for cooperatives	Obligations	29,260	28,988	28,717
	New transactions	29,260	28,988	28,717
	Net Change	-1,115	173	360
	Outstandings.....	7,533	7,707	8,067
Federal intermediate credit banks	Obligations	13,390	12,716	12,078
	New transactions	13,390	12,716	12,078
	Net Change	-3,368	-2,416	-26
	Outstandings.....	15,625	13,209	13,183
Federal land banks.....	Obligations	1,445	1,660	1,876
	New transactions	1,445	1,660	1,876
	Net Change	-3,368	-2,466	-3,241
	Outstandings.....	45,935	43,470	40,229
Federal Home Loan Bank system: Federal home loan banks	Obligations	124,916	100,000	105,000
	New transactions	124,916	100,000	105,000
	Net Change	12,139	10,013	8,748
	Outstandings.....	87,015	97,028	105,775
Federal Home Loan Mortgage Corporation: Corporation accounts.....	Obligations	4,921	3,935	5,000
	New transactions	4,921	3,935	5,000
	Net Change	3,641	1,297	3,106
	Outstandings.....	13,088	14,385	17,491
Participation certificate pools ¹	Obligations	35,343	39,011	39,500
	New transactions	35,343	39,011	39,500
	Net Change	27,957	30,758	26,593
	Outstandings.....	91,989	122,747	149,340
Subtotal, lending (gross).....	Obligations	259,984	233,505	238,822
	New transactions	251,958	228,517	237,201
	Net Change	65,828	63,297	65,128
	Outstandings.....	418,299	481,598	546,725
Less loans between sponsored enterprises.....	Obligations			
	New transactions			
	Net Change	-600	-240	-250
	Outstandings.....	1,190	950	700

Table F-21. LENDING AND BORROWING BY GOVERNMENT-SPONSORED ENTERPRISES—Continued

(In millions of dollars)

Enterprise		Actual 1985	Estimate	
			1986	1987
Less secondary funds advanced from Federal sources:				
SLMA from FFB ²	Obligations			
	New transactions			
	Net Change			-30
	Outstandings	5,000	5,000	4,970
TVA to FNMA	Obligations			
	New transactions			
	Net Change			
	Outstandings	80	80	80
Less guaranteed loans held as direct loans by:				
Federal National Mortgage Association	Obligations			
	New transactions			
	Net Change	1,826	-1,553	-1,476
	Outstandings	31,064	29,511	28,035
Federal home loan banks	Obligations			
	New transactions			
	Net Change	751	357	263
	Outstandings	2,514	2,871	3,134
Federal Home Loan Mortgage Corporation	Obligations			
	New transactions			
	Net Change	981	-94	-89
	Outstandings	1,875	1,781	1,692
Farm Credit Banks	Obligations			
	New transactions			
	Net Change	-13	55	-9
	Outstandings	60	115	105
Student Loan Marketing Association ²	Obligations			
	New transactions			
	Net Change	2,142	2,356	2,621
	Outstandings	6,576	8,932	11,553
Total lending	Obligations	259,984	233,505	238,822
	New transactions	251,958	228,517	237,201
	Net Change	60,741	62,416	64,098
	Outstandings	369,940	432,358	496,456
BORROWING (Funds Raised)				
Student Loan Marketing Association	Net Change	2,671	2,465	2,741
	Outstandings	12,670	15,135	17,876
Federal National Mortgage Association ³	Net Change	27,451	22,110	25,562
	Outstandings	140,462	162,572	188,134
Farm Credit System:				
Banks for cooperatives	Net Change	-258	19	457
	Outstandings	8,067	8,086	8,542
Federal intermediate credit banks	Net Change	-2,744	-2,318	-743
	Outstandings	15,522	13,205	12,461
Federal land banks	Net Change	-1,382	-2,160	-2,028
	Outstandings	46,249	44,088	42,059
Federal Home Loan Bank system:				
Federal home loan banks	Net Change	6,168	11,426	11,000
	Outstandings	73,573	85,000	96,000

Table F-21. LENDING AND BORROWING BY GOVERNMENT-SPONSORED ENTERPRISES—Continued

(In millions of dollars)

Enterprise		Actual 1985	Estimate	
			1986	1987
Federal Home Loan Mortgage Corporation	<i>Net Change</i>	31,581	36,813	29,222
	<i>Outstandings</i>	105,815	142,628	171,850
Subtotal, borrowing (gross)	<i>Net Change</i>	63,487	68,355	66,211
	<i>Outstandings</i>	402,358	470,714	536,922
Less borrowing from other sponsored enterprises	<i>Net Change</i>	-626	-84	-298
	<i>Outstandings</i>	834	1,349	1,052
Less borrowing from Federal sources:				
SLMA from FFB ²	<i>Net Change</i>			-30
	<i>Outstandings</i>	5,000	5,000	4,970
FNMA from TVA	<i>Net Change</i>			
	<i>Outstandings</i>	80	80	80
Total borrowing from the public	<i>Net Change</i>	64,113	68,439	66,539
	<i>Outstandings</i>	396,444	464,285	530,820
Less investments in Federal securities	<i>Net Change</i>	542	-553	-96
	<i>Outstandings</i>	2,743	2,190	2,094
Less borrowings for guaranteed loans held as direct loans by:				
Federal National Mortgage Association	<i>Net Change</i>	1,826	-1,553	-1,476
	<i>Outstandings</i>	31,064	29,511	28,035
Federal home loan banks	<i>Net Change</i>	751	357	263
	<i>Outstandings</i>	2,514	2,871	3,134
Federal Home Loan Mortgage Corporation	<i>Net Change</i>	981	-94	-89
	<i>Outstandings</i>	1,875	1,781	1,692
Farm Credit System	<i>Net Change</i>	-13	55	-9
	<i>Outstandings</i>	60	115	106
Student Loan Marketing Association ²	<i>Net Change</i>	2,142	2,356	2,621
	<i>Outstandings</i>	6,576	8,932	11,553
Total borrowed	<i>Net Change</i>	57,884	67,871	65,325
	<i>Outstandings</i>	351,612	418,885	484,208

¹ All new transactions are loans purchased from FHLMC corporation accounts.² Until recently, all SLMA lending has been financed through the FFB, and therefore has been counted in Table F-19 as direct loans. All SLMA loans are student loans guaranteed by the Federal Government. They have, therefore been counted in Table F-20 as guaranteed loans. The first deduction eliminates the overlap of this table with the direct loan table. The second deduction removes the non-FFB financed remainder of SLMA, to eliminate overlap with the guaranteed loan table.³ Loans purchased at discount are recorded at their acquisition cost.

Table F-22. FFB ACQUISITIONS (in millions of dollars)

Agency or program	Actual 1985	Estimate					
		1986	1987	1988	1989	1990	1991
Purchase of loan assets from:							
Overseas Private Investment Corporation:							
<i>Net outlays</i>	-5	-5	-1	*			
Outstandings	6	1	*				
Farmers Home Administration (USDA):							
Agricultural credit insurance fund:							
New acquisitions	6,815	2,172			526		
<i>Net outlays</i>	2,658	922	-382	-385	-3,434	-2,620	-2,150
Outstandings	28,175	29,097	28,715	28,330	24,896	22,276	20,126
Rural housing insurance fund:							
New acquisitions	3,695	391					
<i>Net outlays</i>	1,585	391	-150		-1,000	-1,990	-1,415
Outstandings	28,351	28,742	28,592	28,592	27,592	25,602	24,187
Rural development insurance fund:							
New acquisitions	1,010	343		362		115	
<i>Net outlays</i>	415	313		362		-180	
Outstandings	7,643	7,956	7,956	8,318	8,318	8,138	8,138
Rural Electrification Administration (USDA):							
New acquisitions	379	327					
<i>Net outlays</i>	188	327					
Outstandings	3,724	4,051	4,051	4,051	4,051	4,051	4,051
Medical facilities guarantees (HHS):							
<i>Net outlays</i>	-9	-6	-6	-7	-7	-7	-8
Outstandings	123	117	111	104	97	90	82
Health Maintenance Organizations (HHS):							
New acquisitions	3	1					
<i>Net outlays</i>	-7	-4	-5	-6	-6	-6	-7
Outstandings	109	105	100	95	89	82	76
Small business assistance:							
<i>Net outlays</i>	-7	-10	-10	-10	-3		
Outstandings	33	23	13	3			
Subtotal, purchase of loan assets:							
New acquisitions	11,902	3,234		362	526	115	
<i>Net outlays</i>	4,818	1,928	-554	-45	-4,450	-4,804	-3,580
Outstandings	68,164	70,093	69,539	69,494	65,044	60,240	56,660
Direct loans (purchases of loans guaranteed by agencies):							
Foreign military sales credit (FAP): ¹							
New acquisitions	1,683	950	473	303	173	147	187
<i>Net outlays</i>	978	187	-306	-440	-613	-720	-728
Outstandings	18,089	18,275	17,969	17,529	16,916	16,197	15,469
Defense production guarantees (DOD):							
New acquisitions	3	6	6	2			

Table F-22. FFB ACQUISITIONS (in millions of dollars)—Continued

Agency or program	Actual 1985	Estimate					
		1986	1987	1988	1989	1990	1991
<i>Net outlays</i>	3	6	6	2			
Outstandings	6	12	18	20	20	20	20
Navy industrial fund (DOD):							
New acquisitions	1,533	495					
<i>Net outlays</i>	1,313	438	-30	-34	-42	-41	-43
Outstandings	1,313	1,751	1,721	1,687	1,645	1,603	1,560
Rural Electrification Administration (USDA): ¹							
New acquisitions	2,063	2,019	1,804	1,493	1,297	1,098	899
<i>Net outlays</i>	1,088	719	1,304	993	797	598	399
Outstandings	21,675	22,394	23,698	24,691	25,488	26,086	26,485
Guarantees of SLMA obligations (Education):							
<i>Net outlays</i>			-30	-30	-30	-30	-30
Outstandings	5,000	5,000	4,970	4,940	4,910	4,880	4,850
Alternative fuels production (Energy):							
New acquisitions	247						
<i>Net outlays</i>	-1,290						
Outstandings							
Geothermal resources development fund (Energy):							
New acquisitions	6						
<i>Net outlays</i>	-6						
Outstandings							
Low-rent public housing (HUD): ¹							
<i>Net outlays</i>	-32	-35	-37	-39	-42	-44	-47
Outstandings	2,146	2,111	2,074	2,035	1,993	1,949	1,902
Revolving fund-liquidating (HUD):							
<i>Net outlays</i>		-1	-2	-2	-2	-2	-2
Outstandings	34	32	31	29	27	26	24
Community development grants (HUD): ¹							
New acquisitions	103	108	73	29	3		
<i>Net outlays</i>	81	46		-53	-76	-68	-57
Outstandings	289	335	335	282	206	138	81
Loans to territories (Interior):							
<i>Net outlays</i>	-1	-1	-2	-2	-2	-2	-2
Outstandings	63	62	60	59	57	55	53
Railroad programs (DOT): ¹							
New acquisitions	4	2	4	3			
<i>Net outlays</i>	-6	-93	-3	-5	-9	-7	-5
Outstandings	154	61	57	52	43	36	30
Federal Buildings Fund (GSA):							
<i>Net outlays</i>	-5	-5	-6	-6	-7	-8	-8
Outstandings	408	403	397	391	384	376	368

Table F-22. FFB ACQUISITIONS (in millions of dollars)—Continued

Agency or program	Actual 1985	Estimate					
		1986	1987	1988	1989	1990	1991
Space flight, control and data communications (NASA):							
<i>Net outlays</i>	-67		-79	-91	-105	-121	-138
Outstandings	888	888	809	717	612	491	354
Small business investment companies and other small business assistance: ¹							
New acquisitions	525	514	300				
<i>Net outlays</i>	405	369	-1,989				
Outstandings	1,620	1,989					
Oregon veterans housing:							
New acquisitions	60						
<i>Net outlays</i>	60		-60				
Outstandings	60	60					
Seven States Energy Corporation (TVA):							
New acquisitions	206	248	167	165	145	133	112
<i>Net outlays</i>	96	136	-147	-147	-159	-174	-59
Outstandings	1,651	1,787	1,640	1,493	1,334	1,160	1,101
Subtotal, direct loans (purchase of loans guaranteed by agencies):							
New acquisitions	6,433	4,342	2,827	1,994	1,617	1,378	1,198
<i>Net outlays</i>	2,616	1,765	-1,380	145	-290	-619	-721
Outstandings	53,396	55,160	53,780	53,926	53,635	53,017	52,296
Total, direct loans and purchases of agency loan assets:							
New acquisitions	18,335	7,575	2,827	2,356	2,143	1,492	1,198
<i>Net outlays</i>	7,433	3,693	-1,934	100	-4,740	-5,423	-4,301
Outstandings	121,560	125,253	123,319	123,419	118,679	113,256	108,956
ADDENDUM							
AGENCY BORROWING							
Export-Import Bank:							
<i>Net change</i>	-281	-292	-890	-799	-900	-1,000	-1,100
Outstandings	15,409	15,117	14,227	13,428	12,528	11,528	10,428
Tennessee Valley Authority:							
<i>Net change</i>	896	350	577	581	265	339	470
Outstandings	14,381	14,731	15,308	15,889	16,154	16,493	16,963
National Credit Union Administration:							
<i>Net change</i>	-47	-22					
Outstandings	222	200	200	200	200	200	200
U.S. Railway Association:							
<i>Net change</i>	22	11	7	7	8	9	9
Outstandings	74	85	92	99	107	115	125
Postal Service:							
<i>Net change</i>	603	1,228	1,248	1,510	1,498	1,065	891

Table F-22. FFB ACQUISITIONS (in millions of dollars)—Continued

Agency or program	Actual 1985	Estimate					
		1986	1987	1988	1989	1990	1991
Outstandings	1,690	2,918	4,166	5,676	7,174	8,239	9,129
Total, agency borrowing:							
<i>Net change</i>	<i>1,194</i>	<i>1,275</i>	<i>941</i>	<i>1,299</i>	<i>871</i>	<i>412</i>	<i>270</i>
Outstandings	31,776	33,051	33,992	35,292	36,163	36,575	36,845

*\$500,000 or less.

¹ FFB activity for this account may not be identical to the entries in Part 6d of the Budget, "Budget by Agency and Account", due to timing differences between recognition of FFB budget authority and commitments to guarantee loans that are financed through the FFB (shown here as FFB new acquisitions).

Table F-23. **FEDERAL PARTICIPATION IN DOMESTIC CREDIT MARKETS**

(Dollar amounts in billions)

	Actual									
	TQ	1977	1978	1979	1980	1981	1982	1983	1984	1985
Total funds loaned in U.S. credit markets ¹	64.9	309.8	386.7	427.9	354.5	407.4	396.7	512.6	687.1	768.6
Direct loans	3.7	11.6	19.8	19.6	24.2	26.1	23.4	15.3	6.3	28.0
Guaranteed loans	-0.1	13.5	13.4	25.2	31.6	28.0	20.9	34.1	20.1	21.6
Government-sponsored enterprise loans ²	3.1	11.7	25.2	28.1	24.1	32.4	43.3	37.1	53.1	60.7
Federal and federally assisted lending	6.7	36.7	58.4	72.9	79.9	86.5	87.6	86.5	79.6	110.3
Federal lending participation ratio (percent)	10.3	11.8	15.1	17.0	22.5	21.2	22.1	16.9	11.6	14.4
Total funds borrowed in U.S. credit markets ¹	64.9	309.8	386.7	427.9	354.5	407.4	396.7	512.6	687.1	768.6
Federal borrowing from public	18.0	53.5	59.1	33.6	70.5	79.3	135.0	212.3	170.8	197.3
Borrowing for guaranteed loans	-0.1	13.5	13.4	25.2	31.6	28.0	20.9	34.1	20.1	21.6
Government-sponsored enterprise borrowing ²	1.4	12.0	21.4	21.9	21.4	34.8	43.8	34.6	55.5	57.9
Federal and federally assisted borrowing	19.3	79.0	93.9	80.7	123.5	142.1	199.7	281.0	246.5	276.8
Federal borrowing participation ratio (percent)	29.7	25.5	24.3	18.9	34.8	34.9	50.3	54.8	35.9	36.0

¹ Funds loaned to and borrowed by nonfinancial sectors, excluding equities.² The data in Table F-23 for total funds loaned are defined as excluding financial sectors. Nonetheless, the Government-sponsored enterprises, as well as federal assisted lending, are properly compared with total funds loaned. Government-sponsored enterprises lending is a proxy for the lending by non-financial sectors that is intermediated by the sponsored enterprises. It assists the ultimate non-financial borrowers whose loans are purchased or otherwise financed by the sponsored enterprise.

Source: Federal Reserve Board Flow of Funds Accounts for total funds loaned and borrowed.

SPECIAL ANALYSIS G

TAX EXPENDITURES

The Congressional Budget Act of 1974 (Public Law 93-344) requires a listing of tax expenditures in the Budget. The act defines tax expenditures 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 liability."

The definition of tax expenditures requires a distinction between the baseline provisions of the tax structure and special or preferential provisions that are exceptions to the baseline structure. Prior to 1983, Special Analysis G used the term normal to denote the baseline against which tax expenditures were measured. Because Public Law 93-344 does not provide an exact specification of the normal provisions of the tax law, determination of what provisions constitute special or preferential provisions, and therefore should be listed as tax expenditures, necessarily involves some arbitrary choices. This process has been overseen by executive agency and congressional committee staffs.

Prior to 1983, the listing of tax expenditures in Special Analysis G generally matched those published by the Congressional Budget Office and the Joint Committee on Taxation. This resulted from the concept of a normal tax used by both executive branch and congressional staffs which was a variant of the comprehensive income tax, albeit with several major exceptions, that had not deviated significantly from the concept as used in the original tax expenditure listings.

Tax expenditures in Special Analysis G were measured against a revised baseline after 1982 which is referred to as the reference tax. This year's Special Analysis G displays tax expenditures as compared to both the reference tax baseline used beginning with 1983 and the normal tax baseline used prior to 1983. In the following sections both baselines are described in general terms, the conceptual and practical differences between them are discussed, and then the major categories of tax expenditures are reviewed.

The current Special Analysis G does not incorporate any revisions based on either the President's tax reform proposal of May 1985 (Treasury II) or the version passed in late 1985 by the House of Representatives (H.R. 3838). A comprehensive review will ad-

dress this and other tax expenditure issues once tax reform legislation has been enacted later this year.

PRE-1983 BUDGET CONCEPTS

The normal tax structure used as a departure point for identifying and measuring tax expenditures has historically had many features in common with a comprehensive income tax, where income is defined as the sum of consumption and the change in net wealth in a given period of time. The concept of a normal income tax did not specify any particular structure of tax rates, or definition of the taxpaying unit (as between families and individuals), and allowed for personal exemptions and a standard deduction. In addition, the concept of a normal tax, as would a comprehensive income tax, allowed for deductions needed to measure net income, such as deductions for interest incurred to finance the holding of income-producing assets and for employee business expenses. The normal tax structure did allow, however, for several major departures from what is commonly understood to be the base of a truly comprehensive income tax:

- Under the normal tax structure, income was only taxed when realized, not as accrued. Thus, for example, the benefit, relative to strict accrual accounting of income, from deferring tax on accrued, but unrealized, capital gains was not regarded as a tax expenditure.
- The fact that the current tax system taxes only cash income, not imputed income received in the form of consumption benefits from capital used directly by households or consumption by households of goods they produce, was regarded as part of the normal tax structure. Thus, the exclusions from tax of imputed income from owner-occupied homes and consumer durables and tax-free consumption by farmers of products grown on their farms were not regarded to be tax expenditures.
- The normal tax structure included a separate tax on corporation income, although neither economic theory nor common international practice justifies a totally separate corporation income tax. At the same time, the normal tax structure allowed for devices to eliminate the separate corporate tax by attributing income to shareholders, such as subchapter S corporations. The additional revenue resulting from the maintenance of a separate, unintegrated corporation tax could well be considered a negative tax expenditure if the normal tax base were defined as the comprehensive income of individuals, with corporate retained earnings attributed to individual shareholders.

- The normal tax structure did not adjust the basis of capital assets or debt for changes in the price level over the time period assets were held, thus overstating real capital gains, interest income, as well as interest costs, and understating depreciation during a period of inflation. If the normal tax were a true comprehensive income tax, failure to take account of inflation in measuring depreciation, capital gains, and interest income of lenders would be regarded as negative tax expenditures. In turn, failure to take account of inflation in measuring the interest costs of borrowers would be regarded as a positive tax expenditure, or subsidy for borrowing.

Notwithstanding these major differences from a fully comprehensive income tax, the normal tax concept can be thought of as a base for a practical income tax intended to avoid these complexities. Moreover, these departures from a comprehensive tax that define the normal tax had essentially remained unchanged until 1982. This facilitated generally consistent decisions on what constituted tax expenditures by those responsible for preparing tax expenditure budgets.

The normal tax as described above is, of course, not the only broad-based or normative tax system that can be used as a standard for identifying tax expenditures. One could, for example, use as the standard a truly comprehensive income tax in which the tax base is equal to consumption plus the change in net wealth of individuals and families. Under such a standard, as indicated in the previous discussion, the failure to include accrued but unrealized income in the tax base would be regarded as a tax expenditure, while the double taxation of corporate dividends would be regarded as negative tax expenditure, or tax penalty.

Alternatively, the normative standard could be a comprehensive personal tax on consumption of individuals and families. The failure to tax income accrued within pension funds would not be a tax expenditure, as it would be under an income tax standard, because under a consumption based tax, income earned but not consumed would not be taxable. On the other hand, the failure to include the proceeds of borrowing in the tax base would be a tax expenditure under a consumption tax standard, even though borrowing, in itself, would have no effect on the tax base under an income tax.

In addition, some of the items listed as tax expenditures when the normal tax is used as a baseline can themselves be regarded as practical adjustments to correct for departures of the normal tax from a truly comprehensive base. For example, as noted above, the failure to adjust the basis of capital assets for changes in the price level in measuring taxable income is part of the normal tax even though it represents a significant departure from correct income measurement. The exclusion from tax of 60 percent of realized

capital gains—a provision listed as a tax expenditure relative to both the normal tax baseline and the reference tax baseline discussed below—may itself be regarded as a pragmatic rule to adjust for the overstatement of income from capital gains in a period of inflation.

Similarly, in a period of stable prices, capital consumption allowances under a comprehensive income tax would be based on economic depreciation. In a time of inflation, however, use of more accelerated depreciation methods can be regarded as a pragmatic, though imprecise, way of offsetting the failure to adjust depreciation deductions for the increases in the replacement cost of assets.

POST-1982 BUDGET CONCEPTS

Both definition and measurement of tax expenditures have undergone major changes in recent years, in part reflecting a changed perception of what constitutes the major structural features of the current tax system. This evolution began with the introduction of the concept of outlay equivalents in the 1982 budget and evolved into a redefinition of the tax structure against which departures labelled as tax expenditures would be measured in subsequent budgets.

In 1982, Special Analysis G included a supplement that departed from previous procedures. In it were jointly displayed the Federal support for housing and energy programs provided on both the outlay and revenue sides of the budget. The purpose of this departure was to illustrate how a tax expenditure budget might be used in the budgetary process to provide a consistent accounting of all resources used to achieve specified national needs, or program objectives, and to demonstrate how such a procedure might aid in the determination of overall budget expenditure and revenue targets.

To achieve this purpose, a modification of previous estimation methodology was introduced. If, for example, the purpose of residential energy tax credits was to reduce the costs to homeowners of certain energy conservation investments, then the credit should be viewed not as a reduction in tax, but as a subsidy payment that might just as well have been made by the Department of Energy. In order to convert the residential energy credit into an outlay equivalent, it was necessary to ask how the payment would be treated under the existing tax laws if instead it were a grant from the Department of Energy. If this payment in cash would be taxable, then the tax subsidy would have to be “grossed-up” to the equivalent taxable cash payment to be comparable with actual outlays for the same purpose.

In performing this analysis of the subsidy-equivalence of housing and energy tax expenditures, it was observed that the norm from which these special provisions departed was simply the body of generally applicable income tax rules to which the special provisions were exceptions. This suggested that, in the budgetary context implied by the Congressional Budget Act of 1974, it would be useful to distinguish two categories of items that had been labelled tax expenditures in previous budgets. The first category would consist of deviations from general rules of the existing tax system that could be measured and evaluated in a manner comparable to the measurement and evaluation of subsidy and transfer programs on the outlay side of the budget. The second category would consist of more general deviations of the structure of the Federal income tax from some normative, comprehensive income or other broad-based tax. The items in the second group would not be labeled tax expenditures as such, even though they might be regarded as items to be considered as part of a more general reform of the existing income tax.

This evolutionary step was taken in the 1983 Special Analysis G and has been continued since then. Two criteria were used to identify a tax expenditure or tax subsidy. First, it was necessary that, absent the special provision, the tax laws provided general rules to enable a taxpayer to determine his income tax due and payable. These general rules were called the reference law. Second, it was necessary that the special provision apply to a sufficiently narrow class of transactions or transactors to permit the specification of a program objective that could be assigned to an existing agency other than the IRS and be administered with appropriated funds. In keeping with the intended use of the estimates in budget program displays, the budget impacts of the items listed were expressed as outlay equivalents.

Neither the Congressional Budget Office nor the Joint Committee on Taxation, however, adopted these revisions. Both continued to use a modified income tax norm, described above, as their basis for identifying tax expenditures. As a consequence, Special Analysis G did not fully correspond in the 1983 and 1984 budgets to these other tax expenditure listings, a condition some have found confusing. Beginning with the 1985 budget, therefore, tax provisions qualifying as tax expenditures under the broader income tax norm were listed in Special Analysis G in addition to those that had met the narrower tests for identifying tax expenditures (or tax subsidies) of the reference law standard used in 1983 and 1984. The discussion below sets out in greater detail the reference tax law and identifies some of the departures of this reference law from the normal income tax standard used prior to 1983 to identify tax expenditures.

REFERENCE TAX RULES AND COMPARISON TO NORMAL TAX STRUCTURE

The reference tax rules from which departures represent expenditure-like government programs include:

1. *Definition of the taxpaying unit.* Taxpaying units are individuals (single, married, head of household); corporations (except those electing subchapter S treatment, cooperatives, real estate investment trusts, and other financial organizations that attribute their income to members in whose hands it is taxable); and trusts and estates (to the extent income is not distributed to beneficiaries). Certain otherwise taxable corporations and associations whose activities and ownership meet the requirements of section 501 are exempt from income tax, as are government-owned enterprises encompassed by section 115.

The taxpaying units are the same in the normal and reference tax structures with one major exception. In the normal tax, controlled foreign corporations are not regarded as entities separate from their controlling U.S. shareholders. Therefore, the deferral of tax on income accumulated within controlled foreign corporations is regarded as a tax expenditure. In contrast, except for tax haven activities, the reference tax rules follow the current tax system in treating controlled foreign corporations as separate taxable entities whose income is not subject to U.S. tax until distributed to U.S. taxpayers. Under that definition of the tax unit, deferral of tax on controlled foreign corporation income is not a tax expenditure because U.S. taxpayers generally are not taxed on accrued, but unrealized income.

2. *Tax rate schedules.* Separate schedules for single individuals, heads of household, married persons filing jointly, married persons filing separately, and corporations are all regarded as part of the reference tax system. The rate structures imposed on the tax base of these entities are whatever current law provides. The normal tax system is similar, except that it specifies a single rate (the current maximum rate) on corporate income. The lower tax rates applied to the first \$100,000 of corporate income are thus regarded as a tax expenditure relative to the normal tax.

3. *General accounting rules for determining income subject to tax.* Income subject to tax is gross income less costs of earning that income. Gross income includes payments (or obligations to receive payment) from all sources, foreign and domestic, that are: (1) consideration received in the exchange of goods and services (including one's labor services), or of property; and (2) the taxpayer's share of gross, or net income earned and/or reported by another entity, such as interest, dividends, rents, royalties, and profits of partnerships, subchapter S corporations, and cooperatives. Under the reference tax rules, gross income does not include gifts, defined as

receipts of money or property that are not consideration in an exchange, or most transfer payments (gifts from the Federal Government). Gross income does, however, include transfer payments associated with past employment, such as social security benefits. The normal tax base also does not define gifts between individuals as gross income. However, under the normal tax baseline used prior to 1983, all cash transfer payments (gifts from government to private individuals) were regarded as gross income, and exemptions of such gifts from tax under current law were identified as tax expenditures.

Costs of earning gross income are deductible in determining taxable income under the reference rules. These include: (1) expenses incurred in earning gross personal service income (not including expenditures on goods and services for personal use); (2) costs of earning income incurred by a taxpayer's trade or business including costs of goods sold (compensation of employees, goods and services purchased from other firms, royalties paid), an allowance for physical capital used up in producing the output that generates the gross income of the business (depreciation in the case of machinery, equipment, and structures; depletion in the case of mineral deposits); and (3) interest paid creditors who have advanced funds to help finance the ownership and use of assets by the trade or business.

These deductions are all necessary to measure the net income of the equity holder in a business. Deductions for cost of goods sold functionally allocate to employees and suppliers their shares of the trade or business' gross income which they in turn will report on their income tax returns. Depreciation and depletion deductions are necessary to cover the using-up of physical capital, the cost of which has already been paid for by the owners, thus enabling the owners to recover their capital free of an additional tax. Depreciation allowances as provided according to statutory schedules for different classes of depreciable property are part of the reference tax rules. Depletion allowances in the reference tax rules are not schedular, but are based on the pro-rata recovery of the original cost as the mineral deposit is depleted by extraction. Deductions for interest represent an allocation of pretax income of a trade or business reportable as such by creditors of that trade or business under the reference tax.

The normal tax includes the same items of deduction needed to measure net income as the reference tax, but, in addition, specifies the time pattern of depreciation deductions to correspond in some approximate way to the time pattern of using up of physical capital. The reference tax encompasses the existing general depreciation rules, as modified by the Accelerated Cost Recovery System (ACRS), as part of the general structure of the tax rules. Because ACRS schedules are generally the applicable rules for all invest-

ments in depreciable property, they are part of the reference tax structure and not identified as a tax expenditure item, or tax subsidy, when the reference tax is taken as the baseline. In contrast, when the normal tax rules are used as the baseline, the ACRS schedules for depreciable personal and real property are a tax expenditure item. This identification of ACRS as a tax expenditure relative to the normal tax base recognizes that some attempt, however imprecise, to match capital recovery rules to the decline in asset value is needed to measure economic income from depreciable capital. In the accompanying tables, the revenue loss resulting from substituting ACRS for the normal tax depreciation rules, is listed as a tax expenditure under the pre-1983 budget concept. The normal tax rules used for this purpose are the Asset Depreciation Range System (ADR) midpoint lives for machinery and equipment and 35-year straight-line depreciation for structures.

In addition to rules for determining what is to be includable in gross income and what deductions are to be allowed, and when, an operational income tax requires a set of accounting procedures for classifying, recording, and summarizing transactions during the tax year. In the reference tax system, the basic elements of this accounting system are similar to those described above that characterize the normal income tax. These elements are: (1) reliance on valuations determined at the time transactions occur (realization as opposed to accrual accounting); (2) exclusion from gross income of the market value of services from durable goods or other self-produced income, such as do-it-yourself repairs and maintenance; (3) reliance on historical cost to determine allowable deductions for capital cost recovery and in the computation of gain on the sale of an asset (no inflation adjustments); (4) distinguishing current expense from capital expenditures, with the former deductible from gross income in the period when the transaction is completed, while the latter is recovered by depreciation or depletion deductions over the asset's productive life; and (5) specification of the accounting period for summarizing transactions to determine income subject to tax, computing tax due and payable as well as a stipulation of when tax must be paid. As part of the computation of tax liability, both the reference tax and the normal tax allow a tax credit for foreign income taxes paid up to the amount of U.S. income taxes that would otherwise be due. This prevents the double taxation of income earned abroad.

MAJOR DEPARTURES FROM THE REFERENCE RULES

Beginning with the 1983 budget, the reference tax has been used to identify provisions that substitute for budget outlays. For example, compared to the general rules described as the reference tax:

- Not all consideration received in exchange for goods and services is reportable as gross income. Some forms of employee compensation, such as certain military housing and food allowances or employer-paid fringe benefits, are specifically excluded from employees' reportable gross income although it is clearly a consideration received in exchange for labor services and is properly deductible from the gross income of the trade or business of employers who are taxable entities.
- Holders of State and local government bonds are specifically exempt from reporting interest payments on those obligations as gross income, although these payments are no less income than interest, dividends, rents, and royalties received from other payees.
- Dividend and interest receipts of pension funds, the value of which accrues to taxable beneficiaries, are not reportable as gross income when received, either by the qualified pension trusts or by the beneficiaries; they become reportable, after compounding at pre-tax rates of interest, only when they are paid out as retirement benefits.

Defense Department outlays reported in the budget for military personnel are lower because part of military compensation is paid in tax-free housing and food allowance dollars. This exclusion of compensation from tax substitutes for higher direct outlays to obtain the same quality and quantity of military personnel whose compensation in this form, if received from another employer, would be subject to tax. Similarly, the nontaxability of interest paid by State and local borrowers enables them to obtain funds at lower rates with a saving to their taxpayers. This particular exclusion is, therefore, a substitute for interest subsidies or capital grants to State and local governments on the outlay side of the budget. The exclusion of employer-paid pension, health, and other insurance benefits for employees and the preferred treatment of pension trust income substitute for outlays that would pay part of the costs of private retirement, health, and insurance plans.

The tax laws also provide many deductions from gross income in the derivation of taxable income that have no apparent relation to the cost of earning the reported gross income, as the general rule requires. For example:

- Individuals may deduct amounts paid to charitable, educational, scientific or religious organizations, although these are not costs of earning reportable gross income.
- Some oil, gas, and mineral producers are allowed deductions for percentage depletion that are not limited to recovery of the cost of acquiring the mineral deposit. In addition, some investments in the acquisition of depletable and depreciable property may be deducted in the year incurred, rather than

capitalized and recovered as production ensues. These special rules for cost recovery of oil and gas and mineral deposits permit investment costs in these activities to be recovered more rapidly than the reference rules allow in activities generally. Furthermore, they often permit more than the full investment to be recovered tax free, contrary to the conditions imposed on other forms of capital use.

- Individuals are allowed to deduct mortgage interest and consumer interest paid from their pretax incomes, although under the reference tax rules applicable to housing and consumer durables, they have not reported the gross income from services of housing and consumer durables earned with the aid of the debt they are servicing.

These particular exceptions to the general reference tax rules governing the use of deductions for computing taxable income have direct incentive effects that could just as well be obtained with outlay programs. Deductibility of qualified contributions lowers the private price of giving, as would matching grants to qualified organizations based on contributors' support. The preferential treatment of minerals investment and production expands mineral output as would direct subsidies paid to mineral producers. The deductibility of mortgage interest encourages home ownership much the same as Federal mortgage interest subsidy programs do.

Finally, there are special exceptions to the general rules for determining net income tax due and payable. After a taxpayer has determined his pretax income, taking into account all preferential exclusions for gross income and all the special deductions, and has applied the appropriate tax rate schedule, the tax liability thus derived is not necessarily the amount he must pay. For example, the taxpayer may take as credits against his tax otherwise due and payable amounts determined by expenditures during the tax year on:

- Qualified property (the investment tax credit for purchasing machinery and equipment).
- Rehabilitating old and historic structures.
- Contributions to political candidates.
- Transfer of the employer corporation stock to qualified employee stock ownership plans.

It is not difficult to visualize equivalent outlay programs designed to subsidize these particular classes of transactions directly.

All of these departures from the reference tax rules are also departures from the normal tax rules and appear in the tax expenditure budgets constructed from both baselines. The major items that are tax expenditures relative to the normal baseline (pre-1983 budget method), but that are not items of tax expenditure relative to the reference rules used beginning with the 1983 budget

are: deferral of income of controlled foreign corporations, expensing of research and development expenditures, reduced tax rates on the first \$100,000 of corporate income, "gifts" or unilateral transfers from governments, and the difference between current statutory depreciation rules (ACRS) and alternative rules designed to provide a more accurate measure of economic income from capital investments.

MEASURING TAX EXPENDITURES

Accounting for budget outlays on a functional or programmatic basis, as in Part 5 of the Budget, provides a measure of Federal Government influence on the allocation of resources in the economy and for what purposes. The functional purposes may be broadly divided into: (1) the provision of public goods and services; (2) the provision of subsidies; and (3) the payment of transfers. Budget outlays for public goods and services such as national defense, are used to acquire labor and capital services directly used in the production of such goods. Subsidies, such as those for school lunches, are intended to reduce market prices below the cost of resources used to produce them. Transfers, such as aid to families with dependent children, are intended to provide a level of income to recipients they otherwise could not achieve.

Government receipts and outlays reallocate resources because they change the composition of GNP from what it would be in their absence. The decisions to provide public goods and services, to subsidize certain prices (and hence outputs), and to make transfers result in producing a slate of goods and services that otherwise would not be produced. This occurs because control over resources is removed from the private sector either by taxation or by borrowing and made available for public use. Functional budget outlay figures, then, provide a basis for evaluating programs. The amount of an outlay measures the resource cost to the Federal Government of accomplishing the program objective. Because GNP is a (gross) measure of the market value of goods and services, the ratio of total budget outlays to GNP is commonly used as an indicator of the size of Government relative to the private economy.

When functional budget outlay figures are used to evaluate specific programs, it is essential that the outlay figures be both consistent and comprehensive measures of resource costs. In this regard, it is important that resource costs represent the pretax price of resources. The market value of all goods and services summarized in GNP not only includes the effects of indirect taxes (sales and property taxes) on market prices, but also the beforetax incomes of suppliers of labor (wages) and capital (rent, interest, and profit). Consistency of budget outlay figures requires that all such amounts also be stated in pretax magnitudes. Generally, budget

outlays for the purchase of goods and services are gross of taxes; the payments to vendors and Government employees are gross income to the sellers out of which taxes will be paid as determined by the reference tax law in effect. Similarly, subsidy outlays in the budget generally enter the gross incomes of sellers of subsidized goods and services, along with the remainder of the sales proceeds realized by sellers as payment by private purchasers of the subsidized goods.

In some instances budget outlays for goods and services or subsidies are exempted from tax by a special tax provision. When this occurs, the outlay figure understates the resource cost of the program of which it is a part and is, therefore, not comparable with other outlay amounts. For example, as noted above, the budget outlays for certain housing and meal allowances of military personnel are not includable in their incomes and therefore understate the cost of this National Defense budget element. If this form of compensation were treated under the generally applicable reference or normal tax rule as income taxable to the employee, the Defense Department would have to make larger cash payments to its military personnel to leave them as well off after tax as they are now with nontaxable allowances. Only when the existing tax subsidy is added to the tax-exempt budget outlay is this element of National Defense expenditure comparable with other defense outlays.

The estimates of tax expenditures in table G-1 have been prepared to conform to the objectives of functional budget accounting for outlays. Thus, table G-1 figures are estimated as outlay equivalents, the magnitudes of which are consistent with direct budget outlays. The entries should be viewed as amounts that should be added to functional budget outlays and restored to budget receipts to provide a more consistent and comprehensive display of the resource reallocations produced by Federal fiscal measures.

The basic difference between the outlay equivalent and revenue loss estimates is that the former estimates reflect the fact that payments would be subject to tax under the reference tax rules. The following examples will clarify the difference in estimating technique for major classes of tax subsidies.

1. *Government outlays that are exempt from tax.*—As noted above, certain housing and meal allowances for military personnel are not included in the pretax incomes of military personnel. The revenue loss estimate for this item merely computes the tax that would be paid by military personnel if these payments had been taxable. The outlay equivalent recognizes that the intent of this personnel policy is to attract and retain the existing military force. The equivalent taxable pay under the reference or normal tax law would, therefore, have to be sufficient to yield them an aftertax

(disposable) income large enough to permit the same housing and meal expenditures they now enjoy. This is equivalent to the taxable cash pay they receive which must yield them enough disposable income to continue in military service. The outlay equivalent estimate exceeds the revenue loss estimate that does not take account of this fact. By grossing-up exempt government outlays for military service, the tax subsidy estimate is now measured in a manner consistent with other Defense Department outlays.

2. *Subsidies to reduce market prices.*—Some subsidies reduce market prices by purposively reducing taxes otherwise due and payable by producers. For example, before it was allowed to expire at the end of 1985 the incremental research and experimentation (R&E) credit provided a subsidy for industrial R&E. A firm qualifying for the credit, however, was not required to include the credit in computing its taxable income, as it would have had to if it had received such funds as a cash payment from the Government in support of its R&E. Cash payments for R&E would either be reported as gross income by the payee or would have reduced the deduction for R&E expense, entering the payee's income subject to tax in either event. The expenditure equivalent of the incremental R&E tax credit would be estimated as the amount of subsidy subject to reference tax rules that would have to be paid to firms for their qualified R&E expenditures and which would reduce their costs by as much as the tax credit, which does not enter taxable income. Again, this estimate of the R&E tax credit expenditure equivalent would be larger than the amount that would be estimated as a revenue loss.

Other subsidies reduce prices by reducing tax otherwise due and payable by the final purchaser. For example, the personal deduction formerly allowed for medical insurance obviously reduced the cost of medical insurance to its purchasers. Under the reference tax rules, this deduction was unrelated to the computation of individuals' (purchasers') taxable income. Further, the full payment of the premium by the insured taxpayer entered the taxable incomes of medical practitioners and others whose fees were covered by the insurance. The expenditure equivalent of this subsidy was, therefore, simply the reduction in tax payments of purchasers. In other words, the preferential deduction represented partial reimbursement to households for the personal insurance expenditure they had made. Because this amount was included in the tax base of suppliers, the outlay equivalent of this tax expenditure was, therefore, the same as the revenue loss estimate.

3. *Capital subsidies.*—The Government may subsidize the acquisition of capital in the private sector in either of two ways. It might provide capital grants with respect to the acquisition of specified classes of assets, or it might provide preferential loans to entities

acquiring particular assets. The investment tax credit for machinery and equipment is an example of a capital grant; so are construction subsidies paid to shipowners who have ships built in U.S. shipyards, or the furnishing of equipment to Government contractors.

In general, under the reference and normal tax laws, the beneficiary of a capital grant is regarded as not having contributed the portion paid for by the Government to the cost of an asset. His "basis" in the subsidized asset is only the amount of his disposable resources expended. The asset is, therefore, shown on the beneficiary's tax books of account at its net private cost. Depreciation of only the private cost net of subsidy is recoverable in computing his income tax liability. However, in the case of the investment tax credit before January 1, 1983, the private firm was allowed cost recovery deductions for the entire cost of credited assets, gross of the investment tax credit for its purchase. Under the outlay equivalent computation, this additional cost recovery is accounted for as an addition to the initial grant (tax credit) to derive the expenditure equivalent. The estimated outlay equivalent for the investment tax credit was, therefore, larger than the revenue loss estimate because the latter did not take into account the extra investment grant provided by the additional tax depreciation allowed. Beginning in January 1983, this additional grant was reduced by half the amount of the investment tax credit with the introduction of a partial basis adjustment on assets eligible for the investment tax credit.

Tax deferrals resulting from special accelerated capital cost recovery allowances are a form of Government lending. For example, as has been noted, under both the reference and normal tax rules investments for the discovery and development of mineral deposits would be capitalized when incurred and recovered as depletion allowances as production from the deposit ensues. Under special tax rules, however, these investment expenditures are recovered as deductions when made, reducing taxes due and payable at the time the investment is made, and increasing taxes in later years. The deferral of tax, as compared with the tax stream that would have occurred under either tax rules, is the equivalent of an interest-free loan. Accounting for the tax expenditure resulting from the tax deferral is akin to the budget outlay accounting for Federal lending. When the tax is deferred, a tax expenditure (revenue loss) equal to the deferral is recorded. This is equivalent to making an interest free loan. When the tax is actually paid, the tax expenditure is reversed as if it were a loan repayment. The procedure mirrors that of net lending, with the revenue loss of the tax expenditure canceling out over time. Budget accounting, however, fails to measure the subsidy value of Federal lending. Therefore,

the subsidy element attributable to the zero interest rate on the tax deferral is not counted either in the outlay equivalent estimate of this tax expenditure. For this reason the tax deferral's outlay equivalent is the same as the revenue loss estimate.

All tax expenditure estimates reported were prepared by the Treasury Department and are based upon income tax law enacted as of December 31, 1985. In table G-1 the estimates show the expenditure equivalent of each special tax provision by fiscal year. For tax expenditures resulting from the exclusion from taxable income of Federal Government payments to individuals, estimates of the payments upon which the tax subsidy estimates are based are shown elsewhere in the Budget.

The estimating procedure for tax expenditures uses the implicit assumption—the same that governs estimates of out-year budget outlays—that the existing tax structure and all other institutional resource costs determinants are given. It is also assumed that aggregate output and incomes remain at the levels that underlie the 1987 budget estimates.

The tax expenditure estimates presented in this Special Analysis, including those computed on a revenue loss basis shown in Table G-2, should not be interpreted as estimates of the increase in Federal receipts (or reductions in budget deficit) that would accompany the repeal of the special provisions. There are four reasons why such an interpretation is not possible.

First, repeal of some provisions could affect the aggregate level of income and economic growth. All receipts and expenditures in the budget are based on projections of income and growth that assume all existing laws, amended only as proposed in the budget, will continue. Thus, it is assumed that the investment tax credit and other incentives for private capital formation as currently enacted remain in effect. If, however, these investment incentives were repealed (or drastically curtailed) without being replaced by a comparable investment incentive or other appropriate offset, the current projections of income and growth would have to be revised downward. Projections of receipts and expenditures would also have to be changed to be consistent with the revised estimates of income. The estimated net effect of repeal of the investment tax credit on receipts, therefore, would not be equivalent to the tax expenditure. Of course, large changes in outlay programs beyond those proposed in the budget would also affect the tax base.

Second, all the tax expenditure estimates are based on the actual level of benefited activities achieved with their aid, given the existence and utilization of all other tax expenditures. In the event a particular tax expenditure provision was repealed, the relative cost of the affected activity would be increased and this could be expected to elicit a response, some of which would spill over into other

activities favored as tax expenditures. For example, if the exclusion of employer-paid medical insurance from the gross income of employees were repealed, this form of employee compensation would become more costly from the employees' point of view and would likely be substituted for by other forms of compensation, including cash and other still tax-favored fringes, such as employer-paid pensions. Thus, the budget impact of repealing the exclusion of employer-paid medical insurance would not be an increase in revenues equal to the estimated cost of that tax expenditure, but a smaller amount due to some increase in tax expenditures for pensions or other fringes. In this respect, tax expenditures are similar to many outlay programs; a cut in support prices for one commodity might very well result in an increase in outlays for other price-supported commodities.

Third, as is the case with estimates of proposed changes in the reference tax law, tax subsidy estimates are computed on a cash-flow basis. The magnitudes of resources reallocated by the Federal Government are portrayed by showing the budget impact of differences between current law provisions and either the reference or normal tax under the assumption that the baseline without the particular tax subsidy provision had always been in effect. These figures generally show, therefore, larger amounts than would be realized as increased receipts in the first years of transition to a tax law without the special provisions. The estimates only take into account those changes scheduled under existing law, such as the phasing in or out of specific provisions.

Fourth, tax expenditure estimates cannot simply be added together to obtain totals for functional areas or a grand total. Although these estimates are reported on a provision by provision basis, many tax expenditures are interdependent because they mutually affect marginal tax rates and because of specific interdependencies between related provisions. For example, if a significant tax expenditure item such as exclusion from gross income of state and local bond interest received were repealed, this would move many taxpayers into higher tax brackets and, for those taxpayers, the value of other special exclusions and deductions from gross income would be enhanced. Thus, if one of these other tax expenditure provisions were simultaneously repealed along with exemption of State and local interest payments, the budget impact of the dual repeal would be greater than the sum of the two separate tax expenditure estimates. On the other hand, simultaneous repeal of two or more of the tax expenditure items cleared through individual tax accounts as deductions, such as for charitable contributions, mortgage interest, and property taxes, would have less budget impact than the sum of the individual tax expenditure estimates because each elimination of a deduction would

make it more advantageous for taxpayers to opt for the zero bracket amount rather than to continue to itemize remaining allowable deductions. This would reduce the revenue gain from additional limitations on itemized deductions. Due to these and other interdependencies among tax expenditure items, the tabulated figures can only be interpreted as estimates of the budget impact of changes in one item at a time, assuming that other provisions of the tax law remain unchanged.

TAX EXPENDITURES BY FUNCTION

The 1985-87 outlay equivalent estimates of tax expenditures for are displayed by functional category in table G-1 and revenue loss estimates for the same items are shown in table G-2. Whenever an item is identified as a tax expenditure by application of normal tax rules, but not by reference tax rules, both are shown in the tables, the former designated as "Pre-1983 budget method", the latter as "Post-1982 budget method." The headings for National Need, or functional categories, are those used in Part 5 of the budget.

Inasmuch as the sources of data for estimating tax expenditures are largely corporation and individual income tax returns, the estimates are arrayed by type of return. It must be emphasized, however, that listing estimates under the corporation and individual headings does not imply that these categories of filers benefit from the functional program served by the special tax provisions in proportion to the respective tax expenditure amounts shown. Rather, these breakdowns principally show the specific tax accounts through which the cost of the program is cleared. Corporations as such neither pay tax nor receive government payments. They are the institutional conduit through which their employees, creditors, and stockholders engage in exchanges with customers and the Government. Thus, the reduction in tax deposits of corporations resulting from minerals tax preferences makes possible higher wages and/or more employment for mineral workers, higher royalties payable to mineral land owners (usually not the mining company), and may even make possible lower minerals prices. Little, if any, of the subsidy remains in the pockets of creditors and equity holders as interest rates or rates of return that are higher than such capital can earn elsewhere in the economy. Similarly, the exemption from Federal income tax of interest paid by State and local governments provides a subsidy to those governments in the form of lower borrowing rates. Individual and corporate holders of such debt only benefit from the tax exemption to the extent their marginal tax rates exceed the percentage spread between taxable and nontaxable interest rates.

With these caveats in mind, a review follows of the tax expenditure estimates by functional category, as shown in tables G-1 and G-2.

National defense.—The housing and meals provided military personnel, either in cash or in kind, are excluded from income subject to tax. The exclusion is a tax expenditure relative to the normal as well as the reference tax rules.

International affairs.—A U.S. citizen or resident alien who is a resident of a foreign country or who is present in one or more foreign countries for a prescribed period is allowed tax relief on his foreign earnings. Beginning in 1982, the prescribed period of time abroad is a minimum of 11 out of the past 12 months.

Eligible taxpayers in 1986 may exclude \$80,000 per year of foreign earned income and may exclude or deduct reasonable housing costs in excess of one-sixth of the salary of a civil servant at grade GS-14, step 1. The \$80,000 exclusion in 1986 will increase by \$5,000 annually starting in 1988 until it reaches \$95,000 in 1990. These provisions do not apply to persons who are employed by the U.S. Government. However, they do apply to persons who are not U.S. Government employees, but who are paid from public funds. The tax expenditure estimate does include the effect, however, of excluding from their taxable income certain allowances received by Federal employees working abroad. These provisions depart from the income measurement rules of both the reference and normal tax law under which no allowance is made for regional cost-of-living differentials. Their effect is to reduce the cost of employing U.S. taxpayers abroad.

Domestic international sales corporations (DISC) were organized to carry out the export sales of their U.S. parent corporations and to obtain the benefits of certain preferential tax rules. These preferential tax rules were departures from the reference as well as the normal income tax structure. However, responding to increasing concern over the legality of DISC under the General Agreement on Tariffs and Trade (GATT), Congress replaced DISC in 1984 with an alternative export incentive, the Foreign Sales Company (FSC). A portion of the export income of these FSCs is exempt from federal income tax. In addition, a domestic corporation is allowed a 100 percent dividends received deduction for distributions from a FSC attributable to certain foreign trade income. In effect no corporate income tax is imposed on a portion of income from exports.

With certain limited exceptions, the income of foreign corporations controlled by U.S. shareholders is not subject to U.S. taxation because, under the reference tax rules, corporations chartered and operating in foreign countries are not subject to U.S. income reporting and taxation. Therefore, the income of even those foreign corporations controlled by U.S. shareholders (individuals and corpo-

rations) subject to U.S. taxation becomes taxable only when the controlling U.S. shareholders receive dividends or other distributions with respect to their foreign stockholding.

As previously noted, this rule, however, is a deviation from the normal income tax rule under which a controlling interest in a foreign corporation, defined as ownership of more than 50 percent of the foreign corporation's common stock by U.S. shareholders, each holding 10 percent or more of the stock, is considered a partnership interest held by the U.S. shareholders. The currently attributable foreign source pretax income from such an interest is subject to U.S. taxation, whether or not distributed. Thus, when the normal tax rule is taken as a baseline, the excess of controlled foreign corporation income over the amount distributed to a U.S. shareholder gives rise to a tax expenditure in the form of tax deferral, that is, an interest-free loan. This tends to encourage investment abroad by U.S. shareholders.

General science, space, and technology.—Research and development expenditures are intended to result in new products or processes, cost reductions, or other effects whose benefits will in nearly all cases continue into the future. Such expenditures are, therefore, capital outlays under the normal income tax rules that will generate amortization deductions over the period they are productive. Quantification is to a substantial degree arbitrary, however, due to lack of a clearly defined norm for the expected amortization period. Yet expensing of R&D expenditures is a departure from the normal tax rules and is, therefore, considered a tax expenditure under this standard. This is not the case under the reference tax rule, because Code section 174 makes such expensing the general tax rule.

The Economic Recovery Tax Act of 1981 (ERTA) added a credit for increasing research activities. The credit was equal to 25 percent of the increase in certain research and experimentation expenditures over average expenditures in a base period. The taxpayer was not required to reduce his otherwise allowable deduction for R&E expenses by the amount of credit allowed. For 1983, 1984, and 1985, the base period was the preceding 3 years. The credit was allowed to expire at the end of 1985.

Under both the reference and normal tax rules, the worldwide gross income of U.S. taxpayers is reportable and taxable under U.S. income measurement rules and tax rates, although a credit is allowed for foreign income taxes paid. Due to differences between U.S. and foreign country income measurement rules and tax rates, a reasonably accurate "sourcing" of domestic and foreign gross incomes and related deductions of taxpayers engaged in international operations is required to determine net tax owed in the United States. Regulations issued in 1976 under Code section 861, but suspended until July 31, 1985, were designed to achieve a

reasonable international allocation of research and experimentation expenses.

Energy.—Certain expenditures necessary to discover fuel mineral properties may be deducted in whole or in part as current expenses rather than being capitalized and amortized over the productive life of the property. Included in this category of expenditures, the tax treatment of which departs from both the reference and normal tax rules, are: In the case of oil and gas investments, the intangible drilling costs (IDCs) of wells, such as wages and the costs of using machinery for grading and drilling, and for nonsalvageable materials used in constructing wells; and in the case of other fuel minerals, the exploration and development costs of surface stripping and the construction of shafts and tunnels. However, in the case of IDCs, integrated oil companies may currently deduct only 85 percent of such costs and amortize the remaining 15 percent over three years. Other oil producers may currently deduct 100 percent of their IDCs, but the amount of annual IDCs in excess of the taxpayer's oil and gas income is subject to the minimum tax. In the case of other fuel minerals, only 85 percent of the exploration and development costs may be currently deducted. The remaining 15 percent are deductible over five years. These departures from both the reference and normal tax rules yield subsidies to the domestic supply of these energy resources.

In addition, mineral fuel producers may generally take percentage depletion deductions rather than cost depletion as provided in the reference and normal tax rules. Under cost depletion, actual outlays, to the extent not immediately recovered through expensing of exploration, discovery, and development costs, may be deducted over the productive life of the property, much as other businesses may take deductions for the depreciation of the capital goods they use, the cost of which is capitalized when acquired. Unlike depreciation, however, percentage depletion deductions are not limited to the cost of the investment. Under percentage depletion, taxpayers may deduct a percentage of gross income from mineral production at rates that are 22 percent for uranium, 15 percent for oil, gas and oil shale, and 10 percent for coal. However, the deduction is limited to 50 percent of net income from the property (65 percent of taxable income in the case of oil and gas). Percentage depletion for oil and natural gas is available only for limited quantities of output from independent oil and gas producers and royalty owners. Production from geothermal deposits is eligible for percentage depletion at the same rate as allowed for oil and gas, but with no limit on output and no limitation with respect to qualified producers. In lieu of taking percentage depletion, holders of royalties from coal deposits may treat their payments as capital gains rather than ordinary income.

A variety of tax incentives stimulate energy conservation and encourage conversion to energy sources other than oil or natural gas. Individuals could take a 15 percent income tax credit for home insulation and other energy-conserving components up to a maximum amount of \$300. A credit of 40 percent of the first \$10,000 of qualifying expenditures was allowed on residential solar and other renewable energy source property. The residential energy credits have been allowed to expire on December 31, 1985.

In addition to the 10 percent investment tax credit for machinery and equipment, and before they were allowed to expire at the end of 1985, a 10 percent credit was allowed for biomass energy property and intercity buses, an 11 percent additional credit was available for certain small-scale hydroelectric generating property, and a 15 percent additional credit was allowed for solar, wind, ocean thermal, and geothermal equipment. However, the credit for small-scale hydroelectric generating property is available through December 31, 1988 for projects filed with the Federal Energy Regulatory Commission before January 1, 1986.

Prior to December 31, 1982, there were also additional 10 percent credits allowed for alternative energy property (i.e., property using fuel other than oil or natural gas); specially defined energy property (i.e., property used in an existing industrial, agricultural or commercial facility to reduce the amount of energy consumed or heat wasted); recycling equipment; shale oil equipment, cogeneration equipment; alumina electrolytic cells; and equipment for producing natural gas from geopressurized brine. The additional investment credit can still be claimed for long term projects under these provisions if the taxpayer completed all engineering studies and applied for all required environmental and construction permits in connection with the project prior to January 1, 1983.

A nontaxable \$3 per barrel of oil-equivalent production credit is provided for several forms of alternative fuels, but, as a general rule, is not available unless the price of oil drops below \$29.50 (in 1979 dollars). The credit was available without this price limitation for processed wood fuel and steam produced from solid agricultural byproducts until the exception expired at the end of 1984.

Gasohol (a motor fuel comprised of at least 10 percent alcohol) is exempt from 6 of the 9 cents per gallon Federal excise tax on gasoline. There is a corresponding production income tax credit for alcohol used as a fuel in applications where the excise tax is not assessed. This credit, equal to a subsidy of 60 cents per gallon for alcohol used as a motor fuel, is intended to encourage substitution of alcohol for petroleum-based gasoline. Certain small scale hydroelectric generating facilities and facilities which produce steam or alcohol from solid waste may be financed with tax-exempt industri-

al development bonds, again to encourage the supply of nonpetroleum energy resources.

Natural resources and environment.—As is true for fuel minerals, certain capital outlays associated with exploration and development of nonfuel minerals may be expensed rather than capitalized and depreciated over the life of the asset. Most nonfuel mineral extractors also make use of percentage depletion rather than cost depletion, with percentage depletion rates ranging from 22 percent for sulphur down to 5 percent for sand and gravel.

Interest on State and local government debt issued to finance pollution control facilities of private firms is excluded from income subject to tax.

Expenditures to preserve and restore historic structures qualify for a 25 percent investment credit. Taxpayers are permitted to depreciate 87.5 percent of the investment notwithstanding the 25 percent capital grant implicit in the credit. Annual depreciation amounts are determined by the 18-year straight-line method.

The pretax income derived from the cutting of timber and iron ore royalties are taxed as capital gain at rates lower than those applicable to ordinary income.

Private forestry is in addition encouraged by a special provision permitting up to \$10,000 (\$5,000 for a married taxpayer filing a separate return) of direct costs incurred in a taxable year to forest or reforest a site for the commercial production of timber to be amortized over a 7-year period rather than to be capitalized and recovered when the timber is cut, 20 or more years later. The \$10,000 of costs are also eligible for the 10 percent investment tax credit, notwithstanding that investments in timber stands are not depreciable.

Agriculture.—Farmers, other than certain corporations and partnerships engaged in agriculture, are allowed to deduct currently certain expenditures for feed and fertilizer, and for certain conservation measures. Current expensing is allowed, although these expenditures are for inventories held at the end of the year or for capital improvements that otherwise are required to be capitalized under reference tax income accounting rules. Capital gains treatment generally applies to the profit from the sale of livestock and certain other agricultural products.

Commerce and housing credit.—This category includes a number of tax expenditure provisions that also affect economic activity in other functional categories. In general, provisions related to investment, such as the investment tax credit, could as well have been classified under the natural resources and environment, energy, agriculture, or transportation categories.

An exclusion of \$100 (\$200 on a joint return) is allowed for dividend income. The Deficit Reduction Tax Act (DEFRA) of 1984

repealed the 15 percent net interest income exclusion of up to a maximum of \$3,000 (\$6,000 for joint returns) which had been provided for tax years beginning in 1985 by ERTA in 1981.

The interest on small issue industrial development bonds (IDBs) issued by State and local governments to finance private business property is excluded from income subject to tax. Depreciable property financed with small issue IDBs must be depreciated using the straight-line method. Small issue IDBs are generally limited only in the face amount of the bond issue, although certain facilities, such as recreation or entertainment facilities, cannot be so financed. The tax exemption of small issue bonds is scheduled to expire on December 31, 1986, except for small issue IDBs exclusively issued to finance manufacturing facilities for which the tax exemption is scheduled to expire two years later.

Interest is exempt from taxation on all mortgage subsidy bonds issued before January 1, 1988, by State and local governments to finance below-market rate mortgages for certain owner-occupied homes. The annual volume of mortgage subsidy bonds is restricted to State-by-State ceilings. Bond proceeds generally are used to finance homes purchased by first time buyers of dwellings with prices under 110 percent of the average area purchase price.

Because mortgage subsidy bonds were found to be relatively inefficient in providing subsidies to first time home buyers, States have been authorized through December 31, 1987 to issue mortgage credit certificates (MCCs) in lieu of qualified mortgage bonds. MCCs entitle home buyers to income tax credits for a specified percentage of interest on qualified mortgage loans. When utilizing MCCs the entire amount of the subsidy flows directly to the home buyer without part of it ending up with investors and middlemen as under the bond program.

The aggregate annual amount of MCCs a State may issue may not exceed 20 percent of the amount of qualified mortgage bonds that may be issued under the annual State-by-State ceiling and that the State elects to surrender in lieu of MCCs. Because of this relationship between MCCs and qualified mortgage bonds, their outlay equivalent and revenue loss estimates are presented in the tables G-1 and G-2 as single line items.

State and local government issues of IDBs to finance private multifamily residential rental projects are restricted to multifamily rental housing projects that include 20 percent (15 percent in targeted areas) of units for low- and moderate-income families. Other tax-exempt bonds for multifamily rental projects are issued generally with the requirement that all tenants must be low- or moderate-income families.

There are also limits imposed on State and local government bonds for private activity, specifically IDBs and student loan bonds.

This includes limits on the aggregate volume of private activity bonds that each State may issue. The annual limitation has been set initially at the greater of \$150 for each resident of a State (reduced to \$100 after 1987) or \$200 million and is effective for bonds issued after 1983.

Life insurance policies, other than term policies, generally contain a savings element. Savings in the form of policyholder reserves are accumulated from premium payments and interest is earned on the reserves. Such interest income is taxable neither as it accrues nor when received by beneficiaries upon the death of the insured.

The earnings of credit unions not distributed to members as interest or "share dividends" are exempt from Federal income taxes. Commercial banks, mutual savings banks, and savings and loan associations also are provided a subsidy. They are permitted to deduct additions to bad debt reserves in excess of actual loss experience and reasonable expectations as to future losses. Mutual savings banks and savings and loan associations may deduct 40 percent of income provided they maintain stipulated fractions of their assets in "qualifying assets," primarily residential mortgages.

As previously noted, interest paid on consumer credit is allowed as an itemized deduction for individuals, and owner-occupants of homes may deduct mortgage interest and property taxes (but not maintenance outlays or depreciation) as itemized nonbusiness deductions. These are tax expenditures because, under the reference and normal tax rules, these taxpayers are not required to report gross income from the properties to which the deductions pertain.

The minimum required holding period to qualify as a long-term gain was shortened from 1 year to 6 months for assets acquired after June 22, 1984 and before January 1, 1988. Sixty percent of net long-term gains from the sale of capital assets may be excluded from income. However, the excluded 60 percent of net long-term gains is treated as a preference item in computing the alternative minimum tax for individuals. This tax is applicable only if a taxpayer's regular income tax is less than his alternative minimum tax. Half of net long-term capital losses and 100 percent of net short-term capital losses may be offset against ordinary income up to a maximum deduction of \$3,000 per year with an unlimited carryforward. Net long-term capital gains from sales or exchanges are taxed at a maximum rate of 20 percent. This maximum rate is equal to the 40 percent inclusion rate times the maximum individual marginal tax rate of 50 percent.

Corporations may elect a 28 percent alternative tax rate on capital gains. The tax expenditure is estimated on the assumption that these gains would otherwise be taxed at ordinary rates.

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 2 years before or after the sale. The "adjusted sales price" is the amount realized (gross proceeds less selling expenses) minus qualified fixing up expenses. If a new house is constructed, it must be occupied within 2 years after the sale of the previous residence. The deferral of tax with respect to these gains on owner-occupied dwellings is the tax expenditure estimated.

A taxpayer who is 55 years of age or older at the time of the sale of his residence may elect to exclude up to \$125,000 of gain from its sale. This is a once-in-a-lifetime election. In effect, this provision converts some prior deferrals of tax into forgiveness of tax.

The gain on the sale of capital assets acquired by inheritance is computed as the excess of the sales price over their value at the time of the original owner's death, rather than as the excess over their value at the time of acquisition by the original owner. The estimate assumes that the difference in the computed gain would be taxed as part of the capital gain in the year of sale.

The 10 percent investment tax credit is applied to the cost of qualifying property (generally, tangible, depreciable personal property used in a trade or business) in the 5-, 10-, and 15-year recovery classes under the Accelerated Cost Recovery System (ACRS). (Assets in the 3-year recovery class are entitled only to a 6 percent credit). Notwithstanding the reduction in cost of acquiring qualified property provided by the credit, taxpayers prior to 1983 were able to recover the original cost gross of the credit. However, beginning with property placed in service in 1983, the basis of an asset must be reduced by one half of the investment credit allowed on the asset, or the taxpayer may elect a 2 percentage point reduction in the credit rate.

As a general rule, the investment tax credit cannot be claimed for investments in land or buildings or for property used abroad. The credit may be claimed as progress payments are made on equipment which require two or more years to construct. Prior to the Revenue Act of 1978, the maximum credit allowed against income tax liability in a taxable year was generally limited to \$25,000 plus 50 percent of tax liability in excess of \$25,000. The 1978 act raised the excess liability percentage to 60 percent for 1979 and, through annual increments of 10 percentage points, to 90 percent by 1982. As of 1983, the percentage was scaled back to 85 percent.

(ACRS) replaced previous statutory and administrative rules that determined annual tax depreciation allowances. Under ACRS, effective for all depreciable property placed in service after January 1, 1981, six statutory cost allowance schedules were provided. Four

classes were for personal property and two for real property. The four personal property schedules, with recovery periods ranging from 3 years for vehicles and R&E equipment to 15 years for certain public utility property, set forth annual allowances that are based on the declining balance formula at a rate equal to 150 percent of the straight-line rate. Originally, the two real property schedules both had 15-year recovery periods. The first property schedule applies only to low-income housing which continues with a 15 year recovery period whenever depreciation is on an accelerated basis. Annual allowances based on the declining balance formula may be accelerated to 200 percent of the straight-line rate. The holding period of the other property schedule, applicable to all other buildings, was extended to 18 years. Its allowances may be based on 175 percent of the straight-line rate.

As previously noted, ACRS is presently the reference law and thus yields no tax expenditure when that is taken as the baseline. However, when the preexisting statutory Asset Depreciation Range System (ADR), with its guideline depreciation periods for scores of personal property classes, is taken as the normal tax depreciation standard along with 35-year straight-line depreciation for real property (not included in ADR), then the ACRS provisions yield "Pre-1983 budget method" tax expenditure estimates (tax deferrals) as shown in the tables. Of course, other standards for determining annual depreciation allowances would yield different estimates.

In 1981 "safe harbors" were provided for tax leases of business machinery and equipment. Under these leases, depreciation and the investment tax credit are normally claimed by the lessor, although the lessee is the actual user and owner of the machinery or equipment. Safe-harbor leasing was repealed by the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), effective after 1983. For the period between July 1, 1982 and January 1, 1984, a restricted form of safe harbor leasing was in effect.

In 1984, DEFRA reduced the tax benefits that were up to then available for tangible property used by tax-exempt entities including Federal, State and local governments. The Act provides for less rapid write-offs of property in use by tax-exempt entities. Depreciation deductions must be computed using the straight-line method disregarding salvage values instead of applying ACRS. For example, real tax-exempt use property must be depreciated over the greater of 40 years or a period equal to 125 percent of the lease term.

As under prior law, the investment credit generally is denied for property leased or used by tax-exempt entities. The Act expands the number of tax-exempt entities placed under the use restriction and provides statutory guidelines to distinguish between leases and service contracts or similar arrangements designed to circumvent

the use restriction. DEFRA also introduced measures to limit foreign tax-exempt entities so that their tax benefits for property used does not exceed that of domestic tax-exempt entities. The Act's provisions generally apply to leases entered into after May 23, 1983 subject to numerous transition rules.

When an individual or corporation acquires or otherwise enters into a new business, certain "start-up" expenses, such as the costs of investigating opportunities and legal services, are normally incurred. The taxpayer may elect to amortize these outlays over 60 months although they are similar in kind to other payments he makes for nondepreciable intangible assets to be used in the business that are not recoverable until the business is sold.

Before expiring at the end of 1985, taxpayers who held common or preferred stock in a qualified dividend reinvestment plan established by a domestic public utility company could exclude from tax up to \$750 per year (\$1,500 for joint returns) of distributions in the form of common stock rather than cash. The stock so received had a zero basis; the proceeds of sales of the stock were taxed as capital gain if the sale took place at least one year after the record date of the distribution. Under the normal and reference tax rules, distributions from corporate income are taxable to individual shareholders as ordinary income in the year received.

Corporation income tax rates range from 15 percent of the first \$25,000 of taxable income to 46 percent of taxable income over \$100,000. Prior to DEFRA, the corporation income tax of corporations with income of \$100,000 or more was \$20,250 less than had the tax been at a flat 46 percent rate on all income. DEFRA imposed an additional 5 percent corporate tax on corporations with taxable income in excess of \$1 million, but with this additional tax liability limited to \$20,250. The benefit of graduated rates is, therefore, eliminated for corporations with income in excess of \$1,405,000.

Under the "Post-1982 budget method" graduated rates are part of the reference tax rules and do not give rise to a tax expenditure. Under the "Pre-1983 budget method", however, this rate progression departs from the normal tax rule that all corporation income be taxed at the single rate at which most corporation income is taxed (46 percent) and gives rise to a tax expenditure intended to encourage small business.

Transportation.—Certain companies that operate U.S. flag vessels receive an indefinite deferral of income taxes on that portion of their income used for shipping purposes, primarily construction, modernization and major repairs of ships, and repayment of loans to finance these qualified investments. An investment credit of one half the regular credit may be claimed on the tax-deferred amounts withdrawn from capital construction funds. This is an exception to

the reference tax rule that the credit may be claimed only with respect to the taxpayer's basis in qualified property.

Until expiration on December 31, 1984, State and local governments were allowed to issue tax-exempt obligations to finance the purchase of mass-commuting vehicles for lease to government transit agencies.

As a consequence of the deregulation of motor carriers in 1980, the value of operating authorities held by affected firms diminished. Under the reference and normal tax rule asset value changes are recognized only when an exchange transaction occurs, so this loss of value would occasion no income tax consequence. A motor carrier would simply experience a diminished gross income as competition reduced tariffs and, accordingly, pay less income tax. Only in the event a carrier liquidated or sold out to another firm would the loss trigger a tax refund. To relieve existing motor carriers continuing in business of some of the loss they experienced due to deregulation, a tax expenditure was provided in the form of an exceptional 60-month amortization of their investment in operating authorities (a nondepreciable intangible asset). The provision applies to taxable years ending after June 30, 1980.

Community and regional development.—Until it expires on December 31, 1986, taxpayers may, under certain conditions, elect to amortize rehabilitation expenditures for low- and moderate-income rental housing over a 5-year period in lieu of ACRS depreciation. Rehabilitation expenditures may not exceed \$20,000 per dwelling unit and must exceed \$3,000 to qualify. The limit is \$40,000 per dwelling unit if the rehabilitation was on units which the tenants could purchase at a price that limited the profit to the seller.

An investment tax credit is available for the rehabilitation of buildings that are used for business or productive activities (other than for residential purposes). The credit is 15 percent of rehabilitation expenditures for buildings at least 30 years old and 20 percent for buildings at least 40 years old. The basis of the rehabilitation recoverable as depreciation must be reduced by the amount of the credit. Under prior law, a 10 percent credit was allowed for buildings at least 20 years old, with no reduction in basis.

The interest on industrial development bonds (IDBs) issued by State and local governments to finance airports, docks, and sports and convention facilities is exempt from taxation. Unlike the small issue IDBs, there is no limit on the face amount of tax-exempt bonds issued for these purposes nor are they subject to the annual State-by-State volume limitation placed on the issuance of IDBs.

Education, training, employment, and social services.—The first \$300 per month received by students as scholarship or fellowship aid is excluded from students' gross incomes, provided the amounts are not emoluments awarded them for services they perform in

association with the payee. From a strictly economic point of view, scholarships and fellowships are either gifts not conditioned on the performance of services, or they are rebates of educational costs by the institutions in which students are enrolled. Thus, under the "Post-1982 budget method", the exclusion is not a tax expenditure, because the reference law does not include either gifts or price reductions in a taxpayer's gross income. However, under the "Pre-1983 budget method," the exclusion is considered a tax expenditure, because under normal tax rules gifts of Government funds—and many scholarships are derived directly and indirectly from Government funding—are includable in gross income.

Interest on State and local government debt issued to finance student loans and facilities used by private nonprofit educational facilities is excluded from income subject to tax. The Treasury Department has exclusive jurisdiction over any determination by the executive branch as to whether interest on any such obligation is exempt from tax. As mentioned before, the aggregate volume of such private activity bonds that each State may issue during any calendar year is limited.

Taxpayers may claim personal exemptions for dependent children age 19 or over who receive parental support payments of \$1,000 or more per year if the children are full-time students. The student may also claim an exemption on his own return; the extra exemption claimed by parents is, therefore, a tax expenditure.

Many employers provide employee benefits that are excluded from employee income. The employers' costs for these benefits are deductible business expenses. The exclusion from an employee's income of the value of meals and lodging provided by an employer for his own convenience is a tax expenditure, as are the exclusion of housing allowances and the rental value of parsonages from the taxable income of ministers. However, deductions of mortgage interest and real estate taxes taken by ministers who are provided such housing allowances are severely limited as of January 1, 1986, when IRS Revenue Ruling 83-3 became effective.

From January 1, 1979, through December 31, 1985, an employer was able to set up an educational assistance program to provide educational benefits to his employees. The program could pay for tuition, fees, books, and supplies and amounts received under the program were excluded from an employee's gross income. Employer contributions to prepaid legal services plans and the value of legal services received under such plans were also excluded from employee income until the exclusion expired at the end of 1985.

Prior to January 1, 1983, a corporation could claim an additional 1 percent investment tax credit if an equivalent amount of its common stock were set aside in a employee stock ownership plan (ESOP). A further one-half of 1 percent investment tax credit could

be claimed to the extent that additional employer contributions to an ESOP were matched by employee contributions. The base for the tax credit for contributions of stock to an ESOP is limited to one-half of 1 percent of total compensation paid to all employees under the plan from 1983 through 1987, after which it expires. Employees generally are prohibited from withdrawing their share of an ESOP for 7 years. The effective subsidy rate for this form of employee compensation exceeds 100 percent; the employer is fully reimbursed for the stock he transfers, and the benefited employees are not required to include this compensation in their current year gross income.

Contributions to charitable, religious and certain other nonprofit organizations are allowed as an itemized deduction for individuals, generally up to 50 percent of adjusted gross income. Beginning in 1982, nonitemizers could also deduct a portion of their charitable contributions. Taxpayers whose contributions to charitable or educational organizations are in the form of capital assets (usually securities that have appreciated in value) obtain a deduction for the contribution at the current value of the asset without taxation of the appreciation in value. Beginning in 1982, corporations could also deduct charitable contributions of up to 10 percent of their pretax income. Tax expenditures resulting from the deductibility of contributions are shown separately for educational and other institutions. Contributions to health institutions are reported under the health function.

A 30 percent tax credit may be claimed by married couples for child and dependent care expenses incurred when both spouses work full time or when one spouse works part time or is a student. The credit may also be claimed by divorced or separated parents who have custody of children and by single parents. Expenditures up to a maximum \$2,400 for one dependent and \$4,800 for two or more dependents are eligible for the credit. The credit is equal to 30 percent of qualified expenditures for taxpayers with incomes of \$10,000 or less with the credit reduced by one percentage point for each \$2,000 of income between \$10,000 and \$28,000. This aid to encourage employment of spouses is supplemented by excluding from employees' income the value of employer-furnished child care. Additional aid to spousal employment is provided by the deduction allowed married taxpayers filing jointly. The deduction allowed is equal to 10 percent of the lesser of \$30,000 or the earned income of the lower earning spouse.

Before it was allowed to expire on December 31, 1985, the targeted jobs credit provided tax credits to employers for qualified wages paid to individuals certified as members of a targeted group. A credit of 50 percent of first-year wages and 25 percent of second-year wages up to \$6,000 of each employee's wages could be taken

by the employer to offset up to 90 percent of his tax liability. However, the employer's deduction for wages was reduced by the amount of the credit, the same reference tax treatment as would be accorded a wage subsidy paid in cash. The credit also included an 85 percent credit for wages paid for the summer employment of 16 and 17 year old disadvantaged youths. These credits were also structured to be taxable with the requirement that the employer reduce his wages paid deduction by the amount of the credit claimed.

To encourage the adoption of children found by a State to be difficult to place without financial assistance to the adopting parents, taxpayers may deduct up to \$1,500 of adoption expenses incurred during a year. Only those adoption expenses incurred with respect to a child with "special needs" as defined in section 473 of the Social Security Act qualify for this tax expenditure.

Health.—Employee compensation in the form of payments by employers for health insurance premiums and other medical expenses are deducted as business expenses by employers but excluded from employee gross income. The exclusion from employee income of this form of compensation gives rise to a tax expenditure.

For tax years beginning in 1983, the floor for deductible medical expenses was increased from 3 percent to 5 percent of a taxpayer's adjusted gross income. Beginning in 1984, the one percent of adjusted gross income floor under the deductible amount of drug expenditures was eliminated. However, only expenditures for prescription drugs and insulin are now deductible.

Interest on State and local government debt issued to finance hospital construction is excluded from income subject to tax.

Contributions to nonprofit health institutions are allowed as a deduction for individuals and corporations. Tax expenditures resulting from the deductibility of contributions to other charitable institutions are listed under the education, training, employment, and social services function.

Drugs for the treatment of rare diseases or physical conditions are often called "orphan drugs" because the narrow markets for their use discourages private firms from undertaking the costly investment in clinical testing that must be completed before manufacture and general distribution may be approved by the Food and Drug Administration. To encourage the development of such drugs, a tax credit equal to 50 percent of the clinical testing costs incurred by the taxpayer was introduced. Because the drug firm is not required to reduce its deduction for testing expense (an R&D expenditure), this credit reduces the private cost of clinically testing "orphan drugs" to little more than 7.5 cents per \$1 expended. This tax expenditure is scheduled to expire at the end of 1987.

Income security.—The exclusion from taxable income of public assistance benefits received by individuals is listed as a tax expenditure under the "Pre-1983 Budget Method" because, under normal tax rules, cash transfers from government are includable in gross income. In contrast, gifts not conditioned on the performance of services, including transfers from government as well as from individuals, are not taxable under the reference tax baseline. Therefore, under the "Post-1982 Budget Method" the exclusion from taxable income of public assistance benefits is not shown as a tax expenditure.

The exclusion from tax of a portion of unemployment benefits gives rise to a tax expenditure. Under current law, if the sum of a taxpayer's adjusted gross income, unemployment compensation and excludable disability income is over \$12,000 (\$18,000 for a joint return), the lesser of one-half of that amount over the \$12,000 limit or his unemployment benefits is taxable.

Certain payments up to \$100 per week by an employer in lieu of wages during periods of employee injury or sickness were excluded from the taxable income of persons under the age of 65, who are permanently and totally disabled. For these individuals the exclusion was reduced dollar for dollar by adjusted gross income plus disability income in excess of \$15,000. This exclusion was repealed effective December 31, 1983, and the tax credit for the elderly was expanded to cover the permanently disabled. Disability-related military pension income received by current retirees is also mostly excluded from income subject to tax.

Certain contributions to pension plans by employers and amounts set aside by the self-employed and those not covered by an employer's plan (contributions to individual retirement accounts or IRAs) are excluded from the individual's adjusted gross income in the year of contribution. Self-employed persons can make deductible contributions to their own retirement plans equal to 15 percent of their income up to a maximum of \$15,000 per year. Employees can deduct annual contributions of \$2,000 (or 100 percent of compensation, if less), or \$2,250 on a joint return if one spouse has no income. The investment income earned by pension funds and other qualifying retirement plans is not taxable when earned.

The exclusion from employee income of certain other employer payments, including payments for premiums of group life insurance and accident and disability insurance, are listed here because of their relationship to income security. The exclusion of certain other benefits is listed under the education, training, employment, and social services function.

Additional personal exemptions of \$1,000 may be taken by taxpayers who are 65 years of age or older or blind. These additional exemptions may not be claimed for a taxpayer's dependents.

The retirement credit for the elderly allows individuals who are 65 years of age or older to take a tax credit equal to 15 percent of earned and retirement income up to \$2,500 for single individuals and married couples filing a joint return where only one spouse is 65 years of age or older, and up to \$3,750 for joint returns where both spouses are 65 years of age or older. The \$2,500/\$3,750 base is reduced by one-half of the taxpayer's adjusted gross income over \$7,500 for single individuals and \$10,000 for married couples filing a joint return. The disabled and retired are both covered under this provision.

Premiums paid for casualty and theft insurance with respect to items of one's personal or real property are considered personal expenditures on a par with purchases of the property itself. Neither the purchases of property nor insurance premiums are, therefore, deductible as costs of earning income, and receipt of reimbursement for insured loss of such property is not reportable as gross income by the insured. Thus, under neither the reference nor normal tax baselines would the amount of an uninsured loss of such property be reportable. However, a special provision permits taxpayers to deduct casualty and theft losses of more than \$100 each, but only to the extent that total losses during the year exceed 10 percent of adjusted gross income (AGI). This special relief for taxpayers suffering an uninsured loss is, therefore, a tax expenditure.

The earned income credit may be claimed by low-income workers with minor dependents. As a percentage of earned income up to \$5,000, the credit is equal to 11 percent for a maximum annual credit of \$550. The credit phases out at the rate of 12% cents per dollar over \$6,500. Furthermore, in any tax year the amount of the credit allowed must be reduced by the alternative minimum tax liability of the tax payer. Earned income tax credits in excess of tax liabilities are paid to individuals. This portion of the credit is included in outlays while the amount that offsets tax liabilities is shown as a tax expenditure.

Social Security.—Social security benefits, like other forms of deferred employee compensation, give rise to tax expenditures to the extent that they exceed employees' contributions of previously taxed income to pay for those benefits. These additional retirement benefits are paid for by employers' contributions that were excluded from employees' taxable compensation. Up to one-half of any recipient's social security benefits and tier 1 railroad retirement benefits may be subject to inclusion in the income tax base. Thus, this tax expenditure is reduced to the portion which remains excluded from the tax base. Benefits will be taxable if a recipient's "modified adjusted gross income" plus one-half of his or her social security and railroad retirement benefits exceed a certain base

amount: \$32,000 for those filing joint tax returns; \$25,000 for single persons; and zero for those married filing separately (if they did not live apart from their spouse for the entire year). Modified adjusted gross income is AGI plus (a) the amount, if any, taken as a deduction for two-earner married couples, (b) foreign or U.S. possession income excluded from AGI, and (c) tax-exempt interest excluded from AGI. If the modified AGI exceeds the specified base amount, the lesser of one-half of the excess or one-half of the social security or railroad retirement benefits must be included in income subject to tax.

Other benefit payments from the Social Security Trust Fund, for disability and for dependents and survivors, are excluded from beneficiaries' gross incomes and thus also give rise to tax expenditures. However, beginning in 1984, Social Security disability benefits were modified when the elderly tax credit (see Income Security, above) was expanded.

Veterans 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.

The interest on general obligations issued by State and local governments to finance housing for veterans is excluded from income subject to tax. However, there are restrictions on veterans mortgage subsidy bonds including limits on their issuance to preexisting State programs and amounts based upon previous volume levels. Furthermore, future issuance of these bonds is limited to veterans who served in active duty before 1977. This tax expenditure provision is unaffected by the sunset of mortgage subsidy bonds.

General government.—A 50 percent credit may be claimed for political contributions up to \$100 (\$200 for joint returns).

General purpose fiscal assistance.—Interest on State and local government debt is excluded from Federal taxation. Most of these bonds are owned by commercial banks and casualty and property insurance companies, but a substantial proportion is also held by individuals. As a result of the tax exemption, State and local governments can 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 securities to finance private activities, such as student loans, businesses, private nonprofit organizations, and housing, is classified elsewhere. Only the excluded interest on bonds for public purposes, such as schools, roads, and sewers, is included in this functional tax expenditure.

The deductibility of nonbusiness State and local taxes gives indirect assistance to these governments by reducing the costs of the services they provide and, thus, the burden on their taxpayers. The estimates shown here are primarily for the deductibility of State

and local income and sales taxes. The deductibility of property taxes on owner-occupied homes is classified under commerce and housing credit.

Under certain conditions, U.S. corporations receiving income from sources in a U.S. possession can claim a special tax credit equal to the U.S. tax, but only on income from such sources.

Interest.—The interest on U.S. savings bonds is not taxable until the bonds are redeemed, thereby deferring tax liability.

PROPOSED CHANGES IN TAX EXPENDITURES

In the current budget the Administration is proposing two new tax revisions that would create education related tax expenditures. If necessary, these proposals will be amended to reflect any changes in present law resulting from the enactment of the tax reform legislation.

Tuition Tax Credit.—The Administration proposes to provide taxpayers a nonrefundable credit of 50 percent of tuition expenses paid to private elementary and secondary schools for certain qualified dependents. The maximum credit allowable for each dependent phases up over time to a maximum of \$300 and phases out for taxpayers with adjusted gross incomes between \$40,000 and \$60,000. The proposed effective date is August 1, 1986.

Enactment of the tuition tax credit will result in a revenue loss of \$370 million in 1987. The corresponding outlay equivalent tax expenditure estimate is \$695 million in 1987.

Tax Incentives for Higher Education.—The Administration proposes to exclude from tax the earnings on savings deposited in special accounts that will be used to pay future higher education expenses of dependent children. The maximum annual contribution to these accounts will be \$1,000 per child. This maximum will be reduced 5 cents for each dollar that the taxpayer's adjusted gross income exceeds \$40,000, so that any taxpayer with adjusted gross income in excess of \$60,000 will be ineligible.

If enacted, the education savings account proposal is scheduled to become effective January 1, 1987 and would result in a revenue loss of \$35 million in 1987. The corresponding outlay equivalent tax expenditure is \$90 million in 1987.

Other Proposals.—A number of other tax revisions have been proposed by the Administration in previous budgets. If enacted, they would also qualify as new tax expenditures.

The Administration continues to support the three year extension of the currently expired credit for research and experimentation expenditures as well as the increase in the spousal IRA limit from \$2,250 to \$4,000. The two proposals are part of the President's May 1985 tax reform proposals to the Congress. None of the tax

reform proposals are included in the current budget because, in total, they are designed to be revenue neutral.

The Administration also continues to support a program for the development of economically distressed localities that would provide Federal regulatory and tax relief for targeted urban areas to encourage jobs and economic development. No specific proposal is included in the current budget, but the Administration plans to propose again an "enterprise zones" program once the tax reform legislation has been enacted.

Table G-1. OUTLAY EQUIVALENT ESTIMATES FOR TAX EXPENDITURES BY FUNCTION

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1985	1986	1987	1985	1986	1987
National defense:						
Exclusion of benefits and allowances to Armed Forces personnel				2,375	2,535	2,675
International affairs:						
Exclusion of income earned abroad by United States citizens				2,265	2,405	2,550
Deferral of income of domestic international sales corporations (DISC)	765					
Exclusion of income of foreign sales corporations (FSC)	750	1,550	1,765			
Deferral of income from controlled foreign corporations:						
Pre-1983 budget method	625	650	715			
Post-1982 budget method						
Total (after interactions) ¹	2,140	2,200	2,480	2,265	2,405	2,550
General science, space, and technology:						
Expensing of research and development expenditures:						
Pre-1983 budget method	3,570	2,795	2,735	160	130	125
Post-1982 budget method						
Credit for increasing research activities	2,390	1,225	515	40	20	10
Suspension of the allocation of research and experimentation expenditures	210	110				
Total (after interactions)	6,765	4,530	3,575	220	165	150
Energy:						
Expensing of exploration and development costs:						
Oil and gas	-300	-190	45	790	810	880
Other fuels	60	65	70			
Excess of percentage over cost depletion:						
Oil and gas	415	390	385	1,590	1,490	1,465
Other fuels	430	460	490	30	30	35
Capital gains treatment of royalties on coal	15	15	15	115	120	125
Exclusion of interest on State and local industrial development bonds for certain energy facilities	130	140	155			
Residential energy credits:						
Supply incentives				450	175	20
Conservation incentives				295	70	
Alternative, conservation and new technology credits:						
Supply incentives	215	120	70	170	70	10
Conservation incentives	*	*	*	*	*	*
Alternative fuel production credit	15	15	15			
Alcohol fuel credit ²	*	*	*			
Energy credit for intercity buses	15	5	*	*	*	*
Special rules for mining reclamation reserves	35	50	65	5	5	5
Total (after interactions)	730	760	930	2,445	1,965	1,805
Natural resources and environment:						
Expensing of exploration and development costs, nonfuel minerals	70	75	80	10	10	10
Excess of percentage over cost depletion, nonfuel minerals	440	460	485	25	25	30
Exclusion of interest on State and local IDBs for pollution control and sewage and waste disposal facilities	1,185	1,405	1,640			

Table G-1. OUTLAY EQUIVALENT ESTIMATES FOR TAX EXPENDITURES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1985	1986	1987	1985	1986	1987
Tax incentives for preservation of historic structures.....	140	180	235	290	370	480
Capital gains treatment of iron ore.....	*	*	*	30	30	30
Capital gains treatment of certain timber income.....	460	550	705	115	120	125
Investment credit and seven-year amortization for reforestation expenditures.....	40	45	50	10	10	15
Total (after interactions).....	1,565	1,820	2,140	470	555	675
Agriculture:						
Expensing of certain capital outlays.....	70	75	80	400	425	455
Capital gains treatment of certain income.....	55	65	75	720	755	795
Total (after interactions).....	115	130	145	1,040	1,095	1,165
Commerce and housing credit:						
Dividend exclusion.....				660	685	720
Exclusion of interest on small issue industrial development bonds.....	1,880	2,155	2,295			
Exemption of credit union income.....	345	375	405			
Excess bad debt reserves of financial institutions.....	-180	60	535			
Exclusion of interest on life insurance savings.....				5,020	5,370	5,720
Deductibility of interest on consumer credit.....				15,845	17,775	18,835
Deductibility of mortgage interest on owner-occupied homes.....				24,975	27,180	29,870
Deductibility of property tax on owner-occupied homes.....				9,395	10,145	10,955
Exclusion of interest on State and local housing bonds for owner-occupied housing.....				1,610	1,985	2,405
Exclusion of interest on State and local debt for rental housing.....				760	945	1,075
Capital gains (other than agriculture, timber, iron ore and coal).....	1,560	1,695	2,030	40,675	42,715	44,850
Deferral of capital gains on home sales.....				2,535	2,570	2,965
Exclusion of capital gains on home sales for persons age 55 and over.....				1,150	1,275	1,400
Carryover basis of capital gains at death.....				6,850	7,690	8,535
Investment credit, other than ESOP's, rehabilitation of structures, energy property, and reforestation expenditures.....	28,310	30,520	33,935	4,530	4,580	4,495
Accelerated depreciation on rental housing:						
Pre-1983 budget method.....	165	185	200	630	690	750
Post-1982 budget method.....						
Accelerated depreciation of buildings other than rental housing:						
Pre-1983 budget method.....	5,625	6,460	7,025	2,930	3,260	3,500
Post-1982 budget method.....						
Accelerated depreciation of machinery and equipment:						
Pre-1983 budget method.....	19,035	20,345	21,485	2,425	2,595	2,730
Post-1982 budget method.....						
Safe harbor leasing rules.....	2,640	2,245	1,850			
Amortization of start-up costs.....	40	35	35	310	295	270
Reinvestment of dividends in public utility stock.....				685	170	
Reduced rates on the first \$100,000 of corporate income:						
Pre-1983 budget method.....	9,245	9,805	11,115			
Post-1982 budget method.....						

Table G-1. OUTLAY EQUIVALENT ESTIMATES FOR TAX EXPENDITURES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1985	1986	1987	1985	1986	1987
Deductions for special percentage of taxable income for life insurance companies	1,335	1,425	1,515			*
Total (after interactions) ¹	70,565	75,915	83,105	117,420	128,715	137,685
Transportation:						
Deferral of tax on shipping companies	130	125	115			
Exclusion of interest on State and local government bonds for mass commuting vehicles	20	20	20			
Deduction for motor carrier operating rights	70	15		*	*	
Total (after interactions)	220	160	135	*	*	
Community and regional development:						
Five-year amortization for housing rehabilitation	30	30	30	40	45	50
Investment credit for rehabilitation of structures (other than historic)	185	195	220	160	170	190
Exclusion of interest on IDBs for airports, docks and sports and convention facilities	480	585	695			
Total (after interactions)	730	850	990	210	225	250
Education, training, employment, and social services:						
Exclusion of scholarship and fellowship income:						
Pre-1983 budget method				885	990	1,000
Post-1982 budget method						
Exclusion of interest on State and local student loan bonds				220	245	255
Exclusion of interest on State and local debt for private nonprofit educational facilities	145	175	215			
Parental personal exemption for students age 19 or over				1,120	1,230	1,360
Deductibility of charitable contributions (education)	410	445	495	955	1,155	1,100
Employer educational assistance				95	25	
Total education (after interactions) ¹	555	620	710	3,320	3,695	3,765
Exclusion of employer provided child care				20	25	40
Exclusion of employee meals and lodging (other than military)				885	975	1,075
Exclusion of contributions to prepaid legal services plans				60	15	
Investment credit for ESOPs	3,035	3,660	4,025			
Credit for child and dependent care expenses				3,700	4,020	4,325
Targeted jobs credit	360	350	45	125	70	20
Deduction for two earner married couples				6,795	7,420	8,255
Total training and employment (after interactions)	3,395	4,010	4,070	9,950	11,145	13,855
Deductibility of charitable contributions, other than education and health	510	555	620	9,870	11,965	11,380
Deduction for certain adoption expenses				*	*	*
Exclusion of parsonage allowances				170	175	185
Total social services, (after interactions)	510	555	620	10,040	12,140	11,565
Grand total (after interactions) ¹	4,460	5,185	5,400	23,310	26,980	29,185
Health:						
Exclusion of employer contributions for medical insurance premiums and medical care				28,025	31,285	35,050
Deductibility of medical expenses				3,640	3,825	3,965
Exclusion of interest on State and local debt for private nonprofit health facilities	1,280	1,595	1,945			

Table G-1. OUTLAY EQUIVALENT ESTIMATES FOR TAX EXPENDITURES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1985	1986	1987	1985	1986	1987
Deductibility of charitable contributions (health)	250	275	305	1,390	1,690	1,605
Tax credit for orphan drug research	*	*	*			
Total (after interactions)	1,530	1,870	2,250	33,055	36,800	40,620
Income security:						
Exclusion of railroad retirement system benefits				445	455	460
Exclusion of workmen's compensation benefits				2,325	2,500	2,685
Exclusion of public assistance benefits:						
Pre-1983 budget method				545	580	605
Post-1982 budget method						
Exclusion of special benefits for disabled coal miners				150	145	145
Exclusion of untaxed unemployment insurance benefits				1,115	995	940
Exclusion of military disability pensions				120	125	125
Net exclusion of pension contributions and earnings:						
Employer plans				71,065	78,190	86,755
Individual Retirement Accounts				18,685	21,090	22,925
Keogh plans				3,385	3,730	4,140
Exclusion of other employee benefits:						
Premiums on group term life insurance				2,765	2,990	3,225
Premiums on accident and disability insurance				175	170	175
Income of trusts to finance supplementary unemployment benefits				20	30	30
Additional exemption for the blind				35	40	40
Additional exemption for elderly				3,040	3,340	3,675
Tax credit for the elderly and disabled				110	110	115
Deductibility of casualty losses				295	335	375
Earned income credit ^a				345	330	300
Total (after interactions) ¹				102,780	113,135	124,465
Social Security:						
Exclusion of social security benefits:						
Disability insurance benefits				1,170	1,200	1,220
OASI benefits for retired workers				12,895	13,440	14,070
Benefits for dependents and survivors				3,765	3,960	4,180
Total (after interactions)				17,830	18,600	19,470
Veterans benefits and services:						
Exclusion of veterans disability compensation				1,700	1,735	1,775
Exclusion of veterans pensions				190	190	190
Exclusion of GI bill benefits				105	85	80
Excluding of interest on state and local debt for veterans housing				255	275	295
Total (after interactions)				2,250	2,285	2,340
General government:						
Credits and deductions for political contributions				270	290	310
General purpose fiscal assistance:						
Exclusion of interest on public purpose State and local debt	1,500	1,660	1,835	5,980	6,635	7,325
Deductibility of nonbusiness State and local taxes other than on owner-occupied homes				21,635	23,365	25,225
Tax credit for corporations receiving income from doing business in United States possessions	2,765	3,040	3,345			
Total (after interactions)	4,265	4,700	5,180	27,615	30,000	32,550

Table G-1. OUTLAY EQUIVALENT ESTIMATES FOR TAX EXPENDITURES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1985	1986	1987	1985	1986	1987
Interest:						
Deferral of interest on savings bonds.....				700	720	735

* \$2.5 million or less. All estimates have been rounded to the nearest \$5 million.

¹ Totals include only pre-1983 budget method.² In addition, the exemption from the excise tax for alcohol fuels results in a reduction in excise tax receipts of \$375 million in 1985, \$455 million in 1986, and \$530 million in 1987.³ The figures in the table indicate the tax subsidies provided by the earned income tax credit. The effect on outlays is: 1985, \$1,100 million; 1986, \$1,283 million; 1987, \$1,228 million.

REVENUE LOSS ESTIMATES FOR TAX EXPENDITURES

Table G-2 shows the estimated revenue loss associated with each tax subsidy item for which an outlay equivalent estimate was provided in table G-1. As explained in the text under the heading "Measuring Tax Expenditures," revenue loss estimates do not take into account the additional resources (if any) that would be required to provide the same after-tax incentive if the expenditure program were administered as a direct outlay rather than through the tax system. As was also previously explained, these revenue loss estimates are not equivalent to estimates of the increase in Federal receipts that would accompany the repeal of tax expenditure provisions.

Table G-2. REVENUE LOSS ESTIMATES FOR TAX EXPENDITURES BY FUNCTION

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1985	1986	1987	1985	1986	1987
National defense:						
Exclusion of benefits and allowances to Armed Forces personnel				1,955	2,095	2,210
International affairs:						
Exclusion of income earned abroad by United States citizens				1,405	1,490	1,580
Deferral of income of domestic international sales corporations (DISC)	460					
Exclusion of income of foreign sales corporations (FSC)	450	930	1,030			
Deferral of income from controlled foreign corporations:						
Pre-1983 budget method	375	390	430			
Post-1982 budget method						
General science, space, and technology:						
Expensing of research and development expenditures:						
Pre-1983 budget method	3,430	3,205	2,625	160	130	125
Post-1982 budget method						
Credit for increasing research activities	1,640	1,030	400	25	20	5
Suspension of the allocation of research and experimentation expenditures	125	65				
Energy:						
Expensing of exploration and development costs:						
Oil and gas	-240	-235	15	825	790	850
Other fuels	40	45	45			
Excess of percentage over cost depletion:						
Oil and gas	300	280	275	1,055	990	950
Other fuels	310	330	350	20	20	20
Capital gains treatment of royalties on coal	10	10	10	90	90	95
Exclusion of interest on State and local industrial development bonds for certain energy facilities ..	-30	-40	-45	175	195	215
Residential energy credits:						
Supply incentives				330	315	55
Conservation incentives				245	190	

Table G-2. REVENUE LOSS ESTIMATES FOR TAX EXPENDITURES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1985	1986	1987	1985	1986	1987
Alternative, conservation and new technology credits:						
Supply incentives	175	110	60	95	45	5
Conservation incentives	*	*	*	*	*	*
Alternative fuel production credit	10	10	10	*	*	*
Alcohol fuel credit ¹	*	*	*	10	10	10
Energy credit for intercity buses	10	5	5	*	*	*
Special rules for mining reclamation reserves	35	45	55	5	5	5
Natural resources and environment:						
Expensing of exploration and development costs, nonfuel minerals	50	50	55	5	5	5
Excess of percentage over cost depletion, nonfuel minerals	315	330	350	15	15	20
Exclusion of interest on State and local IDBs for pollution control and sewage and waste disposal facilities	-280	-435	-570	1,530	1,955	2,310
Tax incentives for preservation of historic structures	110	140	185	215	275	355
Capital gains treatment of iron ore	*	*	*	20	20	20
Capital gains treatment of certain timber income	265	320	400	85	90	90
Investment credit and seven-year amortization for reforestation expenditures	20	20	20	*	5	5
Agriculture:						
Expensing of certain capital outlays	70	75	80	400	425	455
Capital gains treatment of certain income	30	35	40	575	605	635
Commerce and housing credit:						
Dividend exclusion				475	495	515
Exclusion of interest on small issue industrial development bonds	-470	-640	-780	2,645	3,135	3,475
Exemption of credit union income	220	240	260			
Excess bad debt reserves of financial institutions	-115	35	330			
Exclusion of interest on life insurance savings				3,915	3,655	3,415
Deductibility of interest on consumer credit				15,530	17,600	18,735
Deductibility of mortgage interest on owner-occupied homes				24,785	26,920	29,560
Deductibility of property tax on owner-occupied homes				9,315	10,060	10,865
Exclusion of interest on State and local housing bonds for owner-occupied housing	425	515	605	1,260	1,545	1,820
Exclusion of interest on State and local debt for rental housing	205	255	285	550	685	780
Capital gains (other than agriculture, timber, iron ore and coal)	1,540	1,675	1,710	25,885	27,185	28,550
Deferral of capital gains on home sales				1,775	1,935	20,090
Exclusion of capital gains on home sales for persons age 55 and over				830	910	990
Carryover basis of capital gains at death				4,355	4,940	5,530
Investment credit, other than ESOP's, rehabilitation of structures, energy property, and reforestation expenditures	21,315	22,315	24,505	3,130	3,210	3,230
Accelerated depreciation on rental housing:						
Pre-1983 budget method	165	185	200	635	700	760
Post-1982 budget method						

Table G-2. REVENUE LOSS ESTIMATES FOR TAX EXPENDITURES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1985	1986	1987	1985	1986	1987
Accelerated depreciation of build- ings other than rental housing:						
Pre-1983 budget method.....	5,420	6,365	6,945	2,590	3,165	3,375
Post-1982 budget method.....						
Accelerated depreciation of machin- ery and equipment:						
Pre-1983 budget method.....	18,105	20,395	21,240	2,040	2,630	2,645
Post-1982 budget method.....						
Safe harbor leasing rules.....	2,340	1,990	1,640			
Amortization of start-up costs.....	25	25	20	210	220	200
Reinvestment of dividends in public utility stock.....				450	280	
Reduced rates on the first \$100,000 of corporate income:						
Pre-1983 budget method.....	5,015	5,225	5,885			
Post-1982 budget method.....						
Deduction for special percentage of taxable income for life insurance companies.....	790	845	900			
Transportation:						
Deferral of tax on shipping companies.....	130	30	120			
Exclusion of interest on State and local bonds for mass commuting vehicles.....	-5	-5	-5	55	50	45
Deduction for motor carrier operating rights.....	50	15	5	5	5	
Community and regional development:						
Five-year amortization for housing rehabilitation.....	30	30	30	40	45	50
Investment credit for rehabilitation of structures (other than historic).....	185	196	215	160	165	180
Exclusion of interest on IDBs for airports, docks and sports and convention facilities.....	525	670	795	-60	-95	-125
Education, training, employment, and social serv- ices:						
Exclusion of scholarship and fellowship income:						
Pre-1983 budget method.....				860	960	995
Post-1982 budget method.....						
Exclusion of interest on State and local student loan bonds.....	65	70	75	225	245	255
Exclusion of interest on State and local debt for private nonprofit educational facilities.....	5	5	5	150	185	220
Parental personal exemption for students age 19 or over.....				1,110	1,215	1,345
Deductibility of charitable contributions (educa- tion).....	410	440	490	935	1,130	1,115
Employer educational assistance.....				110	25	
Exclusion of employer provided child care.....				15	25	30
Exclusion of employee meals and lodging (other than military).....				795	870	955
Exclusion of contributions to prepaid legal services plans.....				40	15	
Investment credit for ESOPs.....	1,890	2,325	2,585			
Credit for child and dependent care expenses.....				2,700	3,030	3,235
Targeted jobs credit.....	360	350	245	80	50	15
Deduction for two earner married couples.....				6,725	7,350	8,155
Deductibility of charitable contributions, other than education and health.....	505	545	610	9,670	11,730	11,545
Deductions for certain adoption expenses.....				*	*	*

Table G-2. REVENUE LOSS ESTIMATES FOR TAX EXPENDITURES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1985	1986	1987	1985	1986	1987
Exclusion of parsonage allowances				130	140	150
Health:						
Exclusion of employer contributions for medical insurance premiums and medical care				21,095	23,510	26,345
Deductibility of medical expenses				3,620	3,805	3,950
Exclusion of interest on State and local debt for private nonprofit health facilities	45	45	35	1,360	1,665	1,970
Deductibility of charitable contributions (health)	250	270	300	1,365	1,655	1,630
Tax credit for orphan drug research	*	*	*			
Income security:						
Exclusion of railroad retirement system benefits				445	455	465
Exclusion of workmen's compensation benefits				2,225	2,390	2,570
Exclusion of public assistance benefits:						
Pre-1983 budget method				545	580	605
Post-1982 budget method						
Exclusion of special benefits for disabled coal miners				150	145	145
Exclusion of untaxed unemployment insurance benefits				1,112	1,005	945
Exclusion of military disability pensions				120	125	125
Net exclusion of pension contributions and earnings:						
Employer plans				48,525	53,365	59,195
Individual Retirement Accounts				12,695	14,365	15,885
Keoghs				1,960	2,135	2,365
Exclusion of other employee benefits:						
Premiums on group term life insurance				2,055	2,220	2,395
Premiums on accident and disability insurance				125	125	130
Income of trusts to finance supplementary unemployment benefits				20	30	30
Additional exemption for the blind				35	40	40
Additional exemption for elderly				3,005	3,305	3,640
Tax credit for the elderly and disabled				110	110	115
Deductibility of casualty losses				230	255	290
Earned income credit ²				285	310	285
Social Security:						
Exclusion of social security benefits:						
Disability insurance benefits				1,170	1,205	1,230
OASI benefits for retired workers				12,955	13,515	14,145
Benefits for dependents and survivors				3,755	3,950	4,170
Veterans benefits and services:						
Exclusion of veterans disability compensation				1,695	1,730	1,770
Exclusion of veterans pensions				190	190	190
Exclusion of GI bill benefits				105	90	85
Exclusion of interest on State and local debt for veterans housing	65	70	75	190	215	225
General government:						
Credits and deductions for political contributions				260	275	295
General purpose fiscal assistance:						
Exclusion of interest on public purpose State and local debt	1,645	1,810	1,950	6,415	7,085	7,670
Deductibility of nonbusiness State and local taxes other than on owner-occupied homes				21,455	23,170	25,025

Table G-2. REVENUE LOSS ESTIMATES FOR TAX EXPENDITURES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1985	1986	1987	1985	1986	1987
Tax credit for corporations receiving income from doing business in United States possessions.....	1,660	1,825	2,010	.....	.....	.....
Interest:						
Deferral of interest on savings bonds.....	.....	.....	.....	690	710	725

* \$2.5 million or less. All estimates have been rounded to the nearest \$5 million.

¹ In addition, the exemption from the excise tax for alcohol fuels results in a reduction in excise tax receipts of \$375 million in 1985, \$455 million in 1986, and \$530 million in 1987.² The figures in the table indicate the effect of the earned income tax credit on receipts. The effect on outlays is: 1985, \$1,100 million; 1986, \$1,283 million; 1987, \$1,228 million.

SPECIAL ANALYSIS H

FEDERAL AID TO STATE AND LOCAL GOVERNMENTS ¹

State and local governments have a vital constitutional role in providing government services. The Federal Government contributes directly toward that role both by promoting a healthy economy and by providing grants, loans, and tax subsidies to State and local governments.

Federal policies designed to improve the economy contribute significantly to the fiscal health of the State and local sector. State and local governments have benefited significantly from the national economic recovery over the past 3 years. Decreases in the deficit and reductions in Federal spending are essential to continued long-term economic growth.

Federal grants help State and local governments finance programs covering most areas of domestic public spending, including income support, capital spending, and other assistance. Federal grant-in-aid outlays, which are estimated to be \$108.8 billion in 1986, are projected to decline to \$99.1 billion in 1987. These reductions reflect the administration's efforts to restrain Federal spending and to reduce Federal involvement in activities that are primarily State and local responsibilities.

The major proposals affecting grants-in-aid in the 1987 *Budget* include program reforms, management reforms, reductions, and terminations. The major reforms include:

- a new transportation block grant proposal for local highway and transit facilities. This would be financed by part of the Federal tax on gasoline. The administration is proposing \$3.3 billion in budget authority for the block grant in 1987.
- expansion of the primary health care block grant to include narrow categorical programs for black lung clinics, migrant health, and family planning.
- consolidation of seven environmental programs into a pollution control block grant. The purpose of this consolidation is to enhance the ability of State policy makers to administer

¹ Federal aid to State and local governments is defined as the provision of resources by the Federal Government to support a State or local program of governmental service to the public. The three primary forms of aid are grants-in-aid (including shared revenues), loans, and tax expenditures. All data in this Special Analysis include the effects of the 1986 automatic reductions associated with the Balanced Budget and Emergency Deficit Control Act of 1985 (Gramm-Rudman-Hollings). For a discussion of the technical aspects of this legislation, see Part 6b, "The Budget System and Concepts" in *The Budget of the United States Government: Fiscal Year 1987*.

these programs in an efficient manner, and to increase State flexibility.

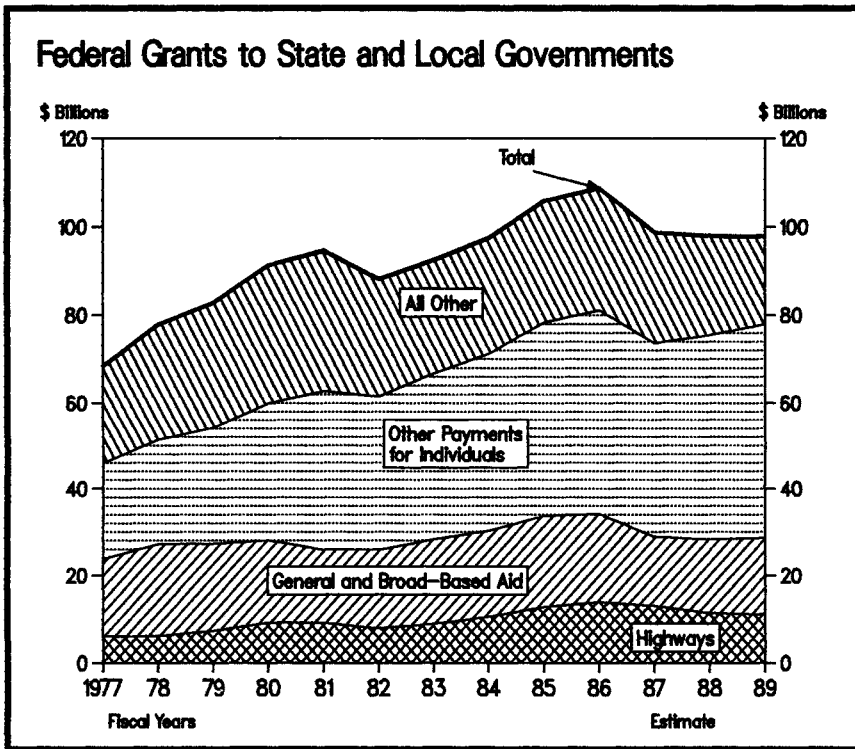
- reforms in the Federal payment for State administrative expenses associated with the medicaid, food stamps, and aid to families with dependent children (AFDC) programs. Generally, a uniform 50% matching rate for all types of administrative costs would be phased in over several years, replacing the complicated and disparate set of matching rates now in place for various types of State overhead costs. Similar changes are proposed for computer-related funding in the child support enforcement program.

The administration is also proposing reductions or terminations of grant programs that are unnecessary, ineffective, or an inappropriate use of Federal funds. These proposals are motivated both by the need to reduce the Federal deficit and by a fundamental conviction about the proper relationship between Federal, State and local governments. The major reductions or terminations include:

- general revenue sharing outlays after 1986. Local governments have decreased their reliance on inelastic and regressive revenue sources and most are able to finance their own public services. In the current fiscal environment, Federal revenues must be used to support national needs and priorities.
- medicaid reforms that would reduce outlays more than \$1.0 billion from projected 1987 current services levels. In subsequent years, growth in Federal payments would be limited to the rate of increase in prices in the medical sector.
- large reductions for mass transit programs. These proposals reflect the administration's belief that it is inappropriate to spend general tax dollars on activities that provide mainly local benefits. The penny gas tax for mass transit activities will continue to be used to fund part of the proposed transportation block grant.
- termination of urban development action grants and economic development assistance in order to reduce direct Federal intervention in the economic decisions of firms and individuals.
- elimination of the work incentive program because it is ineffective and because better programs to train welfare recipients are available under the Job Training Partnership Act.
- termination of the community services block grant. Activities carried out under this program can be funded by the social services block grant.
- sharing timber and mineral receipts on a net rather than a gross basis, in order to discourage production when costs exceed receipts.

In addition, State administrative costs for unemployment compensation and the employment service are financed by a Federal tax on employers. States have raised questions about equity in allocating resources among States, lack of flexibility resulting from highly specific allocations for administering unemployment compensation, and the adequacy of resources for certain activities. The administration is soliciting the views of interested parties about the full range of options to provide States with increased authority, flexibility, and responsibility for unemployment compensation and the administrative effectiveness and financing of the employment service.

The chart below shows trends in outlays in major grant categories from 1977 to 1989. Grants for payments for individuals are estimated to be 53% of total grants by 1989.



Federal direct lending and loan guarantees to State and local governments are an additional source of Federal aid. Federal loans are used by States and localities for many purposes, including housing construction and rehabilitation, land and water resource

development, and education. In 1987, the administration is proposing to disburse \$2.4 billion in new loans to State and local governments. New guaranteed loans are estimated to be \$0.2 billion in 1987.

The two major State and local tax expenditures are the deductibility of most State and local taxes and the exclusion of interest on State and local securities from Federal taxation. Federal aid to State and local governments through tax expenditures is estimated to be \$46.0 billion in 1987.

HIGHLIGHTS OF THE FEDERAL AID PROGRAM

This section provides an overview of the Federal aid program proposed for 1987. Shown first are major differences between actual grant outlays in 1985 and estimated levels for 1986 and 1987. This presentation is followed by a more detailed description of proposals for specific grant programs and a discussion of proposed levels of Federal aid through loans and tax expenditures.

Table H-1 shows changes in grant outlays between 1985 and 1986 and between 1986 and 1987. These changes are divided into three categories: payments for individuals, grants for capital spending, and all other grants.

Between 1985 and 1986, the largest outlay increases are for medicaid, which increases an estimated \$2.0 billion, and capital spending for highways, which increases an estimated \$1.0 billion.

Between 1986 and 1987, the largest decrease is for the elimination of general revenue sharing, which is estimated to have \$4.4 billion in outlays in 1986.

Energy, natural resources, environment, and agriculture.—The administration is proposing to consolidate seven environmental programs into a *pollution control block grant*. The seven programs include air and water quality, drinking water, underground injection control, toxic substances enforcement, pesticides, and hazardous waste. Proposed budget authority for the new pollution control block grants and the hazardous waste program is \$270 million for 1987. Due to the rapid increase in requirements resulting from the 1984 amendments to the Resource Conservation and Recovery Act of 1976, as amended, \$73 million will be designated for the hazardous waste program in 1987. This program will become part of the block grant in 1988. The block grant is designed to:

- simplify and reduce reporting and administrative requirements;
- increase State control over the way in which national environmental standards are met;
- enhance State accountability to its citizens and local governments; and

Table H-1. **FEDERAL GRANT-IN-AID CHANGES, 1985-87**

(In billions of dollars)

	Outlays
Total grants, 1985 actual	105.9
Changes:	
Payments for individuals:	
Medicaid	2.0
Assistance payments program (AFDC)	0.4
Other	-0.2
Subtotal, payments for individuals	2.3
Capital spending:	
Highway programs	1.0
Mass transit	0.8
Other	-0.2
Subtotal, capital spending	1.6
Other programs:	
Mass transit	-0.6
Food donations (CCC)	-0.5
Other	0.2
Subtotal, other programs	-1.0
Total grants, 1986 estimate	108.8
Changes:	
Payments for individuals:	
Housing programs	-1.0
Assistance payments program (AFDC)	-0.9
Other	-0.1
Subtotal, payments for individuals	-2.0
Capital spending:	
Highway programs	-0.5
Sewage treatment plants	-0.4
Community development block grants	-0.5
Mass transit	-0.3
Other	-0.2
Subtotal, capital spending	-1.9
Other programs:	
General revenue sharing	-4.4
Social services	-0.3
Training and employment	-0.5
Other	-0.6
Subtotal, other programs	-5.8
Total grants, 1987 estimate	99.1

- increase State flexibility to address high priority, local concerns by allowing States to shift resources among various environmental categories.

State and local *energy conservation grants* administered by the Department of Energy are used to weatherize school buildings, hospitals, and the homes of low-income individuals. Grants are also available to help States develop energy conservation programs. The administration proposes to terminate funding for these programs

in 1987. The significant energy and dollar savings from conservation projects in schools and hospitals provide sufficient incentive for these institutions to finance such projects without additional Federal assistance. State energy planning and extension activities are a State responsibility that should be supported at the State level. Federal assistance to low-income households for energy conservation and heating expenses would continue through the Department of Health and Human Services. In addition, it is expected that funds will be made available directly to States as part of the resolution of cases involving petroleum pricing violations under the expired oil price control program. Although these funds may be used to help finance energy-related activities, they are not part of the Federal budget and therefore are not counted as grants-in-aid.

The budget authority request in 1987 for grants from the *abandoned mine reclamation fund* is \$151 million, about the same as the 1986 level. Approximately 225 projects in 22 States will be financed by the 1987 request.

Outlays for *sport fish restoration* grants are estimated to increase from \$88 million in 1986 to \$122 million in 1987 due to motor boat fuel taxes, additional excise taxes, and customs duties added by the Deficit Reduction Act of 1984.

Funding is not proposed for 1987 for grants to State governments for recreation land acquisition and development and for historic preservation administration, a reduction of \$73 million from 1986 appropriated levels. These activities are best funded at the State level in accordance with State needs and priorities.

The Environmental Protection Agency *construction grants program* was created to help State and local governments build municipal wastewater treatment systems. The original objective of this program—to reduce the pollution from municipal waste—has largely been met with the assistance that has been provided since 1972. For 1987, the administration will request \$1.8 billion in budget authority after authorization to phase out the program by 1990 has been enacted. Outlays are estimated to be \$2.4 billion in 1987, largely from prior year commitments. In the future, communities will be expected to finance waste treatment facilities from their own sources and assistance that State governments may provide.

The *hazardous substance response trust fund* pays for the cleanup of abandoned hazardous waste sites and chemical spills. Budget authority of \$301 million has been requested in 1987 for site specific cooperative agreements with States. This funding level, which is \$76 million above the 1986 level, should finance the cleanup of 32 sites in 1987. Cooperative agreements with States are one component of a total Federal-State superfund program that will be funded at approximately \$1.1 billion per year over the next 5 years.

The *Extension Service* makes formula and project grants to States to provide out-of-school education in agriculture and other subjects at State and local levels. The 1987 budget proposes to reduce budget authority for these grants to \$140 million, \$188 million below the 1986 level. Funds for projects unrelated to farming or conservation, such as for cooking or homemaking, will no longer be provided.

Transportation.—The major initiative in the transportation area is a proposed new *transportation block grant* to States and large urban areas for local roads, bridges, and transit systems. Grants will be distributed by formula and can be used without prior Federal project approval on highway or capital transit projects in any locality, and for transit operating expenses in small urban and rural areas. Proposed budget authority for the block grant for 1987 is \$3.3 billion, which includes \$2.2 billion from the highway trust fund and \$1.1 billion from mass transit funds, primarily the penny tax on gasoline dedicated to mass transit.

The *Federal-aid highway program* helps fund the Interstate highway system, other primary highways, bridges, and rural and urban highways. The administration is proposing to reauthorize the highway programs for 1987-90 at \$12.6 billion of budget authority per year, which is \$1.9 billion below the 1986 budget authority level. At this lower level, the highway program would be funded only by current year highway user fees. To help maintain the highway program within available receipts, an obligation limitation of \$12.4 billion is requested in 1987. The budget reduction will be implemented largely by restructuring the Interstate completion program. Of the \$12.6 billion request, \$2.2 billion is for the new block grant and \$7.8 billion is proposed for new construction or rehabilitation of the Interstate and primary systems, depending on States' needs.

The administration proposes budget authority of \$110 million in 1987 for *highway traffic safety grants* to States, a reduction of \$16 million from 1986. These grants supplement State highway safety programs and support Federal truck safety standards, highway safety, and alcohol education programs. The reduced level reflects the expiration of the special grants for computerized State traffic recordkeeping systems and inclusion of the motor carrier safety grant program within the highway trust fund, and not as a separate authorization.

Except for funding for the transportation block grant, the administration is proposing no new funding for general *mass transit* programs. This results in a decrease of \$2.0 billion in budget authority from 1986 levels. These changes reflect the administration's belief that mass transportation is a local responsibility since these activities provide mainly local benefits. Localities should not pass

on a portion of their costs to taxpayers who neither benefit from the services nor have any influence on their costs. However, as long as the Federal Government continues to collect the one-cent gas tax for transit, there remains a legitimate Federal role in managing and allocating these receipts.

The proposed limit on obligations for *grants-in-aid for airports* for 1987 is \$712 million. Although this spending level is almost \$300 million less than the amount authorized, little impact on airport development is expected because large airports are in a strong financial situation and can finance their expansion needs with little or no Federal aid. Projects that improve airport safety, increase airport capacity, or reduce noise will receive the highest priority for funding in 1987.

Community and regional development.—The *community development block grant program* (CDBG) provides flexible community and economic development support to cities, counties, Indian tribes, and U.S. territories. The administration proposes to defer \$500 million of 1986 budget authority to 1987. This would make about \$2.6 billion available in both 1986 and 1987. The administration also proposes to change the statutory distribution of these funds between urban and rural areas from 70%-30% to 65%-35%. This change will increase the resources available to rural areas currently served by the Farmer's Home Administration's rural development programs that are proposed for reductions in 1987.

The administration proposes to terminate the *urban development action grants* program in 1987 and rescind \$234 million of the 1986 appropriation. This proposal is consistent with the Government-wide effort to reduce local economic development subsidies and reduce excessive Federal intervention in the economic decisions of firms and individuals. Cities may use CDBG resources for economic development projects.

In 1983, the administration proposed and Congress enacted, the *rental rehabilitation grant program* to help States and localities rehabilitate properties for low-income renters. This program was intended for communities that do not have enough standard quality low- and moderate-income housing to support a rental voucher program. The \$300 million in budget authority made available for this program since 1983 will allow the Federal Government to subsidize up to half the cost of rehabilitating an estimated 60,000 rental housing units by the end of 1986. Because State and local governments and other Federal programs (such as the CDBG program) can support the same services as the rental rehabilitation grants program, the administration is proposing to rescind the 1986 appropriation and terminate this program.

Congress enacted a second grant program in 1983 to subsidize the construction or substantial rehabilitation of rental housing in low-

and moderate-income neighborhoods with shortages of rental housing. The *rental development grant program*, which was funded on a demonstration basis through 1985, is not proposed to be extended in this budget. New housing construction is an expensive means of housing the poor compared to approaches that utilize existing housing, such as the housing voucher programs supported by the administration.

The administration is not requesting funds in 1987 for the *economic development assistance programs* administered by the Economic Development Administration (EDA). The budget also proposes to rescind some unobligated funds in 1986 and use the remainder to close the agency. There is no evidence that categorical EDA project grants create net employment gains for the Nation. Instead, they keep resources in unproductive areas and industries. Funds for State and local community and economic development are available in 1987 through the community development block grant program.

Programs administered by the *Appalachian Regional Commission* (ARC) are intended to promote economic development of the 13-State Appalachian region. Both the Commission and its programs are proposed to be terminated in 1987. The budget also proposes to rescind uncommitted funds in 1986. This proposal reflects the administration's policy to rely on the private sector to provide the major stimulus for economic development. Moreover, continuing the regionally targeted ARC programs can no longer be justified with the economic growth that has occurred in the Appalachian region.

Education.—Budget authority requested for the *State education block grant* for 1987 is \$500 million, about the same as the 1986 level. This block grant provides States and localities with resources that can be used for a wide variety of educational purposes.

Major education grants for persons with special needs include *compensatory education, education for the handicapped, vocational and adult education, bilingual education, and Indian education*. The 1987 budget authority request for these activities is \$5.5 billion, about the same as the 1986 level. Proposed budget authority for 1987 for vocational and adult education is \$503 million, \$184 million below the 1986 level. The administration proposes to redirect the funds for the vocational education basic grant to support only programs for the disadvantaged, the handicapped, and other special groups. Legislation has been proposed to allow parents of children served by Chapter 1 compensatory education services to use Federal funds to obtain educational services in public or private schools.

Impact aid payments compensate school districts for educating children whose parents live and work on Federal property. The

payments also provide assistance for certain construction needs. Budget authority of \$548 million is requested for 1987. Aid for districts with children who live and whose parents work on Federal property is proposed at about the 1986 level. No funds are proposed for compensation where the children impose little or no burden on school districts.

Training and employment.—Budget authority proposed for *basic State grants* under the Job Training Partnership Act of 1982 (JTPA) is \$1.8 billion in 1987. States have considerable discretion in using these funds to prepare youth, welfare recipients, and other unskilled adults for employment.

The *summer youth employment* program finances minimum-wage public sector jobs for youth between the ages of 14 and 21. The formula for distributing these grants unexpectedly increased resources to localities with less severe summer unemployment problems among disadvantaged youth. Therefore, the administration proposes to modify the method for distributing these funds so that they will be directed to the areas with the greatest need. Moreover, the administration also proposes to rescind \$208 million from the amount enacted for the summer of 1987 and to maintain the resulting \$428 million for the summer of 1988.

For the *dislocated worker program*, the administration proposes a supplemental appropriation of \$74 million for 1986, for total resources of \$170 million to assist workers that have been displaced by economic shocks. For 1987, budget authority of \$100 million is proposed, which will be available for helping workers in those locations where significant economic dislocations indicate that workers could not get new jobs without help.

No budget authority is requested in 1987 for the *work incentive (WIN) program*. The program has not proven to be cost effective and is no longer necessary since JTPA block grant funds must be used to train welfare recipients for jobs. In addition, changes are proposed in the AFDC and food stamp programs to expand opportunities for employment.

Grant outlays for the *Federal-State employment service* are estimated to be \$921 million in 1987, compared to an estimated \$955 million in 1986. As discussed at the beginning of this Special Analysis, the administration is soliciting views on options for increasing the States' role in this program.

Social services.—Budget authority requested for the *social service block grant* is \$2.7 billion for 1987, \$116 million more than the level proposed for 1986. Child day care, foster care, child protective service, preparation and delivery of meals, and legal services are some examples of social services offered by the States. In addition, States may transfer up to 10% of their social services allotment to

block grants that support health services, health promotion, or low-income housing assistance.

The administration proposes to terminate in 1987 the *community services block grant program*. States have the discretion to fund community services activities under the social services block grant.

Grants for *vocational rehabilitation services* help physically and mentally disabled persons become gainfully employed and live more independently. The administration is proposing \$1.1 billion of budget authority for 1987 for this program, about the same as for 1986.

In 1987, budget authority of \$808 million is requested for foster care, adoption assistance, child welfare services, and child welfare training programs. These *family social services* support State efforts to reunite children with their families or to place them promptly in adoptive homes. The administration continues to support its legislative proposal for modifications in the foster care system to encourage States to reduce the duration and incidence of foster care placements.

Grants for *human development services* supplement State, local, and nonprofit efforts to improve the quality of life for low-income, neglected, abused, or homeless children, and for elderly people and other special groups. The largest program for children is Head Start, which helps local community groups provide child development programs for low-income preschool children. The 1987 budget authority request for these programs is \$1.9 billion. This funding will allow the Head Start program to maintain its current enrollment of 448,000 children in 1987. To give States greater flexibility in addressing the related issues of child abuse and family violence, three existing categorical programs are proposed to be consolidated into a new family crisis and protective services program. Budget authority of \$30 million is requested for this program in 1987.

Health.—The *medicaid program* continues to be the largest grant-in-aid. This program supports State and local efforts to provide health services to low-income residents. Almost half of the spending is to help finance the costs of nursing homes for the low-income elderly and disabled. For 1987, medicaid outlays are estimated to be \$24.7 billion, more than \$1 billion below the current services level. The savings result in part from increased program flexibility that will help States reduce costs and in part from proposed reforms of Federal funding for administrative costs, described at the beginning of this Special Analysis. In subsequent years, the Federal payment would be limited to increases in the consumer price index for medical costs.

Budget authority of \$1.6 billion is requested in 1987 for the four *health block grants*: maternal and child health; preventive health and health services; alcohol, drug abuse, and mental health; and

primary care. The \$235 million increase over the 1986 proposed level in part reflects an administration proposal to expand the primary care block grant to include three narrow categorical programs for black lung clinics, migrant health, and family planning.

Administration of unemployment compensation.—Grants for the administration of the unemployment compensation program, which provides income to eligible unemployed workers, are financed by a Federal tax on employers. Outlays for this grant are estimated to be \$1.7 billion in 1987. As discussed at the beginning of this Special Analysis, the administration is soliciting views on options for increasing the authority and responsibility of the States for this program.

Housing assistance.—Outlays for the grant portion of the *subsidized housing program* are estimated to be \$3.9 billion in 1987. The administration is proposing that \$2.3 billion of 1986 budget authority be deferred to 1987, with no additional request for 1987. Grant outlays under this program include those for public and Indian housing and for the voucher, existing housing, moderate rehabilitation, and State-sponsored new construction programs funded under Section 8 of the Housing Act of 1937. The administration is proposing 50,000 new housing voucher units per year beginning in 1986, adding to an estimated HUD inventory of about 4 million households served. Of the many initiatives proposed for this account, the most important with respect to State and local governments is the proposal to require these governments to pay half of the administrative costs for the Section 8 existing and housing voucher programs. This reform will bring housing assistance programs more closely in line with the treatment of administrative costs for other low-income assistance programs like the AFDC and food stamp programs.

Budget authority of \$1.2 billion is requested for *payments for the operation of low-income housing*. These payments are used to subsidize operating costs for approximately 1.4 million low-rent public and Indian housing units. This request assumes no growth in personnel and related expenses, but allows for inflation adjustments for utility expenses that are generally beyond the housing authorities ability to control.

Food and nutrition assistance.—Outlays for the Federal share of State *administrative expenses for the food stamp program* are estimated to be \$1.0 billion in 1987. Reforms proposed for these expenses are described at the beginning of this Special Analysis.

Child nutrition programs subsidize meals for children in schools, child care facilities, and other institutional settings. Approximately 12.7 million children will receive federally subsidized meals in

1987. The administration proposes to redirect Federal spending for school lunch and breakfast programs and child care facilities to children from lower income families, discontinuing meal subsidies for upper income students. Budget authority proposed for the program in 1987 is \$3.4 billion, a reduction of \$0.2 billion from the 1986 level.

The special supplemental food program for *women, infants, and children* provides nutritious food supplements monthly to prevent health problems associated with inadequate diets during critical stages of child development. The program will serve approximately 3 million low-income women and children each month in 1987. The budget authority requested for this program is \$1.6 billion in 1987, \$57 million above the 1986 level.

The *Commodity Credit Corporation* (CCC) donates surplus food such as cheese, butter and nonfat dry milk to needy families, charitable institutions, and schools. CCC commodities valued at \$1.2 billion are expected to be distributed through State and local governments in 1987.

Other income security.—Aid to families with dependent children (AFDC) helps State and local governments finance cash *assistance payments* to needy families. The budget proposes several reforms that would require AFDC applicants and recipients to engage in job search and work activities as a condition of AFDC eligibility and would set new Federal funding rates for State and local administrative and training costs. The proposed changes for Federal grants for State administrative costs are described at the beginning of this Special Analysis. Total outlays for AFDC are estimated to be \$8.2 billion in 1987, \$0.9 billion below the 1986 level.

The *child support enforcement program* (CSE) finances most State and local administrative expenses for establishing paternity and for collecting support from legally liable absent parents. These collections offset State and Federal AFDC costs. The administration proposes to continue reductions in the Federal matching rate for CSE costs, consistent with those in the Balanced Budget and Deficit Control Act of 1985 (Gramm-Rudman-Hollings). Federal outlays for CSE are estimated to be \$708 million in 1987.

The Federal Government reimburses States for all of the initial resettlement costs of welfare, health, employment, English language training, and other services for refugees and entrants. Budget authority of \$358 million is requested in 1987 for *refugee assistance*.

To moderate the impact of energy costs on low-income families, \$2.1 billion in budget authority is proposed for *low-income home energy assistance* in 1987, about the same level as for 1986. This program is a block grant that allows States to make payments to individuals, fuel vendors, or public housing operators.

Administration of justice.—For the 2 major *justice assistance* programs, the administration is proposing no new budget authority for 1987. The objective of the juvenile justice and delinquency prevention program—the separation of juvenile from adult offenders—has largely been achieved. The State and local criminal justice assistance grant program benefits only State and local communities and should therefore be funded by these governments.

The administration will continue to support a recent initiative for *victims of crime* in accordance with the Comprehensive Crime Control Act of 1984. Outlays for this program are estimated to be \$47 million in 1987.

General purpose fiscal assistance.—*General revenue sharing* provides assistance to approximately 40,000 local jurisdictions with virtually no restrictions on the use of the funds. The administration is not proposing to reauthorize the general revenue sharing program after it expires at the end of 1986, and is proposing to rescind the final quarterly authorization. Local governments have improved their own tax systems and most have the resources to finance local public services. In the current fiscal environment, Federal revenues must be used to fulfill national needs and responsibilities. Outlays for the program are estimated to be \$4.4 billion in 1986, with no outlays proposed for 1987.

The Federal government collects receipts for the sale of timber and mineral rights on certain Federal lands and returns a portion of the receipts to States and localities. The administration proposes to share these receipts with States and counties after the costs associated with operations and management are deducted. This conversion to sharing receipts on a net rather than gross basis reduces Forest Service, Bureau of Land Management, and Minerals Management Service payments from an estimated \$786 million in 1986 to \$681 million in 1987. The payment in lieu of taxes program would increase in 1988, partially offsetting some of the decreases in 1987.

Additional information on these and other grant programs is in Part 5 of the *Budget*. For a detailed list of all grant programs and proposed budget levels, see Table H-11.

Loans.—Another form of Federal aid to State and local governments is assistance in obtaining credit, either directly through loans and advances, or indirectly through loan guarantees. The Federal government provides credit assistance to States, localities, and Indian tribes on more favorable terms than private lenders. Direct loans and loan guarantees are used to finance housing construction, land acquisition, land and water development projects, and a variety of other activities.

Direct loan disbursements (excluding repayments) are estimated to be \$2.4 billion in 1987. The low-rent public housing program is the largest provider of direct loans to States and localities. This program finances construction, acquisition, and modernization activities for public housing.

A Federal loan guarantee occurs when a government agency enters into a formal commitment to use government funds to repay a lender upon default by the borrower. New loan guarantees to State and local governments are estimated to be \$0.2 billion in 1987.

More information on Federal credit activities is available in table H-12 and in Special Analysis F.

Tax expenditures.—Federal aid to State and local governments is also provided through tax expenditures. Tax expenditures are a means by which the Federal Government carries out public policy objectives; in many cases they can be considered alternatives to direct spending programs. To compare direct Federal spending and assistance provided through tax expenditures, estimates for tax expenditures are generally shown as outlay equivalents; that is, the level of budget outlays required to provide the same amount of after-tax benefits is the tax expenditure. A detailed discussion of the measurement and definition of tax expenditures and a complete list of revenue loss and outlay equivalent estimates for specific tax expenditure items is contained in Special Analysis G.

The two major categories of tax expenditures that provide aid to State and local governments are the deductibility of most State and local taxes and the exclusion of interest on State and local securities from Federal taxation. Individuals can claim nonbusiness sales, income, and property tax payments to State and local governments (other than payments already taken as business deductions) as itemized deductions on their Federal tax returns. This permits States and localities to raise a dollar of revenue with less than a dollar of net cost to their citizens.

Interest on virtually all State and local government securities is tax exempt. As a result, State and local governments can sell their debt at lower interest rates than would be possible if such interest were taxable. The exclusion of interest on public purpose State and local debt subsidizes the financing of traditional public projects, such as toll roads, sewer systems, and schools. However, as shown in table H-2, State and local jurisdictions also provide the benefits of tax-exempt financing to a wide variety of private and quasi-public activities, such as pollution control, housing and small businesses. The growth of private purpose tax-exempt bonds and other issues pertaining to tax-exempt credit are discussed in more detail in Special Analysis F.

Table H-2. TAX EXPENDITURES AIDING STATE AND LOCAL GOVERNMENTS

(Outlay equivalents; in millions of dollars)

Description	Fiscal year		
	1985	1986	1987
Deductibility of:			
Property taxes on owner-occupied homes.....	9,395	10,145	10,955
Nonbusiness State and local taxes other than on owner-occupied homes.....	21,635	23,365	25,225
Exclusion of interest on:			
Public purpose State and Local debt.....	7,480	8,295	9,160
IDBs for certain energy facilities.....	130	140	155
IDBs for pollution control and sewage and waste disposal facilities.....	1,185	1,405	1,640
Small-issue IDBs.....	1,880	2,155	2,295
Owner-occupied mortgage subsidy bonds.....	1,610	1,985	2,405
State and local debt for rental housing.....	760	945	1,075
Mass commuting vehicle IDBs.....	20	20	20
IDBs for airports, docks and sports and convention facilities.....	480	585	695
State and local student loan bonds.....	220	245	255
State and local debt for private nonprofit educational facilities.....	145	175	215
State and local debt for private nonprofit health facilities.....	1,280	1,595	1,945
State and local debt for veterans housing.....	255	275	295
Total (after interactions) ¹	37,700	41,680	45,950

¹ The estimate of total tax expenditures reflects interactive effects among the individual items. Therefore the individual items cannot be added to obtain a total.

To curb the rapid growth of private purpose tax-exempt bonds, Congress has placed restrictions on their use in recent legislation. The Mortgage Subsidy Bond Tax Act of 1980 imposed a number of restrictions on tax-exempt mortgage subsidy bonds (MSB's) for owner-occupied housing, including limitations on the volume issued in each State. The Deficit Reduction Act of 1984 (DEFRA) extended these limitations to December 31, 1987. DEFRA also placed restrictions on qualified veteran's MSB's. The issuance of these bonds is limited to preexisting State programs in amounts based on previous volume levels. Future issuance will be limited to veterans who served in active duty before 1977.

The Tax Equity and Fiscal Responsibility Act of 1982 required that industrial development bonds (IDB's) be approved by an elected public official after a public hearing and that assets of certain IDB-financed projects placed in service after 1982 be depreciated using straight-line rather than accelerated depreciation. The 1982 tax act also eliminated the tax exemption for small issue IDB's issued after 1986. DEFRA extended the expiration date to December 1988 for small issue IDB's that are issued exclusively to finance manufacturing facilities.

The Deficit Reduction Act also placed limits on the total volume of private purpose industrial revenue bonds that can be issued within each State. The maximum amount is limited to the greater of \$150 per capita (\$100 after 1987) or \$200 million per year. Under

prior law there were no limitations on the amount of such bonds issued by State and local governments.

In addition, once tax reform legislation has been enacted, the administration is planning to repropose an enterprise zone program that would provide tax incentives for redevelopment of economically distressed areas.

FEDERAL GRANTS-IN-AID BY FUNCTION, AGENCY, AND REGION

Distribution of grants by function.—Under the Congressional Budget Act of 1974, the Congress reviews the budget and sets targets by function. Consequently, the functional classification of the budget has become important not only for analysis but also for congressional control.

Table H-3. FEDERAL GRANT-IN-AID OUTLAYS BY FUNCTION

(In millions of dollars)

Function	Actual 1985	Estimate					
		1986	1987	1988	1989	1990	1991
National defense.....	157	150	123	142	144	147	146
Energy.....	529	528	377	350	288	248	248
Natural resources and environment.....	4,069	3,918	3,397	3,145	3,143	2,847	2,353
Agriculture.....	2,420	1,922	1,511	1,421	1,028	905	899
Commerce and housing credit.....	2	2	2	2	2	2	2
Transportation.....	17,055	18,178	17,551	16,461	15,586	15,855	15,000
Community and regional development.....	5,221	5,245	4,476	3,614	3,243	3,097	3,111
Education, training, employment, and social services.....	17,817	18,108	17,354	17,258	16,999	16,989	17,020
Health.....	24,451	26,530	26,431	27,631	29,001	30,339	31,603
Income security.....	27,153	27,530	25,721	27,024	27,913	28,790	29,604
Veterans benefits and services.....	91	96	98	111	123	135	141
Administration of justice.....	95	145	166	102	94	96	97
General government.....	182	187	116	79	78	78	78
General purpose fiscal assistance.....	6,656	6,264	1,771	1,868	1,951	2,044	2,098
Total outlays.....	105,897	108,802	99,094	99,208	99,593	101,572	102,400

Table H-3 shows a functional distribution of Federal grant-in-aid outlays.² (Consistent with the emphasis now being placed on longer range budget planning, Table H-3 and other tables in this Special Analysis show estimates through 1991.) The functional composition of grant outlays has changed significantly over the years, as shown in table H-4. The health function has increased from 3% of Federal aid in 1960 to an estimated 27% in 1987. Transportation has declined from 43% in 1960 to an estimated 18% in 1987. Other changes occurred between 1960 and 1987 in education, training, employment, and social services programs, which increase from 7% in 1960 to an estimated 18% in 1987. General purpose fiscal assistance also increased with the addition of revenue sharing, from 2%

² Table H-11 contains functional data and programmatic detail within each function for both budget authority and outlays.

in 1960 to an estimated 9% in 1980. In 1987, outlays for this function are expected to drop to 2% of total grants, due primarily to the termination of the general revenue sharing program. The distribution of grant-in-aid outlays for all other functions is expected to remain fairly constant between 1987 and 1991.

Table H-4. PERCENTAGE DISTRIBUTION OF FEDERAL GRANT-IN-AID OUTLAYS BY FUNCTION

	Actual				Estimate					
	1960	1970	1980	1985	1986	1987	1988	1989	1990	1991
Natural resources and environment.....	2	2	6	4	4	3	3	3	3	2
Agriculture.....	3	3	1	2	2	2	1	1	1	1
Transportation.....	43	19	14	16	17	18	17	16	16	15
Community and regional development....	2	7	7	5	5	5	4	3	3	3
Education, training, employment, and social services.....	7	27	24	17	17	18	17	17	17	17
Health.....	3	16	17	23	24	27	28	29	30	31
Income security.....	38	24	20	26	25	26	27	28	28	29
General purpose fiscal assistance.....	2	2	9	6	6	2	2	2	2	2
Other.....	*	1	1	1	1	1	1	1	1	1
Total.....	100	100	100	100	100	100	100	100	100	100

* 0.5% or less.

Distribution of grants by agency.—Table H-5 shows grant outlays by agency. The Department of Health and Human Services will provide 43% of total estimated grant-in-aid outlays in 1987, far more than any other agency.

Table H-5. FEDERAL GRANT-IN-AID OUTLAYS BY AGENCY

(In millions of dollars)

Agency	Actual 1985	Estimate	
		1986	1987
Funds Appropriated to the President.....	163	274	211
Department of Agriculture.....	10,440	10,167	9,445
Department of Commerce.....	463	342	206
Department of Education.....	7,960	8,219	8,009
Department of Energy.....	314	297	167
Department of Health and Human Services.....	42,018	44,153	43,077
Department of Housing and Urban Development.....	10,796	10,542	8,947
Department of the Interior.....	1,548	1,425	1,368
Department of Justice.....	69	118	135
Department of Labor.....	5,357	5,669	5,457
Department of Transportation.....	16,984	18,111	17,485
Department of the Treasury.....	5,024	4,770	351
Environmental Protection Agency.....	3,197	3,171	2,783
Other.....	1,564	1,544	1,453
Total outlays.....	105,897	108,802	99,094

Distribution of grants by region.—Table H-6 shows that Federal aid on a per capita basis varies among regions. Except for Region II, the thinly populated Western States ranked highest in 1975 because of highway construction grants and shared revenues from

Federal land holdings. The northwestern States had the lowest regional population density, extensive Federal land holdings and, until recently, the highest per capita aid.

Table H-6. DISTRIBUTION OF GRANTS BY REGION, SELECTED FISCAL YEARS

	Federal Region	1985 ¹ total grants	Dollars per capita		Average annual percent in- crease, 1975- 85
			1975	1985 ²	
I.	Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island	6.3	247	501	7.1
II.	New York, New Jersey, Puerto Rico, Virgin Islands	16.9	283	588	7.4
III.	Virginia, Pennsylvania, Delaware, Maryland, West Virginia, District of Columbia	11.6	251	460	6.1
IV.	Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida	16.0	205	381	6.2
V.	Illinois, Indiana, Michigan, Ohio, Wisconsin, Minnesota	19.1	195	417	7.7
VI.	Arkansas, Louisiana, Oklahoma, New Mexico, Texas	9.6	210	344	4.9
VII.	Iowa, Kansas, Missouri, Nebraska	4.7	196	395	7.1
VIII.	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming	4.0	263	530	7.1
IX.	Arizona, California, Nevada, Hawaii, other territories	13.1	232	412	5.8
X.	Idaho, Oregon, Washington, Alaska	4.5	263	517	6.8
	United States	105.9	227	437	6.6

¹ Preliminary estimate, in billions of dollars.

² See "Federal Expenditures by State," Bureau of the Census, for additional information concerning State distribution of Federal grants and other Federal spending.

The highest per capita aid in 1985 went to Region II, which generally provides higher benefits for medicaid and other income support programs. The lowest per capita aid in 1985 went to Regions IV, VI, and VII, generally covering the South and the Plains States.

HISTORICAL PERSPECTIVES

In recent decades, Federal aid to State and local governments has become a major factor in the financing of certain government functions. The rudiments of the present system date back more than 120 years to the Civil War. The Morrill Act, passed in 1862, established the land grant colleges and instituted certain federally required standards, as is characteristic of the present grant-in-aid system. Federal aid was later initiated for agriculture, highways, vocational education and rehabilitation, forestry, and public health. In the depression years, Federal aid was extended to meet income security and other social welfare needs.

However, Federal grants did not become a significant factor in Government expenditures until after World War II. As shown in table H-7, Federal grants to State and local governments were \$2 billion in 1950, and by 1965 they had risen to \$11 billion. In 1981 they increased to nearly \$95 billion, an average annual increase of 14.2% since 1965. In 1987 Federal grants are estimated to be \$99.1

Table H-7. HISTORICAL TREND OF FEDERAL GRANT-IN-AID OUTLAYS

(Fiscal years; dollar amounts in millions)

	Total grants-in- aid	Federal grants as a percent of			
		Federal outlays ¹		State and local expendi- tures ²	Gross National Product
		Total	Domestic ²		
Five-year intervals:					
1950.....	\$2,253	5.3%	9.3%	10.4%	0.8%
1955.....	3,207	4.7	13.7	10.1	0.8
1960.....	7,019	7.6	17.1	14.7	1.4
1965.....	10,910	9.2	17.5	15.3	1.6
1970.....	24,065	12.3	22.0	19.3	2.4
1975.....	49,791	15.0	20.9	23.0	3.3
Annually:					
1980.....	91,451	15.5	20.6	26.3	3.4
1981.....	94,762	14.0	18.7	25.2	3.2
1982.....	88,195	11.8	16.1	21.9	2.8
1983.....	92,496	11.4	15.8	21.6	2.8
1984.....	97,577	11.5	16.0	21.2	2.6
1985.....	105,897	11.2	15.6	21.0	2.7
1986 estimate.....	108,802	11.1	15.6	NA	2.6
1987 estimate.....	99,094	10.0	14.3	NA	2.2
1988 estimate.....	99,208	9.7	14.0	NA	2.0
1989 estimate.....	99,593	9.4	13.8	NA	1.9
1990 estimate.....	101,572	9.3	13.9	NA	1.8
1991 estimate.....	102,400	9.1	13.9	NA	1.7

¹ Includes off-budget outlays; all grants are on-budget.² Excludes outlays for the national defense and international affairs functions.³ As defined in the national income and product accounts.

NA = Not available.

billion, 10.0% of total Federal outlays and 14.3% of domestic Federal outlays.

Table H-7 also shows grants-in-aid as a percent of State and local expenditures and as a percent of gross national product (GNP). Grants as a percent of State and local expenditures increased from 10.4% in 1950 to 26.3% in 1980, declining to 21.0% in 1985. Grants increased as a percent of GNP from 0.8% in 1950 to 3.4% in 1980, and are projected to decline to 1.7% by 1991.

Table H-8 shows the composition of grant-in-aid outlays since 1950 according to the categories of payments for individuals, capital investment, and other purposes. Almost half of estimated 1987 grants are to States and localities as payments for individuals.³ Most such grants are accompanied by State or local matching payments. Among the larger of these programs are medicaid, assistance payments (AFDC), housing assistance, and nutrition programs.

Table H-8 also shows the share of State and local capital expenditures financed by Federal grants or by revenues from State and local own sources. The Federal share increased from 8.3% in 1955

³ Payments for individuals are defined as Federal outlays providing benefits in cash or in-kind that constitute income transfers to individuals or families.

Table H-8. COMPOSITION OF GRANT-IN-AID OUTLAYS

(Fiscal years; dollar amounts in millions)

	Total grants-in-aid	Composition of grants-in-aid			Share of State and local capital expenditures financed by—	
		Grants for payments for individuals ¹	Grants for capital investment ²	Other	Grants-in-aid	Own source revenues
Five-year intervals:						
1950.....	2,253	1,257	484	512	8.4%	91.6%
1955.....	3,207	1,623	820	764	8.3	91.7
1960.....	7,019	2,480	3,321	1,218	23.9	76.1
1965.....	10,910	3,699	4,985	2,226	24.8	75.2
1970.....	24,065	8,612	7,046	8,407	24.6	75.4
1975.....	49,791	16,445	10,870	22,476	25.7	74.3
Annually:						
1980.....	91,451	31,927	22,452	37,072	36.4	63.6
1981.....	94,762	36,931	22,116	35,715	35.9	64.1
1982.....	88,195	37,875	20,108	30,212	34.0	66.0
1983.....	92,496	41,636	20,474	30,386	33.8	66.2
1984.....	97,577	44,284	22,662	30,632	34.8	65.2
1985.....	105,897	48,090	24,844	32,963	36.2	63.8
1986 estimate.....	108,802	50,420	26,406	31,976	NA	NA
1987 estimate.....	99,094	48,431	24,470	26,193	NA	NA

¹ For an identification of accounts in this category, see Table H-11, including its footnotes.² Excludes capital grants that are included as payments for individuals.

NA=Not available.

to 23.9% in 1960 largely because of the initiation of Federal trust fund financing for the interstate highway system. The share increased from 24.6% in 1970 to 36.4% in 1980, increasing by almost half in ten years. The major capital investment programs are for highways, mass transit, community development block grants, and sewage treatment systems.

Grants for capital investment are estimated to be \$24.5 billion in 1987, 25% of total grants-in-aid.

GRANTS MANAGEMENT

The increase in grant expenditures since World War II was accompanied by an increase in the number of grants designated for specific purposes. This increase took place especially in the 1960's and early 1970's. These grants usually contained Federal legislative and regulatory mandates, required matching funds from the recipient governments, and gave little discretion in their use to State and local officials. They came to be known as categorical grants, with complex administrative requirements to ensure that their purposes were met.

To reverse this trend and to devolve authority, broad-based grants have been emphasized in recent years. In addition, many mandatory administrative or procedural requirements associated with grant programs have been simplified or eliminated. Regulatory reforms and management improvements have increased the

efficiency of the intergovernmental grant-in-aid system and have strengthened the authority of State and local elected officials over Federal financing and development activities in their jurisdictions.

General purpose and broad-based grants.—General-purpose aid gives State and local governments almost complete discretion in determining their use. Broad-based aid, which includes the block grants, gives State and local governments considerable discretion within a broadly defined program area. Table H-9 shows general-purpose and broad-based grants as a percent of total grants for selected years from 1972 to 1989.

General-purpose aid increased dramatically with the introduction of the general revenue sharing program, from less than 2% of all grants in 1972 to more than 14% in 1975, but declined to 6.5% in 1985. The administration is not proposing to continue the general revenue sharing program after 1986. The remaining programs in this category are expected to comprise 2.0% of total grants-in-aid in 1987.

Under the current administration, broad-based aid increased as a percent of total Federal aid from slightly over 11% in 1980 to more than 13% in 1985. Based on proposals in the 1982 Budget, Congress enacted nine block grants that consolidated 57 grant programs contained in the Catalog of Federal Domestic Assistance. In 1982, Congress enacted the Job Training Partnership Act, which replaced several expiring Comprehensive Employment and Training Act programs with a block grant to the States.

In this budget the administration is proposing new block grants for transportation and pollution control, and an expanded block grant for primary health care. The community services block grant is the only program in this category proposed for elimination. Broad-based aid is estimated to increase to 15.6% of total grants-in-aid in 1989.

In recent years the number of grant programs has declined. In 1981 there were 361 grant programs compared to 328 in 1985. More than 85% of estimated obligations in 1985 were concentrated in only 25 programs.

Most general-purpose and broad-based grants reduce or eliminate the requirement that recipients match Federal funds with their own. Despite the increase in these grants, matching requirements for all grants as a whole have increased. In 1980, State and local governments were estimated to provide approximately \$.37 of matching funds for each \$1 of Federal aid; the State and local share in 1985 was about \$.50 for each Federal dollar. The increase is because of the significant growth in programs such as medicaid that require a larger than average matching share.

Table H-9. OUTLAYS FOR GENERAL-PURPOSE, BROAD-BASED, AND OTHER GRANTS

(Dollar amounts in millions)

	Actual				Estimate			
	1972	1975	1980	1985	1986	1987	1988	1989
General-purpose grants:								
General revenue sharing		\$6,130	\$6,829	\$4,584	\$4,433			
Other general purpose fiscal assistance and TVA ¹	\$544	878	1,765	2,260	2,026	\$1,973	\$2,093	\$2,189
Subtotal, general-purpose grants	544	7,008	8,594	6,844	6,459	1,973	2,093	2,189
Broad-based:								
Pollution control block grant						118	225	261
Transportation block grant						496	1,820	2,484
Community development		38	3,902	3,817	3,575	3,099	2,629	2,664
Health block grants	90	82	83	1,368	1,442	1,610	1,621	1,622
State education block grants				424	475	449	488	500
Employment and training		1,333	2,144	1,710	1,883	1,806	1,823	1,826
Social services block grant	1,931	2,047	2,763	2,743	2,604	2,693	2,700	2,700
Low-income home energy assistance				2,139	2,017	2,098	2,098	2,098
Other	835	1,100	1,439	1,870	1,803	1,521	1,391	1,376
Subtotal, broad-based grants	2,856	4,600	10,331	14,071	13,799	13,890	14,795	15,531
Other grants	30,975	38,183	72,526	84,982	88,544	83,231	82,320	81,873
Total	34,375	49,791	91,451	105,897	108,802	99,094	99,208	99,593
ADDENDUM: PERCENT OF TOTAL								
General-purpose grants	1.6%	14.1%	9.4%	6.5%	5.9%	2.0%	2.1%	2.2%
Broad-based grants	8.3%	9.2%	11.3%	13.3%	12.7%	14.0%	14.9%	15.6%
Other grants	90.1%	76.7%	79.3%	80.2%	81.4%	84.0%	83.0%	82.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

¹ For detail, see grants in the general purpose fiscal assistance function, Table, H-11. Amounts in Table H-9 above include shared revenues from the Tennessee Valley Authority, shown in the energy function.

Federalism.—The President's success in restoring governmental authority to State and local governments has been substantial. More Federalism changes were underway in 1985 and will be undertaken in 1986. In August 1985, the Domestic Policy Council formed a Working Group on Federalism charged with identifying Federal activities that may be privatized; opportunities for block grants, regulatory relief and simplification of crosscutting requirements; management improvements in categorical programs; and measures for improving Federal responsiveness to State and local concerns. As a result of the Supreme Court's February 1985 *Garcia* decision applying the costly overtime pay and other provisions of the Fair Labor Standards Act (FLSA) to State and local governments, the Domestic Policy Council developed and supported a legislative response jointly with State and local representatives to improve the provisions of the Act. FLSA amendments were signed into law by the President in November 1985.

Regulatory relief.—In addition to structural and legislative reforms described above, regulatory relief has significantly reduced red tape and, more importantly, greatly increased State and local policy flexibility. The nine 1981 block grants and portions of the 1982 Job Training Partnership Act (JTPA) were implemented by only 31 pages of Federal regulations, in place of the previous 905 pages. Most of the integrity of this regulatory relief has been maintained despite pressures for more of the old style of prescriptive regulations, especially for the Education and JTPA block grants. The nine 1981 block grants reduced the paperwork burden on States and localities by an estimated 4.9 million hours per year (over 90%), and reduced Federal staff administering the programs by 80%—from about 3,000 employees to 600. To a striking and increasingly important degree, State and local officials are becoming policy makers for Federal grant programs, not middle managers for Federal agencies.

In 1985, deregulation of selected categorical programs continued. For example, in November, the Department of Education proposed major changes to the existing bilingual education rules to give local education agencies substantial discretion to determine the extent of native language use in transitional bilingual education programs.

The Federalism Working Group is meeting with key State and local officials in an effort to compile a new roster of major regulations for revision or elimination. Following discussions with the Working Group, and pursuant to procedures of Executive Orders 12291 and 12498, the list of targeted regulations will be presented to the Domestic Policy Council for consideration and action early in 1986.

Management improvements.—During 1985, the administration carried out a number of efforts to reduce red tape and streamline Federal aid to State and local governments.

- In October, OMB published an updated catalog identifying the 68 “crosscutting” requirements that affect Federal financial assistance.
- To simplify one of these, the Uniform Relocation Assistance policies, the President signed a memorandum calling upon 20 agencies to issue common regulations. Agencies issued a common proposed rule in May 1985, and will issue a common final rule by February 1986, one year from the date of the President’s memorandum.
- OMB and five interagency teams are completing a draft revision of OMB Circular A-102 that may be reissued as a common proposed rule by 23 grantmaking agencies. The rule will ensure uniform, businesslike management practices by Federal agencies and allow States to follow their own financial management, property, and procurement laws and proce-

dures in administering Federal categorical grant programs. The Government-wide common rule will institutionalize pre-award, post-award and after-the-grant follow-up by Federal agencies, and form a single, simplified set of administrative terms and conditions for States.

- New comparable financial reporting forms are being developed for the management of the five major open-ended entitlement programs in the Department of Agriculture and the Department of Health and Human Services.
- OMB issued Circular A-128, "Audits of State and Local Governments," to carry out the Single Audit Act of 1984. The Act requires each government that receives more than \$100,000 in Federal aid to have an annual organization-wide audit of its financial operations.
- A joint State and Federal task force signed a Memorandum of Understanding regarding proposed amendments to the Intergovernmental Cooperation Act and related administrative regulations. These amendments will provide a mutually agreeable means for transferring funds between the Federal Government and the States.
- Executive Order 12372, "Intergovernmental Review of Federal Programs," has continued to achieve improved Federal responsiveness to State and local concerns and better communication among all levels of government. OMB and the Federal agencies have also instituted several procedural changes to improve Federal performance further, while a number of States have begun to explore ways to use the Order for implementing their own crosscutting policy initiatives.
- OMB and the Bureau of the Census, working with State governments and other Federal agencies, have improved the reporting of Federal grant and other expenditure statistics to local areas. The funds for most major pass-through programs are now shown in the county where they are actually spent.

OTHER SOURCES OF FEDERAL AID INFORMATION

The grant-in-aid series in the budget provides a comprehensive picture of Federal grants-in-aid, which are programs financed but not directly administered by the Federal Government. The Census series (published in *Governmental Finances*) and the national income and product accounts (NIPA) series (published in Special Analysis B and in the *Survey of Current Business*) are parts of a broader statistical concept encompassing the entire economy, and as a consequence grants-in-aid are defined somewhat differently than in the budget. Both series omit the following items that the budget includes:

- Federal aid to the Governments of Puerto Rico and U.S. territories;
- certain payments in-kind, primarily commodities purchased by the Department of Agriculture and donated to the school lunch and other nutrition programs; and
- payments to private, nonprofit entities (such as nonprofit hospitals) that operate under State auspices or within a State plan.

One major group of payments excluded in the budget definition of grants but included in the Census and NIPA series 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 or local programs. Because both Census and the NIPA series focus on total cash payments to State and local governments, they count these as grants. A major item included only in the Census definition is unemployment compensation for Federal employees, ex-servicemen, and temporary extended benefits. One major kind of outlay included in the budget and Census definitions but excluded from the NIPA series is grants to subsidize the operation of public enterprises, mainly housing and transportation facilities. These are counted as subsidies by the Federal Government in the NIPA rather than as grants. Table H-10 shows these and other minor differences among the three series, but the differences are largely offsetting and the three series exhibit similar patterns.

Table H-10. THREE MEASURES OF FEDERAL GRANTS-IN-AID TO STATE AND LOCAL GOVERNMENTS, 1981-84

(In billions of dollars)

	1981	1982	1983	1984
Budget (Special Analysis H)	94.8	88.2	92.5	97.6
Less principal exclusions:				
Agricultural commodities.....	-1.1	-1.1	-2.0	-1.8
Geographical exclusions.....	-1.8	-1.8	-2.5	-2.6
Plus payments for research.....	3.2	3.4	4.2	4.7
Federal unemployment benefits and related.....	2.6	0.4	0.2	0.4
All other (net).....	-3.1	-3.1	-3.9	0.7
Federal payments (Census)	94.6	86.0	88.5	99.0
Less:				
Low-rent public housing.....	-3.9	-4.8	-5.5	-5.6
Federal unemployment benefits and related.....	-2.6	-0.4	-0.2	-0.4
All other (net).....	2.0	2.6	2.9	-2.3
Grants-in-aid (national income and product accounts)	90.1	83.4	85.7	90.7

Note: In December 1985 the Department of Commerce issued a major revision of the NIPA series. The revised data are included in this table.

In addition to these data sources, information on the distribution of Federal funds to State and local governments can be found in several other documents.

- Budget Information for the States* (BIS) provides estimates of State funding allocations for the largest formula grant programs for the past, present and budget year. These programs comprise approximately 80% of total Federal aid to State and local governments. The document is prepared by the Office of Management and Budget soon after the Budget is released.
- Federal Expenditures by State* is a report prepared by the Bureau of the Census that shows Federal spending by State for the most recently completed fiscal year. This document includes the outlay data on Federal grants to State and local governments that previously appeared in the Department of the Treasury publication, *Federal Aid to States*.
- The *Consolidated Federal Funds Report* (CFFR) is two documents that show the distribution of Federal spending by county areas and by local governmental jurisdictions. It is released by the Bureau of the Census in the Spring.
- The *Catalog of Federal Domestic Assistance* is prepared by the General Services Administration with data collected by the Office of Management and Budget and is available from the Government Printing Office. The basic edition of the *Catalog* is usually published in June and an update is generally published in December. It contains a detailed listing of grant-in-aid and other assistance programs; discussions of eligibility criteria, application procedures, and estimated obligations; and related information. This is a primary reference source for communities wishing to apply for grants-in-aid.
- The *Federal Register* is published daily by the Government Printing Office and has current information on agencies that are accepting applications for specific programs. These notices also provide information on eligibility criteria and application procedures.
- The *Federal Assistance Awards Data System* (FAADS) provides computerized information about current grant funding. Data on all direct assistance awards is provided quarterly to the States and to the Congress.

THE STATE AND LOCAL GOVERNMENT SECTOR OF THE NATIONAL INCOME AND PRODUCT ACCOUNTS⁴

The national income and product accounts (NIPA) provide a comprehensive statistical description of the U.S. economy that includes State and local government receipts and expenditures. These data measure the relationship between the State and local governments as a sector of the economy and other sectors.

⁴ Special Analysis B provides general information on the Federal sector of the national income and product accounts.

There are three major differences between NIPA data and a government's own budgetary accounting for receipts and expenditures. First, financial transactions and the purchase and sale of land and other existing assets are excluded from NIPA data but are generally included in budgetary data. Second, a large number of transactions in the NIPA accounts are recorded on an accrual basis, while many governments show transactions on a cash basis. Third, NIPA data aggregate total State and local transactions, whereas many governments separate their general fund from special funds. As a result of these differences, NIPA totals are not the same as an aggregate of these governments' financial budgets. However, the NIPA data do provide timely estimates of total State and local fiscal transactions not otherwise available and if used with care can provide helpful financial indicators.

NIPA State and local sector.—The following chart shows State and local operating account surpluses and deficits as a percent of receipts, excluding the social insurance funds (primarily pensions). The social insurance funds have been excluded because their surpluses are for future pension obligations and are not available for carrying out the general responsibilities of these governments. It is reasonable for the operating account to be in deficit because it includes capital expenditures, often financed through borrowing.

The peaks and troughs in the operating account are largely the result of:

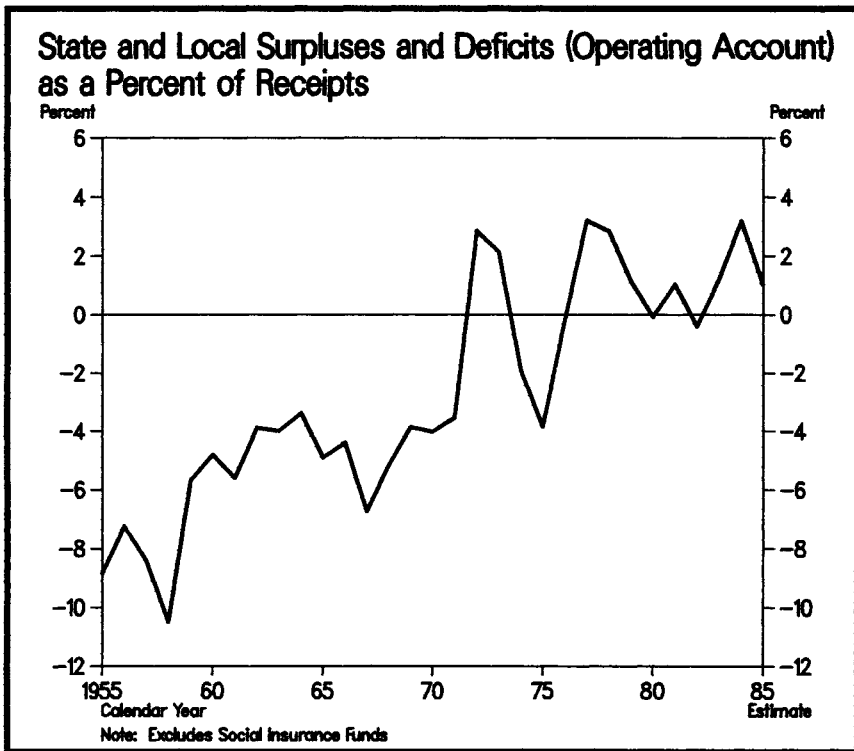
- changes in economic activity, which affect primarily receipts;
- decisions regarding debt-financed capital spending; and
- changes in Federal aid.

The operating account was in deficit every year from 1955 to 1971. Unlike this earlier period, during the 1970's it was generally in surplus. In part, this change reflected the growth of Federal grants (rather than State and local borrowing) to finance new infrastructure.

- The surpluses in the early 1970's were largely the result of the initiation of general revenue sharing and strong economic growth.
- The low point in 1975 was largely the result of the recession.
- The surpluses in the latter 1970's were largely the result of the economic recovery, increases in anti-recession Federal grants, reductions in debt-financed capital spending, and general restraints in government spending exemplified by the passage of Proposition 13 in California in 1978.

The recent recession brought the account into deficit in 1982, albeit a quite small one relative to the 1955-71 period. As a result of the recession, States and localities reduced expenditures and increased taxes. These actions along with the national economic

recovery over the past three years have returned the account to surplus for 1984 and 1985.



DETAILED FEDERAL AID TABLES

The following two tables present detailed Federal aid data for 1985, 1986, and 1987. Table H-11, "Federal Grants to State and Local Governments—Budget Authority and Outlays," provides detailed budget authority and outlay data for grants-in-aid. Table H-12, "Credit Assistance to State and Local Governments," provides information on direct and guaranteed loans to State and local governments.

Table H-11. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—BUDGET AUTHORITY AND OUTLAYS

(In millions of dollars)

Function, agency and program	BUDGET AUTHORITY			OUTLAYS		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
NATIONAL DEFENSE:						
Department of Defense—Military:						
National Guard centers construction.....	52	51	55	52	55	52
Federal Emergency Management Agency:						
Emergency management planning and assistance.....	96	79	76	105	95	71
Total, national defense	148	130	131	157	150	123
ENERGY:						
Department of Energy:						
Energy conservation.....	283	256	5	314	297	166
Department of Housing and Urban Development:						
Assistance for solar and conservation improvements.....	14			27	36	9
Tennessee Valley Authority:						
Tennessee Valley Authority fund.....				188	196	202
Total, energy	298	256	5	529	528	377
NATURAL RESOURCES AND ENVIRONMENT:						
Department of Agriculture:						
Watershed and flood prevention operations.....	103	72		160	134	118
Resource conservation and development.....	8	7		11	8	11
State and private forestry.....	26	27	3	26	27	3
Forest research.....	1	7	1	1	7	1
Department of Commerce:						
Operations research and facilities.....	143	63	28	143	87	6
Coastal zone management.....				24		
Department of the Interior:						
Abandoned mine reclamation fund.....	258	149	151	108	134	128
Regulation and technology.....	37	35	45	36	35	43
Land acquisition.....	72	10		135	75	67
Urban park and recreation fund.....				44	14	4
Historic preservation fund.....	25	5		29	18	3
Resource management.....	4	5		3	5	1
Construction.....	4	2		4	2	*
Sport fish restoration.....		122	161		88	122
Operation of the national park system.....		1			1	
Miscellaneous permanent appropriations.....	124	121	95	148	110	106
Environmental Protection Agency:						
Sewage treatment system construction grants.....	2,400	2,374	1,800	2,889	2,808	2,382
Abatement, control, and compliance.....	262	278	270	262	279	269
Hazardous substance response trust fund.....	64	225	301	47	84	132
Total, natural resources and environment.....	3,532	3,504	2,855	4,069	3,918	3,397
AGRICULTURE:						
Department of Agriculture:						
Food donations (Commodity Credit Corporation).....	1,945	1,424	1,176	1,938	1,427	1,191
Extension Service.....	344	328	140	338	331	179
Cooperative State Research Service.....	162	153	131	141	163	141
Other agriculture.....	4	1		4	2	*
Total, agriculture	2,455	1,906	1,447	2,420	1,922	1,511

Table H-11. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—BUDGET AUTHORITY AND OUTLAYS—Continued

(In millions of dollars)

Function, agency and program	BUDGET AUTHORITY			OUTLAYS		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
COMMERCE AND HOUSING CREDIT:						
Department of Commerce:						
Enterprise development and opportunity...	2	2	2	2	2	2
Total, commerce and housing credit	2	2	2	2	2	2
TRANSPORTATION:						
Department of Transportation:						
Federal-aid highways (trust fund).....	14,771	14,539	12,625	12,434	13,518	13,034
Highway traffic safety grants.....	176	126	110	120	131	131
Highway-related safety grants.....	10	9	10	11	10	11
Motor carrier safety grants.....	14	16	.....	9	27	1
Other highway programs.....	65	38	.....	266	168	157
Formula grants - transit.....	2,450	2,058	.....	1,409	1,189	1,255
Transportation block grant - transit.....	.....	.....	1,220	.....	.....	239
Discretionary grants - transit.....	1,100	755	.....	507	750	793
Interstate transfer grants - transit.....	250	191	.....	462	376	333
Research, training, and human resources.....	18	5	.....	14	9	5
Washington metro.....	250	217	.....	60	149	187
Miscellaneous expired accounts.....	.....	.....	.....	852	950	450
Federal Railroad Administration.....	17	15	.....	35	35	33
Grants-in-aid for airports.....	987	973	1,017	789	776	828
Boat Safety.....	29	43	30	12	19	24
Research and special programs.....	4	4	4	4	4	4
Washington Metropolitan Area Transit Authority:						
Interest payments.....	46	52	52	71	67	67
Total, transportation	20,187	19,043	15,068	17,055	18,178	17,551
COMMUNITY AND REGIONAL DEVELOPMENT:						
Funds Appropriated to the President:						
Disaster relief.....	85	294	85	163	274	211
Department of Agriculture:						
Rural water and waste disposal grants.....	115	109	.....	176	183	162
Rural community fire protection grants.....	3	3	.....	3	3	2
Miscellaneous expiring appropriations.....	.....	.....	.....	1	2	.....
Department of Commerce:						
Economic development assistance programs.....	231	34	.....	263	230	183
Regional development programs.....	.....	.....	.....	10	2	1
Regional development commissions.....	.....	.....	.....	*	*	.....
Miscellaneous appropriations.....	.....	.....	.....	2	3	2
Department of the Interior:						
Bureau of Indian Affairs.....	16	15	7	16	15	7
Department of Housing and Urban Development:						
Community development block grants.....	3,472	2,990	2,125	3,817	3,575	3,099
Urban development action grants.....	440	109	.....	497	488	413
Rental housing and rehabilitation.....	.....	.....	.....	15	243	241
Other community development.....	.....	.....	.....	28	36	13
Federal Emergency Management Agency:						
Emergency management planning and assistance.....	12	10	3	17	12	6
National insurance development fund.....	.....	10	.....	.....	10	.....

Table H-11. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—BUDGET AUTHORITY AND OUTLAYS—Continued

(In millions of dollars)

Function, agency and program	BUDGET AUTHORITY			OUTLAYS		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
Appalachian Regional Commission:						
Appalachian regional development programs.....	147	32	.....	198	150	120
Neighborhood Reinvestment Corporation:						
Neighborhood Reinvestment Corporation.....	16	18	15	16	18	15
Total, community and regional development	4,536	3,625	2,235	5,221	5,245	4,476
EDUCATION, TRAINING, EMPLOYMENT, AND SOCIAL SERVICES:						
Department of Commerce:						
Public telecommunications facilities	24	1	.....	19	18	.....
Miscellaneous appropriations .....	.....	.....	.....	*	*	12
Department of Health and Human Services:						
Social services block grant.....	2,725	2,584	2,700	2,743	2,604	2,693
Community services	368	168	.....	372	229	58
Human development services	1,890	1,813	1,897	1,807	1,818	1,853
Family social services	757	846	808	738	816	814
Work incentives	258	157	.....	274	172	25
Department of the Interior:						
Operation of Indian programs.....	2	2	2	2	2	2
Department of Labor:						
Training and employment services	3,107	2,530	2,477	2,775	3,005	2,661
Federal-State employment service	960	921	922	891	955	921
Community service employment for older Americans.....	72	69	72	70	71	69
Temporary employment assistance .....	.....	.....	.....	—18	.....	.....
Department of Education:						
Compensatory education for the disadvantaged.....	3,683	3,525	3,682	4,194	2,940	3,529
Impact aid.....	686	656	548	629	687	595
Special programs.....	699	592	635	479	612	579
Bilingual education.....	100	96	104	96	69	99
Immigrant education.....	30	.....	.....	15	28	15
Indian education.....	64	61	73	78	55	65
Education for the handicapped	1,177	1,177	1,177	928	1,365	1,135
Rehabilitation services and handicapped research	1,133	1,142	1,137	733	1,321	1,108
Payments to institutions for the handicapped.....	6	5	6	4	7	6
Vocational and adult education	930	687	503	633	976	804
Student financial assistance ¹	76	.....	.....	76	30	*
Higher education	6	10	.....	6	.....	.....
Higher education facilities loans and insurance.....	.....	.....	.....	8	6	.....
Libraries.....	118	89	.....	79	122	74
Community Services Administration:						
Community services programs.....	.....	.....	.....	—1	—1	.....
Corporation for Public Broadcasting:						
Public broadcasting fund.....	150	160	200	150	160	200
National Endowment for the Arts:						
National Endowment for the Arts.....	32	31	29	30	33	32
Institute of Museum Services:						
Institute of Museum Services.....	5	5	.....	5	7	4
Total, education, training, employment, and social services.....	19,059	17,325	16,973	17,817	18,108	17,354

Table H-11. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—BUDGET AUTHORITY AND OUTLAYS—Continued

(In millions of dollars)

Function, agency and program	BUDGET AUTHORITY			OUTLAYS		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
HEALTH:						
Department of Agriculture:						
Food Safety and Inspection Service.....	33	19	36	33	33	36
Department of Health and Human Services:						
Medicaid ¹	21,845	24,440	24,708	22,655	24,686	24,708
Health resources and services ¹	1,109	1,017	1,040	1,037	1,134	964
Disease control, research and training ¹	175	177	182	162	158	171
Alcohol, drug abuse, and mental health ¹	503	470	490	501	461	488
Department of Labor:						
Occupational Safety and Health Administration.....	57	55	60	57	54	59
Mine Safety and Health Administration.....	5	5	5	5	5	5
Total, health	23,729	26,183	26,521	24,451	26,530	26,431
INCOME SECURITY:						
Department of Agriculture:						
Child nutrition programs ¹	3,599	3,664	3,424	3,464	3,656	3,462
Food stamp program administration ¹	912	967	1,037	886	939	1,026
Nutrition assistance for Puerto Rico ¹	825	820	825	825	820	825
Women, infants, and children programs ¹	1,498	1,558	1,615	1,495	1,579	1,611
Commodity supplemental food program ¹	25	37	39	43	37	39
Special milk program ¹	17	11	.....	15	13	4
Food donations program ¹	140	180	187	167	198	177
Agricultural Marketing Service (food donations) ¹	478	368	411	467	369	344
Rural housing preservation grants.....	5	19	.....	.....	1	8
Rural housing for domestic farm labor ¹ .....	.....	.....	.....	3	10	12
Mutual and self-help housing ¹	8	8	.....	8	7	8
Department of Health and Human Services:						
Assistance payments program (AFDC) ¹	8,537	8,962	8,171	8,592	9,041	8,171
Child support enforcement	612	566	707	577	642	708
Payments to States from receipts for child support	*	*	*	*	*	*
Low income home energy assistance ¹	2,098	2,008	2,098	2,139	2,017	2,098
Refugee and entrant assistance ¹	426	304	358	420	374	326
Department of Labor:						
Unemployment trust fund - administration.....	1,601	1,598	1,742	1,576	1,579	1,742
Department of Housing and Urban Development:						
Subsidized housing program ¹	10,759	5,124	.....	5,197	4,813	3,859
Payments for operation of low income housing ¹	1,402	1,159	1,172	1,205	1,337	1,297
Congregate services program ¹	4	.....	.....	5	6	5
Federal Emergency Management Agency:						
Emergency food and shelter ¹	20	70	.....	69	90	.....
Total, income security	32,966	27,422	21,785	27,153	27,530	25,721
VETERANS BENEFITS AND SERVICES:						
Veterans Administration:						
Medical care ¹	63	67	70	63	67	70
Grants for constructing State care facilities ¹	34	21	42	20	20	26

Table H-11. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—BUDGET AUTHORITY AND OUTLAYS—Continued

(In millions of dollars)

Function, agency and program	BUDGET AUTHORITY			OUTLAYS		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
Other veterans	9	3		7	8	2
Total, veterans benefits and services	107	91	112	91	96	98
ADMINISTRATION OF JUSTICE:						
Department of Justice:						
Justice assistance	90	125	20	64	78	82
Crime victims fund	61	96	100		31	47
National Institute of Corrections	7	6	5	6	8	7
Revolving fund				*	*	
Department of Housing and Urban Development:						
Fair housing assistance	7	6	12	5	8	11
Equal Employment Opportunity Commission:						
Equal Employment Opportunity Commission	20	19	20	20	19	20
Total, administration of justice	184	252	157	95	145	166
GENERAL GOVERNMENT:						
Department of the Interior:						
Administration of territories	74	72	67	76	90	84
Trust Territory of the Pacific Islands	99	76	13	106	97	32
Total, general government	173	149	80	182	187	116
GENERAL PURPOSE FISCAL ASSISTANCE:						
Department of Agriculture:						
Forest Service permanent appropriations	236	228	85	236	218	85
Department of Defense—Civil:						
Corps of Engineers permanent appropriations	7	6	6	7	7	6
Department of the Interior:						
Payments in lieu of taxes	103	100	105	103	100	105
Payments to States mineral leasing receipts	539	575	551	539	551	551
Bureau of Land Management permanent appropriations	134	6	46	133	17	45
National wildlife refuge fund	13	12	13	13	12	12
Payments to the U.S. territories	53	57	55	53	57	55
Department of the Treasury:						
General revenue sharing	4,567	3,425		4,584	4,433	
Internal revenue collections for Puerto Rico	327	234	245	336	236	244
Miscellaneous permanent appropriations	97	100	108	105	101	108
Department of Energy:						
Payments to States under the Federal Power Act	1	1	1	1	1	1
District of Columbia:						
Federal payment to the District of Columbia	548	530	560	548	530	560
Total, general purpose fiscal assistance	6,625	5,275	1,775	6,656	6,264	1,771
Total, grants-in-aid	113,998	105,163	89,146	105,897	108,802	99,094

*\$500 thousand or less.

† Programs included in the "grants for payments to individuals" category shown in Table H-8.

Table H-12. CREDIT ASSISTANCE TO STATE AND LOCAL GOVERNMENTS ¹

(In millions of dollars)

Function, agency and program		1985 actual	1986 estimate	1987 estimate
Direct Loans				
Energy, natural resources and environment:				
Department of the Interior:				
Bureau of Reclamation loan program	Loan disbursements.....	58	48	49
	Net loans	51	38	40
	Outstandings.....	442	480	520
Drought emergency loan fund				
	Loan disbursements.....			
	Net loans	-1	-1	-1
	Outstandings.....	15	14	13
Environmental Protection Agency:				
Construction grants	Loan disbursements.....	11	12	13
	Net loans	10	10	10
	Outstandings.....	14	24	34
Abatement, control, and compliance.....				
	Loan disbursements.....	2	30	31
	Net loans	2	30	30
	Outstandings.....	2	32	62
Total, energy, natural resources and environment				
	Loan disbursements.....	71	89	93
	Net loans	63	77	79
	Outstandings.....	473	550	629
Commerce and housing credit:				
Department of Agriculture:				
Rural housing insurance fund	Loan disbursements.....	30	25	25
	Net loans	17	13	15
	Outstandings.....	368	381	396
Transportation:				
Department of Transportation:				
Federal-aid highways (trust fund)	Loan disbursements.....	6	1	1
	Net loans	6	1	1
	Outstandings.....	75	75	76
Right-of-way revolving fund				
	Loan disbursements.....	49	48	50
	Net loans	-15	-2	
	Outstandings.....	116	113	113
Total, transportation				
	Loan disbursements.....	55	48	51
	Net loans	-9	-2	1
	Outstandings.....	190	189	190
Community and regional development:				
Department of Agriculture:				
Rural development insurance fund.....	Loan disbursements.....	531	479	418
	Net loans	-40	-4	141
	Outstandings.....	65	60	202
Department of Commerce:				
Coastal energy impact fund.....	Loan disbursements.....	*	*	*
	Net loans	-2	-2	-2
	Outstandings.....	94	92	90
Department of Interior:				
BIA revolving fund for loans	Loan disbursements.....	14	13	13

Table H-12. CREDIT ASSISTANCE TO STATE AND LOCAL GOVERNMENTS ¹—Continued

(In millions of dollars)

Function, agency and program		1985 actual	1986 estimate	1987 estimate
	<i>Net loans</i>	9	8	8
	Outstandings	50	59	67
Department of Housing and Urban Development:				
Community development	Loan disbursements	103	108	73
	<i>Net loans</i>	81	46	
	Outstandings	289	335	335
FHA revolving fund (liquidating programs)	Loan disbursements			
	<i>Net loans</i>	-21	-18	-18
	Outstandings	385	367	349
Urban renewal programs	Loan disbursements	2		
	<i>Net loans</i>	-21	*	*
	Outstandings	1	*	
Total, community and regional development	Loan disbursements	650	600	505
	<i>Net loans</i>	6	30	129
	Outstandings	884	914	1,044
Education, training, employment, and social services:				
Department of Education:				
College housing loans	Loan disbursements	14	19	19
	<i>Net loans</i>	-50	-7	-360
	Outstandings	741	734	374
Higher education facilities loan and insurance fund	Loan disbursements			
	<i>Net loans</i>	-6	-6	-6
	Outstandings	115	109	104
Student loans and other	Loan disbursements	59	18	
	<i>Net loans</i>	53	*	-163
	Outstandings	163	163	
Total education, training, employment, and social services	Loan disbursements	73	37	19
	<i>Net loans</i>	-3	-12	-528
	Outstandings	1,018	1,005	477
Health:				
Department of Health and Human Services:				
Medical facilities guarantee and loan fund	Loan disbursements			
	<i>Net loans</i>	-1	-1	-1
	Outstandings	15	15	14
Income security:				
Department of Housing and Urban Development:				
Low-rent public housing (includes FFB)	Loan disbursements	14,065	1,459	1,722
	<i>Net loans</i>	13,447	-14,729	-37
	Outstandings	16,840	2,111	2,074
General government:				
Department of the Interior:				
Administration of territories (FFB)	Loan disbursements			
	<i>Net loans</i>	-1	-1	-2
	Outstandings	63	62	60

Table H-12. CREDIT ASSISTANCE TO STATE AND LOCAL GOVERNMENTS ¹—Continued

(In millions of dollars)

Function, agency and program		1985 actual	1986 estimate	1987 estimate
General purpose fiscal assistance:				
Other independent agencies:				
Loans to the District of Columbia.....	Loan disbursements.....			
	<i>Net loans</i>	-311	-35	-38
	Outstandings	1,572	1,537	1,498
Grand total, direct loans.....	New loans	14,945	2,259	2,415
	<i>Net loans</i>	13,206	-14,660	-381
	Outstandings	21,424	6,764	6,383
Guaranteed Loans				
Community and regional development:				
Department of Agriculture:				
Rural development insurance fund.....	New guaranteed loans.....	176	226	139
	<i>Net loans</i>	-294	-222	-155
	Outstandings	2,912	2,690	2,535
Department of Housing and Urban Development:				
Revolving fund (liquidating programs)	New guaranteed loans.....			13
	<i>Net loans</i>			11
	Outstandings			11
Urban renewal programs	New guaranteed loans.....			
	<i>Net loans</i>	-7	-2	-13
	Outstandings	15	13	
Department of Interior:				
Indian loans.....	New guaranteed loans.....	20	50	15
	<i>Net loan</i>	18	46	10
	Outstanding	46	92	102
Total, community and regional development	New guaranteed loans.....	196	276	167
	<i>Net loans</i>	-283	-178	-147
	Outstandings	2,972	2,795	2,647
Income security:				
Department of Housing and Urban Development:				
Low-rent public housing	New guaranteed loans.....			
	<i>Net loans</i>	-13,276	-310	-337
	Outstandings	8,887	8,577	8,240
Grand total, guaranteed loans.....	New guaranteed loans.....	196	276	167
	<i>Net loans</i>	-13,559	-487	-484
	Outstandings	11,859	11,372	10,888

* \$500 thousand or less.

¹ Only direct loans are included in budget outlays. New direct loan disbursements less loan repayments, sales, etc., are net loans, which are counted in the budget as outlays. Guaranteed loans are non-Federal loans guaranteed by the Federal Government. For a discussion of credit in the budget, see Special Analysis, F, "Federal Credit Programs"

SPECIAL ANALYSIS I

CIVILIAN EMPLOYMENT IN THE EXECUTIVE BRANCH

The Administration has steadfastly adhered to its goal of restraining the size of the Federal workforce to the minimum necessary to carry out essential functions with efficiency. This analysis outlines the mechanisms used to control civilian employment in the Executive Branch, the resulting employment ceilings, and experience in reducing nondefense civilian employment. It also deals with personnel compensation and benefits and compares the Federal workforce with other government employment as well as overall civilian employment in the United States.

FULL-TIME EQUIVALENT OF TOTAL FEDERAL CIVILIAN EMPLOYMENT IN THE EXECUTIVE BRANCH

Total employment of civilian agencies in the executive branch is controlled on a full-time equivalent (FTE) or workyear basis. Postal Service employment by law is not subject to Presidential control, and section 904 of the 1982 Defense Authorization Act (Public Law 97-86) exempts the Department of Defense from full-time equivalent employment controls.

Table I-1 is a tabulation of full-time equivalent employment estimates for the major departments and agencies of the executive branch. Generally, the estimates for 1986, 1987, and 1988 constitute upper limits on agency FTE employment.

The 1986 total for "Civilian Agency Employment" reflects an adjustment to reflect the fact that actual nondefense employment tends to fall short of assigned employment ceilings. The average shortfall for the period 1982-1985 is nearly two percent, with a range of 3.38 to 1.17 percent. For 1986, a shortfall of 0.75 percent is projected. Shortfalls for 1987-1988 are not projected since achievement of lower employment levels for these years is dependent on favorable Congressional action on the 1987 Budget.

By the end of 1985, the Administration had reduced nondefense employment by 78,000 FTE's from budget estimates for 1982. Further reductions are planned by the end of 1987.

SIGNIFICANT CHANGES IN FULL-TIME EQUIVALENT EMPLOYMENT

Nondefense employment is expected to decrease by nearly 23,400 from 1986 to 1987 and by about 38,900 from 1986 to 1988.

Table I-1. FULL-TIME EQUIVALENT OF FEDERAL CIVILIAN EMPLOYMENT ¹

	Fiscal year				
	1985 actual ²	1986 estimate	1987 estimate	1988 estimate	difference 86-87
Agriculture	106,658	108,750	98,500	96,570	-10,250
Commerce	32,790	34,440	33,830	37,643	-610
Defense—civil functions	28,681	28,548	28,348	28,348	-200
Education	4,876	4,579	4,500	4,500	-79
Energy	16,257	16,218	15,721	12,005	-497
Health and Human Services	132,501	128,483	123,636	118,674	-4,847
Housing and Urban Development	12,101	11,720	11,288	10,916	-432
Interior	72,166	72,015	70,305	69,955	-1,710
Justice	60,852	64,266	65,820	66,028	1,554
Labor	18,176	18,549	18,155	18,060	-394
State	24,788	26,088	26,937	27,122	849
Transportation	61,044	60,938	58,981	57,164	-1,957
Treasury	127,442	126,467	129,587	132,345	3,120
Environmental Protection Agency	12,459	13,361	13,161	13,090	-200
National Aeronautics and Space Administration	21,991	21,800	21,800	21,800	.....
Veterans Administration	221,292	221,051	212,066	204,662	-8,985
Other:					
Agency for International Development	4,969	4,875	4,825	4,700	-50
General Services Administration	25,254	25,406	22,635	22,297	-2,771
Nuclear Regulatory Commission	3,498	3,491	3,369	3,369	-122
Office of Personnel Management	5,666	5,510	5,419	5,029	-91
Panama Canal Commission	8,215	8,300	8,300	8,300	.....
Small Business Administration	4,177	4,219	707	0	-3,512
Tennessee Valley Authority	31,098	31,000	31,000	31,000	.....
United States Information Agency	8,572	9,120	9,280	9,369	160
Miscellaneous	39,582	41,430	40,822	40,552	-608
Estimated nondefense lapse		-8,180			8,180
Civilian agency employment	1,085,105	1,082,444	1,058,992	1,043,498	-23,452
Defense—military functions ³	1,036,870	1,034,375	1,037,113	1,037,356	2,738
Subtotal	2,121,975	2,116,819	2,096,105	2,080,854	-20,714
Postal Service Employment ⁴	692,748	717,694	736,852	764,852	19,158
Total, Executive Branch	2,814,723	2,834,513	2,832,957	2,845,706	-1,556

¹ Excludes developmental positions under the Worker-Trainee Opportunity Program (WTOP) as well as certain statutory exemptions.

² Data are estimated for portions of Defense-civil functions as well as for the Federal Reserve System, Board of Governors and the International Trade Commission.

³ Section 904 of the 1982 Defense Authorization Act (Public Law 97-86) exempts the Department of Defense from full-time equivalent employment controls. Data shown are estimated.

⁴ Includes the Postal Rate Commission.

Most agencies show decreases, in Table I-1, from the 1986 estimates to the corresponding estimates for 1987:

- Department of Agriculture (-10,250). The decrease is due to significant funding reductions in several major areas. The 1987 Budget proposes to privatize programs now operated by the Federal Crop Insurance Corporation and the Rural Electrification Administration. The Farmers Home Administration will shift most of its lending from direct to privately originated guaranteed loans. With private banks originating and servicing the loans, Federal employment will be reduced. Similarly, the Federal role in conservation and extension activities would be reduced and staffing levels adjusted. Forest

Service staffing levels are also proposed to be reduced consistent with implementation of management efficiencies.

- Veterans Administration (−8,985). This reduction reflects anticipated productivity increases in all areas, together with savings in medical care staffing as a result of treating fewer veterans in the lowest priority care category. These decreases are partially offset by increases for additional medical staff to be used for modernized medical facilities.
- Department of Health and Human Services (−4,847). Reductions result from increased automation and productivity in the Social Security Administration; the phasing in of program terminations such as the Community Services Block Grant, health professions subsidies and health planning; implementing an expanded State primary care block grant; and elimination of duplicative functions and unnecessary overhead.
- Small Business Administration (−3,512). This reduction is due to the planned termination of Small Business Administration credit programs and reductions in non-credit programs. SBA and its remaining non-credit activities are proposed for transfer to the Department of Commerce. Liquidation of the SBA loan portfolio will be transferred to the Treasury Department.
- General Services Administration (−2,771). This decrease reflects productivity improvements resulting from the reorganization of and consolidations within the Federal Supply Service and the Public Building Service. Decreases of 940 FTE in GSA will be offset by an increase in the National Security Administration as it becomes responsible for the maintenance and security of its headquarters building.
- Department of Transportation (−1,957). This decrease reflects both program eliminations and reductions. Employment reductions are expected as a result of the Administration's proposal to combine highway and transit programs of a State and local nature into a Transportation Block Grant. Additional FTE savings are a result of the proposed privatization of the Transportation Systems Center by April 1, 1987 and the Turner-Fairbanks highway facility, as well as consolidations within the Federal Aviation Administration.
- Department of Interior (−1,710). Reductions result from: a transfer of responsibilities for animal damage control from the Interior Department to the Department of Agriculture, a decrease in the size of the Jobs Corps Program, management efficiencies, and program reductions distributed across the entire Department.
- Department of Commerce (−610). This net decrease results from programmatic reductions and productivity savings in the National Oceanic and Atmospheric Administration and the

National Bureau of Standards, as well as termination of the Economic Development Administration and the U.S. Travel and Tourism Administration. Increases are provided for the transfer of 595 FTE's from the Small Business Administration to consolidate business assistance programs into the Department of Commerce and 733 FTE's in the Census Bureau for the conduct of the economic and agricultural censuses.

- Department of Energy (−497). Employment will continue to decline due to implementation of management improvements and reductions in regulatory activities and in near-term research and development activities. This decline is consistent with the administration's policy of primary reliance on the marketplace to achieve energy goals.
- Department of Housing and Urban Development (−432). The department's employment will decline as a result of: (1) the reduced workload associated with the projected decline in Federal Housing Administration mortgage insurance applications, (2) termination of the Urban Development Action Grant Program, (3) a reduction in the number of areas receiving Community Development Block Grants, and (4) the contracting-out of certain administrative functions.
- Department of Labor (−394). The decrease reflects proposed reductions in the Job Corps, the completion of the revision of the Consumer Price Index, and increased productivity in the Department.
- Environmental Protection Agency (−200). This reduction reflects phaseout of the waste treatment grants program and a decrease in agency overhead.
- Department of Defense—civil functions (−200). This reduction reflects an anticipated decrease in personnel needed to carry out the Civil Works program due to systematic application of productivity reviews pursuant to OMB Circular A-76.

Some agencies show increases:

- Department of Treasury (3,120). This increase consists primarily of personnel necessary for a multi-year revenue enhancement initiative within the Internal Revenue Service. Personnel will also be increased to process tax returns and respond to taxpayer inquiries. In addition, 1,664 FTE's will be transferred to the Financial Management Service to service and liquidate a loan portfolio to be transferred from the Small Business Administration. Reductions due to productivity enhancements are anticipated in the Customs Service and the Bureau of Public Debt.
- Department of Defense—military functions (2,738). The increase provides further improvements in spare parts management, supports new weapons systems, releases military per-

sonnel to perform essential military functions, expands logistics support programs and improves supply management functions.

- Department of Justice (1,554). These increases are primarily in the areas of the Federal Bureau of Investigation and the Drug Enforcement Administration agents and support staff, additional attorneys to address increased civil litigation, and for annualization of positions provided in 1986.
- Department of State (849). Substantial increases in staffing abroad and in Washington are required to improve the security of U.S. employees and facilities at diplomatic missions abroad and to protect foreign diplomats in the United States.

END-OF-YEAR EMPLOYMENT LEVELS

Table I-2. TOTAL FEDERAL EMPLOYMENT END-OF-YEAR

Description	Actual, as of September 30		
	1983	1984	1985
Civilian employment in the executive branch:			
Full-time permanent.....	1,852,984	1,881,590	1,898,980
Other than full-time permanent.....	280,051	265,085	286,933
<i>DOD-Military functions (total employment)</i>	(983,644)	(1,004,529)	(1,043,240)
<i>Non-DOD (total employment)</i>	(1,149,391)	(1,142,146)	(1,142,673)
Subtotal.....	2,133,035	2,146,675	2,185,913
Postal Service:			
Full-time permanent.....	545,687	560,952	587,132
Other than full-time permanent.....	117,405	121,764	162,952
Subtotal.....	663,092	682,716	750,084
Special categories ¹	24,367	24,522	27,546
Subtotal, executive branch civilian employment.....	2,820,494	2,853,913	2,963,543
Military personnel on active duty: ²			
Department of Defense.....	2,123,349	2,138,157	2,151,032
Department of Transportation (Coast Guard).....	39,708	39,560	38,487
Subtotal, military personnel.....	2,163,057	2,177,717	2,189,519
Total, executive branch employment.....	4,983,551	5,031,630	5,153,062
Legislative and judicial personnel: ³			
Full-time permanent.....	31,685	32,097	32,644
Other than full-time permanent.....	24,084	23,982	24,345
Subtotal, legislative and judicial branches.....	55,769	56,079	56,989
Grand total.....	5,039,320	5,087,709	5,210,051

¹ Developmental positions under the Worker-Trainee Opportunity Program; disadvantaged summer and part-time workers under such Office of Personnel Management programs as Summer Aids, stay in school, and junior fellowship; and certain statutory exemptions.

² Excludes reserve components.

³ Excludes members and officers of Congress.

Between January 1981, when this administration took office, and September 30, 1985, nondefense total employment fell from 1,232,181 to 1,142,673; a decrease of 89,508 employees. Total Federal

civilian employment in the executive branch was 2,185,913 at the end of 1985, excluding Postal Service employees.

Table I-2 shows Government-wide Federal civilian employment as of the end of fiscal years 1983, 1984, and 1985. Postal Service employment (including the Postal Rate Commission) is also shown, together with data for the legislative and judicial branches and for active duty military personnel.

Full-time permanent employment accounted for nearly 87 percent of executive branch employment (excluding the Postal Service) at the end of fiscal year 1985. The remainder is made up of part-time employees, intermittent employees (those employed on an irregular basis) and full-time temporary employees (generally, in positions occupied for less than one year).

PERSONNEL COMPENSATION AND BENEFITS

Direct compensation of the current Federal work force includes base pay, merit pay, cash incentive and performance awards, meritorious and distinguished executive awards, premium pay for overtime, Sunday and holiday pay, differentials for night work and overseas duty, and flight and other hazardous duty pay. In addition, it includes uniform allowances (when paid in cash), cost-of-living and overseas quarters allowances.

In the case of military personnel, compensation includes basic pay, special and incentive pay (including enlistment and reenlistment bonuses), and allowances for clothing, housing, and subsistence.

Related compensation in the form of personnel benefits for current personnel consists primarily of the Government's share (as employer) of health insurance, life insurance, old-age survivors' disability and health insurance, and payments to the Department of Defense's DOD Military Retirement Fund and the Civil Service Retirement and Disability Fund to finance future retirement benefits.

The 1987 Budget includes proposals that are designed individually and as a whole to gain control over the Government's expenditures as an employer. The size of projected deficits has contributed to a growing perception that Government salaries are relatively high (certain technical measurements of pay comparability with the private sector notwithstanding), and that the benefit programs are liberal and expensive. For 1987, the Administration will propose:

- reform of the Civil Service Retirement System to bring benefits and costs more into line with private sector practice,
- a voucher system for the health benefits program to widen employee choice and to control cost escalation through enhanced competition for employee enrollments.

Additional details on these proposals can be found under the income security and health functions of Part 5 of the 1987 Budget of the United States.

Table I-3. **COMPENSATION AND BENEFITS FOR CURRENT PERSONNEL**

(In millions of dollars)

Description	1985 actual	1986 est.	1987 est.
Civilian personnel costs:			
Executive branch:			
Direct compensation.....	57,462	58,406	59,561
Personnel benefits ¹	12,544	12,897	13,988
<i>DOD-Military functions, civilian personnel:</i>			
Direct compensation.....	(26,130)	(26,093)	(26,952)
Personnel benefits.....	(3,283)	(3,260)	(3,619)
Subtotal.....	70,006	71,303	72,555
Postal Service:			
Direct compensation.....	20,200	20,888	22,202
Personnel benefits.....	3,640	3,667	4,653
Subtotal.....	23,840	24,555	26,855
Legislative and judiciary: ²			
Direct compensation.....	1,093	1,167	1,230
Personnel benefits.....	133	151	164
Subtotal.....	1,226	1,318	1,394
Allowance for civilian pay raise ³			1,119
Total, civilian personnel costs.....	95,072	97,176	101,923
Military personnel costs: ⁴			
Direct compensation.....	43,980	46,606	47,655
Personnel benefits.....	21,168	22,664	23,057
Subtotal.....	65,148	69,270	70,712
Allowance for military pay raise ⁵			2,648
Total, military personnel costs.....	65,148	69,270	73,360
Grand total, personnel costs ³	160,220	166,446	175,283
ADDENDUM			
Retired pay for former personnel:			
Civilian personnel.....	22,850	24,283	25,130
Military personnel.....	17,547	18,028	18,372
Total.....	40,397	42,311	43,502

Note.—Personnel costs do not reflect the effects of the sequestration of 1986 budgetary resources required by Public Law 99-177.

¹ In addition to the employing agency's contributions to the costs of life and health insurance, retirement, and Medicare Hospital Insurance, this amount includes transfers from general revenues to amortize the effects of general pay increases on Federal retirement systems, for employees in the legislative and judicial branches as well as employees (nonPostal) in the executive branch. The transfers amounted to \$4,406 million in 1985 and are estimated to be \$4,407 million in 1986 and \$4,618 million in 1987.

² Excludes members and officers of Congress.

³ Assumes a 3 percent pay raise, effective January 1987.

⁴ Excludes reserve components.

⁵ Comprised of allowances for a 4 percent pay increase effective October 1, 1986 for military personnel as follows: for the Department of Defense, \$2,611 million; for the Coast Guard, \$36 million.

The budget assumes a 4 percent military pay increase on October 1, 1986, and a 3 percent increase in pay for Federal white- and blue-collar workers, effective in January 1987. The final decision on the pay adjustment for white-collar workers will be made in late

summer, as the law provides, after Presidential review of the recommendations of the President's Pay Agent, the Federal Employees Pay Council, and the Advisory Committee on Federal Pay, and after a review of prevailing economic conditions.

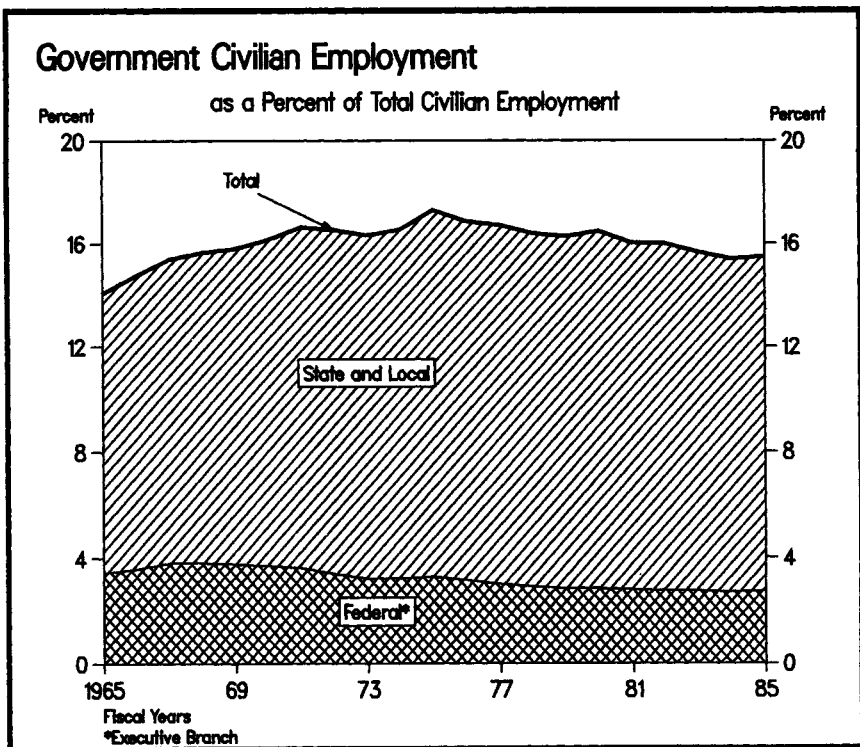
As indicated in table I-3, obligations for executive branch civilian personnel compensation and benefits in 1987 are projected to reach nearly \$72.6 billion, excluding the Postal Service.

GOVERNMENT EMPLOYMENT AND LABOR FORCE COMPARISONS

As shown on the following chart, Government employment—Federal, State, and local—comprised nearly 15.5 percent of the total employed civilian labor force in 1985.

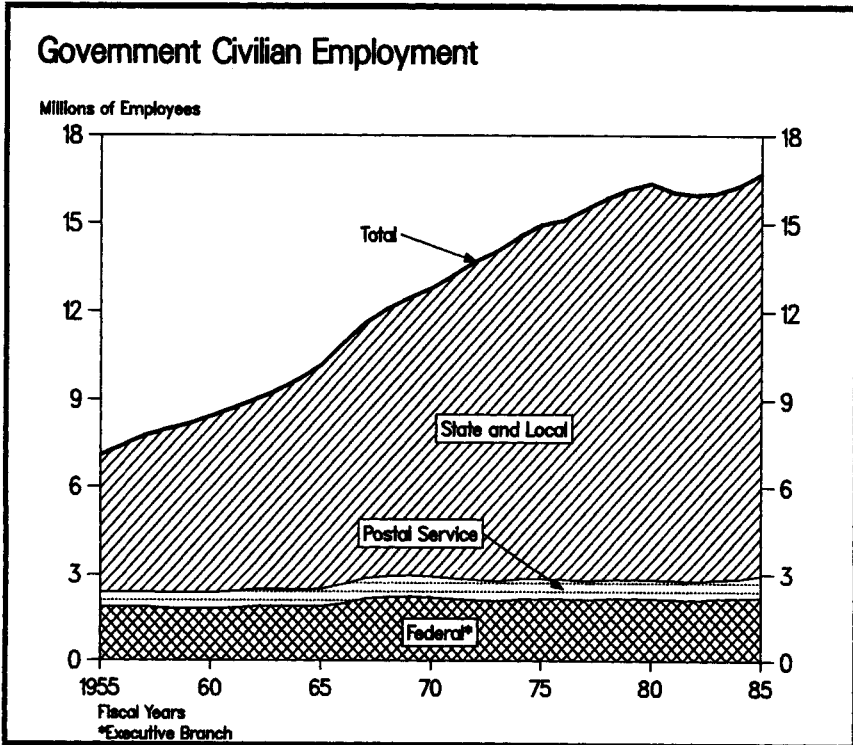
Within this segment, Federal civilian employment in the executive branch accounts for 2.75 percent of the total employed civilian labor force in 1985, down from a high of 3.82 percent in 1968.

The portion of the total employed civilian labor force attributable to State and local government has grown from 10.6 percent in 1965 to 12.7 percent in 1985.



GOVERNMENT EMPLOYMENT AND POPULATION COMPARISONS

As illustrated in the following chart and in table I-4, the Federal share of total government employment has declined significantly over the last three decades, from 33.4 percent in 1955 to 17.7 percent in 1985. Employment for all government had been rising steadily due to increases in State and local government. In 1981 it began to decline but in 1983 this trend reversed and State and local government is again increasing.



The ratio of Federal civilian employment to the total U.S. population is expected to be 12.4 per thousand in 1985. As is evident in table I-2, the main reasons for the increase in this ratio over 1984 are increases in the Department of Defense—Military Functions, and in the Postal Service.

Table I-4. GOVERNMENT EMPLOYMENT AND POPULATION, 1955-85

Fiscal year	Government employment				Population	
	Federal executive branch ¹ (thousands)	State and local governments (thousands)	All governmental units (thousands)	Federal as percent of all governmental units	Total United States (thousands)	Federal employment per 1,000 population
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 ²	2,371	6,073	8,444	28.1	180,671	13.1
1961 ²	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 ³	2,490	6,834	9,324	26.7	189,242	13.2
1964 ³	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 ⁴	2,980	9,496	12,476	23.9	202,677	14.7
1970 ²	2,944	9,869	12,813	23.0	205,052	14.4
1971 ²	2,883	10,372	13,255	21.8	207,661	13.9
1972.....	2,823	10,896	13,719	20.6	209,896	13.4
1973.....	2,775	11,286	14,061	19.7	211,909	13.1
1974.....	2,847	11,713	14,560	19.6	213,854	13.3
1975.....	2,848	12,114	14,962	19.0	215,973	13.2
1976.....	2,832	12,282	15,114	18.7	218,035	13.0
1977 ⁵	2,789	12,704	15,493	18.0	220,904	12.6
1978.....	2,820	13,050	15,870	17.8	223,278	12.6
1979.....	2,823	13,359	16,182	17.4	225,779	12.5
1980 ²	2,821	13,542	16,363	17.2	^a 228,279	12.4
1981 ²	2,806	13,274	16,080	17.5	^a 230,523	12.2
1982.....	2,768	13,207	15,975	17.3	^a 232,993	11.9
1983.....	2,819	13,220	16,039	17.6	^a 235,160	12.0
1984.....	2,854	13,429	16,283	17.5	^a 237,315	12.0
1985.....	2,964	13,743	16,707	17.7	^a 239,440	12.4

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

² Includes temporary employees for the decennial census.

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

⁴ 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 starting with 1969.

⁵ Data for 1954 through 1976 are as of June 30; for 1977 through 1984, as of Sept. 30.

^a U.S. population data for 1980-1985 are the latest available from the Census Bureau.

PART 3

SELECTED

FEDERAL PROGRAMS

3-1

INTRODUCTION

Part 3 furnishes Government-wide program and financial information in two selected program areas—civil rights and research and development, designated J and K.

Special Analysis J (Civil Rights Activities) summarizes Federal spending for principal civil rights activities, concentrating on compliance, investigation, and enforcement efforts.

Special Analysis K (Research and Development) identifies Federal programs for the conduct of research and development, and for the support of facilities related to such activities.

SPECIAL ANALYSIS J

CIVIL RIGHTS ACTIVITIES

Coverage and Scope. Some 130 Federal statutes prohibit discrimination based on sex, race, color, religion, national origin, age, or handicap in employment, housing, education, credit, public accommodations, and participation in Federally assisted programs (as well as in the exercise of such rights and responsibilities of citizenship as voting and jury service). Taken as a whole, these laws express the vision Americans have come to share of the nation we want to be: a nation in which every woman and man is treated according to individual effort and ability; a nation in which one's race, sex, religion, color or national origin are truly irrelevant to the judgment of what a person is worth and what he or she can contribute.

Special Analysis J describes the progress made in enforcing these guarantees.

VOTING RIGHTS

The Voting Rights Act of 1965, as amended, (42 U.S.C. 173 et seq.) and the Overseas Citizens Voting Rights Act (42 U.S.C. 1973 dd) guarantee the right of all qualified citizens to register and vote without discrimination on account of race, color, membership in a language minority group, age, or absence from legal residence. The Department of Justice's Civil Rights Division is primarily responsible for enforcing these statutes.

Under the Voting Rights Act, for example, Justice is solely responsible for designating counties where Federal personnel are necessary to conduct registration or observe polling places; and for determining whether proposed changes affecting voting in 926 political subdivisions in 21 States (including 9 States in their entirety) covered by the Act's pre-clearance provisions are discriminatory. In conjunction with the Director of the Census, the Department determines which States and subdivisions of States will be subject to those pre-clearance requirements. In addition, the Office of Personnel Management is responsible for providing Federal observers as necessary to assure the fairness of elections.

The Civil Rights Division's Voting Rights Section participated in 17 new cases during 1985, 16 as plaintiff and 1 as *amicus curiae*. Of the 16 lawsuits filed by the Division, 6 were brought prior to the November 1984 Presidential election to achieve compliance by the

States of Alabama, Arkansas, Minnesota, Montana, New Hampshire and Wisconsin with the Overseas Citizens Voting Rights Act, (as was a lawsuit filed during the final month of fiscal year 1984 against Colorado). All were resolved by court orders that allowed overseas voters' absentee ballots to be counted for the Presidential election if they were postmarked by election day and received within 10 to 14 days thereafter—allowing the votes of 2,768 people to be counted in the 1984 Presidential election.

The Civil Rights Division filed 4 lawsuits to enforce the pre-clearance requirement of Section 5 of the Voting Rights Act, 5 lawsuits to enjoin alleged dilution of minorities' voting rights through the use of at large or malapportioned election districts in violation of Section 2 of the Voting Rights Act, and 1 lawsuit to compel a State to comply with the voter assistance provisions of the Voting Rights Act. The Civil Rights Division obtained 4 consent decrees during 1985 requiring cities, counties, and school boards to adopt districting plans that comply with Section 2 of the Voting Rights Act.

During 1985, the Civil Rights Division received over 3,000 submissions involving more than 14,000 voting changes under section 5 of the Voting Rights Act, and objections were made to 105 voting changes. Also during 1985, a total of 700 observers were assigned to cover 12 elections in 29 counties in 5 States. 307 of these observers were assigned to counties in Mississippi during the 1984 Presidential election.

ENFORCEMENT OF OTHER FUNDAMENTAL CONSTITUTIONAL AND CIVIL RIGHTS

To be secure in one's person and property and to enjoy the freedoms guaranteed each individual by the Constitution are the most basic of civil rights. In addition to the provisions of the Constitution itself, these rights are guaranteed by:

- Title 18 of the United States Code, which prohibits deprivations of rights and privileges guaranteed under the Constitution or the laws of the United States, including 18 U.S.C. 241 (conspiracy against the rights of citizens), 18 U.S.C. 242 (deprivation of rights under color of law), 18 U.S.C. 245 (interference with Federally protected rights), 18 U.S.C. 1581 (prohibition against peonage), and 18 U.S.C. 1584 (prohibition against involuntary servitude).
- 42 U.S.C. 3631, which prohibits interference with housing rights.
- 30 other criminal civil rights statutes (in addition to those cited above).
- 42 U.S.C. 1997 (The Civil Rights of Institutionalized Persons Act), which prohibits violations of the rights of persons confined to publicly operated residential institutions including

prisons, jails, mental health and retardation facilities, juvenile detention centers, and publicly operated nursing homes.

Within the Department of Justice, the Civil Rights Division's Criminal Section is primarily responsible for investigating and prosecuting violations of the Federal civil rights criminal statutes. The Division annually processes a large number of complaints alleging criminal interference with civil rights.

During 1985, the Criminal Section reviewed over 9,000 complaints alleging criminal interference with civil rights; approximately 3,000 of these complaints were investigated by the Federal Bureau of Investigation. The results of 56 investigations were presented to Federal grand juries; 35 indictments were returned and 13 informations were filed charging a total of 106 defendants, including 67 law enforcement officers. Thirty cases were tried, resulting in conviction for 41 defendants and acquittal for 21 defendants. An additional 36 defendants pled guilty to violations of criminal civil rights statutes. In sum, the Section enjoyed a success rate of almost 80 percent.

The Civil Rights Division's Criminal Section continued to give particular emphasis to prosecuting cases involving racial violence. During 1985, the Division filed 11 racial violence cases involving 30 defendants. Six of these cases (involving 16 defendants) involved Ku Klux Klan activity, and 7 of these defendants have already been found guilty. A 2-year grand jury investigation of crossburnings and shootings into the residences of individuals living in North Carolina resulted in the conviction of 3 members of a group styling itself the "White Knights of Liberty". Indictments are pending against 9 additional members in this case. In Montgomery, Alabama, 3 persons associated with a Klan group pled guilty to setting fire to the offices of the Southern Poverty Law Center which maintains files on Klan activities. All of the defendants were sentenced to prison terms, with one defendant sentenced to serve 15 years for receiving stolen explosives. A fourth individual pled guilty and was sentenced to a year's imprisonment for his involvement in another racial incident in Montgomery, the burning of a cross at the home of a county commissioner who had urged citizens to boycott a local bank for alleged discriminatory practices.

The Civil Rights Division's Criminal Section actively prosecuted alleged violations of civil rights by government officials. For example, the Division obtained convictions in a case involving 10 police officers in Puerto Rico charged with perjury and conspiracy to obstruct justice in connection with their participation in the unlawful killing of 2 independence advocates. The 10 defendants were sentenced to serve prison terms ranging from a minimum of 6 years up to 30 years (5 received terms of 20 years or more). In another noteworthy case, the Division prosecuted 2 police officers

and 3 prison inmate/trustees in Tennessee for beating and sexually assaulting a man and his fiancée while they were in custody for traffic related offenses. The indictments led to the conviction of all 5 defendants.

The Criminal Section also continued its efforts to deter the victimization of migrant workers in violation of the involuntary servitude and peonage statutes during 1985. In Los Angeles, California, 4 defendants indicted for conspiracy to smuggle Indonesian laborers into the United States via fraudulently obtained non-immigrant visas pled guilty, while 2 others charged with conspiracy and violating involuntary servitude statutes were convicted after a 2-month trial. Another case alleging involuntary servitude was filed against 2 wealthy homeowners who recruited illegal aliens to perform domestic work in their homes in Hawaii, California and Nevada. Recruited predominantly in southern California, the victims were misled as to their working conditions and were subjected to physical abuse.

Under the Civil Rights of Institutionalized Persons Act (CRIPA), 42 U.S.C. 1997, the Special Litigation Section of the Department of Justice's Civil Rights Division participates in litigation to vindicate the constitutional rights of persons confined to publicly operated residential institutions. These include prisons, jails, mental health and retardation facilities, juvenile detention centers and publicly operated nursing homes. During 1985, the Special Litigation Section succeeded in resolving 5 suits filed under CRIPA with consent decrees. In addition, the Section filed its first contested lawsuit under CRIPA involving a mental health facility; and initiated 12 investigations of alleged CRIPA violations by mental health institutions, mental retardation facilities, juvenile detention centers, and adult correctional institutions.

NONDISCRIMINATION IN FEDERALLY ASSISTED PROGRAMS

It is fundamental that activities funded by the Federal government itself must be conducted without discrimination. This principle is embodied in a substantial body of law including, in addition to numerous program-specific statutory provisions prohibiting discrimination:

- Title VI of the Civil Rights Act of 1964, which prohibits discrimination in all Federally assisted programs and activities based on race, color, or national origin.
- Title IX of the Education Amendments of 1972, which prohibits discrimination based on sex in Federally educational programs and activities.

- The Age Discrimination Act of 1975, which prohibits discrimination based on age in all Federally assisted programs and activities.
- Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination based on handicap in all Federally assisted programs and activities.

Since every agency which provides financial assistance enforces these statutes, assuring nondiscrimination in Federally assisted programs is the most widely dispersed Federal civil rights enforcement responsibility. In the past, this dispersion has given rise to numerous problems, including: Potential conflicts of interest arising from the fact that each agency is responsible for enforcing these provisions in regard to assistance it provides; absence of correspondence between enforcement resources and the alleged incidence of discrimination in the various Federally assisted programs; overlap and duplication of agency enforcement efforts; a tendency of enforcement agencies to emphasize technical trivia and impose nonproductive reporting and other paperwork burdens; and attempts to extend agency enforcement mandates to include the employment practices of recipients.

Within the Department of Justice's Civil Rights Division, the Coordination and Review Section has been working to eliminate these and other problems. Under Executive Order 12250, the Department of Justice is responsible for coordinating the enforcement of all statutes requiring equal opportunity in the provision of Federally assisted services and benefits except the Age Discrimination Act. Significant accomplishments by the Section in 1985 included:

- Reviewing 59 agency regulations implementing these statutes to assure clarity and consistency.
- Negotiating additional and improved delegation agreements, designed to eliminate duplicate agency compliance activities and provide for more effective allocation of agencies' enforcement resources.
- Developing detailed technical assistance guides designed to aid agencies in implementing their responsibilities under Section 504 (in addition to continuing its efforts to assist agencies in developing regulations under Section 504 governing agency *conducted* activities).

Among Federal agencies, the Department of Health and Human Services and the Department of Education have the largest enforcement programs under these statutes. During 1985, the Department of Health and Human Services (HHS) completed 725 investigations, resulting in changes in potentially discriminatory policies by 83 hospitals, 14 long term care facilities, 12 other direct health care providers, 5 child welfare agencies, and 39 other social services providers. HHS also completed 135 compliance reviews, result-

ing in changes in potentially discriminatory policies by 83 health care providers and social services agencies.

A combination of improved procedures and declining complaint workloads has enabled the Department of Education's Office for Civil Rights (the largest of the Title VI enforcement agencies) to significantly improve its complaint closure rate (resulting in a 50% reduction in its backlog of pending complaints since 1980):

Table J-1. DEPARTMENT OF EDUCATION OFFICE FOR CIVIL RIGHTS COMPLAINT CLOSURE RATE; 1980-1985*

	Fiscal year	
	1980 (actual)	1985 (actual)
Percentage closure rate*	57%	67%
Number, complaints pending end of year	2,051	1009

* Complaints closed/complaints pending or received for processing.

The Equal Educational Opportunity Section of the Justice Department's Civil Rights Division represents the Federal government in education-related litigation under Title VI (as well as other nondiscrimination statutes and the Constitution). During 1985, the Section launched a major inquiry into the funding of minority schools by the Los Angeles Unified School District and targeted for investigation the special education programs of several school systems. The Section also increased its enforcement efforts with regard to Native Americans, initiating investigations of alleged discrimination in the provision of educational opportunities by public school districts in North Dakota, Montana, Idaho, Arizona, and New Mexico.

The Equal Educational Opportunity Section filed 2 new suits involving elementary and secondary education during 1985. One suit, a Title VI referral from the Department of Education concerning the high school district in Phoenix, Arizona, resulted in a consent decree utilizing magnet schools to encourage voluntary student desegregation. The other suit involved the public school system in Bolivar County, Mississippi, and sought further desegregation and equalization of the District's educational facilities. Among significant actions involving institutions of higher education, the Section entered into a consent decree resolving allegations of sex discrimination at a Texas institution, and commenced negotiations with the Massachusetts Maritime Academy concerning appropriate measures to remedy a finding of illegal sex discrimination by a Federal district court.

EQUAL EMPLOYMENT OPPORTUNITY

The principal statutes and Executive orders prohibiting discrimination in employment are:

- Title VII of the Civil Rights Act, which prohibits employment discrimination based on race, color, religion, national origin, or sex.
- The Equal Pay Act (EPA), as amended, which prohibits discrimination in compensation based on sex.
- The Age Discrimination in Employment Act (ADEA), which prohibits discrimination against persons aged 40 through 70 based on age.
- Executive Order 11246, as amended, section 503 of the Rehabilitation Act of 1973, and section 402 of the Vietnam Veterans Readjustment Act, which prohibit employment discrimination by Federal contractors based on race, color, sex, national origin, religion, handicap, service-connected disability, or Vietnam era military service, and require Federal contractors to take affirmative action to assure that such discrimination does not occur.

The EEOC enforces the Equal Pay Act and the Age Discrimination in Employment Act. It also enforces all aspects of title VII except litigation involving State and local governments. The Department of Labor's Office of Federal Contract Compliance Programs (OFCCP) enforces Executive Order 11246, section 503 of the Rehabilitation Act, and section 402 of the Vietnam Era Veterans Readjustment Act. The Department of Justice's Civil Rights Division litigates all employment discrimination cases under Executive Order 11246 and the statutes prohibiting discrimination by Federally assisted programs. It also litigates alleged violations of title VII by State and local governments. The Equal Employment Opportunity Act of 1972 and Executive Order 12067 require the EEOC to coordinate enforcement of all Federal statutes and regulations prohibiting employment discrimination.

During 1985, 72,002 charges of employment discrimination were filed with the EEOC. The Commission completed processing of 63,567 charges, 8,989 (14%) through pre-investigative settlement. The EEOC also continued its leadership among Federal civil rights agencies in involving State and local agencies in resolving employment discrimination charges. During 1985, the EEOC provided over \$18.7 million in grants to State and local nondiscrimination agencies.

The EEOC conducted an equally vigorous litigation program. The Commission had 537 cases in active litigation at the beginning of 1985. During 1985, the Commission prosecuted these (and subsequently authorized) cases by conducting 54 trials, successfully resolving 90 subpoena enforcement actions and successfully resolving 204 lawsuits by settlements, consent decrees or judgments. Additionally, as a result of extensive litigation development activities, field legal units filed 411 new lawsuits in 1985.

Since 1981, the Department of Labor's Office of Federal Contract Compliance Programs (OFCCP) has effected substantial improvements in its management and procedures—particularly its procedures for selecting contractors for compliance reviews and assuring their quality and timeliness. As a result, the OFCCP was able to complete 5,217 compliance reviews of contractor facilities employing 2.97 million persons during 1985 (compared with only 2,632 compliance reviews of facilities employing 1.05 million workers during 1980, the last year of the prior administration. The OFCCP also completed 1,035 investigations of discrimination complaints during 1985.

During 1985, the Employment Litigation Section of the Department of Justice's Civil Rights Division filed 9 new suits against public employers under Title VII of the Civil Rights Act of 1964, as amended. Consent and litigated decrees, providing relief for identified victims of discrimination, were obtained in 10 cases. Also during 1985, the Division contacted defendants in more than 50 cases to seek modifications of consent decrees previously obtained. The modifications sought by the Division were designed to make the decrees consistent with the Department of Justice's interpretation of the Supreme Court's 1984 decision in *Firefighters Local 1784 v. Stotts*, 104 S.Ct. 2576. The Division also filed motions requesting the court to order such modifications in decrees involving 3 cities. These motions are currently pending, and the ultimate disposition of these cases will depend upon the rulings of the Supreme Court and other appellate courts.

FAIR HOUSING AND EQUAL CREDIT

Title VIII of the Fair Housing Act of 1968, as amended, prohibits discrimination based on race, color, religion, sex, or national origin in the sale, rental, or financing of housing or provisions for brokerage services.

The Department of Housing and Urban Development's Office for Fair Housing and Equal Opportunity is responsible for investigating complaints of alleged violations of title VIII. Where it concludes that violations of title VIII have occurred, HUD attempts to resolve them through informal conference, conciliation, and persuasion.

Title VIII also provides that fair housing complaints filed with HUD may be deferred to State and local fair housing agencies with equivalent statutory authority. HUD has worked aggressively to expand the involvement of State and local governments in processing fair housing complaints. Through direct grants and technical assistance, HUD has helped State and local agencies develop procedures, train staff, and complete other tasks necessary to develop the capacity to process fair housing complaints. As a result, the number of State and local agencies participating in charge process-

ing grew from 32 at the end of 1980 to 96 at the end of 1985, a three-fold increase, and 2,867 fair housing complaints were referred to State and local agencies for processing during 1985 which would otherwise have been processed by HUD.

Table J-2. TOTAL FAIR HOUSING COMPLAINTS PROCESSED BY HUD AND STATE AND LOCAL AGENCIES

Year	Total closures	Percent change, 1980- 1985
1980.....	2,860	
1985.....	3,308	+15%

During 1985, HUD also provided financial support for local Community Housing Resource Boards. These Boards initiate affirmative marketing and other voluntary efforts to assure fair housing. It is expected that 589 of these Boards will be in existence at the end of 1986. An estimated \$1 million will be spent to support the activities of these Boards in 1987. (In addition, the President's budget would make \$7 million available to support fair housing initiatives by State and local governments *and* private organizations during 1987.)

Table J-3. FAIR HOUSING COMPLAINTS REFERRED TO STATE AND LOCAL AGENCIES

	Actual					
	1980	1981	1982	1983	1984	1985
Complaints received.....	3,039	4,209	5,112	4,551	4,533	4,490
Complaints referred.....	410	1,661	2,679	2,736	3,062	2,867

HUD's investments in the abilities of the private sector and State and local governments will reduce the incidence of violations which give rise to complaints. Where complaints are filed, more will be resolved by the States and communities in which the parties reside. During 1985, for example, HUD referred 64 percent of the complaints it received to State and local agencies for processing (compared with only 13 percent in 1980). As a result of this cooperation between HUD and State and local agencies, there has been a substantial increase in the service provided to persons filing complaints under title VIII, with 15 percent more complaints closed in 1984 than in 1980.

The Civil Rights Division of the Department of Justice is responsible for bringing suits to enjoin alleged patterns and practices of discrimination prohibited by title VIII. During 1984, the Division established a separate unit, the Housing and Civil Enforcement Section, to handle pattern and practice lawsuits brought pursuant

Table J-4. NUMBER OF STATE AND LOCAL AGENCIES WITH CHARGE PROCESSING AGREEMENTS

End of fiscal year:	
1980	32
1981	42
1982	67
1983	79
1984	90
1985	96
1986 (estimate)	110
1987 (estimate)	130

to the Fair Housing Act (42 U.S.C. 3601-3619) or the Equal Credit Opportunity Act (15 U.S.C. 1691-1691f).

During 1985, the Housing and Civil Enforcement Section filed 18 housing discrimination cases and successfully negotiated consent decrees in 21 housing suits. Nine of the cases filed attack alleged racial discrimination by apartment owners in 7 different States, including a company operating over 1,600 units in the Memphis metropolitan area. Five other new cases alleging racial discrimination were filed against time-share developers. Defendants in these cases controlled the sale of approximately 12,000 time-share units. Three other suits were brought recently to challenge racially restrictive covenants. (During 1985, the Housing and Civil Enforcement Section also filed 6 suits under Title II of the Civil Rights Act of 1964 to remedy alleged racial discrimination in places of public accommodation.)

Since the passage of the 1976 amendments to the Equal Credit Opportunity Act, the Department of Justice's Civil Rights Division has worked with Federal regulatory agencies and significant suits have been filed challenging the lending practices of banks, cash loan companies and retail creditors as well as the activities of real estate appraisers and mortgage lenders. These suits include cases against 4 nationwide creditors. During 1985, the Division's Housing and Civil Enforcement Section filed complaints and consent decrees in 2 cases against nationwide creditors (a third equal credit opportunity case filed in 1985 involved a time-shared development which was also covered by the Fair Housing Act).

THE U.S. COMMISSION ON CIVIL RIGHTS

Congress established the Commission on Civil Rights in 1957 to study the enforcement of statutes guaranteeing equal protection of the law regardless of race, color, religion, or national origin. The Commission's early work contributed significantly to the national recognition that it is immoral to limit any person's opportunities because of his or her sex, race, religion, national origin, or other characteristics similarly irrelevant to character and ability—a rec-

ognition that led to the passage of the Civil Rights Act of 1964, the Voting Rights Act, the Fair Housing Act, the Rehabilitation Act of 1973, and other landmark legislation. In 1983, the President nominated several new members with distinguished civil rights backgrounds to the Commission. An impasse over these nominations was terminated by the passage of compromise legislation, supported by the President and the Congressional leadership of both parties, creating a new Commission.

During 1985, the Commission held a widely noted hearing on the status of affirmative action. The hearing included several panels of experts (with widely varying policy perspectives) in the fields of law, statistics, economics, and management. Topics addressed included the concepts of underrepresentation and underutilization, minority business set-aside programs, and the future of affirmative action. The Commission also published a compilation of papers presented during 1984 hearings on the concept of comparable worth; and completed work on a *Directory of State and Local Fair Housing Agencies* and a *Citizen's Guide to Understanding the Voting Rights Act*.

Through 1987, the Commission will continue to pursue studies focusing on a wide variety of concerns, including violence and bigotry against Asian and Pacific Island Americans; trends in income and unemployment by sex, race, and ethnicity; civil rights enforcement by State and local governments; affirmative action in higher education; methods of achieving school desegregation; and the employment of Americans of Eastern and Southern European Ancestry.

Table J-5. BUDGET AUTHORITY FOR PRINCIPAL FEDERAL CIVIL RIGHTS ACTIVITIES

(In millions of dollars)

	1985 actual	1986 ^a estimate	1987 estimate
Architectural and Transportation Barriers Compliance Board.....	2.0	1.9	2.0
Commission on Civil Rights.....	12.9	11.8	12.6
Department of Education, Office for Civil Rights.....	45.0	41.8	38.2
Department of Health and Human Services, Office for Civil Rights ¹	20.2	19.3	19.3
Equal Employment Opportunity Commission.....	163.7	157.9	167.7
Department of Housing and Urban Development, Fair Housing Activities.....	32.4	32.3	39.8
Department of Justice, Civil Rights Division.....	22.6	21.8	24.1
Department of Labor, Office of Federal Contract Compliance Programs.....	45.4	43.7	45.9

¹ Total obligational authority, including both budget authority and trust fund transfers.

^a 1986 estimates include reductions mandated by the Balanced Budget and Emergency Deficit Control Act of 1985.

SPECIAL ANALYSIS K

RESEARCH AND DEVELOPMENT

This analysis covers the funding of research and development across all agencies with R&D programs of \$10 million or more. It consists of two sections. The first highlights the R&D policies and trends in the 1987 budget. The second describes in more detail the R&D programs of 12 agencies whose R&D obligations individually exceed \$150 million. These agencies fund over 99 percent of total Federal R&D.

PART I. HIGHLIGHTS

In 1987, total Federal obligations for research and development, including R&D facilities, are estimated at \$63 billion, an increase of almost \$9 billion or 16 percent above the 1986 estimated level of \$54 billion as shown in table K-1. Support for the conduct of basic research, included within this total, is estimated to increase by 8 percent, from \$8.0 billion in 1986 to \$8.6 billion in 1987.

All of the 1986 estimates reflect the reductions mandated by the Balanced Budget and Emergency Deficit Control Act of 1985 (Gramm-Rudman-Hollings). These reductions generally reduced 1986 appropriated amounts for R&D by over 4% in the case of civilian programs and about 5% in the case of defense activities.

Within the framework of necessary overall restraint to reduce the deficit, the 1987 budget reflects the continued high priority that this Administration gives to R&D that is appropriate for Federal support. It provides significant increases for:

- the R&D programs of the Department of Defense, including the Strategic Defense Initiative and the nuclear weapons R&D program of the Department of Energy;
- the R&D programs of the National Aeronautics and Space Administration, primarily related to initiation of Space Station Development; and
- government-wide support of basic research, particularly through programs of the National Aeronautics and Space Administration, the Department of Energy, and the National Science Foundation.

At the same time, the 1987 budget continues to propose reductions in programs that are not an appropriate Federal responsibility and should be left to the states or the private sector for needed investments. These include large reductions across the energy tech-

nology programs of the Department of Energy, as well as elimination of selected programs of the Department of Commerce (e.g., the Sea Grant program), and research activities of the Department of Interior (e.g., the Mineral Institutes program).

Table K-1. TOTAL FEDERAL FUNDING FOR CONDUCT OF R&D AND RELATED FACILITIES

(In billions of dollars)

	Obligations			Outlays		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
Conduct of R&D	49.5	52.0	60.8	45.2	47.8	51.4
R&D facilities	1.9	1.8	1.7	1.8	1.7	1.7
Total	51.4	53.8	62.5	47.0	49.5	53.1

CONDUCT OF RESEARCH AND DEVELOPMENT

The budget for 1987 includes \$61 billion in obligations for the conduct of R&D, an increase of \$9 billion or 17 percent over 1986. Highlights of the proposed programs of the seven major R&D agencies, which account for over 97 percent of the obligations for the conduct of R&D by the Federal Government, are presented below.

- **Department of Defense (DOD).**—Obligations for the conduct of R&D by DOD are estimated at \$41.8 billion for 1987, an increase of \$8.3 billion or about 25 percent above 1986. The increased funds proposed for R&D allow growth for several important programs, including work on the Strategic Defense Initiative, the development of the C-17 transport aircraft, and a joint NASA-DOD program to explore technology development on advanced concepts for a future transatmospheric vehicle.
- **Department of Energy (DOE).**—Obligations for the conduct of R&D by the Department of Energy are estimated at \$4.9 billion, a net increase of 2 percent over 1986. Significant increases in nuclear weapons R&D and in basic research are offset by major reductions in energy technology programs. Nuclear weapons R&D will increase from \$2,246 million to \$2,609 million. Funding for the General Sciences program, which includes basic research in high energy and nuclear physics, will increase to \$602 million in 1987. Included in this total are funds for construction of a new nuclear physics facility at Newport News, Virginia and to continue construction projects such as the Accumulator/Booster Ring at the Brookhaven Alternating Gradient Synchrotron. Obligations for Energy Programs will decrease from \$2.0 billion in 1986 to \$1.7 billion in 1987. Within this total, significant increases for basic energy research will be more than offset by reductions

in applied research and development related to specific energy technologies.

- **Department of Health and Human Services (HHS).**—The Administration continues to fund HHS R&D activities at stable and sustainable levels. In 1987, the National Institutes of Health (NIH) will support 18,000 research projects grants, 523 research centers, and 9,100 research trainees. In addition, the Administration's Fair Share Allocated Overhead policy will reimburse research institutions for their administrative expenses at reasonable and fair rates, and will provide additional resources to support high-priority, high-quality research. In 1987, total HHS obligations will amount to almost \$5.5 billion.
- **National Aeronautics and Space Administration (NASA).**—NASA obligations for the conduct of R&D including facilities are estimated at \$4.4 billion in 1987, an increase of \$510 million over 1986. Much or most of this increase initiates space station development planned to be continued in the late 1980's and early 1990's. Initial operational capability is anticipated in the mid-1990's. For science programs, the budget continues support for the Space Telescope and the Galileo mission to Jupiter. The budget also continues development of major flight projects such as the Gamma Ray Observatory and the Mars Observer Mission. It provides for one new mission in 1987, the Ocean Topography Mission (TOPEX), and for instrument development for the International Solar-Terrestrial Physics (ISTP) program.
- **National Science Foundation (NSF).**—Obligations for research supported by NSF are expected to increase by about \$174 million, or 13 percent—to \$1.5 billion in 1987. The budget principally provides enhanced support for basic research in academic institutions with emphasis on the physical sciences and engineering, and on providing modern research instrumentation in universities. The budget provides additional funds for the Engineering Research Centers program, initiated in 1985, aimed at strengthening multidisciplinary research and training in engineering at universities, and for the Advanced Scientific Computing program to improve the productivity of U.S. scientists by providing them greater access to supercomputers. The budget also provides increased support for high-priority research in the geosciences, computational science and engineering, and in biotechnology.
- **Department of Agriculture (USDA).**—Obligations for the conduct of R&D are estimated at \$907 million for 1987, a decrease of 2 percent from the 1986 level of \$922 million. Within the USDA total, the Cooperative State Research Service will

provide \$234 million for research and development primarily conducted by colleges and universities. The Agricultural Research Service expects to obligate \$497 million, an increase of \$34 million over 1986, with emphasis on basic research in plant germplasm, biotechnology, new agricultural products, and the improvement of commodity exports. The Forest Service will continue its research on land management planning and forest inventory.

- **Department of Commerce (DOC).**—Obligations for R&D undertaken by DOC decrease by \$83 million between 1986 and 1987, to \$297 million. The proposed reductions reflect the Administration's continued efforts to reduce funding for programs that are more appropriately the responsibility of the private sector and state or local governments. Programs proposed for elimination include the Sea Grant Program of the National Oceanic and Atmospheric Administration, and both the fire and building research programs at the National Bureau of Standards (NBS). Some increases, however, are proposed for NBS in areas of growing importance, such as ceramics and optical fiber systems. The budget also provides for construction of a Cold Neutron Research Facility at the Bureau.

Table K-2 summarizes Federal support for the conduct of R&D by agency.

Table K-2. CONDUCT OF RESEARCH AND DEVELOPMENT BY MAJOR DEPARTMENTS AND AGENCIES

(In millions of dollars)

Department or agency	Obligations			Outlays		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
Defense-Military functions.....	31,099	33,485	41,823	27,878	29,267	32,693
Health and Human Services.....	5,444	5,524	5,471	4,997	5,561	5,532
(National Institutes of Health).....	(4,824)	(4,905)	(4,672)	(4,419)	(4,957)	(4,752)
Energy.....	4,901	4,785	4,886	4,900	4,778	4,819
National Aeronautics and Space Administration..	3,235	3,594	4,051	2,970	3,528	3,743
National Science Foundation.....	1,346	1,334	1,508	1,186	1,338	1,455
Agriculture.....	941	922	907	889	913	911
Transportation.....	430	364	277	417	416	331
Interior.....	389	381	345	414	403	351
Environmental Protection Agency.....	320	334	310	275	318	332
Commerce.....	399	380	297	373	383	311
Agency for International Development.....	210	206	203	204	208	209
Veterans Administration.....	227	186	194	215	182	187
All other ¹	550	531	531	527	538	544
Total.....	49,491	52,024	60,803	45,244	47,832	51,418

¹ Includes the Departments of Education, Justice, Labor, Housing and Urban Development and Treasury, the Tennessee Valley Authority, the Smithsonian Institution, the Corps of Engineers, the Nuclear Regulatory Agency, and the Federal Emergency Management Agency.

CONDUCT OF BASIC RESEARCH

The 1987 budget continues this Administration's emphasis on the importance of increased support for basic research across all scientific disciplines. Even in a time of budget restraint, such support represents an essential investment in the nation's future. Scientific knowledge in fields such as mathematics, physics, chemistry, biology and the various engineering disciplines provides the foundation for long-term achievement of national objectives of a strong defense, continued economic growth, and an enhanced quality of life.

Funding for basic research is included within the overall Federal support for the conduct of R&D. In 1987, obligations for the conduct of basic research are estimated at \$8.6 billion, an increase of \$614 million, or 8 percent above the level for 1986.

Support of basic research particularly serves to strengthen the ability of the nation's academic research scientists to conduct high-quality research and to assist in educating the next generation of scientists and engineers. University-based researchers receive about half of the total Federal obligations for basic research and provide the critical element of education to maintain a vigorous, first-class scientific and technical talent pool.

Table K-3 summarizes Federal support for the conduct of basic research by agency.

ARCTIC RESEARCH

Two complementary policy documents currently govern U.S. Arctic research policy. The Arctic Research and Policy Act of 1984 (Public Law 98-373) requires an ". . . integrated, coherent, and multiagency request . . ." for research in the Arctic as part of the President's annual budget request to Congress. National Security Decision Directive 90 (NSDD 90, April 14, 1983) identifies four basic elements of U.S. Arctic Policy:

- protection of essential security interests in the arctic region, including the adjacent seas and airspace;
- support for sound, rational development in the arctic region, while minimizing adverse effects on the environment;
- promotion of scientific research in fields which contribute knowledge about the Arctic, or which are most advantageously studied in the Arctic; and,
- promotion of mutually beneficial international cooperation in the Arctic to achieve the above objectives.

In response to these directives, the Interagency Arctic Research Policy Committee (established by Public Law 98-373) has compiled a detailed listing of agency programs in arctic research, including budgetary estimates, and has grouped them into three major categories of national concern:

- national security;

Table K-3. CONDUCT OF BASIC RESEARCH BY MAJOR DEPARTMENTS AND AGENCIES

(In millions of dollars) ¹

Department or agency	Obligations			Outlays		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
Agencies supporting primarily physical sciences and engineering: ²						
National Science Foundation.....	1,262	1,256	1,423	1,111	1,260	1,372
Defense—Military functions.....	860	940	987	705	834	759
Energy.....	926	922	1,045	896	907	1,018
National Aeronautics and Space Administration.....	728	857	1,085	704	870	1,018
Interior.....	131	132	118	142	145	121
Commerce.....	23	22	20	23	21	20
Other Agencies ³	12	13	11	11	14	13
Subtotal.....	3,942	4,142	4,688	3,592	4,051	4,321
Agencies supporting primarily life and other sciences: ⁴						
Health and Human Services.....	3,229	3,290	3,353	2,954	3,303	3,381
(National Institutes of Health).....	(3,024)	(3,077)	(2,938)	(2,765)	(3,099)	(2,988)
Agriculture.....	447	434	434	406	423	427
Smithsonian Institution.....	71	71	79	61	66	73
Environmental Protection Agency.....	39	39	37	25	36	38
Veterans Administration.....	15	15	16	16	15	15
Education.....	12	11	10	6	6	11
Other Agencies ⁵	15	15	14	15	16	14
Subtotal.....	3,828	3,875	3,942	3,483	3,865	3,958
Total.....	7,769	8,017	8,630	7,076	7,915	8,279

¹ Amounts reported in this table are included in totals for conduct of R&D.² Includes mathematics and computer sciences.³ Includes the Corps of Engineers, the Federal Emergency Management Agency, the Tennessee Valley Authority, and the Department of Transportation.⁴ Includes psychology and social sciences.⁵ Includes the Departments of Labor, Justice, and Treasury, and the Agency for International Development.

- rational development with minimal environmental or adverse social impact; and,
- research on arctic phenomena and on science best studied in the Arctic (the Arctic as a natural laboratory).

Table K-4 provides a summary of Federal support for arctic research integrated by major category.

Table K-4. FEDERAL SUPPORT FOR ARCTIC RESEARCH ¹

(Obligations in millions of dollars)

Category	1985 actual	1986 estimate	1987 estimate
National security.....	22,624	26,125	26,278
Rational development.....	35,049	34,974	34,457
Natural laboratory.....	21,163	21,929	22,036
Total.....	78,836	83,028	82,771

¹ Includes the Departments of Defense, Energy, Health and Human Services, Interior, Commerce, and Transportation, the National Science Foundation, the National Aeronautics and Space Administration, the Environmental Protection Agency and the Smithsonian Institution.

R&D FACILITIES

In 1987, within the total for support for R&D facilities, funding is provided for major scientific instrumentation, including the specialized research facilities at national laboratories and university centers, e.g., particle accelerators, telescopes, and advanced computers. Such specialized facilities are critical to advancing the frontiers of science in a number of scientific disciplines. Funds for R&D facilities are also used for construction or renovation of general purpose laboratories and research support facilities.

In 1987, obligations for R&D facilities are expected to total \$1.7 billion, a decrease of \$78 million from 1986. Even though total funding will decrease in 1987, the budget still provides for initiation of several major new construction projects in DOE, including an advanced nuclear physics facility at Newport News, Virginia and the 1-2 GeV-synchrotron source at Lawrence Berkeley Laboratory.

Table K-5 summarizes Federal support for R&D facilities and capital equipment.

Table K-5. RESEARCH AND DEVELOPMENT FACILITIES BY MAJOR DEPARTMENTS AND AGENCIES

(In millions of dollars)

Department or agency	Obligations			Outlays		
	1985 actual	1986 estimate	1987 estimate	1985 actual	1986 estimate	1987 estimate
Energy.....	909	813	759	958	902	826
Defense—Military functions.....	533	437	453	404	325	376
National Aeronautics and Space Administration..	268	279	332	247	271	310
Agriculture.....	41	92	42	34	48	69
National Science Foundation.....	74	68	84	64	68	81
Health and Human Services.....	43	54	10	43	46	27
(National Institutes of Health).....	(29)	(44)	(8)	(26)	(35)	(19)
All other ¹	27	68	54	34	30	41
Total.....	1,894	1,812	1,734	1,784	1,690	1,730

¹ Includes the Departments of Transportation, Commerce, Interior, and Treasury, Veterans Administration, Tennessee Valley Authority, and the Smithsonian Institution.

PART II. AGENCY R&D PROGRAMS

Presented below are summaries of the R&D activities of the 12 agencies whose R&D obligations individually exceed \$150 million.

DEPARTMENT OF DEFENSE

DOD research and development is oriented toward the development of strategic and tactical weapons and supporting systems to provide for the nation's defense.

DOD obligations for the conduct of R&D in 1987 will total \$41.8 billion, an increase of \$8.3 billion over 1986. Within the total, funding for basic research will increase from \$940 million in 1986

to \$987 million in 1987. R&D facilities funding would total \$453 million, up from \$437 million in 1986.

By mission category, major R&D efforts for 1987 include:

- Technology Base and Advanced Technology Development.*—The purpose of these programs is to investigate promising new technologies and to avoid technological surprise by potential adversaries. Funding (budget authority) for the Strategic Defense Initiative (SDI) will increase from \$2.8 billion in 1986 to \$4.8 billion in 1987. SDI areas of study include sensors, laser weapons, high-speed missiles, battle management computers and systems designs. The DOD University Research Initiative program will continue with \$50 million set aside in 1987 to support selected technology thrusts (including instrumentation) at the nation's universities. These funds augment other funds used to support specific research programs at universities. A joint NASA-DOD technology development program would be started to explore advanced concepts for a future transatmospheric vehicle.
- Strategic Programs.*—Programs receiving emphasis in 1987 include the MILSTAR communications satellite program, the Small Intercontinental Ballistic Missile, a short range air-launched attack missile, the Peacekeeper missile and Stealth development. B-1B bomber development winds down as the aircraft enters deployment.
- Tactical Programs.*—Systems are developed to improve the capability of U.S. general purpose and theater nuclear forces, and allow the rapid deployment of those forces wherever the vital interests of the United States are threatened.
 - The Army is developing upgrades to its combat vehicles, the Patriot air defense missile system, aircraft engines and field artillery. In addition, an advanced anti-tank weapon and a light helicopter are being developed.
 - The Navy is developing a new attack submarine. The P-3 antisubmarine patrol aircraft will be upgraded, and development of the V-22 tilt-rotor aircraft, the T-45/TS trainer aircraft, the F-14 upgrade, and the A-6E attack aircraft improvement program will continue.
 - The Air Force continues work on the Advanced Tactical Fighter aircraft, improvements to the F-15 and F-16 aircraft, and the Airborne Warning and Control System (AWACS). The Alternate Fighter Engine program seeks improvements to fighter aircraft engine reliability. The C-17 transport aircraft development progresses.
- Intelligence and Communications, Program Management and Support.*—R&D on intelligence and communication systems will focus on communication satellites, on radios that will

work in the electronic noise of the battlefield, and on surveillance radars. Work will also continue on the use of technology to reduce manufacturing costs and to extend the life and capability of existing defense systems.

—*NATO Cooperation.*—Cooperation in research and development and joint production of new weapon systems will be pursued to make the best use of Alliance resources. Funding for these activities is not identified separately in table K-6 but is included in the other categories listed in that table.

Table K-6 provides the details of the Department of Defense military R&D funding.

Table K-6. DEPARTMENT OF DEFENSE—MILITARY RESEARCH AND DEVELOPMENT

(In millions of dollars)

Type of activity	1985 actual	1986 estimate	1987 estimate
OBLIGATIONS			
Conduct of R&D:			
Research, development, test and evaluation:			
Technology base.....	3,149	3,179	3,596
Advanced technology development.....	2,754	3,949	6,312
Strategic programs.....	7,983	7,251	9,120
Tactical programs.....	8,857	10,179	12,446
Intelligence and communications.....	3,942	4,368	5,028
Program management and support.....	3,350	3,484	4,199
Other appropriations.....	1,064	1,075	1,122
Total conduct of R&D ¹	31,099	33,485	41,823
Total conduct of basic research, included above.....	(860)	(940)	(987)
R&D facilities.....	533	437	453
Total obligations.....	31,632	33,922	42,275
OUTLAYS			
Conduct of R&D.....	27,878	29,267	32,693
R&D facilities.....	404	325	376
Total outlays.....	28,282	29,592	33,070

¹ Includes funds for Operational Systems Development of \$7,883 million in 1985, \$8,636 million in 1986 and \$10,630 million in 1987.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA makes investments in R&D programs to provide for a permanent U.S. presence in space with a future space station; to maintain the Shuttle-based Space Transportation System; to advance knowledge of the Earth, the near-Earth environment, the solar system and the universe; and to support long-term research and technology advancement for low gravity materials science and satellite communications. It also supports long-term research and selected systems technology projects in aeronautics.

R&D accounts for about two-fifths of the total budget for NASA. The balance of the NASA budget includes funding primarily for

Shuttle production and operations, tracking and data acquisition activities, and related institutional support.

In 1987, NASA obligations for R&D including facilities for the agency will be approximately \$4.4 billion, a net increase of \$510 million over 1986. Within this total, funds are available to complete projects currently under development, to augment major research and technology programs, and to initiate a major new flight project in space science and applications. Within the total funding for R&D, basic research obligations in 1987 are estimated at \$1.1 billion, an increase of \$228 million, or 27 percent over 1986. Within the total of \$332 million in 1987 for R&D facilities, a decrease in obligations for facilities construction will be more than offset by an increase for the acquisition of capital equipment.

Space transportation.—Obligations for Space Transportation R&D are estimated to increase from \$611 million in 1986 to \$817 million in 1987. This increase is consistent with funding needed to pursue design, definition, and development of the space station for planned launch in the early 1990's.

The space station is intended to enhance the nation's science and applications programs, to help develop advanced technologies potentially useful to the economy, and to encourage greater commercial use of space.

The 1987 budget provides for restoring progress in the Space Shuttle program towards achieving routine and reliable access to space for all planned users, and for continued investments to further improve the reliability and performance of the Shuttle fleet. Other major continuing activities in the 1987 budget will include development and procurement of the Centaur upper stage—a new high-energy upper stage for use with the Shuttle; further development of the tethered satellite program, a Shuttle-based science program conducted in cooperation with the Italian government; and development of an Orbital Maneuvering Vehicle for future near-Earth orbital transfers.

Space science and applications.—Obligations for space science and applications are estimated in 1987 at \$1.6 billion, essentially at the 1986 level. The funding provided will allow initiation of a major new flight project, continued support of ongoing flight projects, and the analysis of scientific data being sent back to Earth from spacecraft now in space.

The 1987 budget continues support for space science research to enhance understanding of the Sun, the planets, and the universe; space-related research on the Earth's climate, resources, surface and atmosphere; research to advance knowledge in materials science and materials processing through low gravity experiments in space; and continuing long-term basic technology work for satellite communications.

The major new flight project proposed for initiation in 1987 is an Ocean Topography Experiment (TOPEX), a joint U.S.-French cooperative project, to measure the surface topography of the oceans over three years to help determine the oceans' general circulation. In addition, NASA will undertake instrument development for the International Solar-Terrestrial Physics (ISTP) program. This program, which would be planned and carried out jointly by the U.S., the European Space Agency (ESA), and Japan, is intended to provide a comprehensive effort to measure phenomena associated with the Sun-Earth interaction chain.

Continuing development efforts for ongoing major flight projects yet to be launched include:

- the Gamma Ray Observatory, planned for launch in 1988, which will enhance basic research in high energy astrophysics, providing new knowledge about objects in deep space;
- Spacelab astronomy experiments, which will be conducted on the Shuttle with the goal of improving our understanding of the Earth's vicinity, the Sun and the universe;
- the Magellan project, planned for launch in 1988, to map the planet Venus;
- the Mars Observer Mission, a major Space Science project planned for 1990 launch, to continue the scientific exploration of the planet Mars;
- the Upper Atmosphere Research Satellite (UARS) spacecraft, to be launched in 1989, to investigate the chemical composition of the Earth's stratosphere and mesosphere; and
- the Scatterometer project, a research instrument to measure global wind patterns on the surface of the oceans. This instrument will be flown in 1990 on a Navy satellite now under development.

Continued support will be provided in 1987 for several satellites, including:

- two Voyager spacecraft, launched in 1977, which have successfully encountered Jupiter and Saturn; Voyager 2 encountered Uranus in January 1986 and is scheduled to fly by Neptune in 1989;
- the Galileo orbiter and probe mission to Jupiter to carry out long-term studies of the planet, its satellites, and its magnetosphere; and
- the Space Telescope, which is expected to serve as a major astronomy facility for a 10- to 15-year period.

The budget also provides for continuing research and technology work in areas such as space-related life science research; near-Earth experiments using balloons and sounding rockets; research in geodynamics, ocean processes, and atmospheric dynamics; Shut-

tle-based science and applications experiments; and preparations for the future launch of planned missions. Continuing efforts to improve satellite communications technology will be refocused towards generic and longer-term technology-based efforts, in recognition of the responsibility of the private sector to pursue relatively near-term satellite communications technologies.

Transatmospheric research and technology.—In 1987, a new program, supported jointly by DOD and NASA, in transatmospheric research and technology will be initiated. This activity will encompass a vigorous program of research and advanced technology in areas such as airbreathing propulsion, high-temperature structures and advanced materials, and is expected to lead to a transatmospheric flight research vehicle demonstration phase in the early 1990s.

Aeronautical research and technology.—Obligations for aeronautical research and technology are estimated to increase from \$274 million to \$334 million in the 1987 budget to augment ongoing research in fundamental aeronautical disciplines such as materials and structures, propulsion and selected systems technology projects.

In 1987, increased funds are included to continue the following ongoing efforts:

- the X-wing rotorcraft project, a joint NASA/DOD project to develop the technology for future high speed rotorcraft using the X-wing rotor concept; and
- numerical aerodynamic simulation (NAS), which will allow greater use of advanced computational techniques to improve the productivity of aeronautical research and design. In 1987, the NAS system will begin its first year of full operational capability.

Agency-wide support activities.—Obligations for agency-wide support activities will total \$1.2 billion in 1987, a slight increase above the 1986 level. These programs include primarily R&D-related NASA civil service and administrative costs, tracking and data acquisition system improvements, and R&D addressing fundamental space technology problems and opportunities common to a wide spectrum of space programs.

Table K-7 provides the details of NASA's R&D funding.

DEPARTMENT OF ENERGY

The R&D programs of the Department of Energy include: a *National Defense Program* related to the development and testing of nuclear weapons; a *General Science Program* of basic research in high energy physics and nuclear sciences; and an *Energy Program* on R&D in support of energy technology development. Table K-8 provides summary information on the funding of these programs.

Table K-7. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—RESEARCH AND DEVELOPMENT

(In millions of dollars)

Type of activity	1985 actual	1986 estimate	1987 estimate
OBLIGATIONS			
Conduct of R&D:			
Space transportation systems.....	505	611	817
Space science and applications.....	1,341	1,564	1,571
Transatmospheric research and technology.....			43
Aeronautical research and technology.....	312	274	334
Agency-wide support activities:			
Space research and technology.....	127	171	180
Tracking and data acquisition.....	15	16	18
Research and program management.....	935	958	1,088
Total conduct of R&D.....	3,235	3,954	4,051
Total conduct of basic research, included above.....	(728)	(857)	(1,085)
R&D facilities.....	268	279	332
Total obligations.....	3,503	3,873	4,383
OUTLAYS			
Conduct of R&D.....	2,970	3,528	3,743
R&D facilities.....	247	271	310
Total outlays.....	3,217	3,799	4,052

Obligations for the conduct of R&D by the Department are estimated to total \$4.9 billion in 1987, an increase of \$100 million from 1986. Obligations in 1987 for R&D facilities, including the construction or upgrading of general purpose laboratories and other research support facilities, will amount to \$759 million.

Obligations for the conduct of basic research, included in the total for the conduct of R&D, are estimated to be \$1,045 million in 1987, an increase of \$120 million over 1986. Within the basic research total, funds are provided to continue or initiate a number of major projects, in both the energy program and the general science program, that will enhance the nation's capability in basic research.

The *National Defense Program* supports the continued research, development and testing of nuclear weapons. It also supports the development of improved naval propulsion reactors, technologies for monitoring nuclear weapons treaties, and methods for safeguarding nuclear materials. In addition, R&D efforts will continue in developing methods for the safe storage and disposal of radioactive wastes resulting from weapons production. Obligations for the national defense program for the conduct of R&D will increase from \$2.2 billion in 1986 to \$2.6 billion in 1987. Increased funding for conduct of R&D provides for continued R&D in isotope separation techniques, for increased weapons testing, and for increased research in the basic physics of nuclear weapons. Increases in the

advanced weapons concepts activities will focus on research in support of the Strategic Defense Initiative.

The *General Science Program* supports basic research in high energy and nuclear physics. A proposed increase of \$88 million, to \$602 million, in 1987 will enhance support for experimental efforts to understand the basic constituents of matter and energy and the forces that govern their interaction.

The 1987 budget request will provide for:

- increased utilization of existing accelerator facilities, including operation of the newly-completed (1986) Tevatron I upgrade at Fermilab and the Stanford Linear Collider at SLAC;
- initiation of a heavy ion nuclear research and accelerator program at the Brookhaven Alternating Gradient Synchrotron;
- completion of the LAMPF proton beam facilities upgrade at the Los Alamos National Laboratory;
- continued construction of the Central Computing Facility project at Fermilab and the Accumulator/Booster Ring upgrade at the Brookhaven Alternating Gradient Synchrotron; and
- initiation of the construction phase of an advanced nuclear physics electron accelerator facility at Newport News, Virginia.

The budget also includes funds for continued advanced accelerator and detector research and development activities related to the next-generation high-energy particle physics accelerator.

The *Energy Program* funds basic science and engineering research underlying both nuclear and non-nuclear technologies, R&D to support development of specific energy technologies, and research on the environmental and human health effects of energy production technologies. Energy program obligations for the conduct of R&D will decrease from \$2.0 billion in 1986 to \$1.7 billion in 1987. Obligations for R&D facilities in this program will be \$125 million, a decrease of \$88 million from 1986.

In the *basic energy sciences*, funding is proposed at a level of \$441 million in 1987, a slight increase over 1986, for research in such fields as nuclear science, chemistry, engineering, materials science, applied mathematics, biology, and the geosciences. The program provides the fundamental scientific and technical base for future advances in both nuclear and non-nuclear technology development. In addition, the program provides support for the operation of several major national facilities that are used by researchers from industry, universities and national laboratories. These include the National Synchrotron Light Source (NSLS) at the Brookhaven National Laboratory, the Intense Pulsed Neutron Source (IPNS) facility at Argonne National Laboratory, and the Electromagnetic Iso-

tope Separation Plant (Calutrons) at Oak Ridge National Laboratory.

The 1987 budget continues to provide support for construction of the Center for Advanced Materials at Lawrence Berkeley Laboratory (LBL), the Ion Collision Physics Facility at Kansas State University, the expansion of NSLS, the upgrade of the Stanford Synchrotron Radiation Laboratory facilities, and the experimental guidehall for the Los Alamos Neutron Scattering Center.

The budget also provides funds for initiation of construction of a 1-2 GeV synchrotron at LBL and for R&D activities related to advanced synchrotron and neutron facilities required for future engineering and science research.

A new *clean coal technology* program, mandated by Congress in the 1986 budget, has been added to the *Energy Program*. This activity has a budget authority of \$398 million in 1986 to be obligated over a three-year period. The Department will solicit proposals from the private sector for cost-shared commercial-scale demonstrations of clean coal technologies. Typical examples of such technologies include: advanced coal cleaning techniques, alternate combustion technologies, preparation of clean coal based fuels, and post-combustion cleanup systems.

The 1987 budget will continue the redirection of the on-going non-nuclear R&D programs to limit federal support to longer-term generic research and place greater reliance on the private sector for support of nearer-term technology development. To increase the involvement of the private sector in the direction and management of industry-based R&D programs, funds will be available in 1987 to support DOE participation in industry-cooperative R&D ventures in broad areas of generic technology development. Obligations for the conduct of R&D in the *fossil, solar/renewables* and *conservation* programs are expected to be \$273 million in 1987, a decrease of about \$320 million from 1986.

Funding for the conduct of *fossil* related R&D and associated facilities will be \$150 million in 1987, a decrease of \$163 million from 1986. The 1987 budget is focused on research to improve technologies for utilizing coal and for extracting oil and gas from unconventional sources. Support in the technology base program continues to be provided in such areas as the chemistry of coal conversion, environmental controls, and combustion research. Major themes of the cooperative research program will be coal preparation and utilization technology, oil and gas extraction processes, and alternate (coal-based) fuels development.

Research in support of *solar and other renewable energy* technologies, proposed at a level of \$108 million, will emphasize longer term, technology base R&D in areas such as photovoltaics, solar thermal energy, biofuels, wind and geothermal energy, electrical

energy systems, and energy storage. The total request for the *energy conservation* R&D program is \$71 million. Research to foster energy conservation in buildings and community systems, industry, and transportation will continue in 1987.

The 1987 budget continues to provide for a broad program of research in nuclear *fission* and *fusion* energy technologies. Total obligations for these R&D programs will be about \$650 million in 1987, a decrease of \$88 million from 1986. Conduct of R&D will total approximately \$600 million, and funding for related facilities will be \$49 million.

In the *fission* program, obligations of \$302 million are estimated for the conduct of R&D in 1987, a decrease of \$45 million from 1986. Total obligations for R&D facilities in 1987 will be \$23 million. Major portions of the nuclear fission R&D program are being restructured to phase down the advanced civilian reactor program, including breeder reactors, and to shift efforts toward R&D on reactor concepts that can meet space and military nuclear power requirements. The restructured program, while serving national security interests, will also maintain a technical and industrial base for any future deployment of advanced nuclear technologies in the commercial sector. The fission R&D program will also seek to resolve technical issues associated with the technology of nuclear waste storage and consequent environmental impacts.

In the *magnetic fusion* program, funding of \$304 million is proposed for the conduct of R&D, a decrease of \$18 million from 1986. This reduction slows the pace of fusion reactor development consistent with national energy needs and continues the shift in program emphasis toward resolving scientific questions key to the ultimate achievement of fusion energy. In 1987, the fusion program will focus on the development of the toroidal magnetic confinement system by supporting the continued operation of Princeton's large tokamak test reactor (TFTR), and the first year of operations of GA Technologies' Doublet-III-D machine and the Oak Ridge National Laboratory's ATF torsatron. Fabrication of three smaller toroidal devices initiated in 1986 will continue in 1987: a reversed field pinch machine (RFP) at Los Alamos, a compact toroid called a field reversed configuration (FRC) experiment, and a shaped plasma tokamak (PBX-U) at Princeton. Total obligations for R&D facilities in 1987 will be \$26 million. Ignition studies aimed at a final design of a burning plasma tokamak and studies to support the President's Geneva initiative on expanded cooperation with the Soviets in fusion research will also be funded in 1987.

Funds for the *uranium enrichment* R&D program for 1987 total \$50 million. This program develops advanced technologies for separation and enrichment of uranium. In 1986, DOE selected the Atomic Vapor Laser Isotope Separation (AVLIS) process for future

development. In 1987 DOE will take steps to transfer to the private sector in 1988 the responsibility for further development of AVLIS.

Finally, the *energy program* supports R&D to determine the biological and environmental effects of energy production and use. The *biological and environmental research* R&D program emphasizes the health effects of radiation, the use of radiation in medical diagnosis and therapy, and generic biological research related to radiation and other cellular traumas. This program also supports environmental research in areas related to energy technologies, such as atmospheric processes involved in acid rain formation and deposition and carbon dioxide-induced climatic effects. The level of funding for such activities will be \$197 million in 1987, an increase of \$16 million above 1986. Funding in 1987 for radon-related, acid-rain-related, and carbon-dioxide-related research is over \$23 million.

Table K-8 provides the details of funding for the Department of Energy.

Table K-8. DEPARTMENT OF ENERGY

(In millions of dollars)

Type of activity	1985 actual	1986 estimate	1987 estimate
OBLIGATIONS			
Conduct of R&D:			
National defense program.....	2,251	2,246	2,609
General science program.....	515	515	602
Energy program.....	2,135	2,025	1,674
Total conduct of R&D.....	4,901	4,785	4,886
Total conduct of basic research, included above.....	(926)	(922)	(1,045)
R&D facilities.....	909	813	759
Total obligations.....	5,809	5,598	5,645
OUTLAYS			
Conduct of R&D.....	4,900	4,778	4,819
R&D facilities.....	958	902	826
Total outlays.....	5,858	5,680	5,645

DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Department of Health and Human Services will obligate a total of \$5.5 billion in 1987 for the conduct of R&D, a decrease of \$63 million below the 1986 level. Within this total, funding for basic research is estimated to be \$3.4 billion. Obligations for R&D facilities will total \$10 million in 1987.

Health.—Almost 85 percent of the Department's funds for the conduct of R&D will be obligated by the National Institutes of Health for biomedical research to advance the nation's capabilities for the prevention, diagnosis, and treatment of disease. Several

other agencies within the Department—the Alcohol, Drug Abuse, and Mental Health Administration, the Food and Drug Administration, the Centers for Disease Control, the Health Resources and Services Administration, the Health Care Financing Administration, and the Office of the Assistant Secretary for Health—also support health-related research.

The *National Institutes of Health (NIH)* consist of 12 separate Institutes which will obligate \$4.7 billion in 1987 for the conduct of R&D, a 5 percent decrease below the 1986 level. In addition to these direct obligations, NIH will obligate an additional \$144 million for AIDS research. To ensure a coordinated Federal response to AIDS, these amounts are funneled through the Office of the Assistant Secretary for Health. NIH will fund 18,000 research project grants, 523 centers, and 9,100 research trainees in 1987. Continued emphasis will be given to support of basic research in 1987. Over one-half, or \$2.9 billion, of NIH's proposed R&D budget will support basic research, along with \$144 million in reimbursable AIDS-related obligations. Together, this represents a slight increase over the comparable 1986 NIH level of \$3.1 billion.

Among the continuing R&D activities to be supported by NIH are:

- basic research on cancer chemoprevention, including studies of nutritional factors; rehabilitation of patients with chronic obstructive pulmonary disease; prevention of glaucoma; diagnostic imaging; biological response to chemicals; immunology and neurobiology, including development and application of molecular biology techniques;
- clinical research with emphasis on medical intervention in the disease process, including prototype development and refinement of products, techniques, processes, methods, and practices;
- continuation of cooperative clinical trials on the Acquired Immune Deficiency Syndrome (AIDS); isolated systolic hypertension in the elderly; herpes simplex virus vaccine; antiviral drugs against neonatal herpes, herpes encephalitis, and genital herpes; the efficacy of interferon for controlling the frequency and severity of multiple sclerosis; gonococcal vaccines and the prevention of premature labor, and the role of folic acid in neural tube defects; and
- increased basic clinical research into the cause, cure, and prevention of arthritis under the auspices of the newly-created National Institute of Arthritis and Musculoskeletal and Skin Diseases.

The *Alcohol, Drug Abuse and Mental Health Administration (ADAMHA)* conducts studies on the causes, prevention and treatment of alcohol and drug abuse and on mental disease and neuro-

logical disorders, with emphasis on improving knowledge of effective prevention of these public health problems.

The 1987 budget proposes to stabilize ADAMHA's extramural research programs in biomedical, behavioral and clinical areas by supporting 1,400 research project grants per year. Obligations will decrease in 1987 to \$383 million, \$13 million below 1986.

Specific research areas to be addressed include:

- the neurosciences, behavioral sciences, psychopharmacology, and clinical investigations and evaluations of services to the mentally ill, with special emphasis on preventing and diagnosing mental and emotional problems in children;
- drug abuse among the nation's youth, including studies on the adverse health hazards of marijuana and cocaine; and
- causes and consequences of alcohol abuse, particularly among teenagers.

The *Food and Drug Administration* supports research relevant to its mission of regulating food, drugs, biologics, medical devices and radiological products. In 1987, obligations for these activities are estimated at \$82 million.

The *Centers for Disease Control* support studies on the epidemiology and control of communicable diseases and on health promotion and disease prevention. In 1987, obligations for these activities are estimated at \$49 million.

Other Health Related Agencies within the Department support research in areas such as the effect of socioeconomic factors on social security programs and the economy; survey methods and techniques for analysis of health statistics; and the organization, delivery, and financing of health services. This support is provided through programs of the Health Resources and Services Administration, the Office of the Assistant Secretary for Health and the Health Care Financing Administration.

Human services.—The Department's obligations for R&D in human services programs in 1987 will be \$35 million. The proposed budget will support a variety of development and social services research aimed at improving the Head Start program; the quality of life for the elderly; knowledge of child abuse and neglect; day care systems; family and community support systems; and fostering independence for the disabled.

Table K-9 provides details of the R&D funding of the Department of Health and Human Services.

Table K-9. DEPARTMENT OF HEALTH AND HUMAN SERVICES—RESEARCH AND DEVELOPMENT

(In millions of dollars)

Type of activity and organizational units	1985 actual	1986 estimate	1987 estimate
OBLIGATIONS			
Conduct of R&D:			
Health:			
National Institutes of Health	4,824	4,905	4,672
Alcohol, Drug Abuse, and Mental Health Administration	378	396	383
Food and Drug Administration	82	79	82
Centers for Disease Control	46	48	49
Health Care Financing Administration	35	22	19
Office of the Assistant Secretary for Health	18	18	224
Health Resources and Services Administration	19	10	9
Subtotal, Health	5,401	5,478	5,437
Human Services:			
Social Security Administration	10	13	13
Office of Human Development Services	23	27	17
Departmental Management	10	6	5
Subtotal, Human Services	43	46	35
Total conduct of R&D	5,444	5,524	5,471
Total conduct of basic research, included above	(3,229)	(3,290)	(3,353)
R&D facilities	43	54	10
Total obligations	5,487	5,578	5,481
OUTLAYS			
Conduct of R&D	4,997	5,561	5,532
R&D facilities	43	46	27
Total outlays	5,040	5,606	5,558

NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) supports primarily basic research in all disciplines through grants to scientists and engineers in academic institutions. NSF support is particularly important because it complements the basic research programs of other agencies and assists in balancing Federal support for promising research across all fields of science and engineering.

The 1987 NSF budget provides \$1.5 billion in obligations for the conduct of R&D, an increase of \$174 million or 13 percent above 1986. Within this total, support for basic research will increase by more than 13 percent.

Although the principal growth in the 1987 budget will be in the support of basic research at academic institutions through project grants, efforts will also be made to provide opportunities to train future scientists and engineers, and to provide the research facilities and equipment necessary to improve the productivity of academic researchers. High priority will be given to strengthening

support for the physical sciences in fundamental research areas such as mathematics, computational sciences, and global geosciences, for engineering, and for molecular and cell biology. Additional studies of the continental lithosphere will be funded, including investigations of potential future lithospheric and seismological projects.

In addition, the 1987 budget will provide increased funds:

- for the Engineering Research Centers (ERC) program, initiated in 1985. The first six awards were made in the spring of 1985 in a wide variety of research areas including robotics, biotechnology and intelligent manufacturing systems. Research in these areas has the potential to make important contributions to the long-term competitiveness of the U.S. economy, particularly in high-technology-dependent industries. NSF expects to support a total of approximately 15 ERCs in 1987. In addition, an important component of the ERC program is the provision of enhanced opportunities for the training of future engineers.
- to increase the access of academic scientists to supercomputers. In 1987, the Phase 2 supercomputer centers at Princeton, the University of Illinois and the University of California at San Diego will be in full operation. It is anticipated that one or two Phase 1 centers with unique capabilities will remain in operation in 1987. There will also be continuing emphasis on development of a national network to link academic researchers to the supercomputer centers.
- to continue ongoing projects, such as the acquisition of the Advanced Vector Computer at the National Center for Atmospheric Research, the construction of the Very Long Baseline Array radiotelescope, and major improvements at the Cornell Electron Storage Ring accelerator.

DEPARTMENT OF AGRICULTURE

The Department of Agriculture supports research and development in several disciplines related to agriculture and forestry to ensure the continued high productivity of U.S. agricultural and forest lands.

Obligations of the Department for the conduct of research and development are expected to total \$907 million in 1987, compared to the \$922 million in 1986. Of the total, \$434 million will support basic agricultural research, maintaining the 1986 estimated level. The Department's 1987 Budget for research and development is highlighted below by major bureau.

The *Agricultural Research Service* expects to obligate \$497 million in 1987 to conduct basic and applied research in plant and animal productivity; commodity conversion and delivery; soil and

water conservation; and integration of systems. This is an increase of \$34 million in obligations over 1986. In 1987, increased emphasis will be placed on basic research in plant germplasm and biotechnology to improve the profitability and competitiveness of U.S. agriculture. An initiative to develop new uses for surplus agricultural commodities is also included.

The *Cooperative State Research Service (CSRS)* estimates that \$234 million will be obligated in 1987. CSRS supports research on agriculture and forestry through grants to land-grant colleges. Also, within CSRS, the Competitive Research Grants program funds basic research in biotechnology, plant and animal science, pest science, and human nutrition.

The *Forest Service* estimates that \$112 will be obligated for research and development in 1987. This represents a decrease from the \$120 million obligated in 1986. The long-range goal of forestry research is to provide the information needed to manage and protect forest and range land resources, and to gain maximum economic and social benefits from their use.

Other Departmental programs will obligate approximately \$64 million for R&D in 1987, covering a broad spectrum of research activities, such as research in agricultural economics, international agricultural cooperation, and statistical reporting.

DEPARTMENT OF COMMERCE

The Department of Commerce undertakes research primarily in ocean science and engineering, meteorology and weather forecasting, and in the maintenance of measurement standards to support science and industry.

Obligations for the conduct of R&D by the Department in 1987 are estimated at \$297 million, a decrease of \$83 million from 1986. This reflects reduced levels of support by the National Oceanic and Atmospheric Administration and the National Bureau of Standards for applied research, that is more appropriately the responsibility of state and local governments or the private sector.

National Oceanic and Atmospheric Administration (NOAA).—NOAA obligations for the conduct of research and development in 1987 will decrease from \$256 million to \$192 million as a result of greater reliance on support from the private sector and state and local governments, and elimination of lower priority research in such programs as Seafloor Spreading Center Research, National Undersea Research Program, National Sea Grant College Program, and some programs of the National Marine Fisheries Service. NOAA will increase R&D programs on Radiatively Important Trace Species (RITS) and hurricane predictions, and will develop a thermodynamic Profiler system. Acid rain research and R&D to support the Pacific Salmon Treaty will be maintained.

National Bureau of Standards (NBS).—NBS conducts research aimed at maintaining and improving a system of measurement required to support the nation's industrial and scientific endeavors. In 1987, NBS is expected to obligate \$91 million for the conduct of R&D. This represents a decrease of \$8 million from 1986. This decrease reflects program changes affecting all areas of technical research activities at NBS. However, funding will increase to support development of measurements and standards to assure reliable performance of advanced ceramics, and development of measurement technology and services for components of optic fiber systems to support industrial development and to ensure international competitiveness. In addition, construction of a new Cold Neutron Research facility used for materials science will be initiated. Funding for several programs, including fire and building research, the Computer Sciences and Technology Program, the Technical Competence Program, and the Research Associates Program will be terminated or reduced because such research can and should appropriately be supported by other sectors of the economy.

Other Commerce R&D Activities.—Funding for smaller R&D programs in the Department, which include those in General Administration, the Bureau of the Census, the Economic Development Administration, and the National Telecommunications and Information Administration, are proposed at \$14 million in 1987, a decrease of \$10 million from the 1986 level.

DEPARTMENT OF THE INTERIOR

The R&D activities of the Department of the Interior principally derive from its broad-ranging responsibilities for management of the nation's natural resources, including developing energy and mineral resources, and restoring and preserving wildlife habitats. R&D programs also serve the needs of other Federal agencies and the private sector.

Obligations for the conduct of R&D for the Department of the Interior for 1987 are estimated at \$345 million. This represents a decrease of \$36 million from the 1986 level. It reflects reductions in activities of a lower priority and elimination of those activities more appropriately conducted by state and other units of government or the private sector, e.g., the Mineral Institutes.

About 91 percent of the Department's 1987 funds for the conduct of R&D will be obligated by the Geological Survey (\$204 million), Fish and Wildlife Service (\$49 million), and the Bureau of Mines (\$61 million). Highlights of the 1987 research objectives of these and other departmental programs are described below.

The *Geological Survey* undertakes research on the extent, distribution, and character of the nation's natural resources and on the geologic processes, structures, and hazards that affect the develop-

ment and use of the land and physical environment. For 1987, obligations will decrease by \$14 million, to a total of \$204 million.

Research in 1987 will be directed toward:

- accurate appraisals of mineral resources and new improved methods of mineral exploration;
- development of basic data on geologic principles and processes;
- improvement of the scientific basis for appraisal and evaluation of water resources; and
- development and application of new technologies, including remote sensing, to prepare cartographic information.

The *Fish and Wildlife Service* supports research in the Service's laboratories and field stations and cooperative efforts with state fish and game departments. It also provides Federal aid to states for research on restoration of fish and wildlife resources. This research provides basic biological information about species numbers, population dynamics, ecological relationships, and habitat requirements. Obligations will total \$49 million in 1987.

The Fish and Wildlife Service will support research activities concerned with:

- the habitats of waterfowl, migratory and non-migratory birds, and mammals;
- the status and distribution of endangered and threatened species;
- impact of broad-scale environmental changes on fish and wildlife populations and habitat; and
- diseases of freshwater and anadromous fish.

The *Bureau of Mines* conducts basic and applied research across the minerals cycle to improve understanding of the principles of mining and minerals processing and to reduce associated health hazards. Obligations for the conduct of R&D are expected to decrease by \$22 million to \$61 million in 1987. This decrease in obligations is the result of proposed reductions in applied research, particularly in projects which are more appropriate for support by non-Federal sources. The 1987 budget reflects continued emphasis on strategic and critical minerals R&D activities and stresses:

- long-range, high-risk research in extractive metallurgy technology;
- development of domestic source substitutes for imported strategic and critical minerals;
- health-related research on the proper quality and quantity of air flow in underground mines; and,
- long-term, generic research on mine disaster prevention, ground control, industrial hazards, explosives, and systems engineering.

Other Departmental Programs expect to obligate about \$31 million in 1987, a decrease of about \$3 million from 1986.

DEPARTMENT OF TRANSPORTATION

The R&D program of the Department of Transportation is oriented toward providing the information and new technology needed for its own operational (e.g., air traffic control) programs and for regulatory (e.g., automotive and aircraft safety standards) programs. Obligations for the conduct of research and development by the Department are estimated at \$277 million for 1987, a decrease of \$86 million from 1986.

The *Federal Aviation Administration* (FAA) is expected to obligate \$144 million in 1987. The proposed 1987 R&D obligations for FAA represents a decrease from 1986 of \$72 million. This decrease is associated with reduced requirements for the National Airspace System Plan.

Development and testing of the Advanced Automation System to automate air traffic control in the 1990's will continue. FAA will support other research activities concerned with Automated En Route Air Traffic Control (AERA); communications system development; Central Weather Processor (CWP); terminal doppler weather radar; and development of devices to detect weapons, explosives and flammable liquids.

The *National Highway Traffic Safety Administration* will obligate \$27 million for motor vehicle and highway safety research, and demonstrations emphasizing safety belt usage and alcohol countermeasures. In 1987, a small increase is planned for safety belt activity.

The *Urban Mass Transportation Administration* (UMTA) is expected to obligate \$8 million to conduct research, training, and human resources programs in all phases of urban mass transportation to improve mass transportation services (especially in urban areas) and reduce costs. In addition, UMTA will support interdisciplinary academic research including training of personnel to conduct further research or to obtain employment in urban mass transportation planning, construction, operation or management.

The *Federal Highway Administration* will obligate \$54 million to continue support for research programs in highway planning, design, construction, and maintenance to ensure an effective and efficient highway system. Research will also be directed toward identifying and correcting impediments to highway safety and improving truck safety.

The *Federal Railroad Administration* will obligate \$10 million to support R&D efforts to enhance railroad safety.

The *Maritime Administration* will obligate \$6 million in 1987 to support R&D, a decrease of about \$5 million from 1987. The de-

crease reflects movement toward an objective of greater private sector initiative in maritime research and development.

The *U.S. Coast Guard* will obligate \$22 million to support research to maintain and improve search and rescue systems, environmental protection, marine safety, aids to navigation, the enforcement of laws and treaties, and activities affecting all Coast Guard missions. The proposed 1987 figure represents a decrease of \$2 million below the 1986 level.

The *Research and Special Programs Administration* will obligate \$2 million for R&D in hazardous materials, pipeline safety, radio-navigation, transportation statistics, and emergency transportation.

The *Office of the Secretary* will obligate \$5 million for broad-based policy research on domestic and international transportation issues of importance to the nation.

ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency (EPA) conducts research and development in support of its regulatory and enforcement responsibilities to protect human health and the environment. The 1987 budget proposes \$310 million in total obligations represents a reduction of 7 percent below 1986. The major research emphases include: (1) a continued commitment to acid rain research to provide a scientifically valid framework for sound policy decisions; (2) increased research on pesticides, including the cross-media problem of pesticides in groundwater; and (3) a strengthened research effort on bioengineered and conventional toxic substances.

The acid rain/energy research program will support the development of more reliable information upon which mitigation decisions may be made. The program directs basic research in areas identified by the Interagency Task Force on Acid Precipitation to provide enhanced data on the physical and chemical mechanisms governing the acid rain phenomenon. This involves research on aquatic effects, forest damage, monitoring trends, and installation of an acid rain monitoring network.

The pesticides program will support the development of methods to detect the presence of an exposure to pesticides in groundwater, and to assess management strategies to prevent such contamination. Pesticides research will also support studies on the effects of bioengineered pesticides, and validation of models for predicting exposure to, transport and fate of, pesticides.

The toxic substances research program will continue to address any potential hazards associated with products of biotechnology, as well as to support ongoing work on the human health risks and environmental effects associated with toxic pollutants. Toxic substances research will also serve to improve pollutant monitoring methods.

The hazardous waste research program will address several areas of study needed to implement regulations required by the 1984 RCRA Amendments. Risk assessment studies will be used in agency decisions to list and ban hazardous wastes. Studies will be conducted on methods to detect leaks from underground storage tanks.

Under the President's reauthorization proposal, the Superfund research program will expand to provide technical support to EPA's Regional Offices to conduct geophysical surveys at an increased number of Superfund sites. Quality assurance support to contract laboratories will be provided.

The drinking water research program will examine the health effects of complex chemical mixtures. Also, the transport and fate of contaminants in the subsurface environment will continue to be identified through the groundwater research program.

The air research program will continue to provide monitoring methods, air quality models, health and welfare assessments, and emission reduction technology evaluations to assess National Ambient Air Quality Standards, promulgate New Source Performance Standards and National Emissions Standards Hazard Assessment Protocols and develop State Implementation Plans.

VETERANS' ADMINISTRATION

The Veterans' Administration (VA) conducts and administers medical, rehabilitation, and health services research designed to improve the quality and increase the effectiveness of health care for the veteran. In 1987, the VA will obligate \$194 million for the conduct of R&D. This is an increase of \$8 million above 1986.

The VA biomedical research program covers a wide range of medical problems, with special emphasis on Agent Orange, aging, alcoholism, post-traumatic stress, the health problems of female veterans and former prisoners of war, schizophrenia, spinal cord injury and tissue regeneration.

Rehabilitation research focuses on the problems of the disabled veteran and develops sensory aids for impaired vision and hearing. This work brings the latest electronic and computer technology to bear on problems of prosthetics, orthotics, wheelchair design, and spinal cord injury (including functional electrical stimulation of muscles in paralyzed limbs).

Health services research is designed to help health care professionals and managers to improve the effectiveness, economy, and accessibility of health care services provided to the veteran. Research in this area deals with such areas as aging and preventive medicine.

AGENCY FOR INTERNATIONAL DEVELOPMENT

Research and development activities of the Agency for International Development (AID) consist mainly of applied research to solve specific problems associated with basic human needs and social and economic research aimed at improving U.S. and host-country understanding of the barriers to development. Programs under AID reflect the administration's recognition of the importance of R&D in addressing the problems faced by the Third World. Over the years, AID has provided substantial support to research efforts undertaken by U.S. universities and international research centers such as the International Rice Research Institute in the Philippines.

Obligations by AID for the conduct of R&D are estimated at \$203 million for 1987, a decrease of \$3 million from 1986.

AID will continue to support research aimed at improving agricultural production capability, with an emphasis on efforts to overcome the mounting food crisis in Third World nations. R&D funds will also be devoted to two other critical problems: population growth, emphasizing methods of controlling increasing population growth rates in the developing countries, and energy supply, emphasizing renewable and nonconventional energy sources critical for development to proceed.

Significant research efforts are also being pursued in two other promising areas: oral rehydration therapy and a malaria vaccine. The former holds the promise of significantly reducing the incidence of child mortality associated with diarrheal diseases, currently estimated to claim the lives of over 1 million children annually. Similarly, AID-supported research on a malaria vaccine may lead to a breakthrough in controlling a disease which currently infects some 200 million people worldwide and is the leading cause of death in Third World nations.

OTHER AGENCY PROGRAMS

An additional 10 departments and agencies (listed in table K-2, footnote 1) will obligate an estimated \$531 million in 1987, for the conduct of R&D, essentially the same as in 1986. Obligations by these agencies amount to less than 1 percent of all federally-funded programs in R&D. The programs of these agencies, like those of other agencies discussed above, are closely related to serving the agencies' missions.

Among the agencies in this category that expect to increase their obligations for R&D in 1987 are the Smithsonian Institution, the Tennessee Valley Authority, and the Departments of Labor, Housing and Urban Development, and Treasury.

Table K-10 provides information on the long-term trends in Federal funding for the conduct of R&D.

Table K-10. TRENDS IN CONDUCT OF R&D

(Obligations in billions of dollars)

Year	Defense ¹	All other	Total	Basic research ²
1960.....	6.1	1.5	7.6	0.6
1961.....	7.0	2.1	9.1	0.8
1962.....	7.2	3.1	10.3	1.0
1963.....	7.8	4.7	12.5	1.2
1964.....	7.8	6.4	14.2	1.3
1965.....	7.3	7.3	14.6	1.4
1966.....	7.5	7.8	15.3	1.6
1967.....	8.6	7.9	16.5	1.8
1968.....	8.3	7.6	15.9	1.8
1969.....	8.4	7.2	15.6	1.9
1970.....	8.0	7.3	15.3	1.9
1971.....	8.1	7.4	15.5	2.0
1972.....	8.9	7.6	16.5	2.2
1973.....	9.0	7.8	16.8	2.2
1974.....	9.0	8.4	17.4	2.4
1975.....	9.7	9.3	19.0	2.6
1976.....	10.4	10.4	20.8	2.8
1977.....	11.9	11.6	23.5	3.3
1978.....	12.6	13.2	25.8	3.7
1979.....	13.6	14.5	28.1	4.2
1980.....	15.1	14.7	29.8	4.7
1981.....	17.8	15.3	33.1	5.0
1982.....	22.1	14.3	36.4	5.5
1983.....	24.5	13.9	38.4	6.4
1984.....	28.3	14.9	43.2	7.0
1985.....	33.4	16.1	49.5	7.8
1986 (estimate).....	35.7	16.3	52.0	8.0
1987 (estimate).....	44.4	16.4	60.8	8.6

¹ Includes military-related programs of the Departments of Defense and Energy.² Included in totals for conduct of R&D.