

# **SPECIAL ANALYSES**

BUDGET OF THE  
UNITED STATES  
GOVERNMENT

FISCAL YEAR  
**1982**

EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET

## THE BUDGET DOCUMENTS

Data and analyses relating to the budget for 1982 are published in four documents:

*Budget of the United States Government, 1982* 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 estimated 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, 1982* is designed for use by the general public. It provides a more concise, less technical overview of the 1982 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, 1982—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, proposed general provisions applicable to the appropriations of entire agencies or groups of agencies, and schedules of permanent positions. Supplementals and rescission proposals for the current year are presented separately. It also includes the President's recommendations for executive, legislative, and judicial salaries, as well as information on certain activities whose outlays are not part of the budget totals.

*Special Analyses, Budget of the United States Government, 1982* 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; and Government-wide program and financial information for Federal civil rights and research and development programs.

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.

## TABLE OF CONTENTS

	Page
<b>I. ANALYSES OF THE BUDGET</b>	
<b>PART 1. ALTERNATIVE VIEWS OF THE BUDGET</b> .....	5
A. Current services estimates .....	7
B. Federal transactions in the national income ac- counts .....	43
<b>PART 2. ANALYSES OF THE BUDGET TOTALS</b> .....	71
C. Funds in the budget.....	73
D. Investment, operating, and other budget outlays.....	87
E. Borrowing, debt, and investment.....	107
F. Federal credit programs .....	141
G. Tax expenditures.....	203
H. Federal aid to State and local governments .....	239
I. Civilian employment in the executive branch .....	275
<b>PART 3. SELECTED FEDERAL PROGRAMS</b> .....	289
J. Civil rights activities .....	291
K. Research and development.....	305



---

---

PART 1

**ALTERNATIVE VIEWS OF  
THE BUDGET**

---

---

## INTRODUCTION

*Part 1* includes two alternative views of the budget—current services estimates and national income accounts. 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. 11a). These estimates reflect the anticipated costs of continuing ongoing Federal programs and activities at present levels without policy changes (that is, ignoring all new initiatives, Presidential or congressional, that are not yet law).

*Special Analysis B* (Federal Transactions in the National Income Accounts) presents the Federal budget estimates in terms of the national income accounts. It also explains the relationships of the unified budget of the Federal Government to the national income and product accounts, which constitute the most widely used measure of aggregate economic activity in the United States.

## SPECIAL ANALYSIS A

### CURRENT SERVICES ESTIMATES

The Congressional Budget Act of 1974 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 outlays and proposed budget authority which would be included in the Budget to be submitted pursuant to section 201 of the Budget and Accounting Act, 1921, for the ensuing fiscal year if all programs and activities were carried on during such ensuing fiscal year at the same level as the fiscal year in progress and without policy changes in such programs and activities.

The Act further requires the President to submit the economic and programmatic assumptions underlying the estimates and calls for the Joint Economic Committee of the Congress to review and evaluate the estimates.

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.<sup>1</sup>

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, and other programs under which spending varies with the unemployment, interest, and 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 probably result in somewhat different economic conditions than would occur under the budget proposals. For the 1982 budget, however, the

---

<sup>1</sup> Summary comparisons are in the *Budget of the United States Government, Fiscal Year 1982, Part 2, "Economic Assumptions and the Budget Outlook."*

differences are small compared to the uncertainties inherent in the economic forecast.

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, "Economic Assumptions and the Budget Outlook," in the 1982 *Budget*.

Table A-1. SUMMARY OF ECONOMIC ASSUMPTIONS

(Calendar years)

	1980	1981	1982
Gross national product (in billions of current dollars)...	2,627	2,928	3,312
Change in constant dollar GNP (percent change, fourth quarter over fourth quarter) .....	-0.1	0.9	3.5
Unemployment rate (percent, fourth quarter) .....	7.5	7.7	7.4
Consumer Price Index (percent change, fourth quarter over fourth quarter) .....	12.8	12.6	9.6
Interest rate, 91-day Treasury bills (percent) .....	11.5	13.5	11.0

### THE CURRENT SERVICES CONCEPT

The current services estimates are neither recommended amounts nor forecasts as to what the budget for 1981 and 1982 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 near-term budgetary implications of the current directions of Federal programs, they in effect answer the question: "How would the budget come out if we simply left the Federal Government on automatic pilot through next year?"

A 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 concepts possible. Different concepts may be useful for different purposes. Under the current concepts, the current services estimates for 1982 reflect the expected costs of continuing ongoing Federal programs at 1981 levels in real terms, without policy change; that is, they omit all proposed and pending new initiatives, presidential or congressional, that are not now enacted. In general, the 1981 level on which the current services estimates are based is that which is authorized or implied by enacted 1981 appropriations or continuing resolutions. The estimates allow for the future implications of current law, and for anticipated changes of a relatively uncontrollable nature (as dis-



tinct from policy changes)—such as increases in the number of social security retirees.

The question of whether or not to adjust estimates of discretionary programs for anticipated inflation has proven to be a difficult one. Prior to the 1981 *Budget*, this Special Analysis excluded inflation adjustments for discretionary programs on the grounds that there was no reason to assume such increases except where program benefits were tied by law to the cost of living or where there was a clear intent to cover the full costs of future inflation. It provided subsidiary data indicating what the impact on the current services estimates would have been if all programs were adjusted for inflation. However, beginning a year ago, the current services estimates presented in this Special Analysis and in the rest of the budget 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.

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

- 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 in 1982 are assumed to support the same program levels or to be funded at the same real (constant-dollar) amounts as in 1981 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 affect 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.

- Outlays for Federal pay are assumed to increase, in accordance with current law, with the projected results of the annual pay comparability survey. The October 1981 pay raise is projected to be 13.5% on this basis. This figure includes a 4 percentage point “catch up” from the below-comparability increases for October 1978 through October 1980.
- Interest on the public debt is estimated on the basis of the current services deficit 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 1982, it is assumed for purposes of current services estimates that it will be renewed. 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 temporary provisions of existing law will be extended and that future tax changes will occur as scheduled under current law.

#### CURRENT SERVICES TOTALS

Current services outlays are estimated to be \$736.2 billion in 1982, 11.5% higher than in 1981, and budget authority is estimated to be \$806.7 billion, an increase of 11.6% over 1981. Receipts for 1982 are estimated to increase 16.8% on a current services basis, from \$605.0 billion in 1981 to \$706.5 billion in 1982. The resulting 1982 deficit would be \$29.7 billion, \$25.8 billion lower than the \$55.4 billion deficit for 1981.

Table A-2. CURRENT SERVICES TOTALS

(In billions of dollars)

	1980 actual	1981 estimate	1982 estimate
Receipts .....	520.0	605.0	706.5
Outlays .....	579.6	660.5	736.2
Deficit (—) .....	—59.6	—55.4	—29.7
Budget authority .....	658.8	722.9	806.7

**Receipts.**—Table A-3 shows receipts by major source on a current services basis. For purposes of comparison, receipts under the administration's proposals for 1982 are also shown. Current services receipts are projected to increase by \$101.5 billion from 1981 to 1982, largely due to assumed increases in incomes resulting from both real economic growth and inflation.

Table A-3. CURRENT SERVICES RECEIPTS BY SOURCE

(In billions of dollars)

	1980 actual	Current services		1982 administra- tion estimates
		1981 estimate	1982 estimate	
Individual income taxes.....	244.1	284.5	334.5	331.7
Corporation income taxes.....	64.6	66.8	73.3	64.6
Social insurance taxes and contributions.....	160.7	184.8	214.2	214.7
Excise taxes.....	24.3	40.6	53.5	69.6
Other.....	26.3	28.3	31.1	31.2
<b>Total.....</b>	<b>520.0</b>	<b>605.0</b>	<b>706.5</b>	<b>711.8</b>

Individual income taxes are estimated to increase by \$49.9 billion from 1981 to 1982 on a current services basis. This increase of 17.5% reflects rising personal income. Corporation income taxes are estimated to increase by \$6.4 billion, or 9.6%, from 1981 to 1982 on a current services basis, largely as a result of the assumed increase in corporate profits.

Social insurance taxes are estimated to increase by \$29.3 billion on a current services basis. The estimate reflects assumed increases in total wages and salaries paid, scheduled increases in the social security taxable earnings base to \$29,700 in calendar year 1981 and \$32,100 in 1982, and scheduled increases in the combined employer-employee social security tax rate to 13.3% on January 1, 1981 and 13.4% on January 1, 1982.

On a current services basis, excise taxes are estimated to increase by \$12.9 billion, or 31.9%, from 1981 to 1982. This increase is in large part due to a \$12.4 billion rise in estimated windfall profit tax receipts from 1981 to 1982.

Other receipts (estate and gift taxes, customs duties, and miscellaneous receipts) are projected to increase by \$2.8 billion from 1981 to 1982 on a current services basis largely as a result of increased economic activity.

**Outlays.**—The level of outlays necessary to continue ongoing Federal programs and activities at 1981 levels without policy changes is estimated at \$736.2 billion in 1982. The increase in current services outlays from 1981 to 1982 is \$75.7 billion.

Table A-4. CURRENT SERVICES OUTLAYS BY FUNCTION

(In billions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
National defense.....	135.9	159.3	177.8	184.4
International affairs.....	10.7	11.3	11.9	12.2
General science, space, and technology .....	5.7	6.3	7.3	7.6
Energy.....	6.3	8.8	11.8	12.0
Natural resources and environment.....	13.8	13.9	13.8	14.0
Agriculture.....	4.8	1.2	4.8	4.8
Commerce and housing credit.....	7.8	3.6	5.1	8.1
Transportation.....	21.1	23.6	21.9	21.6
Community and regional development.....	10.1	11.2	9.2	9.1
Education, training, employment, and social services.....	30.8	31.8	35.0	34.5
Health.....	58.2	66.2	75.5	74.6
Income security.....	193.1	231.6	259.3	255.0
Veterans benefits and services.....	21.2	22.6	24.4	24.5
Administration of justice.....	4.6	4.7	4.8	4.9
General government.....	4.5	5.0	5.2	5.2
General purpose fiscal assistance.....	8.6	6.9	6.5	6.9
Interest.....	64.5	80.4	89.9	89.9
Allowances:				
Civilian agency pay raises.....			3.2	0.9
Contingencies.....				1.0
Undistributed offsetting receipts:				
Employer share, employee retirement.....	-5.8	-6.6	-6.8	-6.8
Interest received by trust funds.....	-12.0	-13.4	-14.7	-15.2
Rents and royalties on the Outer Continental Shelf.....	-4.1	-7.8	-9.9	-9.9
<b>Total outlays.....</b>	<b>579.6</b>	<b>660.5</b>	<b>736.2</b>	<b>739.3</b>

Table A-4 shows current services outlays by function. Estimates by agency are presented in table A-5. The greatest dollar increases from 1981 to 1982 occur in the income security, national defense, interest, and health functions, 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, higher interest rates and increased borrowing requirements.

Table A-5. CURRENT SERVICES OUTLAYS BY AGENCY

(In billions of dollar)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Legislative branch .....	1.2	1.4	1.4	1.4
The Judiciary .....	.6	.7	.7	.7
Executive Office of the President .....	.1	.1	.1	.1
Funds appropriated to the President .....	7.5	6.2	6.1	6.3
Department of Agriculture .....	24.6	20.9	28.7	28.0
Department of Commerce .....	3.8	3.0	3.1	3.2
Department of Defense—Military .....	132.8	155.6	174.0	180.0
Department of Defense—Civil .....	3.2	3.4	3.4	3.4
Department of Education .....	13.1	14.7	16.5	15.7
Department of Energy .....	6.5	9.8	13.1	14.1
Department of Health and Human Services .....	194.7	227.5	259.7	258.2
Department of Housing and Urban Development .....	12.6	13.3	15.5	15.5
Department of the Interior .....	4.4	4.6	4.2	4.1
Department of Justice .....	2.6	2.6	2.6	2.7
Department of Labor .....	29.7	37.7	36.7	34.5
Department of State .....	1.9	2.2	2.5	2.6
Department of Transportation .....	19.0	21.7	19.9	20.0
Department of the Treasury .....	76.7	90.9	100.1	104.3
Environmental Protection Agency .....	5.6	5.5	5.6	5.8
National Aeronautics and Space Administration .....	4.8	5.3	6.3	6.4
Veterans Administration .....	21.1	22.5	24.4	24.4
Office of Personnel Management .....	15.1	18.0	20.8	20.2
Other independent agencies .....	20.0	20.8	18.9	17.5
Allowances .....			3.2	1.9
Undistributed offsetting receipts .....	-21.9	-27.8	-31.4	-31.9
<b>Total outlays .....</b>	<b>579.6</b>	<b>660.5</b>	<b>736.2</b>	<b>739.3</b>

Table A-6 shows the major components of the changes in current services outlays between 1981 and 1982. Outlays for income security programs are estimated to rise by \$27.7 billion, from \$231.6 billion in 1981 to \$259.3 billion in 1982 due to automatic cost-of-living increases in many benefit programs, increases in the number of beneficiaries, and higher earnings records for new retirees. In the case of social security, for example, about three-fourths of the 1981 to 1982 outlay increase is due to cost-of-living increases; higher earnings records and net increases in beneficiaries account for the remaining one-fourth. Table A-7 shows caseload projections for major benefit programs and other selected programmatic assumptions.

Current services outlays for the military functions of the Department of Defense are estimated to increase by \$18.4 billion between 1981 and 1982. Increased outlays for retired military personnel account for \$2.2 billion of this increase. October 1981 pay raises of 13.5% for military and civilian personnel account for an additional \$7.2 billion of the increase. Current services outlays for other Department of Defense purchases are estimated to increase by \$9.0

billion, due to estimated price increases averaging 9.7% and to spending from funds previously appropriated.

Table A-6. CHANGE IN CURRENT SERVICES BUDGET AUTHORITY AND OUTLAYS, 1981 TO 1982

(In billions of dollars)

	Budget authority	Outlays
<b>1981 current services estimate</b> .....	<b>722.9</b>	<b>660.5</b>
<b>1981-82 changes:</b>		
Income security:		
Social security.....	19.1	21.4
Federal employee retirement .....	2.7	2.9
Unemployment compensation .....	3.4	-2.0
Housing assistance.....	5.5	1.6
Food and nutrition assistance .....	2.5	2.1
Other income security programs .....	-0.3	1.7
National defense:		
Department of Defense—Military:		
Military and civilian pay raise allowance .....	7.2	7.2
Procurement .....	3.6	3.4
Operation and maintenance .....	3.4	3.4
Military retired pay.....	2.2	2.2
Other defense military .....	2.8	2.2
Other national defense.....	0.2	0.2
Net interest .....	8.3	8.3
Medicare and medicaid.....	13.6	8.7
Other health programs.....	0.8	0.6
Allowances for civilian agency pay raises.....	3.4	3.2
Energy programs .....	4.5	3.0
General science, space, and technology.....	1.1	1.1
Rents and royalties, offshore oil lands.....	-2.1	-2.1
Veterans programs.....	1.6	1.8
Farm income stabilization.....	-0.5	3.5
Mortgage credit and thrift insurance.....	1.0	1.6
General revenue sharing .....	*	-0.6
Ground transportation.....	-0.5	-1.8
Community and regional development.....	-1.2	-1.9
Education.....	2.5	1.8
Employment and training.....	1.7	1.0
International financial programs .....	-7.4	0.5
Foreign aid .....	1.2	-0.1
All other programs, net .....	3.4	1.0
<b>1982 current services estimate</b> .....	<b>806.7</b>	<b>736.2</b>

\*\$50 million or less.

Table A-7. CASELOADS AND PROGRAMMATIC ASSUMPTIONS

	Fiscal years	
	1981	1982
Beneficiaries (annual average, in thousands):		
Social security (OASDI) .....	36,000	36,500
Railroad retirement <sup>1</sup> .....	1,000	989
Federal civilian retirees .....	1,822	1,881
Military retirement .....	1,347	1,391
Veterans compensation .....	2,634	2,639
Veterans pensions .....	1,965	1,867
GI bill .....	975	773
Disabled coal miners .....	393	370
Supplemental security income .....	4,157	4,165
Maintenance assistance (AFDC) .....	10,936	10,851
Food stamps .....	22,000	21,500
Housing subsidy recipients (section 8 housing) .....	4,021	4,769
Medicaid .....	18,324	18,783
Medicare:		
Hospital insurance .....	28,027	28,575
Supplementary medical insurance .....	27,725	28,364
Automatic benefit increases (percent):		
Social security and veterans pensions (June) .....	12.3	11.3
Federal employee retirement:		
March .....	4.8	4.7
September .....	7.2	5.2
Food stamps (January) <sup>2</sup> .....	11.4	16.3
Interest rate (91-day bills, percent, calendar years) <sup>3</sup> .....	13.5	11.0
Budget deficit (current services, in billions of dollars) .....	-55.4	-29.7
Unemployment rate (percent, annual average, calendar years):		
Total .....	7.8	7.5
Insured <sup>4</sup> .....	4.4	4.1
Strategic petroleum reserves (thousands of barrels, end of year) .....	168,000	252,000

<sup>1</sup> End of year.

<sup>2</sup> Under the provisions of Public Law 96-499, the Omnibus Reconciliation Act of 1980, food stamp allotments will be adjusted annually, beginning with the January 1982 adjustment. There will be no increase in July 1981.

<sup>3</sup> Average rate on new issues within period. These estimates assume, by convention, that interest rates decline with the rate of inflation. They do not represent a forecast of interest rates.

<sup>4</sup> 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.

Current services outlays for the medicare and medicaid programs are estimated to increase by \$8.7 billion between 1981 and 1982, largely as a result of increases in medical care prices.

Other major changes in current services outlays between 1981 and 1982 include an increase in net interest of \$8.3 billion; a \$3.2 billion increase for civilian agency pay raises; an increase of \$3.5 billion for farm income stabilization; and a \$3.0 billion increase in energy programs.

**Budget authority.**—Current services budget authority is estimated to total \$806.7 billion in 1982, \$83.7 billion more than in 1981. Increases in budget authority between 1981 and 1982 generally reflect the higher funding levels that would be necessary to maintain 1981 services levels in real terms in 1982. 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 display 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 major components of the changes in current services budget authority between 1981 and 1982 are shown in table A-6.

Increases in budget authority of \$27.4 billion for income security (excluding housing assistance) and \$14.4 billion for health are primarily due to higher social security and medicare trust fund receipts and higher medicaid costs.

Table A-8. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION

(In billions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
National defense.....	145.8	172.3	191.8	200.3
International affairs.....	15.5	25.1	19.2	19.6
General science, space, and technology.....	6.1	6.6	7.7	8.1
Energy.....	36.4	8.0	12.5	12.1
Natural resources and environment.....	13.1	12.4	13.4	13.6
Agriculture.....	4.9	5.4	5.0	5.6
Commerce and housing credit.....	10.5	6.8	7.8	10.7
Transportation.....	20.2	25.5	25.1	25.5
Community and regional development.....	10.1	10.4	9.2	9.2
Education, training, employment, and social services.....	30.6	31.4	36.6	36.3
Health.....	59.8	72.2	86.6	86.1
Income security.....	224.2	255.6	288.5	279.6
Veterans benefits and services.....	21.2	23.2	24.8	25.0
Administration of justice.....	4.4	4.4	4.8	4.8
General government.....	4.6	4.9	5.2	5.4
General purpose fiscal assistance.....	8.7	6.2	6.5	6.9
Interest.....	64.5	80.4	89.9	89.9
Allowances:				
Civilian agency pay raises.....			3.4	1.0
Contingencies.....				2.0
Undistributed offsetting receipts:				
Employer share, employee retirement.....	-5.8	-6.6	-6.8	-6.8
Interest received by trust funds.....	-12.0	-13.4	-14.7	-15.2
Rents and royalties on the Outer Continental Shelf.....	-4.1	-7.8	-9.9	-9.9
<b>Total budget authority.....</b>	<b>658.8</b>	<b>722.9</b>	<b>806.7</b>	<b>809.8</b>



A \$19.5 billion increase in budget authority for the Department of Defense—Military largely reflects pay increases for military and civilian personnel and increases in the costs of an equivalent level of defense purchases.

Other major changes in current services budget authority include an increase in net interest of \$8.3 billion; a \$3.4 billion increase in allowances for civilian agency pay raises; a \$2.5 billion increase in education programs; a \$1.7 billion increase in employment and training programs; a \$1.6 billion increase for veterans programs; a \$2.1 billion increase in offsetting collections from Outer Continental Shelf leases; a \$0.5 billion decrease in ground transportation programs; and a \$7.4 billion decrease in international financial programs that results primarily from a \$5.5 billion payment in 1981 of the U.S. quota to the IMF and a \$1.5 billion decrease for the Export-Import Bank.

Table A-9. CURRENT SERVICES BUDGET AUTHORITY BY AGENCY

(In billions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Legislative branch .....	1.3	1.3	1.4	1.5
The Judiciary .....	.6	.7	.7	.7
Executive Office of the President .....	.1	.1	.1	.1
Funds appropriated to the President .....	12.5	14.6	9.9	10.9
Department of Agriculture .....	24.9	26.3	29.8	30.1
Department of Commerce .....	3.1	2.9	3.1	3.1
Department of Defense—Military .....	142.6	168.6	187.8	195.7
Department of Defense—Civil .....	3.3	3.0	3.4	3.4
Department of Education .....	13.8	15.1	17.6	17.0
Department of Energy .....	10.0	11.3	14.0	14.6
Department of Health and Human Services .....	195.9	225.8	259.4	258.4
Department of Housing and Urban Development .....	35.7	38.6	43.9	38.2
Department of the Interior .....	4.6	4.3	4.3	4.5
Department of Justice .....	2.5	2.3	2.5	2.6
Department of Labor .....	28.8	33.6	38.9	37.0
Department of State .....	2.1	2.4	2.8	3.0
Department of Transportation .....	18.2	23.7	23.2	24.0
Department of the Treasury .....	90.6	90.6	100.5	104.7
Environmental Protection Agency .....	4.7	4.7	5.5	5.3
National Aeronautics and Space Administration .....	5.2	5.5	6.6	6.7
Veterans Administration .....	21.2	23.2	24.8	24.9
Office of Personnel Management .....	24.9	28.5	31.2	30.5
Other independent agencies .....	34.3	23.5	23.4	21.7
Allowances .....			3.4	3.0
Undistributed offsetting receipts .....	-21.9	-27.8	-31.4	-31.9
<b>Total budget authority .....</b>	<b>658.8</b>	<b>722.9</b>	<b>806.7</b>	<b>809.8</b>

### DIFFERENCES BETWEEN CURRENT SERVICES ESTIMATES AND BUDGET PROPOSALS

For 1981, the estimates of budget authority and outlays under administration proposals exceed the current services levels by \$3.5 billion and \$2.3 billion, respectively. The 1981 receipts estimate under administration proposals exceeds current services by \$2.5 billion. The deficit under administration proposals is \$0.2 billion lower than that under current services.

For 1982, the administration's estimate of outlays is \$3.1 billion above the current services level, and budget authority is \$3.1 billion above the current services level. The current services receipts level for 1982 is \$5.3 billion below the administration's estimate of \$711.8 billion. The 1982 current services deficit of \$29.7 billion exceeds the administration's estimated deficit by \$2.2 billion.

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

(In billions of dollars)

	1980 actual	1981 Estimate		1982 Estimate	
		Current services	Administra- tion proposals	Current services	Administra- tion proposals
Receipts .....	520.0	605.0	607.5	706.5	711.8
Outlays.....	579.6	660.5	662.7	736.2	739.3
Deficit (—) .....	— 59.6	— 55.4	— 55.2	— 29.7	— 27.5
Budget authority .....	658.8	722.9	726.5	806.7	809.8

**Receipts.**—As shown in table A-11, the administration's estimate of receipts for 1981 is \$2.5 billion higher than the current services level of \$605.0 billion. This difference is due primarily to the effect of the proposed increases in the motor fuels and other highway use taxes and the limitation on the foreign tax credit on oil and gas extraction on 1981 receipts, offset somewhat by the effect on 1981 receipts of the tax reductions in the economic revitalization program.

The administration's tax proposals for 1982 are \$5.3 billion above the current services level. Proposed increases include the motor fuels and other highway use taxes (\$14.6 billion), withholding on interest and dividend income (\$3.9 billion), and airport and airway trust fund taxes (\$1.4 billion). Other increases proposed for 1982 total \$3.7 billion. The tax proposals in the economic revitalization program would reduce 1982 receipts by an estimated \$18.3 billion. The major reductions are the social security tax credit (\$8.5 billion) and constant rate depreciation (\$9.0 billion).<sup>1</sup>

<sup>1</sup> A more detailed discussion of the administration's tax proposals is presented in the *Budget of the United States Government, Fiscal Year 1982, Part 4, "Budget Receipts."*

Table A-11. ESTIMATED EFFECT OF PROPOSED LEGISLATION AND ADMINISTRATION ACTION ON RECEIPTS

(In billions of dollars)

	1981	1982
<b>Current services receipts estimates</b> .....	<b>605.0</b>	<b>706.5</b>
Economic revitalization program:		
Constant rate depreciation.....	-2.9	-9.0
Social security tax credit.....		-8.5
Other proposals.....	-0.1	-0.8
Subtotal, economic revitalization program.....	-3.1	-18.3
Motor fuels and highway use taxes.....	3.5	14.6
Foreign tax credit on oil and gas extraction.....	1.4	0.5
Withholding on interest and dividend income.....		3.9
Airport and airway trust fund taxes.....	0.2	1.4
Other proposals.....	0.5	3.2
Subtotal, other revenue proposals.....	5.6	23.6
<b>Total proposed changes</b> .....	<b>2.5</b>	<b>5.3</b>
<b>Proposed receipts, President's budget</b> .....	<b>607.5</b>	<b>711.8</b>

**Outlays.**—In 1981, the major increase above current services outlays is \$2.1 billion for the Department of Defense—Military supplemental appropriations request. Supplemental appropriations for ground and water transportation, student financial assistance, government personal property, and conservation and land management programs increase 1981 outlays by \$0.9 billion. The refundable tax credits proposed under the economic revitalization program add another \$0.2 billion. Proposed rescissions reduce 1981 outlays by \$0.7 billion.

Table A-12 shows the major differences between the administration's 1982 budget and the current services outlay level. Proposed reductions result in a decrease in outlays of \$15.9 billion below the current services level, which is more than offset by proposed increases of \$19.1 billion.

The largest proposed reduction from 1982 current services outlay levels results from proposals to restrain civilian pay, which limit the October 1981 pay raises to 5.5% for Federal civilian employees and 9.1% for military personnel, rather than the 13.5% raise under comparability. These pay proposals would reduce outlays by \$5.8 billion below the current services level. Other major budget savings include reductions in unemployment compensation programs of \$2.2 billion; and proposed reductions in the public assistance and food and nutrition programs of \$1.0 billion, which reflect improved administration and the targeting of resources toward those most in

need. Proposed modifications to indexation formulas in military and civil service retirement programs reduce 1982 outlays by an estimated \$1.1 billion.

The largest outlay increase above the current services level for 1982 is the proposed \$10.8 billion increase in defense programs for higher purchases to carry out the administration's policy to maintain the deterrent capability of our conventional and strategic forces as the Soviet Union and its allies increase their military capabilities. The refundable tax credits proposed as part of the economic revitalization program increase outlays by \$4.2 billion above the current services level. Other major increases above current services for 1982 include a \$0.4 billion increase for student financial assistance; a \$0.3 billion increase in science and space programs; a \$0.3 billion increase for foreign economic and financial assistance; and increases in allowances for contingencies of \$1.0 billion.

**Budget authority.**—For 1981, the largest increase in budget authority beyond current services is a supplemental appropriations request totaling \$1.8 billion for the Department of Defense—Military. Supplemental appropriations requested for ground and water transportation, student financial assistance, government personal property, and conservation and land management programs account for an additional \$2.2 billion increase in budget authority beyond current services levels. Decreases totaling \$1.3 billion result from rescissions of 1981 budget authority proposed by the administration.

The administration's proposals to restrain pay decreases budget authority below the 1982 current services level by \$2.4 billion for civilian agencies and \$3.4 billion for the Department of Defense. Housing assistance budget authority for 1982 is \$5.4 billion below the current services level primarily because of proposed changes in homeownership assistance and other housing subsidy programs. Reductions in impact aid, student loan guarantees, unemployment compensation, medicare, medicaid, food and nutrition assistance, and public assistance reduce budget authority by a further \$4.4 billion. Other budget authority reductions from 1982 current services levels include \$0.9 billion for the Export-Import Bank and \$1.2 billion for indexation proposals in military and civilian Federal employee retirement programs.

Budget authority increases for defense programs are \$12.7 billion above the current services level for 1982. Other major increases in budget authority above the current services level for 1982 include \$4.2 billion for refundable tax credits under the economic revitalization tax proposals; \$1.2 billion for the youth education and training initiative; \$1.1 billion for foreign economic and financial assistance; \$0.6 billion for highway programs; \$0.6 billion for rural devel-

opment business assistance; \$0.5 billion for agricultural crop insurance programs; and \$1.0 billion for allowances for contingencies.

Table A-12. DIFFERENCES BETWEEN ADMINISTRATION 1982 BUDGET REQUEST AND CURRENT SERVICES LEVELS

(In billions of dollars)

	Budget authority	Outlays
<b>Current services estimates for 1982</b> .....	806.7	736.2
Decreases:		
Defense, pay raise allowance.....	-3.4	-3.5
Defense, retired pay proposals.....	-0.5	-0.5
Defense, stockpile sales proposal.....	-0.2	-0.2
Export-Import Bank.....	-0.9	-0.1
Employment and training assistance.....	-0.2	-0.1
Payment to the Postal Service.....	-0.4	-0.4
Rail assistance.....	-0.4	-0.4
Federal impact aid to education.....	-0.5	-0.4
Loan guarantees to students and parents.....	-0.8	-0.6
Medicare and medicaid proposals.....	-0.1	-0.5
Civil service retirement indexation proposal.....	-0.7	-0.7
Unemployment compensation proposals <sup>1</sup> .....	-2.0	-2.2
Housing assistance.....	-5.4	0.1
Food and nutrition assistance.....	-0.6	-0.5
Public assistance program reform.....	-0.5	-0.5
Civilian agencies, pay raise allowance.....	-2.4	-2.3
Other.....	-3.3	-2.9
Subtotal, decreases.....	-22.3	-15.9
Increases:		
Defense—Military, program increases.....	11.8	10.0
Atomic energy defense activities.....	0.9	0.8
Foreign economic and financial assistance.....	1.1	0.3
Science and space programs.....	0.4	0.3
Federal Crop Insurance Corporation.....	0.5	0.1
Highway programs.....	0.6	0.1
Rural development business assistance proposals.....	0.6	*
Student financial assistance.....	0.1	0.4
Youth education and training proposal.....	1.2	0.1
Economic revitalization—refundable tax credit proposals.....	4.2	4.2
Allowance for contingencies.....	2.0	1.0
Other.....	2.0	1.7
Subtotal, increases.....	25.4	19.1
<b>President's request for 1982</b> .....	<b>809.8</b>	<b>739.3</b>

\*\$50 million or less.

<sup>1</sup> Most of the outlay savings from this proposal are related to the national trigger. Under current law, extended benefits would be paid nationally for the first three quarters of fiscal year 1982, using the unemployment rates forecast in this budget. Under the proposal, these unemployment rates would not activate the national trigger. Extended benefits would still be paid in individual States that trigger extended benefits; these payments are estimated to be \$1.5 billion in 1982. If the unemployment rate were only ¼ percentage point higher for 1982 the national trigger would be activated under both current and proposed law and the outlay savings from this proposal would be relatively small.

Table A-13. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
<b>050 NATIONAL DEFENSE</b>				
<b>051 Department of Defense—Military:</b>				
Military personnel.....	31,014	36,317	37,448	38,363
Retired military personnel .....	11,965	13,917	16,077	16,077
Proposed legislation .....				—477
Operation and maintenance.....	46,365	52,873	56,319	61,492
Procurement.....	35,283	44,909	48,493	49,065
Research, development, test and evaluation.....	13,561	16,054	17,335	19,841
Military construction .....	2,293	3,234	3,467	5,554
Family housing.....	1,526	1,919	2,064	2,156
Revolving funds and other .....	615	—661	—604	—402
Allowances for civilian and military pay raises.....			7,216	3,771
Other legislation.....				220
Subtotal, Department of Defense—Military.....	142,621	168,562	187,815	195,660
<b>053 Atomic energy defense activities</b> .....	2,991	3,607	3,781	4,704
<b>054 Defense-related activities:</b>				
Emergency planning, preparedness, and mobilization .....	132	162	186	186
GSA stockpile sales and related .....	—60	—144	—123	—123
Proposed legislation.....				—210
Other.....	85	101	123	123
Subtotal, Defense-related activities.....	156	119	186	—24
<b>Deductions for offsetting receipts</b> .....	—4	—3	—3	—3
Total budget authority.....	145,764	172,284	191,779	200,337
<b>150 INTERNATIONAL AFFAIRS</b>				
<b>151 Foreign economic and financial assistance:</b>				
International Development Cooperation Agency .....	1,856	1,960	1,962	2,726
Multilateral development banks.....	2,308	1,584	2,414	2,414
Public Law 480—Food aid.....	886	1,305	1,263	1,263
Peace Corps.....	100	108	122	122
Economic support fund/Peacekeeping operations.....	1,972	2,153	2,147	2,450
Refugee assistance.....	483	491	611	611
Offsetting receipts and other .....	—296	—307	—369	—364
Subtotal, Foreign economic and financial assistance .....	7,310	7,295	8,150	9,222
<b>152 Military assistance:</b>				
Grant military assistance.....	110	110	112	34
Foreign military training.....	25	28	28	36
Foreign military sales credit.....	645	500	850	850
Relocation of facilities (Israel) .....	236			
Offsetting receipts and other .....	—333	—276	—286	—286
Subtotal, Military assistance.....	682	363	704	633
<b>153 Conduct of foreign affairs:</b>				
Administration of foreign affairs .....	821	998	1,053	1,281
International organizations and conferences.....	486	517	724	724
Other.....	36	38	41	43
Subtotal, Conduct of foreign affairs.....	1,343	1,553	1,817	2,048
<b>154 Foreign information and exchange activities</b> .....	518	565	602	687
<b>155 International financial programs:</b>				
Export-Import Bank.....	1,842	7,023	5,478	4,594

Table A-13. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Foreign military sales trust fund (net).....	3,997	2,889	2,376	2,376
International monetary programs.....		5,516		
International commodity agreements.....		88	239	239
Other.....	-77	-79	-80	-80
Subtotal, International financial programs.....	5,761	15,437	8,013	7,129
<b>Deductions for offsetting receipts.....</b>	<b>-96</b>	<b>-81</b>	<b>-79</b>	<b>-79</b>
Total budget authority.....	15,519	25,132	19,207	19,639
<b>250 GENERAL SCIENCE, SPACE, AND TECHNOLOGY</b>				
<b>251 General science and basic research:</b>				
National Science Foundation programs.....	991	1,083	1,181	1,359
Department of Energy general science programs.....	470	504	560	607
Smithsonian scientific information exchange activities.....	*	*	*	*
Subtotal, General science and basic research.....	1,461	1,588	1,741	1,966
<b>253 Space flight.....</b>	<b>2,820</b>	<b>3,143</b>	<b>3,749</b>	<b>3,802</b>
<b>254 Space, science, applications, and technology.....</b>	<b>1,425</b>	<b>1,416</b>	<b>1,694</b>	<b>1,782</b>
<b>255 Supporting space activities.....</b>	<b>439</b>	<b>451</b>	<b>558</b>	<b>558</b>
<b>Deductions for offsetting receipts.....</b>	<b>-3</b>	<b>-4</b>	<b>-4</b>	<b>-4</b>
Total budget authority.....	6,141	6,593	7,738	8,104
<b>270 ENERGY</b>				
<b>271 Energy supply:</b>				
Synthetic fuels promotion.....	19,000			
Spent fuel storage fund (proposed).....				
Uranium enrichment.....	245	1,286	562	569
Petroleum reserves and other.....	-916	-636	-969	-961
Power marketing (net).....	14,924	-90	2,421	2,133
Other.....	3,559	3,964	5,674	4,406
Subtotal, Energy supply.....	36,813	4,524	6,688	6,147
<b>272 Energy conservation:</b>				
Energy conservation (DOE).....	736	800	872	872
Solar energy and Energy Conservation Bank.....		121	132	127
Subtotal, Energy conservation.....	736	922	1,004	999
<b>274 Emergency energy preparedness:</b>				
Strategic petroleum reserve.....	-2,000	1,486	3,650	3,650
Strategic petroleum reserve entitlements and royalties.....		1,845	248	248
Strategic petroleum reserve receipts.....		-1,845	-248	-248
Subtotal, Emergency energy preparedness.....	2,000	1,486	3,650	3,650
<b>276 Energy information, policy, and regulation:</b>				
Energy Information Administration.....	91	105	127	127
Federal Energy Regulatory Commission.....	68	76	77	86
Economic Regulatory Administration.....	151	183	184	184
Nuclear Regulatory Commission.....	400	454	501	501
Alaska Gas Inspection.....	8	22	37	37
Department of Energy—administration and other.....	233	264	271	402
Subtotal, Energy information, policy, and regulation.....	951	1,104	1,196	1,336

Table A-13. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
<b>Deductions for offsetting receipts.....</b>	-53	-58	-58	-58
Total budget authority.....	36,447	7,977	12,482	12,075
<b>300 NATURAL RESOURCES AND ENVIRONMENT</b>				
<b>301 Water resources:</b>				
Soil Conservation Service.....	214	224	203	198
Corps of Engineers.....	3,293	3,070	3,393	3,395
Department of the Interior.....	656	826	954	943
Proposed legislation.....				
Other.....	57	53	51	63
Offsetting receipts.....	-62	-55	-56	-56
Subtotal, Water resources.....	4,157	4,118	4,545	4,543
<b>302 Conservation and land management:</b>				
Management of national forests, cooperative forestry, and forestry research.....	1,965	1,843	2,104	2,034
Management of public lands.....	440	454	475	524
Mining reclamation and enforcement.....	180	175	252	246
Conservation of agricultural lands.....	540	583	613	584
Other, including offsetting receipts.....	-538	-605	-892	-918
Subtotal, Conservation and land management.....	2,586	2,450	2,553	2,471
<b>303 Recreational resources:</b>				
Land and water conservation fund.....	539	409	413	520
Urban recreation grants and historic preservation fund.....	165	52	57	108
Operation of recreation resources.....	969	951	1,020	1,045
Subtotal, Recreational resources.....	1,672	1,412	1,490	1,673
<b>304 Pollution control and abatement:</b>				
Regulatory, enforcement, and research programs.....	1,235	1,302	1,383	1,312
Oil pollution funds.....	37	16	19	29
Hazardous substance response fund.....				249
Sewage treatment plant construction grants.....	3,400	3,305	4,033	3,700
Subtotal, Pollution control and abatement.....	4,672	4,623	5,435	5,290
<b>306 Other natural resources:</b>				
Existing law.....	1,401	1,523	1,599	1,659
Proposed legislation.....				124
Subtotal, Other natural resources.....	1,401	1,523	1,599	1,782
<b>Deductions for offsetting receipts.....</b>	-1,439	-1,717	-2,187	-2,187
Total budget authority.....	13,051	12,410	13,436	13,572
<b>350 AGRICULTURE</b>				
<b>351 Farm income stabilization:</b>				
Price-support and related programs.....	3,056	3,300	2,296	2,296
Federal Crop Insurance Corporation.....	12	31	34	544
Agricultural credit insurance fund.....	335	297	795	795
Other programs.....	43	36	43	41
Administrative expenses.....	191	210	214	219
Subtotal, Farm income stabilization.....	3,637	3,874	3,381	3,894
<b>352 Agricultural research and services:</b>				
Research programs.....	560	635	677	692



Table A-13. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Proposed legislation.....				10
Extension programs.....	286	304	331	305
Marketing programs.....	76	82	84	94
Proposed legislation.....				-25
Animal and plant health programs.....	251	282	295	295
Economic intelligence.....	145	159	175	178
Other programs.....	64	70	71	72
Administrative expenses.....	86	100	109	120
Offsetting receipts.....	-66	-70	-72	-72
Subtotal, Agricultural research and services.....	1,402	1,562	1,670	1,670
Deductions for offsetting receipts.....	-95	-5	-5	-5
Total budget authority.....	4,945	5,431	5,047	5,559
<b>370 COMMERCE AND HOUSING CREDIT</b>				
<b>371 Mortgage credit and thrift insurance:</b>				
Mortgage purchase activities (GNMA).....	1,869	210	502	492
Mortgage credit (FHA).....	324	344	305	305
Housing for the elderly or handicapped.....	806	781	861	774
Department of Agriculture—rural housing programs.....	2,282	618	2,218	2,218
National Credit Union Administration.....	1,200	197	310	310
Subtotal, Mortgage credit and thrift insurance.....	6,481	3,150	4,195	4,098
<b>372 Postal Service.....</b>	1,677	1,593	1,501	1,119
<b>376 Other advancement and regulation of commerce:</b>				
Payments in excess of corporate tax liability (proposed).....				3,493
Small business assistance.....	788	881	962	802
National Consumer Cooperative Bank.....	67	122	136	136
Technology utilization.....	241	271	279	313
Economic and demographic statistics.....	750	272	191	198
Chrysler Corporation loan guarantee program.....	2	1	1	1
Other.....	493	512	530	550
Subtotal, Other advancement and regulation of com- merce.....	2,340	2,060	2,099	5,494
Deductions for offsetting receipts.....	—*	—*	—*	—*
Total budget authority.....	10,497	6,804	7,796	10,711
<b>400 TRANSPORTATION</b>				
<b>401 Ground transportation:</b>				
Highways.....	9,177	9,534	10,274	10,907
Mass transit.....	2,565	4,682	5,096	5,197
Railroads.....	2,198	3,991	2,327	1,904
Regulation.....	79	86	88	85
Subtotal, Ground transportation.....	14,019	18,293	17,786	18,093
<b>402 Air transportation:</b>				
Airways and airports.....	3,269	3,576	3,795	3,843
Aeronautical research and technology.....	560	528	567	583
Air carrier subsidies.....	96	114	114	114
Regulation.....	29	30	31	31
Subtotal, Air transportation.....	3,954	4,248	4,507	4,571

Table A-13. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
<b>403 Water transportation:</b>				
Marine safety and transportation .....	1,681	1,971	2,116	2,175
Proposed legislation .....				—9
Ocean shipping .....	507	912	657	601
Regulation .....	11	12	13	13
Subtotal, Water transportation .....	2,199	2,895	2,786	2,779
<b>407 Other transportation .....</b>	97	112	121	122
<b>Deductions for offsetting receipts .....</b>	—60	—60	—56	—56
Total budget authority .....	20,210	25,488	25,143	25,509
<b>450 COMMUNITY AND REGIONAL DEVELOPMENT</b>				
<b>451 Community development:</b>				
Community development block grants .....	3,752	3,695	4,038	3,960
Urban development grants .....	675	675	738	675
Rehabilitation loans .....	110	130	130	134
Neighborhood Reinvestment Corporation .....	12	12	15	15
Pennsylvania Avenue development .....	40	32	31	31
Other programs .....	338	367	396	387
Subtotal, Community development .....	4,927	4,911	5,348	5,202
<b>452 Area and regional development:</b>				
Rural development and business assistance .....	647	803	716	499
Proposed legislation .....				635
Economic development .....	553	667	668	674
Coastal energy impact .....	—35		58	1
Indian programs .....	1,183	1,134	1,161	1,175
Regional commissions .....	474	425	423	350
Other programs .....	271	350	381	201
Offsetting receipts .....	—304	—375	—266	—266
Subtotal, Area and regional development .....	2,790	3,003	3,142	3,268
<b>453 Disaster relief and insurance:</b>				
SBA disaster loans .....	1,208	1,470		
Federal emergency management activities .....	1,182	1,038	729	729
Drought assistance and other .....	35	10	11	10
Subtotal, Disaster relief and insurance .....	2,426	2,518	740	739
<b>Deductions for offsetting receipts .....</b>	—32	—25	—25	—25
Total budget authority .....	10,110	10,407	9,205	9,184
<b>500 EDUCATION, TRAINING, EMPLOYMENT, AND SOCIAL SERVICES</b>				
<b>501 Elementary, secondary, and vocational education:</b>				
Elementary and secondary education .....	3,596	3,838	4,183	4,203
Proposed legislation .....				900
Indian education .....	346	356	370	384
Impact aid .....	825	790	875	401
Education for the handicapped .....	1,051	1,102	1,201	1,225
Vocational and adult education .....	927	932	1,016	904
Other .....	479	464	643	488
Subtotal, Elementary, secondary, and vocational educa- tion .....	7,225	7,482	8,288	8,505

Table A-13. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
<b>502 Higher education:</b>				
Student financial assistance.....	3,496	3,357	3,985	4,091
Loan guarantees to students and parents.....	1,609	2,312	3,143	2,346
Higher and continuing education.....	442	428	453	437
Special institutions.....	188	204	248	248
Subtotal, Higher education.....	5,735	6,301	7,829	7,121
<b>503 Research and general education aids:</b>				
Educational research and improvement.....	375	377	396	389
Administrative expenses.....	161	248	255	255
Cultural activities.....	661	678	765	768
Other.....	146	149	153	157
Subtotal, Research and general education aids.....	1,344	1,451	1,569	1,569
<b>504 Training and employment:</b>				
Temporary employment assistance.....	1,627	729	1,142	1,142
Employment and training assistance.....	6,493	7,246	8,456	7,374
Proposed legislation.....				1,125
Other general programs.....	90	95	97	105
Older workers.....	267	277	277	277
Work incentive program.....	365	365	365	385
Federal-State employment service.....	781	845	904	904
Subtotal, Training and employment.....	9,623	9,557	11,241	11,312
<b>505 Other labor services.....</b>	572	625	675	688
<b>506 Social services:</b>				
Tax credit for non-profit institutions (proposed).....				237
Grants to States for social services.....	2,823	2,398	3,132	3,132
Proposed legislation.....				-41
Services for the elderly, children, youth, families and other special groups.....	2,047	1,870	2,061	2,095
Rehabilitation services and research for the handicapped.....	574	966	1,056	1,011
Community service programs.....	550	542	542	542
Domestic volunteer programs.....	146	160	186	186
Other social services.....	11	12	14	13
Subtotal, Social services.....	6,150	5,969	6,989	7,173
<b>Deductions for offsetting receipts.....</b>	-28	-30	-32	-32
<b>Total budget authority.....</b>	<b>30,622</b>	<b>31,355</b>	<b>36,559</b>	<b>36,336</b>
<b>550 HEALTH</b>				
<b>551 Health care services:</b>				
Medicare.....	35,855	44,874	56,840	56,840
Proposed legislation.....				31
Medicaid.....	14,543	17,365	18,999	18,999
Proposed legislation.....				-98
Other health care services.....	3,902	4,197	4,583	4,520
Proposed legislation.....				-5
Subtotal, Health care services.....	54,300	66,435	80,422	80,287
<b>552 Health research:</b>				
National Institutes of Health research.....	3,211	3,412	3,680	3,611
Alcohol, Drug Abuse, and Mental Health Administration research.....	233	240	260	276

Table A-13. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Other research programs.....	198	187	200	198
Subtotal, Health research .....	3,642	3,839	4,140	4,086
<b>553 Education and training of health care work force:</b>				
National Institutes of Health training .....	218	232	246	237
Health Resources Administration and other training .....	591	481	536	183
Alcohol, Drug Abuse, and Mental Health Administration training.....	114	116	125	114
Subtotal, Education and training of health care work- force .....	923	829	907	534
<b>554 Consumer and occupational health and safety:</b>				
Consumer safety .....	658	723	732	754
Occupational safety and health .....	337	379	397	418
Subtotal, Consumer and occupational health and safety ...	995	1,102	1,129	1,172
<b>Deductions for offsetting receipts.....</b>	-17	-3	-3	-3
Total budget authority .....	59,844	72,202	86,595	86,075
<b>600 INCOME SECURITY</b>				
<b>601 General retirement and disability insurance:</b>				
Social security (OASDI).....	115,997	131,048	150,145	150,145
Proposed legislation.....				247
Railroad retirement .....	-4,400	4,848	5,384	5,384
Proposed legislation.....				118
Special benefits for disabled coal miners .....	1,848	1,898	1,952	1,880
Other.....	17	14	15	15
Subtotal, General retirement and disability insurance .....	122,262	137,809	157,497	157,790
<b>602 Federal employee retirement and disability:</b>				
Retirement and disability programs.....	24,466	27,952	30,654	30,654
Proposed legislation.....				-698
Federal employee compensation .....	266	311	353	353
Subtotal, Federal employee retirement and disability .....	24,732	28,263	31,007	30,308
<b>603 Unemployment compensation:</b>				
Existing law .....	17,703	22,575	26,018	25,988
Proposed legislation .....				-1,957
Subtotal, Unemployment compensation.....	17,703	22,575	26,018	24,031
<b>604 Housing assistance.....</b>	27,813	31,280	36,786	31,386
<b>605 Food and nutrition assistance:</b>				
Food stamps .....	9,182	11,084	12,882	12,882
Proposed legislation.....				-487
WIC-food supplements.....	758	927	1,068	1,068
School lunch and other nutrition programs .....	3,834	4,072	4,637	5,026
Proposed legislation.....				-453
Subtotal, Food and nutrition assistance .....	13,774	16,083	18,588	18,037
<b>609 Other income security:</b>				
Supplemental security income .....	6,468	7,278	7,983	7,983
Proposed legislation.....				-45
AFDC and other .....	7,709	7,728	6,263	6,263

Table A-13. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Proposed legislation.....				— 531
Earned income tax credit.....	1,275	1,203	1,115	1,115
Refugee assistance.....	617	948	800	767
Low income energy assistance.....	1,618	1,850	1,850	
Proposed legislation.....				1,850
Other.....	227	538	598	598
Subtotal, Other income security.....	17,914	19,545	18,608	18,000
Total budget authority.....	224,198	255,555	288,504	279,551
<b>700 VETERANS BENEFITS AND SERVICES</b>				
<b>701 Income security for veterans:</b>				
Service-connected compensation.....	7,353	8,584	9,697	8,658
Proposed legislation.....				1,039
Non-service-connected pensions.....	3,608	3,860	4,106	4,106
Burial and other benefits.....	186	199	204	204
National service life insurance trust fund.....	1,044	1,135	1,162	1,162
U.S. Government life insurance trust fund.....	38	34	32	32
All other insurance programs.....	5	6	8	8
Insurance program receipts.....	— 464	— 474	— 478	— 478
Subtotal, Income security for veterans.....	11,770	13,344	14,731	14,731
<b>702 Veterans education, training, and rehabilitation:</b>				
Existing law.....	2,374	2,040	1,658	1,658
Proposed legislation.....				31
Subtotal, Veterans education, training, and rehabilita- tion.....	2,374	2,040	1,658	1,689
<b>703 Hospital and medical care for veterans:</b>				
Medical care and hospital services.....	5,832	6,365	6,971	7,005
Proposed legislation.....				— 47
Construction.....	402	549	549	673
Medical administration, research, and other.....	175	196	214	220
Subtotal, Hospital and medical care for veterans.....	6,409	7,110	7,734	7,851
<b>705 Other veterans benefits and services:</b>				
VA administrative expenses and other.....	624	668	656	678
Proposed legislation.....				1
Non-VA support programs.....	34	33	36	38
Subtotal, Other veterans benefits and services.....	658	701	692	717
<b>Deductions for offsetting receipts.....</b>	— 2	— 3	— 3	— 3
Total budget authority.....	21,208	23,192	24,812	24,984
<b>750 ADMINISTRATION OF JUSTICE</b>				
<b>751 Federal law enforcement activities:</b>				
General investigation (FBI).....	614	669	710	744
Narcotics violation investigation (DEA).....	201	216	234	236
Alcohol, tobacco, and firearms investigation (ATF).....	143	152	160	160
Border enforcement activities (Customs and INS).....	800	859	902	895
Protection activities (Secret Service).....	179	175	187	187
Proposed legislation.....				1
Other enforcement.....	278	319	400	359
Subtotal, Federal law enforcement activities.....	2,214	2,390	2,593	2,582

Table A-13. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
<b>752 Federal litigative and judicial activities:</b>				
Civil and criminal prosecution and representation .....	459	501	547	554
Proposed legislation .....				-13
Federal judicial activities .....	610	674	738	753
Representation of indigents in civil cases .....	300	321	344	347
Subtotal, Federal litigative and judicial activities .....	1,370	1,496	1,629	1,641
<b>753 Federal correctional activities</b> .....	320	355	371	379
<b>754 Criminal justice assistance</b> .....	498	158	194	235
<b>Deductions for offsetting receipts</b> .....	-11	-12	-12	-12
Total budget authority .....	4,391	4,387	4,776	4,825
<b>800 GENERAL GOVERNMENT</b>				
<b>801 Legislative functions</b> .....	1,106	1,073	1,193	1,208
<b>802 Executive direction and management</b> .....	102	114	113	113
<b>803 Central fiscal operations:</b>				
Collection of taxes .....	2,288	2,489	2,649	2,649
Federal Financing Bank .....	-253	-116	-128	-128
Other fiscal operations .....	448	429	429	477
Subtotal, Central fiscal operations .....	2,484	2,802	2,950	2,998
<b>804 General property and records management:</b>				
Real property .....	*			121
Personal property .....	154	161	170	170
Records management .....	85	90	98	98
Other .....	167	185	199	199
Subtotal, General property and records management .....	406	435	467	588
<b>805 Central personnel management</b> .....	145	161	166	168
<b>806 Other general government:</b>				
Territories .....	210	167	168	199
Proposed legislation .....				1
Indian affairs .....	465	144	15	15
Treasury claims .....	438	305	378	378
Other .....	-531	-29	-37	-37
Subtotal, Other general government .....	583	587	523	555
<b>Deductions for offsetting receipts</b> .....	-224	-267	-193	-193
Total budget authority .....	4,602	4,905	5,220	5,439
<b>850 GENERAL PURPOSE FISCAL ASSISTANCE</b>				
<b>851 General revenue sharing:</b>				
General revenue sharing payments .....	6,855	4,570	4,570	4,570
Administration .....	6	7	7	7
Subtotal, General revenue sharing .....	6,861	4,577	4,577	4,577
<b>852 Other general purpose fiscal assistance:</b>				
Tax credit for State and local governments (proposed) .....				495
Payments and loans to the District of Columbia .....	439	465	581	581
New York City loan guarantee program .....	1	1	1	1
Payments to States from Forest Service receipts .....	280	223	275	275

Table A-13. CURRENT SERVICES BUDGET AUTHORITY BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Payments to States and counties from Federal land management activities.....	488	572	686	583
Payments to territories and Puerto Rico.....	593	365	370	370
Other.....	5	5	5	5
Subtotal, Other general purpose fiscal assistance.....	1,805	1,631	1,918	2,310
Total budget authority.....	8,667	6,208	6,496	6,887
<b>900 INTEREST</b>				
<b>901 Interest on the public debt.....</b>	<b>74,781</b>	<b>94,100</b>	<b>106,500</b>	<b>106,500</b>
<b>902 Other interest:</b>				
Interest on refunds of tax collections.....	502	708	600	600
Interest on loans to the Federal Financing Bank.....	-5,915	-8,899	-12,073	-12,073
Other.....	-4,860	-5,509	-5,081	-5,081
Subtotal, Other interest.....	-10,273	-13,700	-16,554	-16,554
Total budget authority.....	64,508	80,400	89,946	89,946
<b>920 ALLOWANCES</b>				
<b>921 Civilian agency pay raises.....</b>			3,360	958
<b>928 Contingencies for other requirements.....</b>				2,000
Total budget authority.....			3,360	2,958
<b>950 UNDISTRIBUTED OFFSETTING RECEIPTS</b>				
<b>951 Employer share, employee retirement.....</b>	<b>-5,787</b>	<b>-6,561</b>	<b>-6,798</b>	<b>-6,798</b>
<b>952 Interest received by trust funds:</b>				
Existing law.....	-12,045	-13,428	-14,713	-14,714
Proposed legislation.....				-451
Subtotal, Interest received by trust funds.....	-12,045	-13,428	-14,713	-15,165
<b>953 Rents and royalties on the Outer Continental Shelf.....</b>	<b>-4,101</b>	<b>-7,800</b>	<b>-9,900</b>	<b>-9,900</b>
Total budget authority.....	-21,933	-27,789	-31,410	-31,863
<b>Total budget authority.....</b>	<b>658,790</b>	<b>722,940</b>	<b>806,688</b>	<b>809,829</b>

\*\$500 thousand or less.

Table A-14. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
<b>050 NATIONAL DEFENSE</b>				
<b>051 Department of Defense—Military:</b>				
Military personnel.....	30,842	36,330	37,467	38,291
Retired military personnel.....	11,920	13,880	16,049	16,049
Proposed legislation.....				— 477
Operation and maintenance.....	44,770	50,540	53,930	59,659
Procurement.....	29,021	35,419	38,770	40,120
Research, development, test and evaluation.....	13,127	15,441	16,744	18,485
Military construction.....	2,450	2,514	2,051	2,919
Family housing.....	1,680	1,787	1,950	1,959
Revolving funds and other.....	— 969	— 277	— 180	— 932
Allowances for civilian and military pay raises.....			7,216	3,707
Other legislation.....				220
Subtotal, Department of Defense—Military.....	132,840	155,633	173,996	180,000
<b>053 Atomic energy defense activities.....</b>	2,878	3,544	3,709	4,478
<b>054 Defense-related activities:</b>				
Emergency planning, preparedness, and mobilization.....	133	149	169	169
GSA stockpile sales and related.....	— 62	— 144	— 159	— 159
Proposed legislation.....				— 210
Other.....	72	109	124	124
Subtotal, Defense-related activities.....	142	114	134	— 76
<b>Deductions for offsetting receipts.....</b>	— 4	— 3	— 3	— 3
Total outlays.....	135,856	159,288	177,837	184,399
<b>150 INTERNATIONAL AFFAIRS</b>				
<b>151 Foreign economic and financial assistance:</b>				
International Development Cooperation Agency.....	1,609	1,814	1,814	1,898
Multilateral development banks.....	784	988	1,219	1,219
Public Law 480—Food aid.....	1,073	1,471	1,263	1,263
Peace Corps.....	101	106	121	121
Economic support fund/Peacekeeping operations.....	1,904	2,104	2,132	2,314
Refugee assistance.....	446	486	585	585
Offsetting receipts and other.....	— 311	— 324	— 362	— 363
Subtotal, Foreign economic and financial assistance.....	5,607	6,646	6,772	7,038
<b>152 Military assistance:</b>				
Grant military assistance.....	219	151	150	148
Foreign military training.....	26	26	30	34
Foreign military sales credit.....	644	595	660	660
Relocation of facilities (Israel).....	341	360	68	68
Offsetting receipts and other.....	— 335	— 278	— 288	— 288
Subtotal, Military assistance.....	894	854	620	622
<b>153 Conduct of foreign affairs:</b>				
Administration of foreign affairs.....	842	916	1,022	1,122
International organizations and conferences.....	492	539	668	668
Other.....	33	39	39	42
Subtotal, Conduct of foreign affairs.....	1,367	1,494	1,729	1,831
<b>154 Foreign information and exchange activities.....</b>	534	576	603	610



Table A-14. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
<b>155 International financial programs:</b>				
Export-Import Bank.....	1,836	2,352	2,782	2,657
Foreign military sales trust fund (net).....	1,137			
International monetary programs.....	12			
International commodity agreements.....		5	30	30
Other.....	-559	-562	-556	-556
Subtotal, International financial programs.....	2,427	1,795	2,256	2,131
<b>Deductions for offsetting receipts.....</b>	-96	-81	-79	-79
Total outlays.....	10,733	11,285	11,901	12,152
<b>250 GENERAL SCIENCE, SPACE, AND TECHNOLOGY</b>				
<b>251 General science and basic research:</b>				
National Science Foundation programs.....	912	1,007	1,041	1,190
Department of Energy general science programs.....	469	510	557	597
Smithsonian scientific information exchange activities.....	*	*	*	*
Subtotal, General science and basic research.....	1,381	1,518	1,598	1,787
<b>253 Space flight.....</b>	2,594	2,984	3,647	3,679
<b>254 Space, science, applications, and technology.....</b>	1,346	1,330	1,586	1,635
<b>255 Supporting space activities.....</b>	405	431	494	494
<b>Deductions for offsetting receipts.....</b>	-3	-4	-4	-4
Total outlays.....	5,722	6,258	7,321	7,590
<b>270 ENERGY</b>				
<b>271 Energy supply:</b>				
Synthetic fuels promotion.....	26	391	409	409
Spent fuel storage fund (proposed).....				200
Uranium enrichment.....	243	196	284	272
Petroleum reserves and other.....	-858	-414	-925	-879
Power marketing (net).....	1,552	1,922	2,001	1,786
Other.....	3,610	3,777	4,601	4,445
Subtotal, Energy supply.....	4,574	5,872	6,369	6,234
<b>272 Energy conservation:</b>				
Energy conservation (DOE).....	568	729	799	931
Solar energy and Energy Conservation Bank.....		47	137	136
Subtotal, Energy conservation.....	568	776	936	1,067
<b>274 Emergency energy preparedness:</b>				
Strategic petroleum reserve.....	342	2,018	2,567	2,567
Strategic petroleum reserve entitlements and royalties.....		1,000	1,093	1,093
Strategic petroleum reserve receipts.....		-1,845	-248	-248
Subtotal, Emergency energy preparedness.....	342	1,173	3,412	3,412
<b>276 Energy information, policy, and regulation:</b>				
Energy Information Administration.....	75	102	127	127
Federal Energy Regulatory Commission.....	67	79	76	85
Economic Regulatory Administration.....	132	183	173	216
Nuclear Regulatory Commission.....	378	437	484	484
Alaska Gas Inspection.....	5	21	36	36
Department of Energy—administration and other.....	225	254	260	370

Table A-14. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Subtotal, Energy information, policy, and regulation.....	882	1,076	1,156	1,317
<b>Deductions for offsetting receipts</b> .....	- 53	- 58	- 58	- 58
Total outlays.....	6,313	8,839	11,815	11,973
<b>300 NATURAL RESOURCES AND ENVIRONMENT</b>				
<b>301 Water resources:</b>				
Soil Conservation Service.....	250	259	224	220
Corps of Engineers.....	3,258	3,388	3,410	3,412
Department of the Interior.....	798	855	935	929
Proposed legislation.....				4
Other.....	50	67	59	70
Offsetting receipts.....	- 62	- 55	- 56	- 56
Subtotal, Water resources.....	4,294	4,513	4,572	4,578
<b>302 Conservation and land management:</b>				
Management of national forests, cooperative forestry, and forestry research.....	1,798	1,844	2,172	2,153
Management of public lands.....	456	420	438	494
Mining reclamation and enforcement.....	85	158	141	134
Conservation of agricultural lands.....	548	605	594	565
Other, including offsetting receipts.....	- 559	- 598	- 914	- 921
Subtotal, Conservation and land management.....	2,328	2,428	2,432	2,425
<b>303 Recreational resources:</b>				
Land and Water Conservation fund.....	595	518	612	556
Urban recreation grants and historic preservation fund.....	53	102	114	94
Operation of recreation resources.....	1,059	1,037	1,070	1,031
Subtotal, Recreational resources.....	1,707	1,658	1,796	1,681
<b>304 Pollution control and abatement:</b>				
Regulatory, enforcement, and research programs.....	1,143	1,243	1,329	1,338
Oil pollution funds.....	23	32	19	29
Hazardous substance response fund.....				163
Sewage treatment plant construction grants.....	4,343	4,200	4,240	4,230
Subtotal, Pollution control and abatement.....	5,510	5,475	5,588	5,760
<b>306 Other natural resources:</b>				
Existing law.....	1,412	1,551	1,620	1,662
Proposed legislation.....				120
Subtotal, Other natural resources.....	1,412	1,551	1,620	1,782
<b>Deductions for offsetting receipts</b> .....	- 1,439	- 1,717	- 2,187	- 2,187
Total outlays.....	13,812	13,907	13,821	14,039
<b>350 AGRICULTURE</b>				
<b>351 Farm income stabilization:</b>				
Price-support and related programs.....	2,717	- 84	2,151	2,151
Proposed legislation.....				- 86
Federal Crop Insurance Corporation.....	38	216	80	183
Agricultural credit insurance fund.....	478	- 745	640	640
Other programs.....	36	43	49	48
Administrative expenses.....	190	204	209	214

Table A-14. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Subtotal, Farm income stabilization.....	3,459	-365	3,129	3,148
<b>352 Agricultural research and services:</b>				
Research programs.....	546	644	681	688
Proposed legislation.....				6
Extension programs.....	288	302	329	303
Marketing programs.....	81	87	85	95
Proposed legislation.....				-25
Animal and plant health programs.....	251	277	296	296
Economic intelligence.....	147	157	174	177
Other programs.....	64	69	71	71
Administrative expenses.....	86	102	107	119
Offsetting receipts.....	-66	-70	-72	-72
Subtotal, Agricultural research and services.....	1,398	1,569	1,670	1,659
Deductions for offsetting receipts.....	-95	-5	-5	-5
Total outlays.....	4,762	1,199	4,795	4,803
<b>370 COMMERCE AND HOUSING CREDIT</b>				
<b>371 Mortgage credit and thrift insurance:</b>				
Mortgage purchase activities (GNMA).....	1,358	528	1,012	1,013
Mortgage credit (FHA).....	151	61	-104	-116
Housing for the elderly or handicapped.....	753	800	780	780
Department of Agriculture—rural housing programs.....	1,719	-739	1,571	1,571
Federal Deposit Insurance Corporation.....	-922	-1,450	-1,500	-1,500
Federal Savings and Loan Insurance Corporation and other..	552	415	-650	-650
National Credit Union Administration.....	85	198	288	287
Subtotal, Mortgage credit and thrift insurance.....	3,696	-187	1,397	1,385
<b>372 Postal Service.....</b>	1,677	1,593	1,501	1,119
<b>376 Other advancement and regulation of commerce:</b>				
Payments in excess of corporate tax liability (proposed)....				3,493
Small business assistance.....	950	928	1,050	881
National Consumer Cooperative Bank.....	9	136	138	128
Technology utilization.....	241	264	279	305
Economic and demographic statistics.....	794	291	204	210
Chrysler Corporation loan guarantee program.....	2	1	1	1
Other.....	414	547	519	535
Subtotal, Other advancement and regulation of com- merce.....	2,409	2,168	2,191	5,554
Deductions for offsetting receipts.....	-*	-*	-*	-*
Total outlays.....	7,782	3,573	5,089	8,058
<b>400 TRANSPORTATION</b>				
<b>401 Ground transportation:</b>				
Highways.....	9,523	9,001	8,689	8,836
Mass transit.....	3,307	3,680	3,903	3,827
Railroads.....	2,170	3,913	2,199	1,795
Regulation.....	79	85	88	84
Subtotal, Ground transportation.....	15,079	16,679	14,879	14,542
<b>402 Air transportation:</b>				
Airways and airports.....	3,136	3,325	3,530	3,470

Table A-14. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Aeronautical research and technology .....	509	542	549	556
Air carrier subsidies .....	89	118	114	114
Regulation .....	28	30	31	31
Subtotal, Air transportation .....	3,762	4,016	4,224	4,171
<b>403 Water transportation:</b>				
Marine safety and transportation .....	1,613	1,885	2,074	2,122
Proposed legislation .....				-9
Ocean shipping .....	611	997	653	654
Regulation .....	11	12	12	12
Subtotal, Water transportation .....	2,235	2,895	2,740	2,779
<b>407 Other transportation .....</b>	104	111	115	115
<b>Deductions for offsetting receipts .....</b>	-60	-60	-56	-56
Total outlays .....	21,120	23,640	21,902	21,551
<b>450 COMMUNITY AND REGIONAL DEVELOPMENT</b>				
<b>451 Community development:</b>				
Community development block grants .....	3,902	3,938	4,000	3,998
Urban development grants .....	225	365	615	610
Rehabilitation loans .....	165	133	134	135
Neighborhood Reinvestment Corporation .....	12	12	15	15
Pennsylvania Avenue development .....	24	36	34	34
Other programs .....	551	576	537	531
Subtotal, Community development .....	4,878	5,061	5,334	5,322
<b>452 Area and regional development:</b>				
Rural development and business assistance .....	798	897	1,035	933
Proposed legislation .....				11
Economic development .....	629	458	609	614
Local public works .....	416	150	60	60
Coastal energy impact .....	28	41	55	50
Indian programs .....	991	1,004	936	947
Regional commissions .....	458	423	403	364
Other programs .....	164	278	246	222
Offsetting receipts .....	-304	-375	-266	-266
Subtotal, Area and regional development .....	3,180	2,876	3,077	2,935
<b>453 Disaster relief and insurance:</b>				
SBA disaster loans .....	949	2,300	-99	-99
Federal emergency management activities .....	1,070	944	936	936
Drought assistance and other .....	23	29	16	15
Subtotal, Disaster relief and insurance .....	2,043	3,273	853	852
<b>Deductions for offsetting receipts .....</b>	-32	-25	-25	-25
Total outlays .....	10,068	11,186	9,239	9,084
<b>500 EDUCATION, TRAINING, EMPLOYMENT, AND SOCIAL SERVICES</b>				
<b>501 Elementary, secondary, and vocational education:</b>				
Elementary and secondary education .....	3,569	3,374	3,919	3,942
Proposed legislation .....				50
Indian education .....	395	294	311	332

Table A-14. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Impact aid.....	690	932	888	443
Education for the handicapped.....	822	1,074	1,090	1,088
Vocational and adult education.....	863	939	1,129	1,092
Other.....	393	465	576	419
Subtotal, Elementary, secondary, and vocational educa- tion.....	6,732	7,079	7,914	7,366
<b>502 Higher education:</b>				
Student financial assistance.....	3,683	3,407	3,500	2,350
Loan guarantees to students and parents.....	1,408	2,168	2,970	2,350
Higher and continuing education.....	410	457	424	384
Special institutions.....	193	212	246	246
Subtotal, Higher education.....	5,694	6,244	7,141	6,927
<b>503 Research and general education aids:</b>				
Educational research and improvement.....	401	390	400	387
Administrative expenses.....	170	234	249	249
Cultural activities.....	632	671	750	745
Other.....	154	173	154	157
Subtotal, Research and general education aids.....	1,357	1,469	1,553	1,539
<b>504 Training and employment:</b>				
Temporary employment assistance.....	1,796	974	1,096	1,096
Employment and training assistance.....	7,065	7,488	8,268	7,347
Proposed legislation.....				875
Other general programs.....	97	99	97	105
Older workers.....	235	265	277	277
Work incentive program.....	395	365	365	385
Federal-State employment service.....	756	830	904	904
Subtotal, Training and employment.....	10,345	10,022	11,006	10,989
<b>505 Other labor services.....</b>	551	604	650	664
<b>506 Social services:</b>				
Tax credit for non-profit institutions (proposed).....				237
Grants to States for social services.....	2,706	2,963	3,116	3,116
Proposed legislation.....				-41
Services for the elderly, children, youth, families, and other special groups.....	2,242	1,691	1,846	2,004
Rehabilitation services and research for the handicapped.....	427	960	1,044	1,003
Community service programs.....	592	588	546	544
Domestic volunteer programs.....	133	155	178	183
Other social services.....	16	18	13	13
Subtotal, Social services.....	6,116	6,386	6,743	7,058
<b>Deductions for offsetting receipts.....</b>	-28	-30	-32	-32
Total outlays.....	30,767	31,775	34,974	34,511
<b>550 HEALTH</b>				
<b>551 Health care services:</b>				
Medicare.....	35,034	40,065	47,044	47,044
Proposed legislation.....				-446
Medicaid.....	14,028	16,577	18,313	18,312
Proposed legislation.....				-98
Other health care services.....	3,958	4,159	4,357	4,183

Table A-14. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Proposed legislation.....				—5
Subtotal, Health care services.....	53,019	60,800	69,713	68,991
<b>552 Health research:</b>				
National Institutes of Health research.....	3,029	3,212	3,441	3,433
Alcohol, Drug Abuse, and Mental Health Administration research.....	255	199	216	237
Other research programs.....	158	165	183	174
Subtotal, Health research.....	3,442	3,577	3,840	3,844
<b>553 Education and training of health care work force:</b>				
National Institutes of Health training.....	193	220	224	222
Health Resources Administration and other training.....	404	416	470	322
Alcohol, Drug Abuse, and Mental Health Administration training.....	122	125	135	104
Subtotal, Education and training of health care work- force.....	719	761	829	649
<b>554 Consumer and occupational health and safety:</b>				
Consumer safety.....	674	701	725	752
Occupational safety and health.....	327	369	387	404
Subtotal, Consumer and occupational health and safety....	1,001	1,070	1,112	1,156
<b>Deductions for offsetting receipts.....</b>	<b>—17</b>	<b>—3</b>	<b>—3</b>	<b>—3</b>
Total outlays.....	58,165	66,204	75,491	74,636
<b>600 INCOME SECURITY</b>				
<b>601 General retirement and disability insurance:</b>				
Social security (OASDI).....	117,117	138,260	159,648	159,648
Proposed legislation.....				—23
Railroad retirement.....	4,737	5,295	6,013	6,013
Proposed legislation.....				—186
Special benefits for disabled coal miners.....	1,843	2,009	1,947	1,875
Pension Benefit Guaranty Corporation.....	—27	—37	—28	—29
Other.....	13	16	15	15
Subtotal, General retirement and disability insurance.....	123,684	145,543	167,595	167,313
<b>602 Federal employee retirement and disability:</b>				
Retirement and disability programs.....	14,442	17,292	20,185	20,185
Proposed legislation.....				—655
Federal employee compensation.....	233	311	353	353
Subtotal, Federal employee retirement and disability.....	14,675	17,603	20,538	19,883
<b>603 Unemployment compensation:</b>				
Existing Law.....	18,023	26,140	24,118	24,088
Proposed legislation.....				—2,210
Subtotal, Unemployment compensation.....	18,023	26,140	24,118	21,878
<b>604 Housing assistance.....</b>	<b>5,514</b>	<b>6,823</b>	<b>8,397</b>	<b>8,465</b>
<b>605 Food and nutrition assistance:</b>				
Food stamps.....	9,117	10,950	12,722	12,722
Proposed legislation.....				—482
WIC-food supplements.....	717	904	994	994

Table A-14. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
School lunch and other nutrition programs .....	4,181	4,052	4,307	4,676
Proposed legislation .....				—429
Subtotal, Food and nutrition assistance .....	14,015	15,905	18,023	17,481
<b>609 Other income security:</b>				
Supplemental security income .....	6,411	7,305	8,017	8,017
Proposed legislation .....				—45
AFDC and other .....	7,308	7,794	8,216	8,216
Proposed legislation .....				—531
Earned income tax credit .....	1,275	1,203	1,115	1,115
Refugee assistance .....	368	881	810	768
Low income energy assistance .....	1,577	1,850	1,850	
Proposed legislation .....				1,850
Other .....	250	523	597	597
Subtotal, Other income security .....	17,190	19,555	20,604	19,987
Total outlays .....	193,100	231,569	259,275	255,006
<b>700 VETERANS BENEFITS AND SERVICES</b>				
<b>701 Income security for veterans:</b>				
Service-connected compensation .....	7,434	8,492	9,595	8,643
Proposed legislation .....				952
Non-service-connected pensions .....	3,585	3,840	4,085	4,085
Burial and other benefits .....	183	198	204	204
National service life insurance trust fund .....	928	1,036	1,062	1,062
U.S. Government life insurance trust fund .....	77	67	62	62
All other insurance programs .....	—55	—55	—54	—54
Insurance program receipts .....	—464	—474	—478	—478
Subtotal, Income security for veterans .....	11,688	13,103	14,477	14,477
<b>702 Veterans education, training, and rehabilitation:</b>				
Existing law .....	2,342	1,955	1,587	1,588
Proposed legislation .....				*
Subtotal, Veterans education, training, and rehabilita- tion .....	2,342	1,955	1,587	1,589
<b>703 Hospital and medical care for veterans:</b>				
Medical care and hospital services .....	5,981	6,306	6,950	6,983
Proposed legislation .....				—47
Construction .....	309	384	554	558
Medical administration, research, and other .....	225	245	236	242
Subtotal, Hospital and medical care for veterans .....	6,515	6,935	7,739	7,737
<b>704 Veterans housing:</b>				
Loan guaranty revolving fund .....	28	—42	25	25
Direct loan revolving fund .....	—67	—119	—72	—72
Other .....	16	55	—6	—6
Subtotal, Veterans housing .....	—23	—106	—53	—53
<b>705 Other veterans benefits and services:</b>				
VA administrative expenses and other .....	633	671	652	677
Proposed legislation .....				1
Non-VA support programs .....	32	34	37	37
Subtotal, Other veterans benefits and services .....	665	705	689	715

Table A-14. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
Deductions for offsetting receipts.....	-2	-3	-3	-3
Total outlays.....	21,183	22,589	24,436	24,462
<b>750 ADMINISTRATION OF JUSTICE</b>				
<b>751 Federal law enforcement activities:</b>				
General investigation (FBI).....	609	665	710	743
Narcotics violation investigation (DEA).....	204	213	230	232
Alcohol, tobacco, and firearms investigation (ATF).....	146	151	158	158
Border enforcement activities (Customs and INS).....	816	849	872	866
Protection activities (Secret Service).....	179	172	185	186
Proposed legislation.....				1
Other enforcement.....	282	320	341	350
Subtotal, Federal law enforcement activities.....	2,237	2,370	2,496	2,536
<b>752 Federal litigative and judicial activities:</b>				
Civil and criminal prosecution and representation.....	452	491	529	540
Proposed legislation.....				-12
Federal judicial activities.....	575	685	732	746
Representation of indigents in civil cases.....	320	328	347	347
Subtotal, Federal litigative and judicial activities.....	1,347	1,504	1,608	1,620
<b>753 Federal correctional activities</b> .....	342	363	375	378
<b>754 Criminal justice assistance</b> .....	656	495	318	359
Deductions for offsetting receipts.....	-11	-12	-12	-12
Total outlays.....	4,570	4,719	4,786	4,882
<b>800 GENERAL GOVERNMENT</b>				
<b>801 Legislative functions</b> .....	1,032	1,133	1,157	1,173
<b>802 Executive direction and management</b> .....	97	113	113	113
<b>803 Central fiscal operations:</b>				
Collection of taxes.....	2,335	2,480	2,634	2,634
Federal Financing Bank.....	-253	-116	-128	-128
Other fiscal operations.....	440	439	423	473
Subtotal, Central fiscal operations.....	2,522	2,803	2,929	2,979
<b>804 General property and records management:</b>				
Real property.....	-47	-10	22	28
Personal property.....	161	166	173	154
Records management.....	84	88	97	97
Other.....	167	181	209	209
Subtotal, General property and records management.....	364	425	500	487
<b>805 Central personnel management</b> .....	154	162	163	165
<b>806 Other general government:</b>				
Territories.....	126	192	198	202
Proposed legislation.....				1
Indian affairs.....	475	153	13	13
Treasury claims.....	438	305	403	378
Other.....	-480	-50	-73	-72
Subtotal, Other general government.....	559	600	541	522



Table A-14. CURRENT SERVICES OUTLAYS BY FUNCTION AND PROGRAM—Continued

(In millions of dollars)

	1980 actual	Current services		1982 administra- tion proposals
		1981 estimate	1982 estimate	
<b>Deductions for offsetting receipts</b> .....	- 224	- 267	- 193	- 193
Total outlays.....	4,505	4,969	5,210	5,246
<b>850 GENERAL PURPOSE FISCAL ASSISTANCE</b>				
<b>851 General revenue sharing:</b>				
General revenue sharing payments.....	6,829	5,156	4,559	4,559
Administration.....	6	7	7	7
Subtotal, General revenue sharing.....	6,835	5,163	4,566	4,566
<b>852 Other general purpose fiscal assistance:</b>				
Tax credit for State and local governments (proposed) .....				495
Payments and loans to the District of Columbia.....	425	468	606	606
New York City loan guarantee program.....	1	1	1	1
Payments to States from Forest Service receipts.....	280	223	275	275
Payments to States and counties from Federal land management activities.....	483	577	691	582
Payments to territories and Puerto Rico.....	555	415	370	370
Other.....	5	7	5	5
Subtotal, Other general purpose fiscal assistance.....	1,749	1,691	1,950	2,336
Total outlays.....	8,584	6,854	6,516	6,902
<b>900 INTEREST</b>				
<b>901 Interest on the public debt</b> .....	74,781	94,100	106,500	106,500
<b>902 Other interest:</b>				
Interest on refunds of tax collections.....	502	708	600	600
Interest on loans to the Federal Financing Bank.....	- 5,915	- 8,899	- 12,073	- 12,073
Other.....	- 4,865	- 5,504	- 5,081	- 5,081
Subtotal, Other interest.....	- 10,278	- 13,695	- 16,554	- 16,554
Total outlays.....	64,504	80,405	89,946	89,946
<b>920 ALLOWANCES</b>				
<b>921 Civilian agency pay raises</b> .....			3,226	920
<b>928 Contingencies for other requirements</b> .....				1,000
Total outlays.....			3,226	1,920
<b>950 UNDISTRIBUTED OFFSETTING RECEIPTS</b>				
<b>951 Employer share, employee retirement</b> .....	- 5,787	- 6,561	- 6,798	- 6,798
<b>952 Interest received by trust funds:</b>				
Existing law.....	- 12,045	- 13,428	- 14,713	- 14,714
Proposed legislation.....				- 451
Subtotal, Interest received by trust funds.....	- 12,045	- 13,428	- 14,713	- 15,165
<b>953 Rents and royalties on the Outer Continental     Shelf</b> .....	- 4,101	- 7,800	- 9,900	- 9,900
Total outlays.....	- 21,933	- 27,789	- 31,410	- 31,863
<b>Total outlays</b> .....	<b>579,613</b>	<b>660,473</b>	<b>736,168</b>	<b>739,296</b>

\*\$500 thousand or less.



## SPECIAL ANALYSIS B

### FEDERAL TRANSACTIONS IN THE NATIONAL INCOME ACCOUNTS

The budget is designed to serve several purposes:

- It is an *economic document* that reflects the taxing and spending policies of the Government for promoting economic growth, high employment, relative price stability, and a strong balance-of-payments position.
- It proposes an *allocation of resources* between the private and public sectors and within the public sector. Through its impact on consumption and investment decisions and the distribution of income it also affects allocation decisions within the private sector.
- It sets forth the *President's request to the Congress* for appropriation action on existing or new programs and for changes in tax legislation.
- It is a *report to the Congress and the people* on how the Government has spent the funds entrusted to it in past years.

No single budget concept can satisfy all these purposes fully. The budget document and related Treasury reports provide complete, detailed information on the finances of the Federal Government and on the tax and spending programs proposed by the President. For study of aggregate economic activity, however, the national income and product accounts (NIA) of the United States provide the most useful measures. This special analysis shows Federal finances as measured in the NIA. 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 March 1981 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 and also discusses estimating errors inherent in preparing this translation, while the final section explains the major differences between the budget and the NIA concepts. A discussion of fiscal policy can be found in the *Economic Report of the President*.

In December 1980 the Department of Commerce issued a major ("benchmark") revision of the GNP and related data series. While this revision included both conceptual (definitional) and estimating changes, the Federal sector data were subject only to estimating

changes—no definitional changes were made in the Federal sector concepts.

### FEDERAL SECTOR RECEIPTS AND EXPENDITURES

Table B-1 shows Federal sector NIA receipts, expenditures, and deficits for 1980-82.

Table B-1. FEDERAL RECEIPTS AND EXPENDITURES IN THE NIA

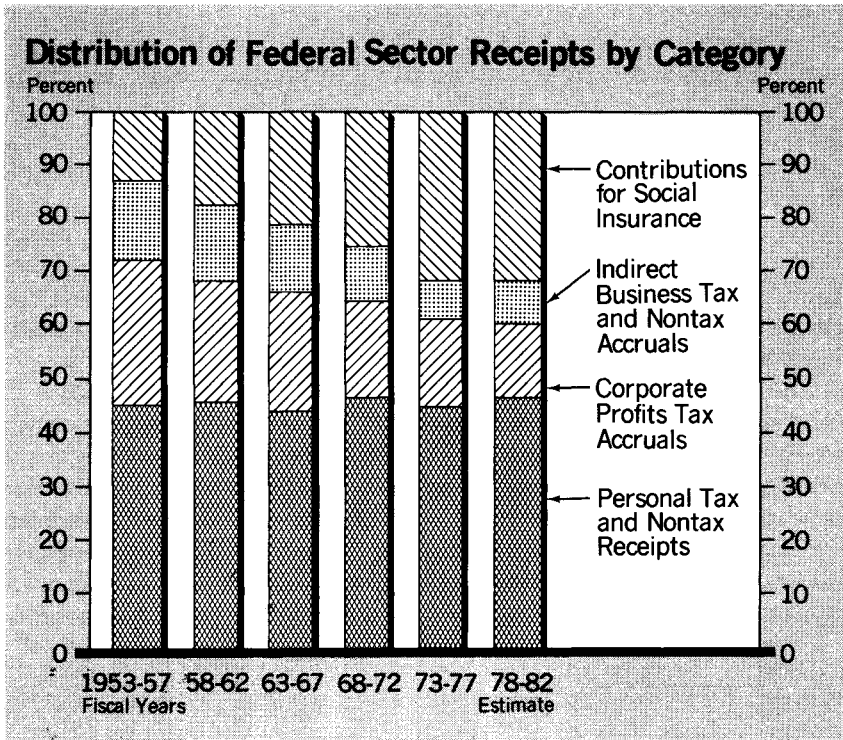
(In billions of dollars)

Description	1980 actual	1981 estimate	1982 estimate
<b>RECEIPTS</b>			
Personal tax and nontax receipts .....	249.7	290.5	339.3
Corporate profits tax accruals .....	70.6	67.9	78.8
Indirect business tax and nontax accruals .....	35.7	61.2	83.8
Contributions for social insurance .....	171.3	194.8	226.3
<b>Total receipts</b> .....	<b>527.3</b>	<b>614.4</b>	<b>728.2</b>
<b>EXPENDITURES</b>			
Purchases of goods and services .....	190.2	218.5	248.7
Defense .....	(126.1)	(148.0)	(167.5)
Nondefense .....	(64.1)	(70.5)	(81.2)
Transfer payments .....	239.3	281.5	313.9
Domestic ("to persons") .....	(234.7)	(276.8)	(308.7)
Foreign .....	(4.6)	(4.7)	(5.2)
Grants-in-aid to State and local governments .....	86.7	90.3	94.6
Net interest paid .....	51.2	67.3	75.1
Subsidies less current surplus of Government enterprises .....	10.8	13.4	14.0
<b>Total expenditures</b> .....	<b>578.2</b>	<b>671.0</b>	<b>746.3</b>
<b>Deficit (-)</b> .....	<b>-50.9</b>	<b>-56.6</b>	<b>-18.1</b>

**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, at 10-year intervals, 3-year averages of Federal sector receipts by category as a percent of the gross national product (GNP). Three-year averages are used in order to eliminate the impact of annual fluctuations and permit a greater focus on basic trends.

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

Description	1950-52 average actual	1960-62 average actual	1970-72 average actual	1980-82 average estimate
Personal tax and nontax receipts .....	7.4	8.6	9.0	10.2
Corporate profits tax accruals .....	5.7	4.2	3.2	2.5
Indirect business tax and nontax accruals .....	3.0	2.6	1.9	2.0
Contributions for social insurance .....	2.1	3.5	5.1	6.9
<b>Total receipts</b> .....	<b>18.2</b>	<b>18.9</b>	<b>19.2</b>	<b>21.6</b>



*Personal tax and nontax receipts.*—The largest receipt category—personal tax and nontax receipts—is composed primarily of individual income taxes but also includes estate and gift taxes and some miscellaneous receipts. Increases in income, because of both real growth and inflation, automatically increase these receipts. Since personal income taxes are progressive, these receipts normally grow at a faster rate than personal income. However, tax reductions enacted periodically over the past three decades have offset part of the increase in effective tax rates resulting from the progressive tax structure.

*Corporate profits tax accruals.*—Corporate profits tax accruals vary significantly from year to year because corporate profits are highly volatile. The NIA corporate profits taxes differ from the corresponding budget category primarily because: (1) the NIA includes 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 NIA records corporate profits taxes when the profits are earned (that is, accrued), while the unified budget records the cash receipts.

Estimates of corporate profits tax accruals are normally subject to greater error than any other category of receipts. The NIA estimate is derived from estimates of corporate profits, estimated tax rates, and adjustments for tax law changes. Even for past periods these estimates are subject to significant revisions based on later data. As is shown in Table B-10, the estimated corporate profits tax accruals for 1979 are now \$2.6 billion lower than was estimated a year ago, even though both estimates were for a period that had ended. There is about a 3-year lag between initial and final estimates of corporate tax liability data; in the interim, successive estimates are made using the better data that gradually become available.

The gradual decline in corporate profits tax receipts relative to GNP and (as shown in the chart above) to total receipts 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.

*Indirect business tax and nontax accruals.*—These receipts are composed of excise taxes, customs duties, and various miscellaneous receipts such as the recently enacted windfall profit taxes, rents and royalties on the Outer Continental Shelf lands, 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, partly because they normally do not rise in proportion to the growth in the economy and partly because some of them, such as the automobile and telephone excise taxes, have been reduced or repealed. However, these receipts nearly triple between 1979 and 1982, largely due to the recently enacted windfall profit taxes and to the proposed motor fuels tax, both of which are discussed in part 4 of the *Budget*.

*Contributions for social insurance.*—This is the second largest category of Federal sector receipts. The increase since World War II has been caused by the growth in the labor force and in wage rates, the expanded coverage of existing social insurance programs, the enactment of new ones, and 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.

**Major tax changes.**—Federal sector receipts in the budget reflect both the impact of tax changes scheduled under current law and proposed tax legislation. The major enacted changes reflected in the Federal sector estimates presented in this analysis are:

- Increases in social security taxes. The taxable earnings base increased from \$25,900 in calendar year 1980 to \$29,700 in 1981, and is estimated to increase to \$32,100 in 1982. The social security tax rate rose from 12.26% in calendar year 1980 to 13.3% in 1981, and is scheduled to rise to 13.4% in 1982.
- The windfall profit tax on domestic producers of crude oil. This was enacted in April 1980.

The receipts proposals in the 1982 budget, which are described in Part 4 of the *Budget*, increase Federal sector receipts by \$2.2 billion in 1981 and by \$4.3 billion in 1982. The provisions of the proposed economic revitalization program, which are designed to increase productivity, lower unemployment, and reduce inflation, reduce Federal sector receipts by \$4.1 billion in 1981 and \$19.4 billion in 1982. The other major proposal affecting Federal sector receipts is the excise tax on gasoline and diesel fuels. This proposal increases estimated indirect business tax and nontax accruals by \$4.2 billion in 1981 and \$13.2 billion in 1982.

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

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

The chart on the distribution of Federal sector expenditures illustrates the trends for 5-year averages starting with 1953. As can be seen, major shifts in the composition of Federal sector expenditures occur over time. For example, for most years since the Korean war, defense purchases of goods and services have been a declining share of Federal spending. This pattern was temporarily reversed for 3 years during the Vietnam period, but by 1970 the defense share was well below the pre-Vietnam percentages. Defense purchases are expected to total 22.1% of Federal sector expenditures in 1981 and 22.4% in 1982; they were 21.8% in 1980, and 21.7% in 1979.

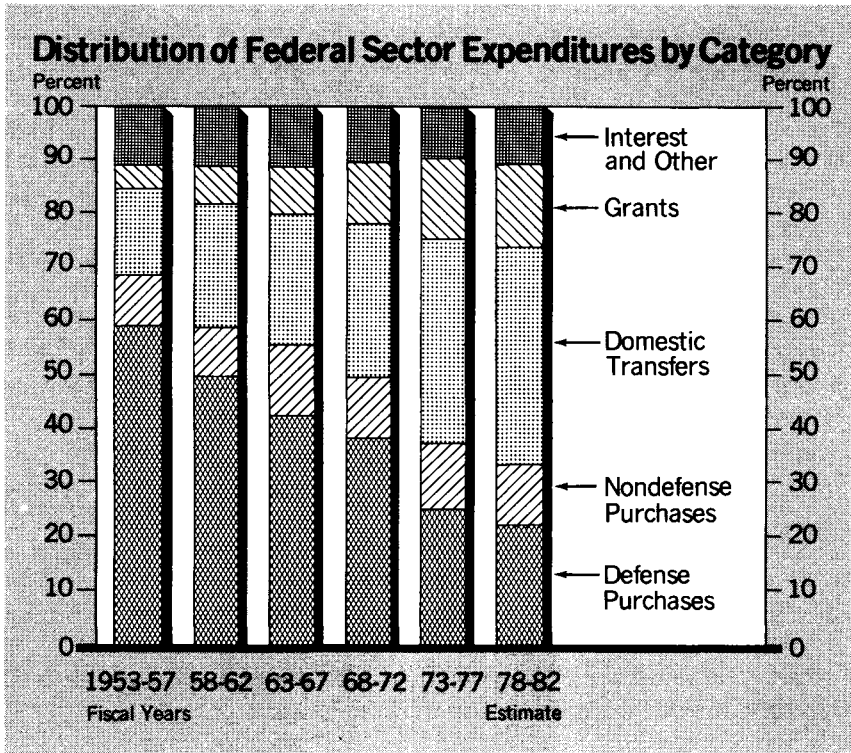


Table B-3 shows, at 10-year intervals, 3-year averages of Federal sector expenditures by category as a percent of GNP.

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

Description	1950-52 average actual	1960-62 average actual	1970-72 average actual	1980-82 average estimate
Defense purchases .....	8.0	9.0	7.1	5.1
Nondefense purchases .....	1.8	1.9	2.3	2.5
Domestic transfer payments .....	3.1	4.4	6.3	9.5
Foreign transfer payments .....	1.1	.4	.2	.2
Grants-in-aid to State and local governments .....	.8	1.4	2.6	3.2
Net interest paid .....	1.4	1.3	1.3	2.2
Subsidies less current surplus of Government enterprises .....	.3	.6	.6	.4
<b>Total expenditures .....</b>	<b>16.6</b>	<b>19.0</b>	<b>20.5</b>	<b>23.1</b>

Defense purchases and foreign transfer payments are, of course, largely devoted to the conduct of our national defense and foreign affairs. In 1950-52 defense purchases were 8.0% of GNP. In 1950 these were greatly reduced by receipts from large-scale sales of World War II materials while 1951 was the first year of the Korean War. Foreign transfer payments in 1950-52 averaged 1.1% of GNP.



The total of these—9.1%—reflects roughly the cost of the conduct of external affairs. The years 1960–62, while a post-Korean war peacetime period, reflected a higher level of defense expenditures than was prevalent prior to the Korean war. In that period, defense purchases and foreign transfers combined were equal to 9.4% of GNP. Even though the 1970–72 period included some spending for the Vietnam war, defense purchases and foreign transfers were down to 7.3% of GNP. In the 1980–82 peacetime period they are estimated to be equal to 5.3% of GNP.

In contrast, spending on most other expenditure categories—especially nondefense purchases, domestic transfer payments, and grants-in-aid—has risen dramatically relative to GNP over this period. In 1950–52, spending for everything except defense purchases and foreign transfer payments was equal to 7.5% of GNP; in 1980–82 such spending is estimated to equal 17.8% of GNP.

Table B-4 displays purchases of goods and services (defense and nondefense) with a split by character of expenditures between compensation of employees and all other purchases.

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

(In billions of dollars)

	1977 actual	1978 actual	1979 actual	1980 actual	1981 estimate	1982 estimate
Defense purchases:						
Compensation of employees .....	42.2	45.4	48.0	51.4	56.9	62.0
Other .....	49.7	52.6	59.4	74.7	91.1	105.5
Total defense purchases .....	91.9	98.0	107.4	126.1	148.0	167.5
Nondefense purchases:						
Compensation of employees .....	23.0	25.1	26.7	28.6	30.5	32.8
Other .....	25.4	27.6	29.3	35.5	40.0	48.4
Total nondefense .....	48.4	52.7	56.0	64.1	70.5	81.2

*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. In addition, defense purchases include purchases of goods and services by the military assistance programs that in earlier years had been 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. The bulk of the remainder is for military assistance, defense stockpile, civil defense, and nuclear weapons programs carried out by other agencies.

The budget calls for an increase in defense purchases of \$19.5 billion in 1982 over 1981. This increase more than offsets the impact of inflation, thus continuing the current trend of rising

defense purchases in real terms. The pattern of real defense spending has altered significantly over the past decade. From a Vietnam peak in 1968, real defense purchases declined each year until 1976. Between 1976 and 1978 they stayed remarkably stable, and starting in 1979 began the rise that is continuing in this budget.

In former years, while constant price estimates of total purchases of goods and services were available, there was no disaggregation as between defense and nondefense purchases in constant prices. Beginning with the GNP revision issued in December 1980, defense and nondefense purchases are now estimated separately in constant as well as current dollars. This new series of constant price data extends back to 1972. It shows that defense purchases declined by 8.6% between 1972 and 1976, was virtually unchanged from 1976 to 1978, and began climbing in 1979. They are estimated to be 17% higher in 1982 than in 1978. While NIA defense purchases are not estimated in constant prices for years prior to 1972, the budget includes constant price estimates of outlays in the national defense function. This category and defense purchases in the NIA are sufficiently similar so that these figures give a rough approximation of the same transactions. Table B-5 shows the budget estimates of outlays in constant prices for the national defense function for a substantially longer period of time.

Table B-5. DEFENSE FUNCTION OUTLAYS IN CONSTANT (FISCAL YEAR 1972) PRICES

(In billions of dollars)

At 5-year intervals:		For selected years:	
1945 <sup>1</sup> .....	255.5	1948 <sup>2</sup> .....	20.5
1950 <sup>3</sup> .....	29.7	1953 <sup>4</sup> .....	96.6
1955.....	77.0	1956 <sup>5</sup> .....	74.2
1960.....	73.7	1968 <sup>7</sup> .....	101.7
1965 <sup>6</sup> .....	69.3	1976 <sup>8</sup> .....	66.9
1970.....	90.3	1981 estimate.....	77.0
1975.....	68.4	1982 estimate.....	80.4
1980 <sup>9</sup> .....	72.5		

<sup>1</sup> World War II peak year.

<sup>2</sup> Post-World War II low, includes large offsets from sale of assets acquired during the war.

<sup>3</sup> Last year prior to Korean war.

<sup>4</sup> Korean war peak year.

<sup>5</sup> Post-Korean war low in the 1950's.

<sup>6</sup> Post-Korean war low in the 1960's.

<sup>7</sup> Peak of spending during Vietnam war.

<sup>8</sup> Lowest point in post-Vietnam era.

<sup>9</sup> Last year for which "actual" data are available.

---

*Nondefense purchases of goods and services.*—This category covers the goods and services purchased by Federal nondefense agencies. These include such programs as operation of national forest, park, and recreation areas; space exploration; promotion of commerce; acquisition and disposal of agricultural commodities; construction of flood control and navigation projects; operation of the Federal airway system; a wide variety of medical, energy, space, and other scientific research; the capital outlays of Government enterprises; Federal law enforcement; and operation of veterans hospitals. Table B-6 shows these purchases by agency for the years 1975 to 1982.

Nondefense purchases consist mainly of the cost of operating the various nondefense agencies. In the case of Government enterprises (including the CCC and the Postal Service), however, the purchases figures reflect net capital formation. The most volatile major segment of nondefense purchases is CCC purchases, because the Corporation buys and sells agricultural commodities. On occasion—as in 1979 and in 1981—such sales may exceed new purchases.

Table B-6.—NONDEFENSE PURCHASES OF GOODS AND SERVICES BY AGENCY AND ACTIVITY

(In billions of dollars)

	Actual						Estimate	
	1975	1976	1977	1978	1979	1980	1981	1982
Legislative and judicial branches.....	1.0	1.1	1.4	1.5	1.6	1.8	2.1	2.1
Department of Agriculture.....	2.6	2.6	5.4	4.5	2.8	5.4	3.2	5.7
Commodity Credit Corporation .....	(0.2)	(0.2)	(2.6)	(0.9)	(-0.9)	(1.0)	(-1.7)	(0.9)
Forest Service.....	(0.8)	(0.9)	(1.1)	(1.2)	(1.5)	(1.8)	(2.0)	(2.2)
All other.....	(1.5)	(1.5)	(1.7)	(2.3)	(2.2)	(2.6)	(2.9)	(2.6)
Department of Commerce.....	0.8	1.0	1.1	1.2	1.3	1.9	1.6	1.8
Corps of Engineers, Civil.....	2.1	2.2	2.3	2.6	3.0	3.3	3.4	3.4
Department of Education.....	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.6
Department of Energy.....	1.7	2.2	3.1	4.1	5.1	3.8	7.3	9.2
Department of Health and Human Services.....	4.8	5.3	5.7	6.4	6.6	7.8	8.3	8.6
Health.....	(3.2)	(3.6)	(3.7)	(4.4)	(4.6)	(5.3)	(5.4)	(5.5)
Income security and other.....	(1.6)	(1.7)	(2.0)	(2.0)	(2.1)	(2.5)	(2.9)	(3.1)
Department of Housing and Urban Development.....	0.7	0.5	0.5	0.6	0.7	0.7	0.7	0.8
Department of the Interior.....	2.0	2.2	2.7	2.9	3.3	3.9	4.0	3.8
Department of Justice.....	1.3	1.4	1.6	1.8	1.9	2.1	2.2	2.3
Department of Labor.....	0.7	1.0	1.1	1.3	1.7	1.9	2.1	2.3
Department of State.....	0.7	0.9	1.0	1.2	1.4	1.4	1.6	1.9
Department of Transportation.....	2.9	3.2	3.6	3.9	4.2	4.8	5.4	5.9
Coast Guard.....	(0.8)	(0.9)	(1.0)	(1.1)	(1.3)	(1.4)	(1.7)	(1.9)
Federal Aviation Administration.....	(1.7)	(1.8)	(2.0)	(2.2)	(2.3)	(2.5)	(2.7)	(2.9)
Other.....	(0.4)	(0.4)	(0.5)	(0.6)	(0.7)	(0.9)	(1.0)	(1.1)
Department of the Treasury.....	2.5	2.7	2.9	3.1	3.4	4.0	4.3	4.6
Internal Revenue Service.....	(1.6)	(1.7)	(1.8)	(1.9)	(2.1)	(2.3)	(2.5)	(2.6)
Other.....	(0.9)	(1.0)	(1.1)	(1.2)	(1.3)	(1.7)	(1.8)	(1.9)
Environmental Protection Agency.....	0.5	0.5	0.6	0.6	0.8	0.9	1.1	1.3
National Aeronautics and Space Administration.....	3.2	3.6	3.9	3.9	4.1	4.8	5.2	6.2
Veterans Administration.....	4.1	4.7	5.2	5.8	6.2	7.0	7.4	8.3
Hospital and medical care.....	(3.6)	(3.9)	(4.6)	(5.1)	(5.4)	(6.3)	(6.7)	(7.6)
Administration and other.....	(0.5)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)

All other.....	5.4	5.4	5.8	6.9	7.3	8.1	10.1	12.4
Tennessee Valley Authority.....	(1.0)	(1.1)	(1.2)	(1.5)	(2.0)	(1.7)	(2.4)	(2.3)
OPM: Imputed employee retirement contributions.....	(0.6)	(0.7)	(0.9)	(1.1)	(1.2)	(1.4)	(1.6)	(1.8)
Postal Service.....	(0.7)	(0.7)	(0.4)	(0.3)	(0.4)	(0.4)	(0.5)	(0.7)
Imputed bank service charges.....	(0.5)	(0.3)	(0.5)	(0.6)	(0.4)	(0.3)	(0.4)	(0.4)
Other.....	(2.6)	(2.6)	(2.8)	(3.4)	(3.3)	(4.3)	(5.2)	(7.2)
<b>Total.....</b>	<b>37.7</b>	<b>40.7</b>	<b>48.4</b>	<b>52.7</b>	<b>56.0</b>	<b>64.1</b>	<b>70.5</b>	<b>81.2</b>

Until 1982, the Department of Health and Human Services will continue to account for more nondefense purchases than any other agency—\$8.3 billion in 1981 and \$8.6 billion in 1982. Of this, \$5.5 billion is for health programs—both for the administration of health care and for medical research—and \$3 billion is to administer the old-age, survivors, and disability (social security) trust funds. The next largest agency in terms of nondefense purchases traditionally has been the Veterans Administration, with a total of \$8.3 billion in 1982. The bulk of these purchases are for hospital and medical care for veterans. Both the National Aeronautics and Space Administration with \$6.2 billion in 1982 nondefense purchases and the Department of Energy with \$9.2 billion in 1982 nondefense purchases conduct major research and development programs, though the Energy Department also has purchases for a wide range of other activities. The Department of Energy is growing rapidly and is estimated to have higher nondefense purchases in 1982 than any other agency. The Transportation Department's \$5.9 billion of 1982 nondefense purchases are mainly for the operation of the Federal Aviation Agency and the Coast Guard. The Corps of Engineers has an estimated \$3.4 billion in 1982 nondefense purchases which, along with the Tennessee Valley Authority's \$2.3 billion, is primarily for public works for natural resources and power activities.

*Domestic transfer payments.*—This is the largest category of Federal sector expenditures. Spending for domestic transfers has expanded rapidly in recent years, mainly because of more beneficiaries and higher benefit payments under social insurance programs. As Table B-7 shows, spending on human resources programs—especially income security programs—dominates domestic transfer payments. This spending is expected to continue to rise in 1982, largely due to demographic and economic conditions—increases in the covered population and adjustments to compensate for inflation. Social security accounts for 50.2% of total domestic transfer payments in 1982, while medicare accounts for another 14.7%, unemployment assistance for 6.5%, and Federal employee's retirement, disability, and compensation for 15.0% 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.

Table B-7. FUNCTIONAL COMPOSITION OF DOMESTIC TRANSFER PAYMENTS

(In billions of dollars)

Description	Actual										Estimate	
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
<b>HUMAN RESOURCES PROGRAMS</b>												
Income security:												
Social security (OASDI) .....	34.0	38.0	46.6	53.2	61.5	70.3	81.1	89.3	99.4	113.7	134.2	155.1
Railroad retirement .....	1.9	2.1	2.4	2.6	3.0	3.4	3.7	3.9	4.2	4.7	5.2	5.7
Civil service retirement .....	3.2	3.8	4.5	5.6	6.9	8.2	9.4	10.8	12.2	14.5	17.3	19.6
Unemployment benefits .....	5.6	6.5	4.9	5.6	12.5	18.3	14.2	10.9	9.5	16.7	24.3	20.2
Benefits for coal miners .....	.3	.4	.9	1.0	.9	1.0	.9	1.0	1.6	1.7	1.8	1.7
Supplemental security income .....				1.9	4.2	4.6	4.7	4.9	5.2	5.7	6.5	7.1
Food and nutrition .....	1.5	1.8	2.1	2.7	4.2	4.7	4.4	4.5	5.7	7.6	9.1	10.3
Special payments, Treasury <sup>1</sup> .....					1.7	.9	.9	.9	.8	1.3	1.2	1.2
Workmen's compensation .....	.2	.2	.2	.3	.4	.5	.5	.6	.7	.8	.9	1.0
Other .....	.1	.1	.1	.1	.1	.2	.2	.2	.2	.2	.3	.4
Subtotal, Income security .....	46.7	52.9	61.8	72.9	95.5	111.9	120.2	127.0	139.5	166.9	200.8	222.3
Health:												
Medicare .....	7.5	8.3	9.0	10.9	14.1	16.9	20.7	24.2	28.1	33.8	38.7	45.5
Other .....	.4	.4	.4	.4	.5	.6	.6	.6	.6	.8	.8	.8
Subtotal, Health .....	7.9	8.8	9.4	11.4	14.6	17.4	21.3	24.8	28.7	34.6	39.4	46.3
Education, training, employment, and social services:												
Education .....	.7	.8	.8	.8	1.3	1.9	2.5	2.9	3.4	4.5	5.1	5.7
Training, employment, and social services .....	.7	.8	.7	.7	.6	.4	.6	.8	.9	1.0	1.0	1.1
Subtotal, education, training, employment, and social services .....	1.3	1.5	1.5	1.5	1.9	2.4	3.0	3.6	4.3	5.5	6.0	6.8
Veterans benefits and services .....	8.0	8.8	9.7	10.4	12.8	14.3	13.3	13.5	14.0	14.5	15.5	16.6

See footnote at end of table.

Table B-7. FUNCTIONAL COMPOSITION OF DOMESTIC TRANSFER PAYMENTS—Continued

(In billions of dollars)

Description	Actual										Estimate	
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
<b>Total, human resources programs.....</b>	<b>64.0</b>	<b>71.9</b>	<b>82.5</b>	<b>96.3</b>	<b>124.8</b>	<b>146.0</b>	<b>157.8</b>	<b>168.9</b>	<b>186.4</b>	<b>221.4</b>	<b>261.7</b>	<b>291.9</b>
<b>ALL OTHER FUNCTIONS</b>												
National defense (military retired pay) .....	3.3	3.8	4.3	5.0	6.2	7.2	8.1	9.0	10.1	11.8	13.6	15.4
All other functions .....	.4	.4	.4	.5	.4	.6	.7	.7	1.3	1.5	1.5	1.4
<b>Total functions not included in human resources grouping .....</b>	<b>3.7</b>	<b>4.2</b>	<b>4.7</b>	<b>5.6</b>	<b>6.6</b>	<b>7.8</b>	<b>8.8</b>	<b>9.8</b>	<b>11.4</b>	<b>13.3</b>	<b>15.1</b>	<b>16.8</b>
<b>Total domestic transfer payments .....</b>	<b>67.7</b>	<b>76.1</b>	<b>87.2</b>	<b>101.8</b>	<b>131.4</b>	<b>153.8</b>	<b>166.6</b>	<b>178.7</b>	<b>197.8</b>	<b>234.7</b>	<b>276.8</b>	<b>308.7</b>

<sup>1</sup> Includes both \$50 tax rebates and earned income tax credits in excess of tax liabilities.

Note.—Excludes the transition quarter.



*Grants-in-aid.*—These expenditures help State and local governments to provide general public services and to finance programs for the needy. Table B-8 shows detail on 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 NIA, the two sets of data largely overlap. Special Analysis H explains the relationship between the series.

There is a substantial degree of substitutability between grants-in-aid and domestic transfer payments and—to a lesser degree—nondefense purchases. For example, low-income veterans could be eligible for free medical care under medicaid (Federal grants to finance State and local purchases), in a veterans hospital (nondefense purchases), or, perhaps under medicare (transfer payments). The supplemental security income transfer payments have substituted 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.) Most grants in the income security function plus medicaid are grants to assist States to provide income support; most other grants finance State and local services to the public. (However, the income support may be aid in-kind as is the case of medicaid where the State and local spending is to purchase medical care for the poor.) Grants-in-aid for income security are estimated to rise by 19% from 1980 to 1982, only about one-half of the rate for domestic transfers in that function. Medicaid grants are projected to rise by 30%, close to the 35% rise in medicare transfer payments. The remainder of grants are projected to rise by only 2% from 1980 to 1982, while the remainder of domestic transfer payments are up nearly 20%.

Table B-8. FUNCTIONAL COMPOSITION OF FEDERAL GRANTS-IN-AID

(In billions of dollars)

Description	Actual										Estimate	
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
<b>HUMAN RESOURCES PROGRAMS</b>												
Income security:												
Public assistance cash .....	5.5	6.6	5.9	5.4	5.1	5.8	6.3	6.6	6.5	7.2	7.7	7.6
Child nutrition and other food programs.....	.6	.9	1.1	1.2	1.7	2.1	2.7	2.8	3.3	4.0	4.3	4.5
Other .....	.4	.4	.5	.5	.9	1.2	1.3	1.3	1.5	3.1	4.6	4.8
Subtotal, income security .....	6.5	7.8	7.5	7.1	7.7	9.2	10.4	10.8	11.3	14.2	16.6	16.9
Health:												
Medicaid.....	3.4	4.6	4.6	5.8	6.8	8.6	9.8	10.6	12.4	13.9	16.4	18.1
Other (includes research, construction, services, and medical training) .....	1.2	1.5	1.7	2.0	2.4	2.9	2.9	2.8	2.8	2.7	3.1	3.1
Subtotal, health .....	4.6	6.1	6.3	7.8	9.2	11.4	12.7	13.4	15.1	16.7	19.5	21.2
Education, training, employment, and social services:												
Education .....	3.5	3.8	3.6	3.5	4.6	4.5	4.9	5.5	6.6	7.4	7.7	8.2
Training and employment .....	1.1	1.7	2.2	1.9	3.4	5.6	6.0	9.5	9.2	8.6	8.0	8.9
Social services.....	1.8	3.1	3.0	2.9	3.6	3.8	4.4	5.0	5.8	5.2	5.5	5.8
Subtotal, education, training, employment, and social services .....	6.4	8.6	8.7	8.4	11.7	13.9	15.4	20.0	21.6	21.2	21.1	22.9
Veterans benefits and services.....	*	*	*	*	*	.1	.1	.1	.1	.1	.1	.1
<b>Total, human resources programs.....</b>	<b>17.5</b>	<b>22.6</b>	<b>22.5</b>	<b>23.3</b>	<b>28.7</b>	<b>34.5</b>	<b>38.5</b>	<b>44.2</b>	<b>48.1</b>	<b>52.2</b>	<b>57.3</b>	<b>61.0</b>
Natural resources and environment.....	.8	.8	1.1	2.0	2.3	2.9	4.1	3.9	4.7	5.5	5.4	5.5

Community and regional development:												
Local public works .....							.6	2.9	1.6	.4	.1	.1
Block grants.....						1.0	2.0	2.4	3.1	3.8	3.8	3.9
Other.....	2.0	2.2	2.6	2.7	2.8	2.4	1.8	1.5	1.7	2.1	2.0	2.3
Subtotal, community and regional develop- ment.....	2.0	2.2	2.6	2.7	2.8	3.3	4.4	6.8	6.4	6.3	6.0	6.2
Transportation.....	4.9	5.1	5.3	5.3	5.8	7.5	7.7	8.1	9.5	11.8	11.8	11.8
General purpose fiscal assistance:												
General revenue sharing.....			6.6	6.1	6.1	6.2	6.8	6.8	6.8	6.8	5.2	4.6
Anti-recession fiscal assistance.....							1.7	1.3				
Other.....	.3	.3	.4	.4	.5	.4	.5	.8	.9	1.1	1.2	1.8
Subtotal, general purpose fiscal assistance..	.3	.3	7.0	6.5	6.6	6.7	9.0	8.9	7.8	7.9	6.3	6.3
All other functions.....	1.3	1.7	1.9	1.9	2.2	2.6	2.6	2.8	2.6	3.0	3.5	3.8
<b>Total other functions.....</b>	<b>9.2</b>	<b>10.0</b>	<b>17.9</b>	<b>18.4</b>	<b>19.7</b>	<b>23.0</b>	<b>27.7</b>	<b>30.4</b>	<b>31.0</b>	<b>34.5</b>	<b>33.0</b>	<b>33.6</b>
<b>Total grants-in-aid.....</b>	<b>26.8</b>	<b>32.6</b>	<b>40.4</b>	<b>41.6</b>	<b>48.4</b>	<b>57.5</b>	<b>66.3</b>	<b>74.7</b>	<b>79.1</b>	<b>86.7</b>	<b>90.3</b>	<b>94.6</b>

\*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 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 NIA expenditures, but it accounted for around 6-7% of the total each year from 1952 to 1977. Net interest paid rose from 6.9% of Federal sector expenditures in 1977 to 8.9% in 1980 and 10.1% in 1982.

In recent years foreign holdings of Federal debt have increased significantly. This expansion, combined with higher interest rates, pushed up the amount of interest paid abroad to over \$11.8 billion in 1980, roughly triple the \$3.2 billion total in 1973. These foreign interest payments are partially offset by interest collections from abroad; in 1973 such collections totaled \$0.9 billion and in 1980 they totaled \$2.4 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.*—Subsidies less current surplus of Government enterprises consist 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, subsidies for railroads, and the construction and operating differential subsidies paid to operators of U.S.-flag merchant ships. As table B-9 shows, roughly half of the subsidies are for housing programs. These subsidies are designed mainly to reduce the cost of housing to moderate- and low-income families.

"Government enterprise" is the term used in the NIA to designate certain business-type operations of the Government, which 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 expenses of a Government enterprise constitutes its surplus or deficit. As noted above, the capital formation of Government enterprises is classified as nondefense purchases. The largest Government enterprises are the Commodity Credit Corporation, the Postal Service (which is not now included in the budget), and the Tennessee Valley Authority.

Table B-9 shows the composition of this aggregation by major category.

Table B-9. SUBSIDIES LESS CURRENT SURPLUS OF GOVERNMENT ENTERPRISES

(In billions of dollars)

Description	Actual										Estimate	
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
<b>Subsidies:</b>												
Commodity Credit Corporation .....	3.4	2.9	3.6	2.4	0.6	0.3	0.6	2.3	2.0	0.5	1.0	0.5
Rural housing insurance fund .....	.1	.1	.1	.1	.2	.3	.4	.4	.6	.6	.7	.7
Other Department of Agriculture .....	.4	.4	.4	.3	.4	.3	.3	.4	.3	.3	.3	.3
Maritime .....	.4	.4	.4	.4	.5	.5	.5	.5	.5	.6	.6	.6
Housing (HUD) .....	.8	1.3	1.7	1.9	2.1	2.3	2.9	3.5	4.3	5.2	6.6	8.0
Railroad and mass transit .....	*	.1	.1	.1	.5	1.1	1.4	1.5	1.7	2.2	2.0	1.9
Other <sup>1</sup> .....	.3	.2	1.1	.1	.1	.1	.3	.2	.4	.2	1.9	3.8
Subtotal .....	5.3	5.3	7.4	5.4	4.4	5.0	6.4	8.9	9.9	9.6	13.2	15.9
<b>Enterprise surpluses (-) or deficits:</b>												
Commodity Credit Corporation .....	.6	.6	1.3	1.0	.3	.2	.2	.8	1.3	1.5	1.3	.6
Postal Service .....	2.1	1.7	1.7	2.2	2.5	2.8	2.0	1.9	1.0	2.2	1.7	1.3
Tennessee Valley Authority .....	-2	-2	-2	-3	-3	-4	-6	-6	-8	-1.1	-1.3	-1.7
Federal Housing Administration .....	-3	-3	-3	-1	-2	-2	-2	-2	-2	-3	-3	-4
Federal Deposit Insurance Corporation .....	-1	-2	-1	-1	-2	-2	-2	-3	-3	-3	-3	-3
Federal Savings and Loan Insurance Corporation .....	-1	-1	-1	-2	-2	-2	-2	-3	-3	-2	-3	-4
All other <sup>2</sup> .....	-3	-3	-2	-4	-4	-6	-4	-6	-8	-6	-7	-9
Subtotal .....	1.7	1.2	1.8	2.2	1.5	1.2	.6	.7	-1	1.1	.2	-1.9
<b>Total subsidies less current surplus .....</b>	<b>7.0</b>	<b>6.5</b>	<b>9.2</b>	<b>7.6</b>	<b>6.0</b>	<b>6.2</b>	<b>7.0</b>	<b>9.6</b>	<b>9.8</b>	<b>10.8</b>	<b>13.4</b>	<b>14.0</b>

<sup>1</sup> Includes subsidies by the disaster loan fund of \$0.7 billion in 1973. Includes proposed legislation for subsidies as part of the economic stimulus program and the 8% social security tax credit.<sup>2</sup> Includes wage disbursements less accruals.

Note.—Excludes the transition quarter.

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

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

#### ESTIMATING ERRORS AND QUARTERLY ESTIMATES

*Estimating errors.*—Estimates of NIA receipts and expenditures are necessarily imprecise. The budget itself is a mixture of a forecast of what receipts and outlays are expected to be for some items under current law and a Presidential request for congressional approval of proposed amounts for others. In compiling this special analysis, each budget receipt and outlay is analyzed and translated into NIA categories. The budget process does not generate all of the data needed to make precise NIA estimates, so approximations are required in the translation. Even the translation from past year accounting data to NIA “actuals” is subject to adjustment when more complete information becomes available.

Table B-10 provides some indication of the magnitudes of the estimating errors associated with the past-year data. When the 1981 budget was published a year ago, 1979 had been over for 3½ months, and the 1979 estimates were labeled “actual”; yet, as table B-10 shows, the figures for 1979 are now significantly different. One can anticipate revisions similar to those shown in table B-10 for the “actuals” each year. The margin of error for the estimated years (1981 and 1982 in this budget) is even greater, since they involve estimating errors and differences between proposals and what is realized in the basic unified budget, as well as errors in translating unified budget transactions into NIA terms.

Table B-10. FEDERAL RECEIPTS AND EXPENDITURES IN THE NIA: COMPARISON OF JANUARY 1980 AND JANUARY 1981 ESTIMATES FOR 1979

(in billions of dollars)

Description	"Actuals" for 1979 shown in 1981 budget	Change	Currently reported "actuals" for 1979
<b>RECEIPTS</b>			
Personal tax and nontax receipts .....	223.5	-0.4	223.1
Corporate profits tax accruals .....	78.4	-2.6	75.8
Indirect business tax and nontax accruals .....	29.4	-0.3	29.1
Contributions for social insurance .....	152.4	0.3	152.7
<b>Total receipts .....</b>	<b>483.7</b>	<b>-3.0</b>	<b>480.7</b>
<b>EXPENDITURES</b>			
Purchases of goods and services .....	162.4	1.0	163.4
Defense .....	(105.9)	(1.5)	(107.4)
Nondefense .....	(56.5)	(-0.5)	(56.0)
Transfer payments .....	201.7	0.1	201.8
Domestic ("to persons") .....	(197.7)	(0.1)	(197.8)
Foreign .....	(4.0)	(*)	(4.0)
Grant-in-aid to State and local governments .....	79.3	-0.2	79.1
Net interest paid .....	40.4	0.2	40.6
Subsidies less current surplus of Government enterprises .....	9.8	*	9.8
<b>Total expenditures .....</b>	<b>493.6</b>	<b>1.1</b>	<b>494.7</b>
<b>Deficit (-) .....</b>	<b>-9.9</b>	<b>-4.1</b>	<b>-14.0</b>

\* \$50 million or less.

*Quarterly estimates.*—Table B-11 presents quarterly NIA receipts and expenditures (at seasonally adjusted annual rates) for 1980 to 1982.

As noted above, the translation of the budget into the NIA categories is inexact. When the annual NIA estimates are converted into quarterly distributions that are seasonally adjusted at annual rates, greater imprecision must be expected. The data presented in table B-11 are the best available estimates of the quarterly NIA receipts and expenditures consistent with the 1982 budget, but should be used with clear recognition of their limitations.



Table B-11. FEDERAL RECEIPTS AND EXPENDITURES IN THE NIA, QUARTERLY, 1980-82

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

Description	Actual					Estimated						
	Oct.-Dec. 1979	Jan.-Mar. 1980	Apr.-June 1980	July-Sept. 1980	Oct.-Dec. 1980*	Jan.-Mar. 1981	Apr.-June 1981	July-Sept. 1981	Oct.-Dec. 1981	Jan.-Mar. 1982	Apr.-June 1982	July-Sept. 1982
<b>RECEIPTS</b>												
Personal tax and nontax receipts.....	247.1	246.9	252.0	259.4	273.6	284.1	295.0	309.6	320.1	333.4	347.2	360.1
Corporate profits tax accruals.....	74.3	80.5	60.9	66.7	68.4	66.9	67.0	69.1	75.4	76.8	79.9	83.2
Indirect business tax and nontax accruals.....	29.6	31.9	38.7	42.9	48.3	57.0	62.9	76.3	80.9	82.7	84.6	87.1
Contributions for social insurance.....	163.0	169.2	169.3	171.8	178.7	196.8	201.2	206.8	212.0	225.4	230.9	237.2
<b>Total, receipts.....</b>	<b>514.0</b>	<b>528.4</b>	<b>520.9</b>	<b>540.8</b>	<b>569.0</b>	<b>604.8</b>	<b>626.1</b>	<b>661.8</b>	<b>688.4</b>	<b>718.3</b>	<b>742.6</b>	<b>767.6</b>
<b>EXPENDITURES</b>												
Purchases of goods and services.....	178.1	190.0	198.7	194.9	212.0	215.1	220.6	226.0	238.1	245.7	252.3	258.6
Defense.....	(118.7)	(125.0)	(128.7)	(131.4)	(142.9)	(146.2)	(149.6)	(153.3)	(161.2)	(165.4)	(169.6)	(173.8)
Nondefense.....	(59.4)	(64.9)	(70.0)	(63.5)	(69.1)	(68.9)	(71.0)	(72.7)	(76.9)	(80.3)	(82.7)	(84.8)
Transfer payments.....	221.7	228.9	236.0	265.3	268.3	276.1	281.4	300.0	301.7	307.1	313.7	333.0
Domestic (to "persons").....	(216.8)	(224.4)	(232.2)	(260.4)	(263.6)	(271.4)	(276.7)	(295.3)	(296.8)	(301.9)	(308.4)	(327.6)
Foreign.....	(4.9)	(4.5)	(3.8)	(4.9)	(4.7)	(4.7)	(4.7)	(4.7)	(4.9)	(5.2)	(5.3)	(5.4)
Grants-in-aid to State and local governments.....	84.9	85.5	87.2	87.7	88.9	88.6	90.5	93.2	93.7	94.4	95.2	95.1
Net interest paid.....	44.4	50.3	54.4	53.5	55.3	65.9	73.0	75.0	75.1	75.1	75.1	75.1
Subsidies less current surplus of Government enterprises.....	9.5	10.1	11.0	13.7	13.5	13.6	12.2	14.2	14.4	14.2	13.8	13.6
<b>Total expenditures.....</b>	<b>538.6</b>	<b>564.7</b>	<b>587.3</b>	<b>615.0</b>	<b>638.0</b>	<b>659.3</b>	<b>677.7</b>	<b>708.4</b>	<b>723.0</b>	<b>736.5</b>	<b>750.1</b>	<b>775.4</b>
<b>Deficit (-).....</b>	<b>-24.5</b>	<b>-36.3</b>	<b>-66.5</b>	<b>-74.2</b>	<b>-69.0</b>	<b>-54.5</b>	<b>-51.6</b>	<b>-46.6</b>	<b>-34.6</b>	<b>-18.2</b>	<b>-7.5</b>	<b>-7.8</b>

Note.—Because of the methods normally used seasonally adjusting NIA 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 NIA

Table B-12 shows the major differences between the budget and the Federal sector of the NIA. These differences are explained below.

Table B-12. RELATIONSHIP OF THE BUDGET TO THE FEDERAL SECTOR, NIA

(In billions of dollars)

Description	1979 actual	1980 actual	1981 estimate	1982 estimate
<b>RECEIPTS</b>				
<b>Total budget receipts</b> .....	<b>465.9</b>	<b>520.0</b>	<b>607.5</b>	<b>711.8</b>
Government contributions for employee retirement (grossing) .....	7.7	8.6	9.7	10.3
Other netting and grossing .....	3.6	4.0	6.4	6.3
Adjustment to accruals .....	4.5	-4.4	-8.0	1.1
Geographic exclusions .....	-1.2	-1.2	-1.5	-1.5
Other .....	.1	.3	.3	.2
<b>Federal sector, NIA receipts</b> .....	<b>480.7</b>	<b>527.3</b>	<b>614.4</b>	<b>728.2</b>
<b>EXPENDITURES</b>				
<b>Total budget outlays</b> .....	<b>493.6</b>	<b>579.6</b>	<b>662.7</b>	<b>739.3</b>
Lending and financial transactions .....	-7.2	-10.3	-6.1	-6.8
Government contribution for employee retirement (grossing) .....	7.7	8.6	9.7	10.3
Other netting and grossing .....	3.6	4.0	6.4	6.3
Defense timing adjustment .....	-6	-7	-9	-2.3
Bonuses on Outer Continental Shelf land leases .....	1.9	2.2	5.2	6.1
Geographic exclusions .....	-3.9	-4.5	-4.9	-5.3
Other .....	-4	-8	-1.1	-1.3
<b>Federal sector, NIA expenditures</b> .....	<b>494.7</b>	<b>578.2</b>	<b>671.0</b>	<b>746.3</b>

*Lending and financial transactions.*—Conceptually, the national income and product accounts measure the Nation's current income and production, and therefore do not include transactions, such as loans, that are an exchange of existing assets and liabilities rather than current income or production. Loan transactions have a significant economic impact, affecting income and output, but they are analyzed more appropriately within a financial market framework, such as provided by the flow-of-funds data of the Federal

Reserve Board. Special Analysis E (Borrowing, Debt, and Investment) 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 displayed in table B-12 are shown in Special Analysis F. However, this total differs from the total for direct loans shown in Special Analysis F because: (a) the NIA records nonrecourse agricultural commodity loans as purchases rather than loans; (b) capital contributions to international financial institutions, while not technically loans, are treated as financial transactions and, therefore, excluded from the NIA; and (c) Special Analysis F includes lending by off-budget Federal entities; these loans do not require reconciliation with the NIA because they are not included in the budget outlay totals.

*Government contribution for employee retirement.*—The contributions of Government agencies to the retirement trust funds of their employees are not included in the budget totals. While the outlays are recorded in each agency's budget, they are offset by an intra-governmental deduction. However, the NIA counts Government payments for employee retirement as part of the compensation paid to Government employees and, therefore, as Government expenditures; this treatment maintains comparability with the treatment of employee retirement contributions in the rest of the economy. 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 accounts are recorded as purchases of goods and services. The receipt of these retirement contributions is treated in the NIA as contributions for social insurance. Since receipts and expenditures are increased by identical amounts, this treatment has no effect on the surplus or deficit. Around 80% of these payments go to the civil service retirement fund, while most of the remainder is for social security.

*Other netting and grossing.*—The budget normally counts as receipts only income from taxation or similar sources that arises from the exercise of governmental power to compel payment. Money received in the course of business-type transactions, therefore, is normally shown as offsets against 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 NIA these insurance premiums are treated as social insurance receipts just as are receipts from compulsory Government programs.

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 NIA as indirect business nontaxes; this converts the money from an offset to outlays in the budget to a receipt in the NIA.

Other netting and grossing includes some imputed contributions for social insurance for Federal employees for unemployment compensation (which adds an equal amount to nondefense purchases) and workmen's compensation (which adds an equal amount to domestic transfer payments).

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

The principal timing adjustment 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. These items are recorded in the Federal sector NIA as defense purchases at the time of delivery to the Federal Government, rather than when the payment is made (as the budget does) or when they are fabricated. Work in progress is counted as part of private business inventories until the goods are completed and delivered to the Government. 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 NIA. In addition, some accounting adjustments are included with the defense timing adjustment in this translation.

Since both the budget and the NIA record public debt interest to the public when it accrues, no timing adjustment is needed for most interest transactions.

*Bonuses on Outer Continental Shelf land leases.*—In recent years bonuses paid on the Outer Continental Shelf oil leases have become a significant reconciliation item between the unified budget and the NIA. As already noted, the budget records these bonuses as proprietary receipts and, therefore, deducts them from budget outlays. The NIA excludes these transactions as being a transfer of

assets, because the payments are not included in calculating book profits under current corporate accounting practice.

*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 NIA excludes such transactions, this constitutes a major reconciliation item between the two data series.

*Other.*—This category contains miscellaneous adjustments, such as the NIA expenditures by off-budget Federal entities and foreign currency transactions that are included in the NIA but not in the budget.

Table B-13. FEDERAL TRANSACTIONS IN THE NATIONAL INCOME ACCOUNTS, 1971-82

(In billions of dollars)

Description	Actual										Estimate	
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
<b>RECEIPTS, NATIONAL INCOME BASIS</b>												
Personal taxes and nontax receipts .....	87.9	100.5	107.4	122.7	127.5	137.2	166.4	186.4	223.1	249.7	290.5	339.3
Corporate profits tax accruals .....	31.9	34.2	41.2	43.4	41.8	52.5	58.8	67.2	75.8	70.6	67.9	78.8
Indirect business tax and nontax accruals .....	20.0	19.9	20.7	21.4	22.2	24.4	24.5	27.2	29.1	35.7	61.2	83.8
Contributions of social insurance .....	52.6	58.9	71.5	84.2	91.9	101.0	116.2	133.4	152.7	171.3	194.8	226.3
<b>Total receipts, national income basis .....</b>	<b>192.4</b>	<b>213.4</b>	<b>240.7</b>	<b>271.6</b>	<b>283.4</b>	<b>314.9</b>	<b>365.9</b>	<b>414.2</b>	<b>480.7</b>	<b>527.3</b>	<b>614.4</b>	<b>728.2</b>
<b>EXPENDITURES, NATIONAL INCOME BASIS</b>												
Purchases of goods and services .....	94.9	100.6	101.1	104.5	117.9	125.1	140.3	150.7	163.4	190.2	218.5	248.7
Defense .....	(72.2)	(72.2)	(72.8)	(73.6)	(80.2)	(84.4)	(91.9)	(98.0)	(107.4)	(126.1)	(148.0)	(167.5)
Nondefense .....	(22.7)	(28.4)	(28.4)	(30.9)	(37.7)	(40.7)	(48.4)	(52.7)	(56.0)	(64.1)	(70.5)	(81.2)
Transfer payments .....	70.1	79.0	89.8	104.8	134.5	156.8	169.8	182.2	201.8	239.3	281.5	313.9
Domestic ("to persons") .....	(67.7)	(76.1)	(87.2)	(101.8)	(131.4)	(153.8)	(166.6)	(178.7)	(197.8)	(234.7)	(276.8)	(308.7)
Foreign .....	(2.3)	(2.8)	(2.7)	(3.0)	(3.1)	(3.0)	(3.2)	(3.5)	(4.0)	(4.6)	(4.7)	(5.2)
Grants-in-aid to State and local governments .....	26.8	32.6	40.4	41.6	48.4	57.5	66.3	74.7	79.1	86.7	90.3	94.6
Net interest paid .....	14.0	14.0	15.7	19.6	21.7	25.2	28.4	33.5	40.6	51.2	67.3	75.1
Subsidies less current surplus of Government enterprises .....	7.0	6.5	9.2	7.6	6.0	6.2	7.0	9.6	9.8	10.8	13.4	14.0
Wage disbursements less accruals .....	.1		-5	.2	.4			*	*			
<b>Total expenditures, national income basis .....</b>	<b>212.9</b>	<b>232.7</b>	<b>256.7</b>	<b>278.2</b>	<b>328.8</b>	<b>370.7</b>	<b>411.7</b>	<b>450.5</b>	<b>494.7</b>	<b>578.2</b>	<b>671.0</b>	<b>746.3</b>
<b>Excess of receipts (+) or expenditures (-), national income basis .....</b>	<b>-20.5</b>	<b>-19.2</b>	<b>-14.9</b>	<b>-6.6</b>	<b>-45.4</b>	<b>-55.8</b>	<b>-45.8</b>	<b>-36.3</b>	<b>-14.0</b>	<b>-50.9</b>	<b>-56.6</b>	<b>-18.1</b>

\*\$50 million or less.

Note.—Excludes the transition quarter.

---

PART 2

ANALYSES OF

THE BUDGET TOTALS

---

## INTRODUCTION

*Part 2* provides analyses and tabulations of the budget totals that cover Government finances and operations as a whole, and reflect the ways in which Government finances affect the economy. These special analyses are designated C through I.

*Special Analysis C* (Funds in the Budget) classifies budget information by the groups of funds (Federal and trust) that comprise the budget.

*Special Analysis D* (Investment, Operating, and Other Budget Outlays) classifies budget 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. Apart from this analysis, the U.S. budget includes outlays that are for "capital" or investment-type activities in the same accounts in which "current" activities and costs are shown.

*Special Analysis E* (Borrowing, Debt, and Investment) 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) covers direct loans, guarantees of private loans, and loans of Government-sponsored enterprises. It includes aggregate measures of total credit supplied to the public and credit raised from the public under Federal auspices. It also reviews the credit control system, which applies budget-type controls to Federal lending activity.

*Special Analysis G* (Tax Expenditures) provides a discussion of revenue losses due to provisions of the Federal income tax laws that allow a special exclusion, exemption, or deduction from gross income or that provide a special credit, preferential rate of tax, or deferral of tax liability.

*Special Analysis 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 relates 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 figures on total Federal personnel costs (including military personnel).



**SPECIAL ANALYSIS C**  
**FUNDS IN THE BUDGET**

This analysis provides information on the two major fund groups, Federal and trust, that together after deducting interfund transactions, as shown in Table C-1, comprise the budget totals.

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

(In millions of dollars)

Description	1980 actual	1981 estimate	1982 estimate
<b>RECEIPTS</b>			
Federal funds:			
Total in fund accounts.....	372,074	445,888	518,940
Intrafund transactions.....	- 3,301	- 3,643	- 3,431
Proprietary receipts from the public.....	-11,721	-17,944	-19,146
Receipts from off-budget Federal entities.....	- 6,203	- 9,062	-12,258
Receipts, Federal funds.....	<b>350,849</b>	<b>415,239</b>	<b>484,105</b>
Trust funds:			
Total in fund accounts.....	226,134	256,808	301,802
Intrafund transactions.....	-1,451	-1,635	-1,938
Proprietary receipts from the public.....	-9,320	-10,897	-12,015
Receipts from off-budget Federal entities.....	-1,489	-1,730	-1,737
Receipts, trust funds.....	<b>213,875</b>	<b>242,545</b>	<b>286,113</b>
Interfund transactions.....	-44,674	-50,259	-58,437
<b>Total budget receipts.....</b>	<b>520,050</b>	<b>607,525</b>	<b>711,780</b>
<b>OUTLAYS</b>			
Federal funds:			
Total in fund accounts.....	440,438	505,581	565,653
Intrafund transactions.....	- 3,301	- 3,643	- 3,431
Proprietary receipts from the public.....	-11,721	-17,944	-19,146
Receipts from off-budget Federal entities.....	- 6,203	- 9,062	-12,258
Outlays, Federal funds.....	<b>419,214</b>	<b>474,932</b>	<b>530,817</b>
Trust funds:			
Total in fund accounts.....	217,333	252,330	282,606
Intrafund transactions.....	-1,451	-1,635	-1,938
Proprietary receipts from the public.....	-9,320	-10,897	-12,015
Receipts from off-budget Federal entities.....	-1,489	-1,730	-1,737
Outlays, trust funds.....	<b>205,074</b>	<b>238,068</b>	<b>266,916</b>
Interfund transactions.....	-44,674	-50,259	-58,437
<b>Total budget outlays.....</b>	<b>579,613</b>	<b>662,740</b>	<b>739,296</b>
<b>Budget deficit.....</b>	<b>- 59,563</b>	<b>- 55,215</b>	<b>- 27,516</b>

Note.—The transactions of the Pension Benefit Guaranty Corporation have been excluded from the budget by law since its establishment. This provision was repealed effective October 1, 1980. Accordingly, all budget totals and Department of Labor amounts for past years have been adjusted retroactively to include these transactions.

The *Federal funds* are derived mainly from taxes and borrowing and are used for the general purposes of the Government. Most of these funds are not restricted by law to any specific Government program. The *trust funds*, on the other hand, collect certain taxes and other receipts for specified purposes, such as payment of social security benefits, in accordance with the terms of a trust agreement or statute.

Amounts collected by the funds are classified either as budget receipts, also called governmental receipts, or as offsets to budget outlays, known as offsetting collections, depending on the following criteria.

When the amounts are collected by the Federal Government from the public and arise from the exercise of governmental or sovereign powers, they are treated as budget receipts. Premiums from voluntary participation in certain Federal social insurance programs (such as supplemental medical insurance) and gifts and contributions are also included in this category.

When the amounts are collected from other Government accounts or from transactions with the public that are of a business-type or market-oriented nature, such as the sale of services or goods, they are treated as deductions from spending in arriving at budget outlays.<sup>1</sup>

#### FEDERAL FUNDS

The Federal fund group is comprised of the *general fund*, *special funds*, *public enterprise (revolving) funds*, and *intragovernmental funds*. Intragovernmental funds include intragovernmental revolving funds, management funds, and consolidated working funds.

*Federal fund budget receipts and outlays.* In 1982, the Federal fund budget receipts are estimated at \$484.1 billion and outlays are estimated at \$530.8 billion. The following table, C-2, presents the distribution of budget receipts by source and outlays by agency for the Federal fund group.

The Federal fund budget receipts shown in the table are derived mainly from taxes and borrowing. They are comprised of the amounts collected by the general and special funds that are governmental in nature. Proprietary receipts from the public of the general and special funds arise from market-oriented transactions and thus are offsetting collections rather than budget receipts.

The Federal fund outlays shown are net of all collections credited to the public enterprise and intragovernmental funds and the proprietary receipts of the general and special funds. These are offset because the amounts collected are associated with business-type or market-oriented activities or payments from other Government accounts.

<sup>1</sup> Additional information on budget receipts and offsetting collections is provided in Part 7 of the Budget of the United States Government, Fiscal Year 1982.

Table C-2. FEDERAL FUND RECEIPTS AND OUTLAYS

(In millions of dollars)

Description	1980 actual	1981 estimate	1982 estimate
<b>RECEIPTS BY SOURCE</b>			
Individual income taxes.....	244,069	284,013	331,677
Corporation income taxes.....	64,600	66,009	64,648
Excise taxes.....	15,563	36,762	55,836
Estate and gift taxes.....	6,389	6,909	7,668
Customs duties.....	7,174	7,439	7,800
Miscellaneous receipts.....	13,054	14,107	16,476
<b>Total receipts, Federal funds.....</b>	<b>350,849</b>	<b>415,239</b>	<b>484,105</b>
<b>OUTLAYS BY AGENCY</b>			
Legislative branch.....	1,215	1,446	1,421
The Judiciary.....	563	672	732
Executive Office of the President.....	95	108	111
Funds appropriated to the President:			
Foreign assistance.....	4,556	5,033	5,233
Other.....	1,829	1,179	1,115
Agriculture.....	24,620	20,893	28,036
Commerce.....	3,763	2,995	3,204
Defense—Military <sup>1</sup> .....	132,837	157,596	179,998
Defense—Civil.....	3,216	3,341	3,364
Education.....	13,113	14,826	15,713
Energy.....	6,501	9,717	14,109
Health and Human Services.....	51,054	59,404	67,369
Housing and Urban Development.....	12,576	13,305	15,507
Interior.....	4,537	4,799	4,268
Justice.....	2,632	2,680	2,658
Labor.....	13,247	16,238	15,780
State.....	2,018	2,226	2,692
Transportation.....	8,529	11,630	9,005
Treasury.....	76,831	90,798	104,602
Environmental Protection Agency.....	5,602	5,520	5,671
National Aeronautics and Space Administration.....	4,849	5,282	6,360
Veterans Administration.....	20,711	22,028	23,933
Other independent agencies.....	28,421	31,015	27,915
Allowances <sup>2</sup> .....			1,920
Undistributed offsetting receipts: Rents and royalties on the Outer Continental Shelf.....	-4,101	-7,800	-9,900
<b>Total outlays, Federal funds.....</b>	<b>419,214</b>	<b>474,932</b>	<b>530,817</b>
<b>Excess of outlays (-).....</b>	<b>-68,364</b>	<b>-59,693</b>	<b>-46,712</b>

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

*Obligations.*—The obligations (net) for Federal funds are estimated at \$580.4 billion for 1982, as set forth in table C-3. These transactions flow largely from budget authority for Federal funds of \$581.1 billion for the year, although in part the obligations were authorized by prior years' budget authority.

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

(In millions of dollars)

Department or other unit	1980 actual	1981 estimate	1982 estimate
Legislative branch.....	1,263	1,428	1,466
The Judiciary.....	577	674	741
Executive Office of the President.....	99	110	111
Funds appropriated to the President:			
International security assistance.....	2,830	2,566	2,931
International development assistance.....	2,742	2,898	4,359
Other.....	2,074	5,326	1,135
Agriculture.....	25,656	21,666	27,489
Commerce.....	3,153	3,129	2,985
Defense—Military <sup>1</sup> .....	140,377	169,334	192,578
Defense—Civil.....	3,148	3,251	3,496
Education.....	14,156	16,708	17,045
Energy.....	7,010	14,785	14,499
Health and Human Services.....	52,008	60,620	66,605
Housing and Urban Development.....	39,607	47,548	44,282
Interior.....	4,662	5,045	4,602
Justice.....	2,532	2,422	2,560
Labor.....	12,592	16,036	16,240
State.....	2,081	2,327	2,838
Transportation.....	9,813	13,541	10,601
Treasury.....	76,738	91,437	104,635
Environmental Protection Agency.....	6,010	5,288	6,364
National Aeronautics and Space Administration.....	5,058	6,160	6,733
Veterans Administration.....	20,701	22,434	24,314
Other independent agencies:			
Export-Import Bank.....	4,004	5,959	3,314
Federal Home Loan Bank Board.....	647	314	—648
General Services Administration.....	99	—42	67
Office of Personnel Management.....	12,032	13,835	14,438
U.S. Postal Service.....	1,677	1,343	1,119
Railroad Retirement Board.....	340	350	350
All other independent agencies.....	11,667	12,631	10,138
Allowances:			
Civilian agency pay raises.....			958
Contingencies for other requirements.....			2,000
Undistributed offsetting receipts: Rents and royalties on the Outer Continental Shelf.....	—4,101	—7,800	—9,900
<b>Total.....</b>	<b>461,254</b>	<b>541,323</b>	<b>580,444</b>

<sup>1</sup> Includes allowances for civilian and military pay raises 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 major construction programs that are fully funded, to provide funding for activities of a continuing nature (such as research and development), for financing loan programs, for standby emergency purposes (such as backup financing for insurance of the Federal Deposit Insurance Corporation), or for reserves for losses and debt redemption.

*Public enterprise funds.*—The public enterprise funds conduct 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. 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 is shown in table C-5.

Collections of public enterprise funds are estimated at \$47.0 billion in 1982, and gross outlays are planned to total \$58.6 billion, resulting in net outlays of \$11.6 billion.

#### TRUST FUNDS

There are two types of trust funds—revolving and nonrevolving. Trust revolving funds are similar to intragovernmental revolving funds and public enterprise funds in that they conduct cycle of business-type operations and are normally stated net of collections.

*Cash operations.*—Trust fund receipts are estimated at \$286.1 billion in 1982, with outlays planned at \$266.9 billion, as shown in tables C-1 and C-6. The transactions of the Federal old-age and survivors insurance and disability insurance funds are far larger than any other trust fund.

In fiscal years 1980-82, trust funds have excesses of receipts of the following amounts (in millions of dollars):

	<i>1980 actual</i>	<i>1981 estimate</i>	<i>1982 estimate</i>
Total receipts, trust funds.....	213,875	242,545	286,113
Total outlays, trust funds.....	205,074	238,068	266,916
Excess of receipts or outlays (—), trust funds.....	8,801	4,477	19,196

Table C-4. FEDERAL FUND BALANCES OF BUDGET AUTHORITY

(In millions of dollars)

Department or other unit	Start 1980		End 1980		End 1981		End 1982	
	Obligated	Unobligated	Obligated	Unobligated	Obligated	Unobligated	Obligated	Unobligated
Legislative branch.....	193	140	201	174	184	70	228	59
The Judiciary.....	53	14	58	18	60	4	70	1
Executive Office of the President.....	13	*	16		17		17	
Funds appropriated to the President:								
International security assistance.....	5,382	346	5,489	125	5,144	2	5,186	2
International development assistance.....	6,433	12,239	7,310	13,117	8,081	13,091	10,091	13,107
Other.....	11,194	5,169	11,298	5,479	15,444	6,587	15,463	6,572
Agriculture.....	10,481	4,942	11,470	4,157	12,216	546	11,669	1,524
Commerce.....	3,050	649	2,421	584	2,550	318	2,331	398
Defense—Military <sup>1</sup> .....	60,825	22,889	67,871	24,118	79,610	25,049	92,190	28,128
Defense—Civil.....	867	292	799	385	709	156	841	8
Education.....	9430	3,217	10,357	2,878	12,231	1,803	13,574	1,763
Energy.....	7,520	4,963	8,026	7,799	13,095	2,757	13,485	2,539
Health and Human Services.....	11,984	349	12,650	949	13,865	183	13,100	133
Housing and Urban Development.....	223,742	9,642	244,151	9,729	272,448	5,583	294,520	4,502
Interior.....	2,653	967	2,723	803	2,970	203	3,291	147
Justice.....	956	230	830	133	571	70	473	68
Labor.....	3,930	743	3,207	617	3,004	390	3,465	320
State.....	413	112	461	62	562	14	708	99
Transportation.....	8,198	5,535	9,385	1,249	11,297	688	12,893	591
Treasury.....	440	9,231	293	25,397	932	25,077	964	25,423
Environmental Protection Agency.....	12,684	4,088	12,772	3,050	12,540	2,456	13,232	1,203
National Aeronautics and Space Administration.....	1,006	523	1,212	705	2,090	79	2,463	68
Veterans Administration.....	2,426	2,661	2,391	2,387	2,797	2,324	3,178	2,203
Other independent agencies:								
Export-Import Bank.....	4,014	1,936	5,737	184	8,772		8,728	
Federal Deposit Insurance Corporation.....		3,000		3,000		3,000		3,000
Federal Home Loan Bank Board.....	-22	10,333	73	9,686	-28	9,372	-26	10,020
General Services Administration.....	568	304	474	428	344	790	393	877
Office of Personnel Management.....	29	48	55	11	11	47	13	7
Railroad Retirement Board.....	1	27		*		*		*
All other independent agencies.....	5,712	7,098	5,453	21,417	5,493	2,380	5,647	2,397
Allowances <sup>2</sup> .....							1,038	
<b>Total.....</b>	<b>394,175</b>	<b>111,689</b>	<b>427,185</b>	<b>138,638</b>	<b>487,008</b>	<b>103,038</b>	<b>529,224</b>	<b>105,161</b>

<sup>\*</sup>500 thousand or less.<sup>1</sup> Includes balances of allowances for civilian and military pay raises for the Department of Defense.<sup>2</sup> Includes balances of allowances for civilian agency pay raises and contingencies.

Table C-5. PUBLIC ENTERPRISE FUND TRANSACTIONS

(In millions of dollars)

Description	Applicable collections			Gross outlays		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Legislative Branch.....	*	*	*	*	*	*
Funds appropriated to the President:						
Foreign assistance.....	91	96	103	39	44	32
Other.....	*	*		*	2	
Agriculture:						
Commodity Credit Corporation.....	8,528	10,243	7,759	11,466	10,227	9,871
Farmers Home Administration.....	17,151	23,393	16,300	19,563	22,188	18,860
Federal Grain Inspection Service.....	27	33	36	29	37	37
Federal Crop Insurance Corporation.....	104	158	154	130	343	200
Rural Electrification Administration.....		1	1		20	13
Commerce.....	119	139	152	153	43	99
Defense: Military.....	2	4	4	4	6	8
Department of Education.....	171	171	173	185	203	176
Department of Energy.....	638	986	1,299	589	893	1,307
Health and Human Services.....	70	96	108	106	129	155
Housing and Urban Development:						
Government National Mortgage Association.....	1,239	1,942	2,338	2,606	2,512	3,336
Urban renewal programs.....	163	41	16	375	206	166
Low-rent public housing.....	1,301	308	308	1,335	314	400
Federal Housing Administration Fund.....	1,126	1,589	1,657	1,277	1,650	1,541
Other.....	221	336	411	1,171	1,309	1,340
Interior:						
Water and Power Resources Service.....	224	358	439	232	358	439
Other.....	19	21	23	29	30	31
Department of Justice.....	*	*	*		*	*
Transportation.....	42	46	47	153	152	86
Treasury.....	596	486	479	115	3	3
Environmental Protection Agency.....	1	1	1	*	1	1
Veterans Administration.....	871	1,008	979	819	830	920
Other independent agencies:						
Community Services Administration.....	1	2	3	*	30	8
Export-Import Bank.....	2,355	2,765	3,132	4,191	5,115	5,788
Farm Credit Administration.....	13	13	16	12	14	16
Federal Emergency Management Agency.....	172	225	249	578	481	492
Federal Home Loan Bank Board:						
Federal Savings and Loan Insurance Corporation.....	834	966	1,063	1,387	1,382	413
Revolving fund.....	20	61	64	19	61	64
General Services Administration.....	4	3	3	3	3	3
National Consumer Cooperative Bank.....	*	69	27	6	179	115
National Credit Union Administration.....	289	2,177	3,646	374	2,375	3,933
Pennsylvania Avenue Development Corporation.....	7	5	3	7	25	18
Small Business Administration.....	1,068	1,202	1,349	2,749	4,098	1,888
Tennessee Valley Authority.....	3,329	3,752	4,543	5,198	5,930	6,701
All other not included above.....	96	134	137	147	114	131
<b>Total.....</b>	<b>40,889</b>	<b>52,827</b>	<b>47,019</b>	<b>55,046</b>	<b>61,304</b>	<b>58,590</b>
Offsetting collections from the public.....	(25,973)	(32,341)	(34,929)			
Offsetting collections from* other accounts.....	(14,917)	(20,486)	(12,090)			

\*\$500 thousand or less.

Table C-6. OUTLAYS AND RECEIPTS OF TRUST FUNDS

(In millions of dollars)

Description	Outlays			Receipts		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Federal old-age, survivors, and disability insurance trust funds .....	118,559	139,884	161,551	117,439	132,672	152,318
Railroad retirement account .....	4,737	5,295	5,827	4,400	4,848	5,502
Black lung disability trust fund .....	808	922	770	808	922	770
Veterans life insurance trust funds .....	1,005	1,102	1,125	1,082	1,169	1,194
Federal employees retirement funds .....	14,862	17,796	20,114	24,503	27,986	29,990
Unemployment trust fund .....	16,440	23,500	21,590	16,195	20,000	23,743
Health insurance trust funds .....	35,034	39,939	46,599	35,690	44,877	56,871
Highway trust funds .....	9,212	8,773	8,615	7,647	7,993	11,382
Airport and airway trust fund .....	1,224	1,406	2,357	2,274	830	3,256
State and local government fiscal assistance trust fund .....	6,829	5,156	4,559	6,855	4,570	4,570
Foreign military sales trust fund .....	8,791	9,612	10,714	7,654	9,612	10,714
Other trust funds (nonrevolving) .....	1,201	984	1,021	1,588	1,329	1,492
Trust revolving funds .....	-1,369	-2,038	-2,235			
Subtotal .....	217,333	252,330	282,606	226,134	256,808	301,802
Intrafund transactions .....	-1,451	-1,635	-1,938	-1,451	-1,635	-1,938
Proprietary receipts from the public .....	-9,320	-10,897	-12,015	-9,320	-10,897	-12,015
Receipts from off-budget Federal entities .....	-1,489	-1,730	-1,737	-1,489	-1,730	-1,737
<b>Total .....</b>	<b>205,074</b>	<b>238,068</b>	<b>266,916</b>	<b>213,875</b>	<b>242,545</b>	<b>286,113</b>

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

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

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

	1979 actual	1980 actual	1981 estimate	1982 estimate
Open book balances .....	11,905	11,961	11,226	11,841
Investments in U.S. securities:				
Public debt .....	170,632	179,376	184,590	203,423
Agency debt .....	1,015	1,015	1,015	765
<b>Total .....</b>	<b>183,552</b>	<b>192,352</b>	<b>196,831</b>	<b>216,029</b>

A summary of the balances by fund is presented in table C-9. The amounts include both 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 1982, the largest net investments are expected to be those of the Federal employees retirement fund.

*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.

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

[Amounts under proposed legislation are shown separately]

Description	1980 actual	1981 estimate	1982 estimate
Federal old-age, survivors, and disability insurance trust funds:			
Social insurance taxes and contributions .....	113,220	128,544	148,138
Interest on Federal securities .....	2,337	2,078	1,546
Federal payment as employer for employee retirement .....	1,204	1,378	1,539
Other (mainly receipts of special Federal payments) .....	679	672	849
Proposed legislation .....			247
Subtotal, Federal old-age, survivors, and disability insurance trust funds .....	117,439	132,672	152,318
Railroad retirement account:			
Social insurance taxes and contributions .....	2,312	2,592	2,784
Interest on Federal securities .....	355	309	220
Receipts from other trust funds .....	1,442	1,624	1,926
Other (mainly receipts of special Federal payments) .....	291	323	304
Proposed legislation .....			268
Subtotal, railroad retirement account .....	4,400	4,848	5,502
Black lung disability trust fund:			
Excise taxes .....	272	275	292
Advances from general fund .....	536	647	478
Subtotal, black lung disability trust fund .....	808	922	770
Veterans life insurance trust funds:			
Interest on Federal securities .....	618	695	716
Other receipts .....	464	474	478
Subtotal, veterans life insurance trust funds .....	1,082	1,169	1,194
Federal employees retirement funds:			
Social insurance taxes and contributions .....	3,712	4,114	4,144
Interest on Federal securities .....	4,968	5,770	7,170

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

[Amounts under proposed legislation are shown separately]

Description	1980 actual	1981 estimate	1982 estimate
Federal payment as employer for employee retirement (including payment on prior year liabilities):			
Entities included in budget.....	14,328	15,834	17,627
Entities excluded from budget.....	1,489	1,730	1,737
Other receipts.....	7	11	11
Proposed legislation.....			-698
Supplemental now requested.....		527	
Subtotal Federal employees retirement funds .....	24,503	27,986	29,990
Unemployment trust fund:			
Social insurance taxes and contributions.....	15,336	16,338	19,699
Interest on Federal securities.....	859	1,222	1,503
Advances from the general fund.....	*	2,439	3,898
Proposed legislation.....			-1,357
Subtotal, unemployment trust fund .....	16,195	20,000	23,743
Health insurance trust funds:			
Social insurance taxes and contributions.....	26,161	33,229	39,399
Interest on Federal securities.....	1,457	1,717	2,469
Federal payment as employer for employee retirement.....	249	324	371
Other (mainly receipts of special Federal payments).....	7,823	9,604	14,601
Proposed legislation.....		3	31
Subtotal, health insurance trust funds.....	35,690	44,877	56,871
Highway trust funds:			
Excise taxes.....	6,620	6,890	6,960
Interest on Federal securities.....	1,027	1,112	726
Other receipts.....	*		
Proposed legislation.....		-9	3,697
Subtotal, highway trust funds .....	7,647	7,993	11,382
Airport and airway trust fund:			
Excise taxes.....	1,874		
Interest on Federal securities.....	400	511	349
Proposed legislation.....		319	2,907
Subtotal, airport and airway trust fund .....	2,274	830	3,256
State and local government fiscal assistance trust fund: Deposits for general revenue sharing .....	6,855	4,570	4,570
Foreign military sales trust fund.....	7,654	9,612	10,714
Other trust funds (nonrevolving).....	1,588	1,329	1,492
Subtotal.....	226,134	256,808	301,802
Intrafund transactions.....	-1,451	-1,635	-1,938
Proprietary receipts from the public.....	-9,320	-10,897	-12,015
Receipts from off-budget Federal entities.....	-1,489	-1,730	-1,737
<b>Total receipts.....</b>	<b>213,875</b>	<b>242,545</b>	<b>286,113</b>

\*\$500 thousand or less.

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

[Amounts under proposed legislation are shown separately]

Description	1980 actual	1981 estimate	1982 estimate
Federal old-age, survivors, and disability insurance trust funds:			
Benefit payments.....	115,514	136,409	157,628
Payments to other trust funds.....	1,442	1,624	1,906
Administrative expenses and other.....	1,603	1,851	2,040
Proposed legislation.....			-23
Subtotal, Federal old-age, survivors, and disability insurance trust funds.....	118,559	139,884	161,551
Railroad retirement account:			
Benefit payments and claims.....	4,699	5,257	5,809
Administrative expenses and other.....	38	38	54
Proposed legislation.....			-36
Subtotal, railroad retirement account.....	4,737	5,295	5,827
Black lung disability trust fund:			
Benefit payments.....	722	775	570
Federal administrative expenses.....	87	148	200
Subtotal, black lung disability trust fund.....	808	922	770
Veterans life insurance trust funds.....	1,005	1,102	1,125
Federal employees retirement:			
Benefit payments and claims.....	14,453	17,371	20,255
Refunds to former employees.....	385	407	482
Administrative expenses and other.....	24	29	32
Proposed legislation.....		-12	-655
Subtotal, Federal employees retirement.....	14,862	17,796	20,114
Unemployment trust fund:			
Withdrawals for benefit payments.....	14,280	21,184	20,701
Repayment of advances from general fund.....	250		
Administrative expenses and other.....	1,910	2,203	2,499
Proposed legislation.....			-1,610
Supplemental now requested.....		113	
Subtotal, unemployment trust fund.....	16,440	23,500	21,590
Health insurance trust funds:			
Benefit payments.....	33,937	38,870	45,820
Administrative expenses and other.....	1,097	1,153	1,225
Proposed legislation.....		-84	-446
Subtotal, health insurance trust funds.....	35,034	39,939	46,599
Highway trust funds (mainly grants to States)	9,212	8,773	8,615
Airport and airway trust fund.....	1,224	1,406	2,357
State and local government fiscal assistance trust fund: Payments for general revenue sharing.....	6,829	5,156	4,559
Foreign military sales trust fund.....	8,791	9,612	10,714
Other trust funds (nonrevolving).....	1,201	984	1,021
Trust revolving funds.....	-1,369	-2,038	-2,235
Subtotal.....	217,333	252,330	282,606

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

[Amounts under proposed legislation are shown separately]

Description	1980 actual	1981 estimate	1982 estimate
Intrafund transactions .....	-1,451	-1,635	-1,938
Proprietary receipts from the public .....	-9,320	-10,897	-12,015
Receipts from off-budget Federal entities .....	-1,489	-1,730	-1,737
<b>Total outlays .....</b>	<b>205,074</b>	<b>238,068</b>	<b>266,916</b>

Table C-9. TRUST FUND BALANCES

(In millions of dollars)

Description	As of Sept. 30			
	1979 actual	1980 actual	1981 estimate	1982 estimate
Federal old-age, survivors, and disability insurance trust funds .....	33,379	32,259	25,047	15,815
Railroad retirement account .....	3,056	2,719	2,272	1,947
Black lung disability trust fund .....	1	*		
Veterans life insurance funds .....	8,432	8,509	8,575	8,644
Federal employees retirement funds .....	64,677	74,317	84,508	94,384
Unemployment trust fund .....	15,131	14,886	11,386	13,539
Health insurance trust funds .....	18,373	19,029	23,967	34,240
Highway trust funds .....	12,564	10,999	10,220	12,988
Airport and airway trust fund .....	4,392	5,442	4,866	5,765
State and local government fiscal assistance trust fund .....	1,796	1,822	1,236	1,247
Foreign military sales trust fund .....	6,341	5,204	5,204	5,204
Other trust funds (nonrevolving) .....	1,311	1,698	2,044	2,516
Trust revolving funds .....	14,099	15,468	17,506	19,741
<b>Total .....</b>	<b>183,552</b>	<b>192,352</b>	<b>196,831</b>	<b>216,029</b>

\*\$500 thousand or less.

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

	1979	1980	1981	1982
Balance available on an authorization basis .....	195,148	208,320	217,808	238,069
Unfinanced contract authority:				
Airport and airway trust fund .....	-961	-914	-1,041	-1,256
Highway trust funds .....	-17,878	-18,348	-18,731	-20,564
Foreign military sales trust fund .....	-8,091	-12,087	-14,976	-17,352
Other .....	-1	-1		
Unappropriated receipts:				
Available as needed, on an indefinite basis .....	3	-49	2	2
Available for appropriation by Congress:				
Soldiers' Home permanent fund .....	94	96	96	112
Airport and airway trust fund .....	3,755	4,716	3,991	4,767
Highway trust funds .....	11,475	10,610	9,576	12,008
Other .....	1	2	101	236
Retained as permanent endowment .....	6	6	6	6
<b>Balance available on a cash basis .....</b>	<b>183,552</b>	<b>192,352</b>	<b>196,831</b>	<b>216,029</b>

Table C-10. TRUST REVOLVING FUND TRANSACTIONS

(In millions of dollars)

Description	Offsetting collections			Gross outlays		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Office of Personnel Management (employees' life insurance and health benefits) .....	4,541	5,505	6,386	4,134	4,963	5,702
Federal Deposit Insurance Corporation.....	1,507	1,566	1,624	584	116	124
All other trust revolving funds .....	485	519	561	444	473	510
<b>Total trust revolving funds <sup>1</sup> .....</b>	<b>6,532</b>	<b>7,589</b>	<b>8,571</b>	<b>5,163</b>	<b>5,551</b>	<b>6,336</b>
Receipts from the public .....	(2,863)	(3,299)	(3,778)			
Receipts from other accounts.....	(3,669)	(4,290)	(4,793)			

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



## SPECIAL ANALYSIS D

### INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS

This analysis divides outlays between those of an "investment" or capital nature, and those devoted to "current" or operating purposes.

*Investment-type* programs are those that yield benefits in future years through the acquisition of physical or financial assets, or through expenditures for less tangible long-term benefits such as education. They include: the construction, rehabilitation, and acquisition of physical assets; education, training, and vocational rehabilitation; research and development; international development; and financial investments such as loans. Outlays for investment-type programs are estimated to be \$161.5 billion in 1982.

*Current* programs provide benefits primarily in the year in which the outlays that finance them are made. They include: payments for retirement, disability, and other income maintenance; social services; payments (including subsidies) to agriculture, businesses, transportation systems, and other institutions that are not directly used to purchase physical assets; payments for the repair, maintenance, and operation of existing physical assets; and regulatory, law enforcement, interest, and other operating costs of the Federal Government. Outlays for current programs are estimated to be \$576.8 billion in 1982.

The allowance for contingencies cannot be classified as either investment or current in nature; it accounts for the remaining \$1.0 billion of 1982 outlays.

#### INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS

(In billions of dollars)

	1980 actual	1981 estimate	1982 estimate
Investment-type programs.....	136.7	142.9	161.5
Current programs.....	442.9	519.8	576.8
Unclassified.....			1.0
<b>Total.....</b>	<b>579.6</b>	<b>662.7</b>	<b>739.3</b>

The Federal Government has never had a capital budget in the sense of financing capital or investment-type programs separately from current expenditures. While the application of accounting

concepts for capital budgeting is difficult for private sector entities, it is much more so for the public sector. For example, the Federal Government holds vast amounts of land and controls off-shore areas; both have potential value as sources of timber, oil, and minerals. As a matter of national policy, however, these are not available for public sale, and do not have a known or easily estimated market value. Defense procurement poses similar problems of using capital accounting. A capital budget would pose formidable accounting problems in the measurement of depreciation on Government property, especially weapons. Moreover, a capital budget would be misleading as a measure of the Government's effect on the demand for economic resources, and might also suggest that programs with intensive expenditures for physical assets, such as construction, are better than those for which future benefits cannot be accurately capitalized, such as education or research. Likewise, physical assets might be favored relative to current operations in any given program because deficit financing for capital purposes would be easier to justify.

There are inevitable classification difficulties in preparing the kind of analysis presented here. In the case of a few programs—such as general revenue sharing—the recipients are free to utilize the funds for either investment-type or current purposes. In such cases, this analysis classifies the outlays in the category where most of the outlays are expected to occur.

Some programs could logically be put in more than one subcategory within these broader categories. For example, grants for construction of education facilities not only finance the acquisition of physical assets but are an important element in the conduct of education and training. In such cases, the outlays are classified in the subcategory that is most “capital-like” and therefore appears first in the special analysis structure (i.e., first, loans, then construction and rehabilitation, then acquisition of major equipment, then conduct of research and development, etc.).

The classification structure used in compiling information for this analysis is designed primarily to distinguish investment-type outlays from current outlays. It does not provide a ready source of information on total outlays assisting a particular sector of the economy. For example, the category “aids to agriculture, commerce, and transportation” reflects current benefits, such as current subsidies for operating expenses for 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, and other ways not reflected in this analysis.



Table D-1. SUMMARY OF INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
<b>National defense:</b>			
Investment-type programs:			
Construction and rehabilitation.....	2,591	2,919	3,509
Acquisition of major equipment and other physical assets.....	30,341	36,811	41,987
Conduct of research and development.....	14,648	17,237	20,455
Other investment-type programs.....	258	139	81
Subtotal, investment-type programs.....	47,838	57,106	66,032
Current programs:			
Provision of benefits.....	11,970	13,851	15,657
Repair, maintenance, and operation of physical assets.....	46,317	53,886	61,496
Other current programs.....	29,731	36,246	41,214
Subtotal, current programs.....	88,018	103,982	118,367
Total, national defense.....	135,856	161,088	184,399
<b>Civil:</b>			
Investment-type programs:			
Loans and financial investments.....	9,839	4,841	7,257
Construction and rehabilitation.....	28,992	30,277	31,553
Acquisition of physical assets.....	4,543	3,712	6,364
Conduct of research and development.....	15,592	16,570	18,579
Conduct of education and training.....	26,169	26,464	27,822
Other investment-type programs.....	3,757	3,926	3,864
Subtotal, investment-type programs.....	88,892	85,790	95,439
Current programs:			
Provision of benefits.....	263,572	311,973	346,330
Social services and related programs.....	8,751	9,005	9,685
Aids to agriculture, commerce, and transportation.....	12,504	17,124	18,360
Repair, maintenance, and operation of physical assets.....	-334	-182	-1,091
General purpose fiscal assistance.....	8,824	7,116	7,241
Regulation, control, and law enforcement.....	7,792	7,665	7,832
Net interest.....	52,458	66,971	74,781
Other current programs.....	1,297	-3,809	-4,679
Subtotal, current programs.....	354,865	415,863	458,458
Unclassified.....			1,000
Total, civil.....	443,757	501,653	554,897
<b>Grand total.....</b>	<b>579,613</b>	<b>662,740</b>	<b>739,296</b>
<b>Addendum:</b>			
Off-budget Federal entities (civil):			
Loans.....	14,722	23,219	18,531
Other investment-type programs.....	-8	-10	-30
Aids to agriculture, commerce, and transportation.....	-617	-4	-168
Other current programs.....	148	-6	-23
Total, off-budget Federal entities.....	14,245	23,198	18,309

Table D-2. SUMMARY OF BUDGET OUTLAYS FOR GRANTS-IN-AID, LOANS, AND DIRECT FEDERAL PROGRAMS

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
<b>Grants-in-aid:</b>			
Investment-type programs:			
Construction, rehabilitation, and acquisition of physical assets .....	22,569	21,342	22,433
Conduct of education and training .....	15,549	15,210	16,347
Other investment-type programs .....	405	457	430
Subtotal, investment-type programs .....	38,523	38,009	39,209
Current programs:			
Provision of benefits .....	33,431	39,414	42,128
Social services and related programs .....	7,567	7,817	8,286
Aids to agriculture, commerce, and transportation .....	1,395	1,182	1,128
General purpose fiscal assistance .....	8,859	7,152	7,284
Regulation, control, and law enforcement .....	831	738	595
Other current programs .....	866	1,030	1,199
Subtotal, current programs .....	52,950	57,333	60,620
Total, grants-in-aid .....	91,472	95,343	99,829
<b>Loans .....</b>	9,032	3,790	5,936
<b>Direct Federal programs:</b>			
Investment-type programs:			
Construction and rehabilitation .....	9,330	11,250	13,027
Acquisition of major equipment .....	30,861	37,574	42,824
Acquisition of commodity inventories and other physical assets .....	3,707	2,553	5,130
Conduct of research and development .....	29,952	33,482	38,713
Conduct of education and training .....	10,620	11,255	11,476
Other investment-type programs .....	4,705	4,983	5,156
Subtotal, investment-type programs .....	89,175	101,096	116,326
Current programs:			
Provision of benefits .....	242,111	286,410	319,859
Social services and related programs .....	1,185	1,187	1,398
Aids to agriculture, commerce, and transportation .....	11,109	15,942	17,232
Repair, maintenance, and operation of physical assets .....	45,411	53,159	59,734
Regulation, control, and law enforcement .....	6,961	6,927	7,237
Net interest .....	52,458	66,971	74,781
Other current programs .....	30,700	31,915	35,965
Subtotal, current programs .....	389,934	462,511	516,206
Total, direct Federal programs .....	479,109	563,607	632,532
Unclassified .....			1,000
<b>Grand total .....</b>	<b>579,613</b>	<b>662,740</b>	<b>739,296</b>
<b>Addendum (Direct Federal):</b>			
Off-budget Federal entities:			
Loans .....	14,722	23,219	18,531
Other investment-type outlays .....	-8	-10	-30
Aids to agriculture, commerce, and transportation .....	-617	-4	-168
Other current .....	148	-6	-23
Total, Off-budget Federal entities .....	14,245	23,198	18,309

The remainder of the text discusses in greater detail the components and rationale for classifying the various types of budget outlays. The benefits from outlays in each investment-type subcategory, either in the form of financial, physical or less tangible assets, are briefly discussed. The remaining outlays by definition (except for the allowances for contingencies) are classified as current.

Four tables are presented in this analysis. Table D-1 summarizes budget outlays, divided between national defense and civil programs. Table D-2 separates outlays by grants-in-aid,<sup>1</sup> loans, and direct Federal programs. This table makes no distinction between national defense and civil programs. Tables D-3 and D-4 provide detailed backup to the summary tables. This year, for the first time, these tables show the outlays of off-budget Federal entities as addendum items.<sup>2</sup> Most of the off-budget outlays are for loans, which are investment-type outlays.

***Investment-type programs.***—Total investment-type outlays are estimated to increase from \$142.9 billion in 1981 to \$161.5 billion in 1982. About \$7.3 billion are for loans and financial investments, \$83.4 billion are for the acquisition, construction or rehabilitation of physical assets, and \$70.8 billion are for the conduct of education, training, research and development, and other investment-type programs. Defense investment-type outlays are primarily for the acquisition of major equipment and other physical assets, and for research and development. Civil programs, which account for 59% of total investment-type outlays, are primarily for construction and rehabilitation of physical assets and the conduct of education, research, and development.

***Loans and financial investments.***—A loan creates a financial asset; if made at competitive market rates, the asset is of value equal to the outlay. For domestic loans, the Government's asset is matched by the liability of the private sector. Most Federal domestic loans finance the acquisition or improvement of either physical assets or human capital. This is especially true for loans in the commerce and housing credit, education, and transportation functions. Loans to foreign borrowers represent an increase in financial assets held by the United States. Most foreign loans are for economic development programs or the promotion of U.S. exports, including military equipment and farm commodities.

---

<sup>1</sup> Grants-in-aid are resources provided by the Federal Government in support of State and local programs of governmental service to the public. Special Analysis H, "Federal Aid to State and Local Governments," discusses grants-in-aid in greater detail.

<sup>2</sup> See part 6 of the Budget of the United States Government for a discussion of off-budget Federal entities.

Net loan outlays are estimated to total \$5.9 billion in 1982. This figure masks the volume of new loans made in a given year because outlays for new loans are offset by loan repayments, or by sales of loans (so-called "asset sales") to the private sector or to the Federal Financing Bank. Outlays for financial investments are estimated to be \$1.3 billion in 1982 and almost entirely go to international organizations. Off-budget loans are estimated to be \$18.5 billion in 1982. Federal loan programs are discussed in greater detail in Special Analysis F, "Federal Credit Programs."

*Physical assets.*—The benefits provided by the construction and rehabilitation of physical assets, the acquisition of major equipment, and the establishment of commodity inventories are of a long term nature. Budget outlays designed specifically to purchase such assets are treated as investment-type outlays regardless of whether the asset is owned by the Federal Government, or by State, local, or private entities. Total outlays for physical assets are estimated at \$83.4 billion in 1982; of this amount \$45.5 billion is for national defense. Most national defense outlays for physical assets are for the procurement of military equipment. A large portion of Federal outlays for nondefense physical assets is in the form of grants-in-aid to State and local governments, especially for construction programs such as highways, mass transit, and pollution control facilities.

*Conduct of research and development.*—Outlays for research and development increase our base of knowledge and apply that knowledge for its future benefit to the Nation. Total outlays for the conduct of research and development are estimated at \$39.0 billion in 1982. Outlays for defense research and development are estimated to increase by 19% over 1981 and represent nearly one-half of research and development outlays. Outlays for nondefense research are estimated to increase by approximately 12%. Outlays for health, energy, and space technology research account for approximately one-half of nondefense research and development outlays in 1982. Additional information about Federal research and development programs is contained in Special Analysis K, "Research and Development."

*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, scholarships and grants to institutions, and State and local governments. As with physical assets, the benefits accrue over a considerable period of time. Outlays are estimated at \$27.8 billion in 1982, of which \$16.3 billion are in the form of grants to State and local governments.

*Collection of information.*—This category includes outlays for collection of information, censuses, topographic or other natural resource surveys, and programs that benefit both the present and future by establishing a base of knowledge. The completion of the decennial census is primarily responsible for the decline in total outlays from \$2.0 billion in 1980 to an estimated \$1.5 billion in 1982.

*International development.*—Foreign assistance for general international economic development is included in this category. These outlays, which are expected to prove beneficial to U.S. interests by enhancing the economic development of friendly foreign nations, are estimated to be \$2.4 billion in 1982.

*Current programs.*—Programs that provide benefits in the current year are divided into several subcategories briefly discussed below. Outlays classified as current may in part be used by their recipients for investment-type purposes. However, the principal effect of these outlays is to provide short-term benefits—such as unemployment compensation, and retirement and disability payments—rather than providing the means for future benefits. Total outlays for current programs are estimated to increase from \$519.8 billion in 1981 to \$576.8 billion in 1982. More than three-quarters of 1982 estimated budget outlays are for current programs. About \$118.4 billion of current outlays in 1982 are for defense and \$458.5 billion for civil programs.

Outlays for “provision of benefits” is the largest category in the budget. Social security and other disability and retirement benefits are estimated to be \$215.0 billion of the total in 1982. Other major outlays in this category are for medicaid, medicare, unemployment, and food and nutrition programs. Total outlays for the provision of benefits are estimated to increase from \$325.8 billion in 1981 to \$362.0 billion in 1982.

Current outlays for “social services and related programs” include human development and child welfare services, and employment programs. Outlays in 1982 are estimated to be \$9.7 billion, of which \$8.3 billion are in the form of grants to State and local governments.

“Aids to agriculture, commerce, and transportation” are primarily for direct Federal activities, including price support, small business and transportation programs. Outlays for these programs are estimated to increase from \$12.5 billion in 1980 to \$17.1 billion in 1981 and \$18.4 billion in 1982. The 1981 estimates include a one-time payment of \$2.1 billion to the Penn Central Corporation for properties transferred to Conrail in 1976. The estimates also include

outlays of \$0.3 billion in 1981 and \$3.5 billion in 1982 for proposed tax refunds to businesses with no tax liability.

Other current outlays are largely for the operation of the Federal Government, including: the repair, maintenance, and operation of physical assets (primarily defense related); regulatory and law enforcement activities; net interest, and other administrative or operating expenses. Because proprietary receipts from the public—such as receipts from the sale of power and other utilities, the sale of publications and reproductions, and the sale of minerals and mineral products—are offsets against the outlays to which they most nearly apply, net outlays for the operation of the Federal Government are negative in some cases.

*Unclassified.*—The allowance for contingencies is not placed in either the investment or current category because it is for unforeseen circumstances.

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
<b>National defense investment-type programs</b>			
Construction and rehabilitation of physical assets:			
Military construction.....	2,119	2,336	2,780
Family housing.....	137	95	91
Atomic energy defense activities.....	335	487	638
Subtotal, construction and rehabilitation of physical assets.....	2,591	2,919	3,509
Acquisition of major equipment:			
Procurement.....	29,021	35,422	40,120
Atomic energy defense activities and other.....	1,072	1,333	1,710
Subtotal, acquisition of major equipment.....	30,093	36,755	41,830
Commodity inventories.....	248	57	157
Conduct of research and development.....	14,648	17,237	20,455
Other investment-type programs.....	258	139	81
Subtotal, investment-type programs.....	47,838	57,106	66,032
<b>National defense current programs</b>			
Provision of benefits:			
Retired military personnel.....	11,920	13,880	16,049
Proposed legislation.....		-85	-477
Other.....	50	55	85
Subtotal, provision of benefits.....	11,970	13,851	15,657
Repair, maintenance, and operation of physical assets:			
Department of Defense, Military.....	46,176	53,711	61,269
Other.....	142	175	227
Subtotal, repair, maintenance, and operation of physical assets.....	46,317	53,886	61,496
Other current programs:			
Military personnel.....	30,374	36,119	37,679
Allowance for civilian and military pay raises.....			3,707
Other national defense.....	-644	127	-172
Subtotal, other current programs.....	29,731	36,246	41,214
Subtotal, current programs.....	88,018	103,982	118,367
Total, national defense.....	135,856	161,088	184,399
<b>Civil investment-type programs</b>			
Loans:			
International affairs.....	3,335	3,819	3,925
Agriculture.....	-858	-3,996	-179
Mortgage credit and thrift insurance.....	3,615	-408	650
Aids to commerce.....	359	530	554
Transportation.....	832	699	206
Disaster relief.....	773	2,320	-158

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS—Continued

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
Other community and regional development .....	272	130	126
Education.....	465	529	500
Other .....	249	178	322
Subtotal, loans.....	9,042	3,800	5,946
Other financial investments:			
International development.....	796	1,013	1,259
Other .....		28	52
Subtotal, other financial investments.....	797	1,041	1,311
Construction and rehabilitation of physical assets:			
Highways and mass transit.....	10,985	11,085	11,050
Air transportation .....	886	859	886
Other transportation .....	147	162	158
Community development block grants .....	3,902	3,938	3,998
Other community and regional development .....	2,133	1,976	1,922
Pollution control and abatement .....	4,345	4,202	4,234
Water resources .....	2,458	2,487	2,598
Other natural resources and environment .....	1,242	1,383	1,499
Energy .....	1,900	2,992	3,746
Veterans hospitals and other health facilities .....	509	567	752
Other .....	487	625	711
Subtotal, construction and rehabilitation of physical assets.....	28,992	30,277	31,553
Acquisition of major equipment:			
Transportation.....	453	462	472
Other .....	322	384	541
Subtotal, acquisition of major equipment.....	775	845	1,013
Commodity inventories:			
Energy.....	444	1,371	3,695
Agriculture.....	1,567	-128	33
Other .....		5	30
Subtotal, commodity inventories .....	2,011	1,248	3,759
Other physical assets .....	1,757	1,619	1,593
Conduct of research and development.....	15,592	16,570	18,579
Conduct of education and training:			
Department of Education:			
Higher education.....	5,161	5,896	6,330
Elementary, secondary, and vocational education .....	6,378	6,652	7,041
Other.....	503	565	575
Subtotal, Department of Education .....	12,042	13,113	13,946
Veterans readjustment benefits.....	2,385	2,042	1,669
Training and employment programs.....	8,922	8,434	9,378
Health training.....	1,028	1,068	996
Other education and training.....	1,792	1,808	1,834
Subtotal, conduct of education and training.....	26,169	26,464	27,822



Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS—Continued

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
Collection of information:			
Census Bureau.....	758	255	165
Other.....	1,237	1,388	1,270
Subtotal, collection of information.....	1,995	1,642	1,435
International development.....	1,762	2,283	2,429
Subtotal, investment-type programs.....	88,892	85,790	95,439
<b>Civil current programs</b>			
Provision of benefits:			
Retirement, survivor, and disability benefits:			
Social Security:			
Retirement and survivor benefits.....	100,615	119,478	138,890
Disability benefits.....	14,899	16,861	18,682
Subtotal, Social Security.....	115,514	136,339	157,572
Civil Service:			
Retirement and survivor benefits.....	11,899	14,259	15,994
Disability benefits.....	2,791	3,345	3,900
Subtotal, Civil Service.....	14,690	17,603	19,894
Railroad retirement and disability benefits.....	4,737	5,295	5,827
Veterans disability benefits.....	11,238	12,569	13,922
Other retirement and disability benefits.....	1,784	2,098	2,083
Subtotal, retirement, survivor, and disability benefits.....	147,963	173,903	199,298
Other provisions of benefits:			
Medicare.....	33,937	38,786	45,374
Medicaid.....	13,957	16,452	18,120
Other health benefits.....	941	1,078	1,118
Unemployment compensation.....	16,847	24,632	20,259
Housing programs.....	6,001	7,582	9,700
Food and nutrition programs.....	13,446	15,426	16,695
Supplemental security income.....	5,694	6,434	7,095
Assistance payments program.....	6,126	6,540	6,259
Other.....	4,031	5,021	5,082
Subtotal, other provisions of benefits.....	100,981	121,952	129,702
Direct provision of services:			
Hospital and medical care for veterans.....	5,644	5,943	6,543
Other health services.....	1,093	1,036	1,129
Other.....	-113	199	-99
Subtotal, direct provision of services.....	6,625	7,177	7,573
Administrative expenses:			
Social Security retirement and disability.....	1,480	1,751	1,923
Medicare.....	1,080	1,137	1,207
Unemployment compensation.....	1,215	1,549	1,665
Nutrition programs.....	735	805	944
Supplemental security income.....	668	767	826

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS—Continued

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
Assistance payments program.....	1,178	1,250	1,422
Veterans benefits .....	667	695	717
Other.....	980	988	1,053
Subtotal, administrative expenses.....	8,003	8,941	9,757
Subtotal, provision of benefits.....	263,572	311,973	346,330
Social services and related programs:			
Human development services.....	2,069	1,426	1,914
Employment programs.....	1,409	1,488	1,593
Social services and child welfare services.....	2,668	3,061	3,000
Proposed Social Security tax credit payments to nonprofit institutions.....			237
Other.....	2,605	3,030	2,941
Subtotal, social services and related pro- grams.....	8,751	9,005	9,685
Aids to agriculture, commerce, and transportation:			
Proposed payments in excess of business tax liabilities.....		227	3,493
Agriculture.....	2,850	3,696	3,335
Postal Service.....	1,677	1,343	1,119
Small business assistance.....	809	436	518
Mortgage credit and thrift insurance.....	309	1,004	1,364
Ground transportation.....	2,497	4,676	2,598
Air transportation.....	2,139	2,284	2,439
Water transportation and waterways.....	1,365	1,995	1,802
Other.....	858	1,464	1,692
Subtotal, aids to agriculture, commerce, and transportation.....	12,504	17,124	18,360
Repair, maintenance, and operation of physical assets:			
Natural resources:			
Water resources.....	792	907	807
Conservation and land management.....	1,223	1,335	1,307
Recreation resources and other.....	511	636	822
Offsetting receipts.....	-1,519	-1,942	-2,592
Subtotal, natural resources.....	1,008	937	345
Energy (net of naval petroleum reserve and other receipts).....	-1,316	-1,517	-1,883
Indian tribal receipts.....	-682	-279	-284
Other.....	656	677	732
Subtotal, repair, maintenance, and operation of physical assets.....	-334	-182	-1,091
General purpose fiscal assistance:			
General revenue sharing.....	6,829	5,156	4,559
Proposed Social Security tax credit payments.....			459
Other general purpose grants-in-aid.....	681	735	805
Shared revenues.....	1,315	1,225	1,381
Subtotal, general purpose fiscal assistance.....	8,824	7,116	7,241

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS—Continued

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
Regulation, control, and law enforcement:			
Regulatory and inspection activities:			
Natural resources and environment.....	945	1,088	1,188
Transportation.....	825	897	916
Health.....	663	706	776
Energy.....	582	748	820
Agriculture.....	291	321	344
Savings institutions.....	-965	-1,952	-2,199
Tax collections.....	521	576	607
Other.....	573	679	670
Subtotal, regulatory and inspection activities.....	3,434	3,062	3,122
Law enforcement activities:			
Federal law enforcement.....	2,215	2,391	2,519
Federal litigative and judicial activities.....	1,335	1,500	1,606
Federal correctional activities.....	318	347	362
Other law enforcement assistance.....	489	364	223
Subtotal, law enforcement activities.....	4,358	4,602	4,710
Subtotal, regulation, control, and law enforcement.....	7,792	7,665	7,832
Net interest:			
Interest on the public debt.....	74,781	94,100	106,500
Other interest.....	-10,278	-13,695	-16,554
Interest received by trust funds.....	-12,045	-13,435	-15,165
Subtotal, net interest.....	52,458	66,971	74,781
General Administration:			
International affairs.....	1,488	1,673	2,030
Legislative branch.....	1,090	1,194	1,253
Other general government.....	2,966	3,087	3,302
Other.....	2,066	2,024	2,466
Subtotal, general administration.....	7,609	7,978	9,051
Other current programs:			
International security assistance.....	3,122	2,160	2,108
Employer share, employee retirement.....	-5,787	-6,561	-6,798
OCS receipts.....	-4,101	-7,800	-9,900
Allowances for civilian agency pay raises.....			920
Other.....	453	413	-61
Subtotal, other current programs.....	-6,312	-11,788	-13,731
Subtotal, current programs.....	354,865	415,863	458,458
Unclassified.....			1,000
Total, civil.....	443,757	501,653	554,897
<b>Grand total.....</b>	<b>579,613</b>	<b>662,740</b>	<b>739,296</b>
<b>Addendum:</b>			
Off-budget Federal entities (civil):			
Investment-type:			
Loans (see Table D-4).....	14,722	23,219	18,531

Table D-3. INVESTMENT, OPERATING, AND OTHER BUDGET OUTLAYS—Continued

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
Other investment .....	- 8	- 10	- 30
Subtotal, investment.....	14,714	23,209	18,500
Current:			
Aids to agriculture, commerce, and transportation:			
Postal Service.....	- 424	229	- 40
Railways.....	39	- 23	29
Other.....	- 232	- 210	- 158
Subtotal, aids to agriculture, commerce and transportation .....	- 617	- 4	- 168
Other .....	148	- 6	- 23
Subtotal, current .....	- 469	- 11	- 191
Total, off-budget Federal entities.....	14,245	23,198	18,309

Table D-4. BUDGET OUTLAYS FOR GRANTS-IN-AID, LOANS, AND DIRECT FEDERAL PROGRAMS

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
<b>Grants-in-aid</b>			
Investment-type programs:			
Construction and rehabilitation of physical assets:			
Highways and mass transit .....	10,981	11,075	11,042
Other transportation .....	624	536	549
Pollution control and abatement .....	4,343	4,200	4,230
Other natural resources and environment .....	261	312	298
Community development block grants .....	3,902	3,938	3,998
Other community and regional development .....	1,938	1,710	1,719
Other construction .....	205	174	201
Subtotal, construction and rehabilitation of physical assets .....	22,254	21,945	22,036
Acquisition of equipment and other physical assets .....	316	397	397
Conduct of research and development .....	288	325	320
Conduct of education and training:			
Employment and training assistance .....	7,987	7,339	8,143
Elementary and secondary education .....	5,349	5,437	5,507
Other .....	2,213	2,434	2,697
Subtotal, conduct of education and training .....	15,549	15,210	16,347
Collection of information .....	117	133	110
Subtotal, investment-type programs .....	38,523	38,009	39,209
Current programs:			
Provision of benefits:			
Medicaid .....	13,957	16,452	18,120
Nutrition and food programs .....	4,662	4,886	4,918
Assistance payments .....	6,126	6,540	6,259
Housing payments and subsidies .....	3,412	4,582	5,452
Other .....	2,292	3,693	3,728
Administrative expenses:			
Unemployment compensation .....	1,138	1,462	1,564
Nutrition and food programs .....	582	594	711
Assistance payments program .....	1,143	1,204	1,375
Other .....	120	*	*
Subtotal, administrative expenses .....	2,983	3,260	3,651
Subtotal, provision of benefits .....	33,431	39,414	42,128
Social services and related programs:			
Employment programs .....	1,162	1,220	1,317
Human development services .....	1,992	1,358	1,842
Social services and child welfare services .....	2,668	3,061	3,000
Other .....	1,745	2,178	2,128
Subtotal, social services and related programs .....	7,567	7,817	8,286
Aids to agriculture, commerce, and transportation:			
Transportation .....	1,361	1,155	1,097

Table D-4. BUDGET OUTLAYS FOR GRANTS-IN-AID, LOANS, AND DIRECT FEDERAL PROGRAMS—  
Continued

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
Other.....	34	27	30
Subtotal, aids to agriculture, commerce, and transportation .....	1,395	1,182	1,128
Repair, maintenance, and operation of physical assets .....	573	544	672
General purpose fiscal assistance:			
General revenue sharing.....	6,829	5,156	4,559
Shared revenues.....	1,315	1,225	1,381
Proposed Social Security tax credit payments .....			495
Other.....	716	771	848
Subtotal, general purpose fiscal assistance .....	8,859	7,152	7,284
Regulation, control, and law enforcement:			
Law enforcement assistance .....	428	332	197
Other.....	403	406	398
Subtotal, regulation, control, and law en- forcement.....	831	738	595
Other current programs .....	294	486	527
Subtotal, current programs.....	52,950	57,333	60,620
Total, grants-in-aid .....	91,472	95,343	99,829
<b>Loans</b>			
International affairs .....	3,335	3,819	3,925
Agriculture.....	— 858	— 3,996	— 179
Mortgage credit and thrift insurance.....	3,615	— 408	650
Transportation.....	832	699	206
Small Business Administration, disaster loans .....	773	2,320	— 158
Education.....	465	529	500
Other .....	870	828	991
Total, loans .....	9,032	3,790	5,936
<b>Direct Federal Programs</b>			
Investment-type programs:			
Financial investments .....	797	1,041	1,311
Construction and rehabilitation of physical assets:			
National defense .....	2,537	2,906	3,492
Water resource projects .....	2,400	2,428	2,548
Other natural resources and environment.....	1,040	1,132	1,255
Energy.....	1,900	2,992	3,746
Transportation.....	413	494	503
Veterans hospitals and other health facilities.....	490	547	732
Other construction.....	550	751	751
Subtotal, construction and rehabilitation of physical assets.....	9,330	11,250	13,027
Acquisition of major equipment:			
National defense .....	30,091	36,755	41,830
Other.....	770	819	994

Table D-4. BUDGET OUTLAYS FOR GRANTS-IN-AID, LOANS, AND DIRECT FEDERAL PROGRAMS—  
Continued

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
Subtotal, acquisition of major equipment.....	30,861	37,574	42,824
Commodity inventories.....	2,259	1,305	3,916
Other physical assets.....	1,448	1,248	1,215
Conduct of research and development.....	29,952	33,482	38,713
Conduct of education and training:			
Assistance to veterans.....	2,621	2,278	1,932
Higher education.....	5,061	5,806	6,252
Elementary and secondary education.....	403	347	381
Employment and training assistance.....	863	1,022	1,158
Health training.....	638	597	543
Other.....	1,034	1,204	1,210
Subtotal, conduct of education and training.....	10,620	11,255	11,476
Collection of information.....	1,896	1,533	1,349
International development.....	2,013	2,409	2,496
Subtotal, investment-type programs.....	89,175	101,096	116,326
Current programs:			
Provision of benefits:			
Social Security retirement and disability.....	116,187	137,009	158,415
Other retirement and disability benefits.....	43,747	50,745	56,540
Medicare.....	33,937	38,786	45,374
Medical care for veterans.....	5,644	5,943	6,543
Other health.....	1,126	1,110	1,171
Unemployment compensation.....	16,847	24,632	20,259
Nutrition programs and food.....	8,784	10,540	11,777
Housing payments and subsidies.....	2,616	3,138	4,313
Supplemental security income.....	5,655	6,389	7,095
Earned income tax credit.....	1,275	1,203	1,115
Other.....	1,272	1,234	1,151
Administrative expenses:			
Social Security retirement and disability.....	1,480	1,751	1,923
Medicare.....	1,080	1,137	1,207
Nutrition and food programs.....	153	211	233
Supplemental security income.....	668	767	826
Other.....	1,639	1,815	1,917
Subtotal, administrative expenses.....	5,020	5,680	6,106
Subtotal, provision of benefits.....	242,111	286,410	319,859
Social services and related programs:			
Proposed Social Security tax credit payments to nonprofit institutions.....			237
Other.....	1,185	1,187	1,161
Subtotal, social services and related pro- grams.....	1,185	1,187	1,398

Table D-4. BUDGET OUTLAYS FOR GRANTS-IN-AID, LOANS, AND DIRECT FEDERAL PROGRAMS—  
Continued

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
Aids to agriculture, commerce, and transportation:			
Proposed payments in excess of business tax liabilities.....		227	3,493
Agriculture.....	2,850	3,696	3,335
Postal Service.....	1,677	1,343	1,119
Small business assistance.....	809	436	518
Mortgage credit and thrift insurance.....	308	1,002	1,362
Ground transportation.....	1,139	3,524	1,504
Air transportation.....	2,139	2,284	2,439
Water transportation and waterways.....	853	1,422	1,189
Other.....	1,333	2,009	2,273
Subtotal, aids to agriculture, commerce, and transportation.....	11,109	15,942	17,232
Repair, maintenance, and operation of physical assets:			
National defense.....	46,315	53,884	61,490
Other (includes offsetting collections).....	-905	-724	-1,756
Subtotal, repair, maintenance, and operation of physical assets.....	45,411	53,159	59,734
Regulation, control, and law enforcement.....	6,961	6,927	7,237
Net interest.....	52,458	66,971	74,781
Other current programs:			
Military personnel.....	30,374	36,119	37,679
Allowance for Department of Defense pay raises.....			3,707
Other national defense.....	-679	91	-215
Allowance for civilian agency pay raises.....			920
Employer share, employee retirement.....	-5,787	-6,561	-6,798
Offshore oil receipts.....	-4,101	-7,800	-9,900
Other.....	10,891	10,066	10,571
Subtotal, other current programs.....	30,700	31,915	35,965
Subtotal, current programs.....	389,934	462,511	516,206
Total, direct Federal programs.....	479,109	563,607	632,532
Unclassified.....			1,000
Grand total.....	579,613	662,740	739,296
<b>Addendum (Direct Federal):</b>			
Off-budget Federal entities:			
Investment-type:			
Loans:			
International.....	1,928	2,005	2,215
Agriculture.....	3,982	6,096	1,570
Mortgage credit and thrift insurance.....	2,033	5,668	3,736
Transportation.....	158	-24	319
Community and regional development.....	1,214	1,463	1,464
Education.....	1,070	1,095	1,923
Other.....	4,338	6,976	7,304



Table D-4. BUDGET OUTLAYS FOR GRANTS-IN-AID, LOANS, AND DIRECT FEDERAL PROGRAMS—  
Continued

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
Subtotal, loans .....	14,722	23,219	18,531
Other investment-type .....	-8	-10	-30
Subtotal, investment .....	14,714	23,209	18,500
Current:			
Aids to agriculture, commerce, and transportation:			
Postal Service .....	-424	229	-40
Railways .....	39	-23	29
Other .....	-232	-210	-158
Subtotal, aids, agriculture, commerce, & transportation.....	-617	-4	-168
Other .....	148	-6	-23
Subtotal, current .....	-469	-11	-191
Total, off-budget Federal entities .....	14,245	23,198	18,309

\*\$500 thousand or less.



## SPECIAL ANALYSIS E

### BORROWING, DEBT, AND INVESTMENT

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

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

This analysis summarizes current developments in Federal borrowing. It also discusses the size and growth of the Federal debt and the interest on the Federal debt, the amount of U.S. Government debt held abroad, agency borrowing, agency investment in Federal securities, the statutory debt limit, 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 funds raised 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.<sup>1</sup>

Special Analysis F 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 of the programs contained in the 1982 Federal budget.

### BORROWING AND REPAYING DEBT

The Federal Government sells debt for two principal reasons. First, it sells debt to the public, largely in order to finance the Federal deficit. Second, it sells debt to the Government agencies that accumulate surpluses in separate funds, primarily trust funds, that are required by law to be invested in Federal securities. Most Federal debt has been issued by the Treasury and is called "public

---

<sup>1</sup>Information on many of these liabilities is contained in "Statement of Liabilities and Other Financial Commitments of the United States Government," an annual report prepared by the Bureau of Government Financial Operations of the Department of the Treasury.

debt," but a small portion has been issued by other Government agencies and is called "agency debt."<sup>2</sup>

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 System as well as borrowing from commercial banks, foreign central banks, other financial institutions and businesses, and individuals. "Borrowing from the Federal Reserve System" does not ordinarily mean that the Treasury sells debt securities directly to the Federal Reserve. This occurs only in exceptional circumstances and then in amounts limited by statute. The Federal Reserve System normally buys debt securities in the open market.

For most purposes borrowing from the Federal Reserve System should be distinguished from borrowing from the rest of the public. Federal Reserve purchases of debt are undertaken to carry out monetary policy, not to earn income, and affect the economy by expanding bank reserves and the money stock. They thus have a markedly different motivation and effect on financial markets than do purchases by other sectors of the public. The debt held outside the Federal Reserve System enters into investment portfolios of businesses and individuals and by this means affects interest rates, other financial conditions, and the size and composition of private assets. Almost all interest received by the Federal Reserve System is returned to the Treasury as receipts, called deposits of earnings, so the 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 System 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.

Table E-1 summarizes Federal borrowing from 1980 through 1984. In 1980 the total Federal borrowing (net of the refunding of securities)—i.e., the rise in gross Federal debt—was \$80.6 billion. The sale of debt to Government agencies was \$10.1 billion, and the sale of debt to the public was \$70.5 billion. Of the increase in debt held by the public, \$5.3 billion was purchased by the Federal Reserve System and \$65.3 billion by the rest of the public.

---

<sup>2</sup>The term "agency debt" is defined more narrowly in the budget than in the securities market, where it may include not only the debt of the Government agencies listed in table E-6 but also certain Government-guaranteed securities and the debt of the Government-sponsored enterprises listed in table E-10.

Table E-1. FEDERAL BORROWING

(In millions of dollars)

Description	Borrowing or repayment (—) of debt					Debt outstanding, end of year	
	1980 actual	1981 estimate	1982 estimate	1983 estimate	1984 estimate	1982 estimate	1984 estimate
Gross Federal debt:							
Treasury debt .....	81,182	78,592	66,411	NA	NA	1,052,705	NA
Agency debt .....	— 616	— 512	— 1,145	NA	NA	4,959	NA
Gross Federal debt .....	80,566	78,081	65,266	36,752	— 10,345	1,057,664	1,084,071
Less debt held by Gov. agencies:							
Treasury debt .....	10,060	6,071	20,517	NA	NA	224,331	NA
Agency debt .....	— 9	10	— 251	NA	NA	1,228	NA
Debt held by Gov. agencies <sup>1</sup> .....	10,051	6,081	20,266	14,443	8,007	225,559	248,009
Total, debt held by public .....	70,515	72,000	45,000	22,309	— 18,352	832,105	836,062
Composed of:							
Debt held by the Federal Reserve System .....	5,253	NA	NA	NA	NA	NA	NA
Debt held by others .....	65,263	NA	NA	NA	NA	NA	NA

NA=Not available.

<sup>1</sup> Estimates for agency investment in 1983 and 1984 are equal to the total trust fund surplus.

Borrowing from the public has fluctuated sharply in recent years, with a large part of the change automatically generated by fluctuations in the economy. It rose from \$3.0 billion in 1974 to \$82.9 billion in 1976 primarily because the 1974-75 recession and its aftermath automatically reduced tax receipts and raised unemployment benefits and certain other spending, and because tax reductions and some expenditure programs were enacted to stimulate the economy. Borrowing then declined to \$33.6 billion in 1979, mainly due to the economic recovery. The rise in borrowing to \$70.5 billion in 1980 was caused in considerable part by the economic slowdown and recession of that year.

Borrowing from the public is estimated to remain about level in 1981 and decrease to \$45.0 billion in 1982, as the economy gradually recovers. By the end of 1982 gross Federal debt is estimated to be \$1,057.7 billion, with \$832.1 billion or 79% held by the public (including the Federal Reserve System) and the remainder by the agencies. Almost all of the gross Federal debt will have been issued by the Treasury.

Borrowing from the public for years beyond the budget year is estimated as part of the Government's multi-year budget planning. As explained in Part 2 of the *Budget*, the economic assumptions underlying the receipts and outlay estimates for 1983 and 1984 are not forecasts of the probable economic conditions in these years, unlike the economic forecast underlying the 1981 and 1982 estimates. Instead, the 1983-84 assumptions are projections that

*assume* progress in reducing unemployment and inflation. The receipts and outlay estimates also assume that current tax laws are continued, as modified by the proposals in the budget, and that existing and proposed programs are carried out in 1983 and 1984 at the levels planned under current policy.

Under these assumptions, the total Government deficit declines substantially in 1983 and turns into a surplus in 1984. Borrowing from the public decreases to \$22.3 billion in 1983, and \$18.4 billion of debt held by the public is repaid in 1984. The projected 1984 surplus may not, of course, actually occur. In particular, it is unrealistic to assume that Federal receipts will be allowed to rise continually as a percentage of gross national product, as implied by current law. Tax reductions were enacted during the last two decades to partially offset the rising tax burdens, and tax reductions will be required periodically in the future to continue this policy and to provide incentives for business investment and innovation.

#### BORROWING AND GOVERNMENT DEFICITS

Table E-2 shows the way in which borrowing from the public is related to the Federal deficit. Until several years ago the budget deficit comprised practically the entire deficit of the Federal Government, but the deficit of the off-budget Federal entities is now significant. These entities, such as the Federal Financing Bank and the Postal Service, are parts of the Federal Government but have been excluded from the budget under provisions of law.

The Government deficit is financed either by borrowing from the public or by several other means. These other means of financing the deficit may be either positive, in which case they finance part of the deficit; or negative, in which case they, like the deficit, must themselves be financed by borrowing from the public. In 1980 the total Government deficit was \$73.8 billion. The greater part of this amount, \$70.5 billion, was borrowed from the public, and the remaining \$3.3 billion was financed by other means.

Table E-2. MEANS OF FINANCING THE FEDERAL DEFICIT <sup>1</sup>

(In millions of dollars)

Description	1980 actual	1981 estimate	1982 estimate	1983 estimate	1984 estimate
Budget surplus or deficit (—) .....	—59,563	—55,215	—27,516	—8,045	32,008
Deficit (—) of off-budget Federal entities <sup>2</sup> .....	—14,245	—23,198	—18,309	—15,326	—14,726
Total, surplus or deficit (—) .....	—73,808	—78,414	—45,825	—23,371	17,283
Means of financing other than borrowing from the public:					
Decrease or increase (—) in cash and other monetary assets .....	643	5,110			
Increase or decrease (—) in liabilities for:					
Checks outstanding, etc. <sup>3</sup> .....	—490	227	15		
Deposit fund balances .....	2,478	633	161		
Seigniorage on coins .....	663	444	649	1,062	1,069
Total, means of financing other than borrowing from the public .....	3,293	6,414	825	1,062	1,069
Total, requirements for borrowing from the public .....	—70,515	—72,000	—45,000	—22,309	18,352
Change in debt held by the public .....	70,515	72,000	45,000	22,309	—18,352

<sup>1</sup> Several amounts have been assumed to be zero in 1982 and 1983 because they are usually small and would be very difficult to estimate accurately.

<sup>2</sup> The off-budget Federal entities consist of the Rural Electrification and Telephone revolving fund, Rural Telephone Bank, Federal Financing Bank, Postal Service fund, Synthetic Fuels Corporation, and one program of the U.S. Railway Association.

<sup>3</sup> Besides checks outstanding, includes military payment certificates, accrued interest (less unamortized discount) payable on Treasury debt, and, as an offsetting change in assets, certain collections in transit.

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

- A decrease in the Treasury cash balance or other types of monetary assets.
- An increase in monetary liabilities for checks outstanding, accrued interest payable to the public, etc.
- An increase in deposit fund balances, which include amounts held by the Government as an agent for others (such as State income taxes withheld from Federal employees' salaries and not yet paid to the State) or amounts held in suspense temporarily before being refunded or paid into some other fund.
- Seigniorage, which is the face value of minted coins less the cost of their production.

These 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, 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 year and tend to be 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.

The structure of table E-2 demonstrates that, because of the off-budget Federal entities, balancing the budget is not enough to prevent an increase in the Federal debt held by the public. Even if the budget were balanced, the off-budget deficit would have to be financed by borrowing. By 1983, the projected off-budget deficit is larger than the projected budget deficit. The budget and the off-budget entities combined must be in balance in order for the Government not to have to borrow from the public (aside from the effects of the other means of financing).

The sale of debt to Federal agencies largely depends on the surpluses of the trust funds, which own 91% of the Federal debt held by Government agencies. Agency investment in Federal securities and the total trust fund surplus during 1979-82 are compared in the table below (in billions of dollars):

	1979 <i>actual</i>	1980 <i>actual</i>	1981 <i>estimate</i>	1982 <i>estimate</i>
Agency investment in Federal debt.....	19.7	10.1	6.1	20.3
Total trust fund surplus.....	18.3	8.8	4.5	19.2

As the table shows, the agency investment in Federal securities is 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 agencies other than trust funds buy or sell Federal debt, as shown in table E-7, and the trust funds may increase or decrease their open book balances.<sup>3</sup>

#### SIZE AND GROWTH OF FEDERAL DEBT

Gross Federal debt has risen substantially over the past half century, from \$17 billion in 1929 to \$914.3 billion at the end of 1980. Table E-3 presents the detail of Federal debt since 1954 and shows that a sizable part of the increase is held in Federal Government accounts (primarily trust funds) rather than being owed to

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



Table E-3. COMPARISON OF TRENDS IN FEDERAL DEBT AND GROSS NATIONAL PRODUCT

(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 System	Other		
1954.....	270.8	46.3	224.5	25.0	199.5	364.1	61.7
1955.....	274.4	47.8	226.6	23.6	203.0	381.7	59.4
1956.....	272.8	50.5	222.2	23.8	198.5	411.7	54.0
1957.....	272.4	52.9	219.4	23.0	196.4	434.5	50.5
1958.....	279.7	53.3	226.4	25.4	200.9	442.7	51.1
1959.....	287.8	52.8	235.0	26.0	209.0	472.1	49.8
1960.....	290.9	53.7	237.2	26.5	210.7	499.3	47.5
1961.....	292.9	54.3	238.6	27.3	211.4	510.1	46.8
1962.....	303.3	54.9	248.4	29.7	218.7	546.9	45.4
1963.....	310.8	56.3	254.5	32.0	222.4	579.0	43.9
1964.....	316.8	59.2	257.6	34.8	222.8	618.4	41.6
1965.....	323.2	61.5	261.6	39.1	222.5	660.5	39.6
1966.....	329.5	64.8	264.7	42.2	222.5	725.5	36.5
1967.....	341.3	73.8	267.5	46.7	220.8	776.2	34.5
1968.....	369.8	79.1	290.6	52.2	238.4	834.4	34.8
1969 <sup>1</sup> .....	367.1	87.7	279.5	54.1	225.4	911.0	30.7
1970 <sup>2</sup> .....	382.6	97.7	284.9	57.7	227.2	968.9	29.4
1971.....	409.5	105.1	304.3	65.5	238.8	1,032.7	29.5
1972.....	437.3	113.6	323.8	71.4	252.3	1,126.6	28.7
1973 <sup>3</sup> .....	468.4	125.4	343.0	75.2	267.9	1,255.2	27.3
1974.....	486.2	140.2	346.1	80.6	265.4	1,381.5	25.0
1975.....	544.1	147.2	396.9	85.0	311.9	1,480.5	26.8
1976 <sup>4</sup> .....	631.9	151.6	480.3	94.7	385.6	1,642.7	29.2
TQ.....	646.4	148.1	498.3	96.7	401.6	1,729.0	28.8
1977.....	709.1	157.3	551.8	105.0	446.8	1,864.0	29.6
1978.....	780.4	169.5	610.9	115.5	495.5	2,085.3	29.3
1979.....	833.8	189.2	644.6	115.6	529.0	2,357.8	27.3
1980.....	914.3	199.2	715.1	120.8	594.3	2,567.5	27.9
1981 estimate.....	992.4	205.3	787.1	NA	NA	2,843.7	27.7
1982 estimate.....	1,057.7	225.6	832.1	NA	NA	3,214.8	25.9
1983 estimate.....	1,094.4	240.0	854.4	NA	NA	3,612.5	23.7
1984 estimate.....	1,084.1	248.0	836.1	NA	NA	4,044.0	20.7

NA—Not available.

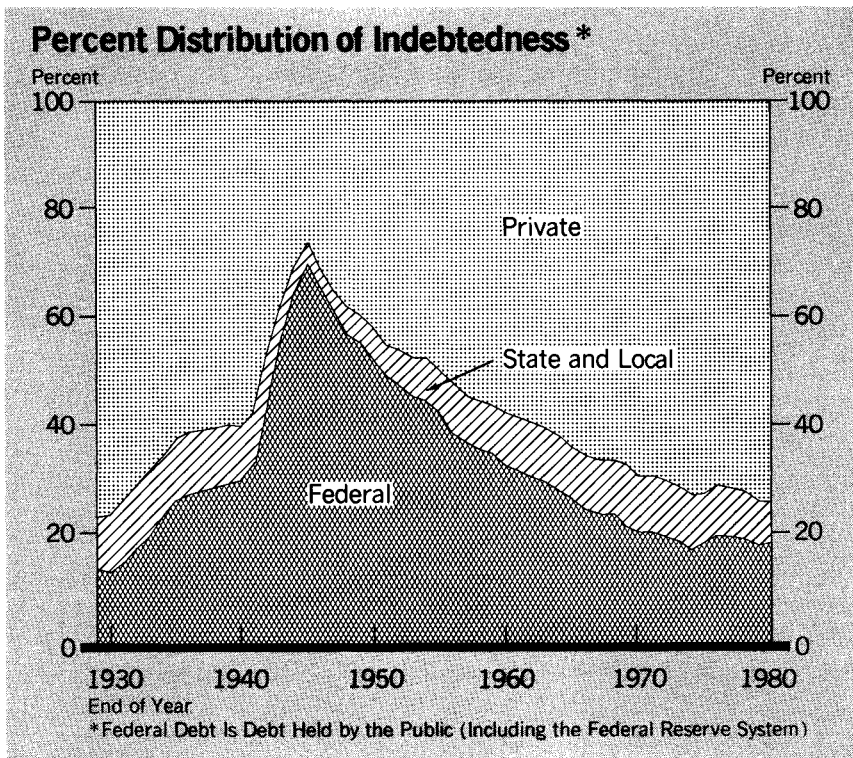
<sup>1</sup> During 1969, 3 Government-sponsored enterprises became completely privately owned, and their debt was removed from the totals for the Federal Government. At the dates of their conversion, gross Federal debt was reduced \$10.7 billion, debt held by Government accounts was reduced \$0.6 billion,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

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

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

<sup>4</sup> Gross Federal debt and debt held by the public increased \$0.5 billion due to a retroactive reclassification of the Export-Import Bank certificates of beneficial interest from loan assets to debt.

the public. From the end of 1954 to the end of 1980, gross Federal debt rose by 238%, and debt held by the public rose by 219%. Federal debt held by the public apart from the Federal Reserve System rose a little less, by 198%—an average annual rate of growth



of 4.3% over the 26 years—because during this period the Federal Reserve System bought a large quantity of Federal debt in the market, thereby expanding the reserves of the banking system and increasing the Nation's money stock.

During the depression of the 1930's and during World War II, Federal debt held by the public increased greatly, not only in absolute amount but also, as shown in the preceding chart, as a proportion of the total credit market debt owed by nonfinancial sectors of the economy: Federal, State and local, and private.<sup>4</sup> Whereas Federal debt held by the public was only 13% of total debt at the end of calendar year 1929, it had risen to 70% by the end of calendar year 1945. Federal borrowing was large during these years, particularly to finance World War II, and borrowing by other sectors was restricted by low incomes and poor credit-worthiness during the depression and by controls and scarcities during the war.

<sup>4</sup>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.

From 1945 to 1974, however, private debt increased as a proportion of total debt in every year but one, and likewise in every year but one the Federal debt held by the public decreased as a proportion of the total. This uninterrupted trend ended in 1975 because of the large Federal deficit caused by the recession. Another large Federal deficit in 1976 caused Federal debt held by the public to rise as a percentage of total debt again in that year, and the 1980 recession caused a further increase in the percentage. As a result of these events, Federal debt held by the public declined only slightly as a percentage of total debt during the 1970's. The percentage was 18% at the end of 1980, which is essentially the same as in 1973 and only a little less than the 20% in 1970.

Over a longer period, however, the decrease in the relative importance of Federal debt is unmistakable in comparison with both private debt and State and local government debt. During the years from 1960 to 1980, the average annual compound rate of growth was 5.7% for Federal debt held by the public, 7.7% for State and local debt, and 10.2% for private debt. As a result of these trends, Federal debt, though still important, has become a relatively smaller influence in the financial market than it was some years ago.

During the same period Federal debt has decreased relative to gross national product (GNP). As shown in table E-3, debt held by the public equaled 61.7% of GNP at the end of 1954 but declined steadily to 25.0% by the end of 1974. In 1975, however, due to the recession, debt held by the public rose as a percentage of GNP, at the same time as it rose as a percentage of total debt. It rose further in the following 2 years and, after a decline, rose again in 1980 because of the recession in that year. As a result, Federal debt held by the public declined only slightly as a percentage of GNP during the 1970's, from 29.4% in 1970 to 27.9% in 1980. The percentage is estimated to decrease to 25.9% in 1982.

The interest cost of the debt may be more significant than the amount of the debt for some types of comparison designed to measure the importance of Federal indebtedness. Interest on the debt held by the public has risen much faster than the debt itself, due to a strong upward trend since World War II in the interest rates that must be paid on new borrowings and on refunded debt. The interest rate on 91-day Treasury bills, for example, averaged 11.5% in calendar year 1980 compared to 6.3% in the 1970's, 4.0% in the 1960's, and 2.0% in the 1950's. Consequently, whereas the Federal debt held by the public about tripled between 1954 and 1980, table E-4 shows that the interest paid on this debt increased by twelve times.

Interest payments to the public have tended to grow faster than GNP over this entire period. In the first 5 years interest was equal to 1.38% of GNP, whereas by the last 5 years the proportion had

risen to 1.96%. The percentage was significantly higher in 1980 than in any preceding year and is estimated to be higher still in 1981 and 1982. These estimates assume that market interest rates will decline with the estimated decrease in the rate of inflation. Interest as a percentage of budget outlays, on the other hand, does not show a sustained trend over the period as a whole. However, this percentage has been rising steadily in recent years and in 1980 was distinctly the highest in the last quarter century. In 1981 and 1982 this percentage is estimated to be higher still. Thus, by either measure the importance of interest on the debt is now relatively high and rising.

Table E-4. COMPARISON OF 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 <sup>1</sup>	Paid to				GNP	Budget outlays <sup>3</sup>
		Federal Government accounts	The public				
			Total	Federal Reserve System <sup>2</sup>	Other		
1954.....	6.4	1.3	5.2	0.5	4.7	1.42	7.29
1955.....	6.4	1.2	5.2	.4	4.8	1.36	7.56
1956.....	6.8	1.3	5.6	.5	5.1	1.35	7.90
1957.....	7.3	1.4	5.9	.7	5.3	1.36	7.73
1958.....	7.8	1.4	6.3	.7	5.6	1.43	7.68
1959.....	7.8	1.4	6.4	.8	5.6	1.36	6.96
1960.....	9.5	1.5	8.1	1.0	7.1	1.61	8.73
1961.....	9.3	1.5	7.8	1.0	6.8	1.53	7.96
1962.....	9.5	1.6	7.9	1.0	6.9	1.45	7.40
1963.....	10.3	1.6	8.7	1.1	7.6	1.50	7.78
1964.....	11.0	1.8	9.2	1.2	8.0	1.49	7.80
1965.....	11.8	2.0	9.8	1.4	8.4	1.49	8.29
1966.....	12.6	2.1	10.4	1.7	8.7	1.44	7.75
1967.....	14.2	2.6	11.6	2.0	9.6	1.50	7.36
1968.....	15.6	3.0	12.6	2.4	10.2	1.51	7.07
1969.....	17.6	3.5	14.1	2.9	11.2	1.55	7.66
1970.....	20.0	4.4	15.6	3.5	12.2	1.61	7.95
1971.....	21.6	5.3	16.3	3.7	12.6	1.58	7.73
1972.....	22.5	5.8	16.6	3.7	12.9	1.47	7.16
1973.....	24.8	6.3	18.5	4.3	14.2	1.47	7.49
1974.....	30.0	7.7	22.4	5.5	16.9	1.62	8.29
1975.....	33.5	8.8	24.7	6.1	18.6	1.67	7.56
1976.....	37.7	9.0	28.7	6.3	22.5	1.75	7.84
TQ.....	8.3	.6	7.6	NA	NA	1.77	8.07
1977.....	42.6	9.6	33.0	6.8	26.2	1.77	8.20
1978.....	49.3	10.2	39.2	8.0	31.2	1.88	8.69
1979.....	60.3	12.1	48.3	9.6	38.6	2.05	9.78
1980.....	75.2	14.8	60.4	12.6	47.9	2.35	10.42
1981 estimate.....	94.5	16.5	78.0	NA	NA	2.74	11.76
1982 estimate.....	106.8	18.6	88.2	NA	NA	2.75	11.94

NA = Not available.

<sup>1</sup> Total interest significantly exceeds the outlays for the interest function in the budget, because the interest function includes collections of interest as an offset to outlays.<sup>2</sup> These figures are approximate. For most years they are estimated as the average of calendar year amounts. The 1980 estimate is tentative.<sup>3</sup> Budget outlays for all years are published in the *Budget*, Part 9, table 23.

Since the end of World War II the composition of the Federal debt has changed. Until recently 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. Because long-term market rates exceeded 4¼% after 1965, the ceiling eventually 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, 1980, the amount of notes outstanding with an original maturity over 5 years was \$131.1 billion, of which \$48.3 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 System were exempted from the interest rate limit, and since 1976 the amount of the exception has been raised in seven steps to \$70 billion. As of December 31, 1980, \$75.0 billion of bonds outstanding had been sold since the change of law in 1971, of which \$53.1 billion were held by the public exclusive of the Federal Reserve System. The effective interest rates have ranged from 6.1 to 12.8%.

Notwithstanding the initial relaxations of the interest rate ceiling, the average maturity of privately held, marketable Treasury debt decreased steadily from 4 years at the end of 1967 to about 2½ years at the end of 1976. Since then, however, as the restriction has been relaxed further, the average maturity has gradually lengthened to about 3¾ years.

#### DEBT HELD ABROAD

The Federal debt during most of American history 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% of the total debt held by the public. In the following years the debt held abroad tended to grow gradually, and, as shown in table E-5, 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.

Table E-5. 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 <sup>1</sup>	Total <sup>2</sup>	Foreign	Total	Foreign <sup>3</sup>
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	5.0
1978.....	610.9	120.9	59.1	25.4	39.2	7.9
1979.....	644.6	125.2	33.6	4.3	48.3	10.7
1980.....	715.1	126.0	70.5	.8	60.4	11.8

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

<sup>2</sup> 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-3.

<sup>3</sup> Estimated by Bureau of Economic Analysis, Department of Commerce. These estimates include small amounts of interest on the debt of Government-sponsored enterprises, which are not part of the Federal Government.

Foreign holdings began to grow much faster in 1970. This change arose in part out 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, and 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 has been the massive current account surpluses of some countries, particularly the OPEC nations, since 1974. The counterpart to these surpluses has been the acquisition of financial assets, and the financial assets acquired in the United States have largely taken the form of U.S. Government securities.

The increase in foreign holdings of U.S. Government securities during the past decade has therefore been primarily the product of foreign decisions. By the end of 1980 foreign holdings of Treasury debt had reached \$126.0 billion, which was 18% of the total debt held by the public. Because of the rising interest rates, the interest paid to foreign residents grew much faster over this period than did the debt held by foreign residents. Interest paid to foreign residents as a proportion of the total interest paid to the public

grew in roughly the same way as did the proportion of foreign debt holdings.

In the years before 1970, when debt held abroad was so small, borrowing from the public was approximately the same as borrowing from the domestic public. Since 1970, though, borrowing from the domestic public has generally been quite different from total borrowing. The relative importance of borrowing from abroad has varied, as table E-5 shows, but for this period as a whole borrowing from abroad was 27% of borrowing from the public. For the last 4 years borrowing from abroad was 24%. Borrowing from abroad is, of course, an even larger proportion of total borrowing from the public exclusive of the debt securities bought by the Federal Reserve System.

Nearly all the Federal debt held abroad is owned by foreign central banks or other official institutions and is denominated in dollars. On November 1, 1978, however, the administration announced that as part of its plan to strengthen the dollar the Treasury would sell in private markets abroad up to \$10 billion of securities denominated in certain foreign currencies. Beginning in December 1978, the Treasury has sold the equivalent of \$6.4 billion of securities denominated in Deutsche marks and Swiss francs to residents of Germany and Switzerland, respectively. By selling these securities, the Treasury acquires foreign currencies for use in intervention operations that are designed to deal with disturbances in the foreign exchange market. No securities of this kind have been sold since January 1980.

#### 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. The authorization to borrow is budget authority, and the disbursement of borrowed money is an outlay. Agency debt includes the borrowings of the off-budget Federal entities.

Agency borrowing was shown in total in table E-1 and is shown by agency in table E-6. In all 3 years more debt is repaid than is newly borrowed, and over the period as a whole total agency debt decreases by \$2.3 billion or by one-third. The agency debt outstanding at the end of 1982 is less than 1% of gross Federal debt.

Table E-6. AGENCY BORROWING <sup>1</sup>

(In millions of dollars)

Description	Borrowing or repayment (-) of debt			Debt end 1982 estimate
	1980 actual	1981 estimate	1982 estimate	
<b>Borrowing from the public:</b>				
Agriculture: Farmers Home Administration <sup>2</sup> .....			-31	141
Defense .....	-106	-116	-117	340
Education:				
College housing loans <sup>2</sup> .....			-1	248
Health education facilities <sup>2</sup> .....			-16	75
Health and Human Services <sup>2</sup> .....				5
Housing and Urban Development:				
Federal Housing Administration .....	-72	-68	-73	192
Housing for elderly or handicapped <sup>2</sup> .....				52
Government National Mortgage Assoc. <sup>2</sup> .....	-41	-47	-92	264
Revolving fund (liquidating programs) <sup>2</sup> .....			-15	53
Transportation: Coast Guard .....	* .....	* .....	* .....	1
Veterans Administration <sup>2</sup> .....	-116	-80		309
Export-Import Bank .....	-272	-211	-415	36
Postal Service .....				250
Small Business Administration <sup>2</sup> .....			-133	41
Tennessee Valley Authority .....				1,725
<b>Total, borrowing from the public</b> .....	<b>-607</b>	<b>-521</b>	<b>-894</b>	<b>3,731</b>
<b>Borrowing from other funds:</b>				
Agriculture: Farmers Home Administration <sup>2</sup> .....			-28	118
Defense .....	-19	-10	-12	46
Education:				
College housing loans <sup>2</sup> .....			-1	214
Health education facilities <sup>2</sup> .....			-14	60
Health and Human Services <sup>2</sup> .....				5
Housing and Urban Development:				
Federal Housing Administration .....	15	20	22	204
Housing for elderly or handicapped <sup>2</sup> .....				45
Government National Mortgage Assoc. <sup>2</sup> .....	-1		-83	210
Revolving fund (liquidating programs) <sup>2</sup> .....			-14	42
Veterans Administration <sup>2</sup> .....	-4			269
Small Business Administration <sup>2</sup> .....			-120	16
<b>Total, borrowing from other funds</b> .....	<b>-9</b>	<b>10</b>	<b>-251</b>	<b>1,228</b>
<b>Total, agency borrowing included in gross Federal debt</b> .....	<b>-616</b>	<b>-512</b>	<b>-1,145</b>	<b>4,959</b>
<b>ADDENDUM</b>				
<b>Borrowing from Federal Financing Bank:</b>				
Export-Import Bank .....	2,114	2,582	3,067	15,716
National Credit Union Central Liquidity Facility .....	90	210	300	600
Postal Service .....	-67	-232	-67	1,221
Tennessee Valley Authority .....	1,810	2,200	2,100	13,235
United States Railway Association .....	36	-258	30	255
<b>Total, agency borrowing from Federal Financing Bank</b> .....	<b>3,983</b>	<b>4,503</b>	<b>5,430</b>	<b>31,027</b>

\* \$500 thousand or less.

<sup>1</sup> Excludes agency borrowing from Treasury.<sup>2</sup> Certificates of participation in loans issued by the Government National Mortgage Association on behalf of several agencies.



As shown in the addendum to table E-6, the amount of agency borrowing has been profoundly affected by the Federal Financing Bank (FFB).<sup>5</sup> The FFB was created in December 1973 under the Treasury Department as an off-budget Federal entity and began financial operations in May 1974. Its purposes were to assist and coordinate agency borrowing and guaranteed borrowing and to reduce the cost to the Government of some of its borrowing operations. It was given the authority to purchase agency debt and guaranteed obligations and, in turn, to finance 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.<sup>6</sup> 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 market borrowed \$4.0 billion from the FFB in 1980 and are estimated to borrow \$4.5 billion in 1981 and \$5.4 billion in 1982. Because these agencies now borrow almost entirely from the FFB instead of the public, almost no new agency borrowing in the market took place in the last 6 years or is scheduled to take place in the future. The change in agency debt outstanding is therefore determined almost solely 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 several times greater than it is now, though not by the exact amount that agencies have borrowed from the FFB. The Treasury component would be correspondingly less.

By the end of 1982, \$2.0 billion of agency debt, or two-fifths of the total, will be obligations of three of the five agencies listed in table E-6 that in recent years have borrowed almost exclusively from the FFB: the Export-Import Bank, Postal Service, and Tennessee Valley Authority. The other two agencies borrowing from the FFB were established more recently than the FFB and have never had to borrow from the public. A total of \$2.2 billion, or another

---

<sup>5</sup> FFB purchases of guaranteed obligations are shown in table E-11.

<sup>6</sup> 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 has been from Treasury, because Treasury can borrow from the public at slightly lower interest rates than FFB would have to pay. No further FFB borrowing from the public is planned.

two-fifths 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-6. These certificates have not been issued since 1968. A further \$0.4 billion of agency debt will be family housing mortgages assumed by the Department of Defense (and Coast Guard) under a program terminated more than a decade ago. The remaining agency debt—\$0.4 billion, or 8% of the total—will have been issued by the Federal Housing Administration, which conducts the only program that normally continues to borrow from the public. This agency issues debentures as payment for insurance claims on defaulted loans, and the nature of this transaction precludes these securities from being sold to the FFB.

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 would be double counting to add together the agency borrowing from the Treasury and the Treasury borrowing from the public that was necessary to provide the agencies with this capital. Therefore, agency borrowing from Treasury is excluded from figures on agency borrowing and debt both in this analysis and in all other parts of the budget documents.

#### AGENCY INVESTMENT IN FEDERAL SECURITIES

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

Net investment by trust funds and other Federal agencies rose steadily from the relatively low level of \$4.3 billion in the recession year of 1976 to \$19.7 billion in 1979. This was caused primarily by the improvement in the economy, the growing payment from the general fund to the civil service retirement and disability trust fund, and the tax increase enacted by the Social Security Amendments of 1977. In 1980, however, as shown in table E-7, agency investment declined to \$10.1 billion, and in 1981 it is estimated to fall further to \$6.1 billion. This decline is estimated to be reversed in 1982, with a rise of agency investment to \$20.3 billion.

The most important reason for the decline in agency investment is the recession of 1980, with the unemployment rate rising from 5.8% in 1979 to 6.8% in 1980 and to a still higher average in 1981.

Table E-7. AGENCY INVESTMENT IN FEDERAL SECURITIES

(In millions of dollars)

Description	Increase or decrease (—) in holdings			Holdings end of 1982 estimate
	1980 actual	1981 estimate	1982 estimate	
<b>Investment in Treasury debt:</b>				
Health and Human Services:				
Federal old-age and survivors insurance trust fund.....	—3,751	—2,050	—9,835	11,138
Federal disability insurance trust fund.....	2,092	—4,555	673	3,792
Federal hospital insurance trust fund.....	1,493	5,349	7,552	27,507
Federal supplementary medical insurance trust fund.....	—416	—636	2,771	6,693
Housing and Urban Development:				
Federal Housing Administration.....	111	240	342	2,614
Government National Mortgage Association.....	36	—57	—268	1,090
Other.....	21	78	93	387
Interior: Outer Continental Shelf deposit funds.....	2,088	827	195	3,110
Labor: Unemployment trust fund.....	—1,082	—3,525	2,153	11,339
Transportation:				
Highway trust fund.....	—1,609	—779	2,768	12,848
Airport and airway trust fund.....	1,046	—569	899	5,753
Treasury:				
Exchange stabilization fund <sup>1</sup> .....	—722	483	476	4,503
Federal Financing Bank <sup>2</sup> .....	—149	51	33	162
Veterans Administration:				
National service life insurance trust fund.....	105	96	96	8,122
Other trust funds.....	6	12	14	1,118
Veterans reopened insurance fund.....	17	18	11	484
Federal Deposit Insurance Corp.: Trust fund.....	926	1,450	1,500	13,128
Federal Home Loan Bank Board: FSLIC.....	—553	—415	661	5,176
Office of Personnel Management:				
Civil Service retirement and disability trust fund.....	9,520	10,102	9,671	93,027
Other trust funds.....	428	537	684	5,557
Postal Service <sup>2</sup> .....	288	—467	—40	2,020
Railroad Retirement account: Trust fund.....	—376	—412	—325	1,942
Other Federal funds.....	176	99	180	1,355
Other trust funds.....	362	194	213	1,459
Other off-budget Federal entities <sup>3</sup> .....	2	.....	—*	8
<b>Total, investment in Treasury debt.....</b>	<b>10,060</b>	<b>6,071</b>	<b>20,517</b>	<b>224,331</b>
<b>Investment in agency debt:</b>				
Agriculture: Commodity Credit Corp.....	—6	—6	—5	.....
Health and Human Services:				
Federal old-age and survivors insurance trust fund.....	.....	.....	—100	455
Federal hospital insurance trust fund.....	.....	.....	—50	.....
Housing and Urban Development:				
Federal Housing Administration.....	—14	.....	.....	174
Government National Mortgage Association.....	11	16	15	222
Veterans Administration: National service life insurance trust fund.....	.....	.....	.....	135
Federal Home Loan Bank Board: FSLIC.....	—*	.....	—11	67
Office of Personnel Management: Civil Service retirement and disability trust fund.....	.....	.....	—100	175
<b>Total, investment in agency debt.....</b>	<b>—9</b>	<b>10</b>	<b>—251</b>	<b>1,228</b>
<b>Total, investment in Federal debt.....</b>	<b>10,051</b>	<b>6,081</b>	<b>20,266</b>	<b>225,559</b>
<b>MEMORANDUM</b>				
Investment by Federal funds.....	—923	456	1,494	16,070
Investment by trust funds.....	8,744	5,214	18,583	204,188
Investment by off-budget Federal entities <sup>3</sup> .....	2,230	412	188	5,301

\* \$500 thousand or less.

<sup>1</sup> The change in holdings in 1981 and 1982 is estimated as equal to interest collections.<sup>2</sup> Off-budget Federal entity.<sup>3</sup> Includes deposit funds.

The growth of tax receipts fell, particularly for the social security trust funds, and unemployment benefits rose. Unemployment benefit payments increased by \$5.5 billion in 1980 and are estimated to increase by a further \$6.9 billion in 1981, for a cumulative rise of \$12.5 billion compared to 1979. If the economy had grown strongly enough so that the unemployment rate had not risen over its 1979 level, agency investment would not be decreasing from 1979 to 1981. In 1982 the estimated agency investment rises markedly as the economy improves, as higher proposed tax rates increase the receipts of the highway and the airport and airway trust funds, and as proposed legislation reduces the outlays for extended unemployment benefits (this last effect would be very small, however, if unemployment is only a little higher than forecast).

The trust funds financed by the social security tax—old age and survivors insurance, disability insurance, and hospital insurance—disinvest as a whole each year during 1980–82 for a cumulative decrease in holdings of Government debt of \$3.0 billion. This is in spite of the very large increase in the funds' tax receipts due to the Social Security Amendments of 1977. During this period the pattern of agency investment or disinvestment differs markedly among the three funds. The old age and survivors insurance trust fund disinvests substantially, whereas the disability insurance trust fund disinvests considerably less and the hospital insurance trust fund accumulates large amounts of securities. Because of these diverging tendencies, legislation was enacted in 1980 to shift some of the disability insurance payroll tax receipts to the old age and survivors insurance trust fund during 1981 and 1982. In order to improve further the solvency of the old age and survivors insurance trust fund over the next 2 or 3 years, however, legislation is recommended to permit these funds to borrow among themselves.

In recent years only a very small investment in Federal debt was made by deposit funds, which, as defined previously, are neither part of the budget (as Federal funds or trust funds) nor off-budget Federal entities. During 1980, however, \$2.1 billion of Treasury securities were acquired by two deposit funds that hold amounts from the Outer Continental Shelf receipts until a decision is made as to how they are to be divided between the Federal Government and the States. Until 1980 the balances of these funds were not invested in Federal debt. These funds are estimated to accumulate \$1.0 billion more of Treasury debt in 1981 and 1982.

Total agency holdings of Federal securities will reach an estimated \$225.6 billion by the end of 1982. This will comprise 21% of the gross Federal debt. One major trust fund—the civil service retirement and disability trust fund—will account for 41% of total agency holdings and will account for four-fifths of net agency investment during 1980–82. All the trust funds together will account for 91% of the holdings at the end of 1982. Nearly all of the holdings will be Treasury debt, and the holdings of agency debt will continue to decline by a small amount.

#### LIMITATIONS ON FEDERAL DEBT

Statutory limitations have normally been placed on Federal debt. Until World War I, the Congress ordinarily authorized a specific amount for each debt 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. The limit currently applies to the total of:

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

The debt subject to statutory limit<sup>7</sup> includes virtually all Treasury debt. The small amount of Treasury debt not subject to limit is shown in table E-8. 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 about one-quarter 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

<sup>7</sup> 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.

finance power facilities in 1959. The limit was \$750 million. Subsequently, to enable TVA to finance additional facilities, Congress raised the limit several times. In October 1979, Congress raised the limit from \$15 billion to \$30 billion, with more than half of the increase for TVA's current construction program. The Postal Service is limited to \$10 billion of securities outstanding and \$2 billion of annual borrowing, but proposed appropriation bill limitations would restrict the annual borrowing to \$1 billion in both 1981 and 1982 and would require that any borrowing for operating expenses during 1982 be repaid within 12 months.

Table E-8. DEBT SUBJECT TO STATUTORY LIMIT

(In millions of dollars)

Descriptions	End of year		
	1980 actual	1981 estimate	1982 estimate
Federal debt held by the public.....	715,105	787,105	832,105
Federal debt held by Government agencies.....	199,212	205,293	225,559
<b>Total, gross Federal debt.....</b>	<b>914,317</b>	<b>992,398</b>	<b>1,057,664</b>
<b>Deduct:</b>			
Treasury debt not subject to limit.....	608	608	608
Agency debt not subject to the general limit:			
Department of Defense.....	641	515	387
Export-Import Bank.....	662	451	36
Postal Service.....	250	250	250
Tennessee Valley Authority.....	1,725	1,725	1,725
Participation certificates <sup>1</sup> .....	1,707	1,580	1,030
Coast Guard.....	1	1	1
<b>Total, Federal debt not subject to limit.....</b>	<b>5,594</b>	<b>5,130</b>	<b>4,035</b>
Federal debt subject to statutory limit.....	908,724	987,268	1,053,628
Other debt subject to limit, and adjustments.....	—*	—*	—*
<b>Total, debt subject to statutory limit.....</b>	<b>908,723</b>	<b>987,268</b>	<b>1,053,628</b>

\* \$500 thousand or less.

<sup>1</sup> Certificates of participation in loans issued by the Government National Mortgage Association on behalf of several agencies (this excludes the certificates issued during 1968, which are subject to the debt limit).

The only other appreciable component of debt subject to limit in recent years was the small issue of stadium bonds (\$20 million) sold by the District of Columbia Armory Board in 1960. These bonds matured on December 1, 1979. Unlike the rest of the debt subject to limit discussed above, the stadium bonds were not part of the Federal debt. The gross Federal debt further excludes a very small amount, less than a million dollars, of matured principal and interest that is included in debt subject to limit. To derive the debt subject to limit from the gross Federal debt also requires a very small accounting adjustment.

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. 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. Since 1971 the statutory debt limit has consisted of a permanent limit of \$400 billion plus a temporary increment that was usually scheduled to expire in a year or less. Since the debt subject to limit has been more than \$400 billion, new legislation has been required no later than the expiration date of each temporary increment. Three times in recent years the temporary increment has 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 sales of savings bonds and other debt securities.

On September 29, 1979, the statutory limit was raised to \$879 billion for the period ending May 31, 1980. The same legislation also changed the method of enacting statutory debt limits in the future (Public Law 96-78). The purpose was to establish the debt limit as a part of the congressional budget process. The first and second concurrent resolutions on the budget (scheduled to be adopted by May 15 and September 15, respectively, for the forthcoming fiscal year) establish targets or ceilings for budget outlays, receipts, and the budget deficit and also recommend an appropriate level for the debt subject to limit. The recommendation as to the appropriate level of debt had not heretofore 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 had a direct effect. 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 is thus deemed to have passed the House and is transmitted to the Senate for further legislative action. Upon final passage, it is sent to the President for his signature. This procedure is intended to relate 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. It is also intended to ensure that a new increase to the debt limit will be enacted well before the previous increase is scheduled to expire, thereby reduc-

ing the uncertainty about extension of the debt limit and eliminating the costs that occur when the level of debt exceeds or is about to exceed the debt limit. The debt limit may still be changed by a separate act as in the past.

The first budget resolution for 1981 did not pass Congress until June 12, 1980, which was nearly 2 weeks after the expiration date of the temporary increment to the debt limit that had been enacted the previous September. Congress did, however, pass legislation to extend the \$879 billion limit in time to prevent the debt from exceeding the statutory limit. On May 30, 1980, the expiration date of this limit was extended from May 31 to June 5; and on June 6 the date was extended further to June 30.

Because of the uncertainty about when the debt limit would be extended, Treasury postponed its auctions for new securities in late May and then scheduled several in early June when the limit was first extended. In order to raise as much cash as possible to meet the Government's operating expenses, Treasury called in all of its deposits in tax and loan accounts at commercial banks so as to increase its operating balance at the Federal Reserve Banks; and it redeemed debt held by the Exchange Stabilization Fund, up to a maximum of \$3 billion at one time, so that it could raise cash by borrowing from the public. On one occasion it announced that the sale of savings bonds would have to cease, but this announcement was rescinded before it took effect when Congress extended the limit. The question of the debt limit created uncertainty in the securities market for quite a number of days, and the actions that the Treasury had to take incurred administrative costs and reduced the earnings of the Exchange Stabilization Fund.

After the first budget resolution was passed on June 12, the new procedure went into effect. This resolution, which contained revised totals for 1980 as well as the initial targets for 1981, had two separate provisions for changing the debt limit. In the section revising the second budget resolution for 1980, it declared that the appropriate debt limit from the date of enactment through February 28, 1981, was \$925 billion; and in the section on the 1981 totals, it declared that the appropriate debt limit for the fiscal year beginning on October 1, 1980, was \$935.1 billion. Both provisions were deemed to have passed the House, as separate joint resolutions (as well as being part of the concurrent resolution on the budget), and were sent to the Senate. The Senate passed the former resolution, and it was signed into law by the President on June 28.

The second budget resolution, which passed Congress on November 20, 1980, declared that the appropriate level of the debt limit was \$978.6 billion through the end of fiscal year 1981. A separate



joint resolution to this effect was deemed to have passed the House, but the Senate did not concur. Instead, the Senate went back to the joint resolution (arising from the first budget resolution) that it had received from the House in June but had not passed. The Senate passed this resolution, which raised the debt limit to \$935.1 billion through September 30, 1981, and it was signed into law by the President on December 19. However, a further increase will be required early this year in order to permit the Federal Government to meet its obligations.

The outstanding debt subject to limit is shown in table E-8 and compared with the gross Federal debt and the Federal debt held by the public. The debt subject to limit was \$908.7 billion at the end of 1980 and is estimated to rise to \$1,053.6 billion by the end of 1982. These amounts are a great deal more than the permanent limit of \$400 billion. As shown in table E-8, 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 Government agencies. 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.

#### 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 total Government deficit, that is, by the sum of the budget deficit and the deficit of the off-budget Federal entities. The trust fund surplus or deficit, which makes up part of the budget surplus or deficit, has no essential effect on the amount of debt that is subject to the limit. This 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.<sup>8</sup> The trust funds collect certain taxes and other receipts to be used for specified purposes, such as paying social security and unemployment insurance benefits. The Federal funds comprise the rest of the budget. Their resources are derived mainly from taxes and borrowing and are used for the general purposes of the Government. The off-budget Federal entities make up a third group of fiscal operations, analagous to the Federal funds and trust funds groups. If the off-budget entities were included in the budget, they would be classified as Federal funds.

---

<sup>8</sup> Data for Federal funds and trust funds are presented in Special Analysis C, "Funds in the Budget."

When the Federal funds have a deficit, this deficit must generally be financed by borrowing. The borrowing is necessary regardless of whether the trust funds have a surplus. This is because trust fund surpluses are mostly invested in securities issued by Federal funds, Federal funds securities held by trust funds are treated as Federal debt, and therefore the trust fund surplus does not reduce the need for Federal funds to issue debt. Federal funds borrowing is done almost exclusively by the Treasury selling debt securities that are subject to the statutory limit. The deficits of the off-budget Federal entities are generally financed in the same way as the Federal funds deficit. Thus, the Federal funds deficit and the deficit of the off-budget Federal entities generally have to be financed by selling debt securities that are subject to the statutory limit; and these securities are sold to either the public, the trust funds, or certain Federal revolving funds.

Table E-9 shows in detail the relationship of the change in debt subject to limit to the Federal funds deficit and the deficit of the off-budget Federal entities. The sum of these deficits 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 those cash assets held by Federal funds and off-budget Federal entities (if the sum of these other means of financing is negative, then these other means must themselves be financed).<sup>9</sup> A small portion may be financed by the Federal funds or off-budget entities selling their investments in Federal debt. Another small portion may be financed by their issuing debt that is not subject to the statutory limit. The remainder of the amount to be financed, ordinarily comprising most of the total, can only be financed by selling debt subject to the statutory limit. Thus, the deficits of the Federal funds and the off-budget Federal entities are together the principal determinant of the change in debt subject to statutory limit.

---

<sup>9</sup>The amounts for means of financing other than borrowing that are shown in table E-9 exclude amounts attributable to trust funds. It is not known how the trust fund open book balances are divided between cash and monetary assets and liabilities for checks outstanding, etc. In this table they are all assumed to be in liabilities for checks outstanding, etc.

Table E-9. FEDERAL FUNDS FINANCING AND CHANGE IN DEBT SUBJECT TO STATUTORY LIMIT <sup>1</sup>

(In millions of dollars)

Description	1980 actual	1981 estimate	1982 estimate	1983 estimate	1984 estimate
Federal funds surplus or deficit (—)	–68,364	–59,693	–46,712	–22,488	24,002
Deficit (—) of off-budget Federal entities	–14,245	–23,198	–18,309	–15,326	–14,726
<b>Total, amount to be financed</b>	<b>–82,609</b>	<b>–82,891</b>	<b>–65,021</b>	<b>–37,814</b>	<b>9,276</b>
Means of financing other than borrowing:					
Decrease or increase (—) in cash and other monetary assets	643	5,110			
Increase or decrease (—) in liabilities for:					
Checks outstanding, etc	–433	–510	628		
Deposit fund balances	2,478	633	161		
Seigniorage on coins	663	444	649	1,062	1,069
<b>Total, means of financing other than borrowing</b>	<b>3,351</b>	<b>5,677</b>	<b>1,438</b>	<b>1,062</b>	<b>1,069</b>
Decrease or increase (—) in Federal funds and off-budget entity investments in Federal debt <sup>2</sup>	–1,307	–868	–1,682		
Increase or decrease (—) in Federal funds and off-budget entity debt not subject to limit	–560	–464	–1,094		
<b>Total, requirements for borrowing subject to debt limit</b>	<b>–81,126</b>	<b>–78,545</b>	<b>–66,360</b>	<b>–36,752</b>	<b>10,345</b>
Change in debt subject to limit but not part of Federal debt <sup>3</sup>	–19				
Change in debt subject to limit	81,108	78,545	66,360	36,752	–10,345

<sup>1</sup> Several amounts have been assumed to be zero in 1982 and 1983 because they are usually small and cannot be estimated accurately.<sup>2</sup> Also includes change in deposit fund investments.<sup>3</sup> Almost entirely District of Columbia Armory Board stadium bonds in 1980.

In 1980, for example, the total Federal funds and off-budget deficit to be financed was \$82.6 billion, and \$3.4 billion of this amount was financed by means other than borrowing.<sup>10</sup> The Federal funds and off-budget entities increased their holdings of Federal debt by \$1.3 billion, which had to be financed by still further borrowing in the same way as their deficits had to be financed;<sup>11</sup> and they decreased their debt outstanding that was not subject to limit by \$0.6 billion, which had to be replaced by an equal amount of debt that was subject to limit. Therefore, a total of \$81.1 billion had to be borrowed subject to the debt limit.

The trust fund surplus does not have an explicit effect in table E-9. However, to the extent that trust fund surpluses are used to increase the trust fund holdings of open book balances instead of Federal debt securities, the debt subject to limit is reduced. This is because the cash available from the trust funds surplus can be used to finance Federal funds outlays without recording an increase in Federal debt. In table E-9 the increase in open book

<sup>10</sup> Except that the increase in deposit fund balances includes investment in Treasury debt, which is offset in a later line of the table.<sup>11</sup> This item also includes deposit fund investment in Treasury debt.

balances is recorded as an increase in Federal funds liabilities for checks outstanding, etc. This increases the Federal funds means of financing other than borrowing, which in turn reduces the requirement for borrowing subject to the statutory limit. The trust fund open book balances do change from year to year, but they do not usually change a great deal. By law the trust fund surpluses must generally be invested in Federal debt, and during 1971-80 the increase in trust fund holdings of Federal debt equalled 93% of the cumulative trust fund surplus. Consequently, the effect of the trust fund surplus on debt subject to limit is minor.<sup>12</sup>

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 substantially 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-8, during 1981 and 1982 the debt subject to limit is estimated to increase by \$144.9 billion, whereas the debt held by the public is estimated to increase by \$117.0 billion.

The present analysis helps to demonstrate the difficulties in preventing the Federal debt from continuing to rise. The structure of table E-2 showed that the Government would have to borrow from the public even if the budget were exactly balanced, because it would have to finance the deficit of the off-budget Federal entities. The structure of table E-9 shows that the debt subject to statutory limit would almost surely continue to rise even if the debt held by the public remained constant, that is, even if the budget had a large enough surplus so that the budget and the off-budget entities were together just in balance. In order for debt subject to limit not to rise, the Federal funds portion of the budget must (as an approximation) have a large enough surplus so that the Federal funds and the off-budget entities are together in balance. The same condition must be met in order not to have a rise in gross Federal debt, which is approximately equal to debt subject to limit. This condition is met in the 1984 projection, but the decrease in the debt subject to limit (\$10.3 billion) is considerably less than the decrease in the debt held by the public (\$18.4 billion) or the size of the budget surplus (\$32.0 billion).

#### FEDERALLY ASSISTED BORROWING

The effect of the Government on borrowing arises not only from its own borrowing to finance Federal operations but also from its

<sup>12</sup> The debt subject to limit exceeded the statutory limit during April 1-2, 1979. Under these exceptional circumstances, Treasury used the net cash inflow of the trust funds to increase the trust funds' open book balances in order to finance Federal funds outlays that could not legally be financed by increasing the amount of debt subject to limit.

assistance to certain borrowing by the public. Federally assisted borrowing is of two principal types: Government-guaranteed borrowing, and borrowing by Government-sponsored enterprises.<sup>13</sup>

Guaranteed borrowing 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, it may be a security sold in the capital market, or it may be a security sold to the Federal Financing Bank (FFB). Guaranteed borrowing is the same as guaranteed lending.

Guaranteed loans include most loan asset sales made by Federal agencies. Loan asset sales occur when an agency makes a direct loan and then sells it. A guarantee by the selling agency is usually attached. Loan asset sales are offsets to the outlays of the agency that sells them. Therefore, if the selling agency is in the budget, the increase in budget outlays caused by the direct loans is offset by the sale of the loan assets.

In some cases the agency sells the direct loans themselves, and in other cases the agency sells securities (sometimes called participation certificates or certificates of beneficial ownership) that are backed by loans that the agency continues to hold and service. The certificates of beneficial ownership sold by the Farmers Home Administration (a budget agency) and the Rural Electrification and Telephone revolving fund (an off-budget Federal entity) would be classified as Federal debt according to the recommendations of the President's Commission on Budget Concepts.<sup>14</sup> However, according to statute these certificates are required to be treated as loan assets instead of Federal debt. Since the certificates are guaranteed, they are classified as guaranteed loans. These certificates of beneficial ownership are currently sold almost entirely to the FFB, but some certificates sold by Farmers Home before FFB was established are outstanding and continue to mature. The net amount of sales to the FFB less repayments (i.e., the increase in certificates outstanding) is shown below for 1979-82 (in millions of dollars):

	1979 actual	1980 actual	1981 estimate	1982 estimate
Farmers Home Administration.....	8,805	6,881	12,420	6,056
Rural Electrification and Telephone revolving fund .....	586	689	516	624

<sup>13</sup> The Federal Government also assists State and local government borrowing, and the private beneficiaries of certain types of such borrowing, by exempting the interest on State and local obligations from income tax. See the discussions in Special Analysis F, "Federal Credit Programs," and Special Analysis G, "Tax Expenditures."

<sup>14</sup> *Report of the President's Commission on Budget Concepts* (Washington: U.S. Government Printing Office, 1967), pp. 8, 47-48, and 54-55.

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 guaranteed loans is to support housing, but in recent years guarantees have increasingly been used for other purposes. As shown subsequently in table E-11, guaranteed borrowing net of repayments (but before purchases by Federal agencies) was \$47.9 billion in 1980 and is estimated to be \$73.3 billion in 1981 and \$75.0 billion in 1982. Special Analysis F presents detailed data on guaranteed loans and loan asset sales.

The other type of federally assisted borrowing is by Government-sponsored enterprises. They 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.<sup>15</sup> 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 essentially financial intermediaries, borrowing in the securities market and lending their borrowed funds for specifically authorized purposes either directly or by purchasing loans originated by the private 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 and the Federal Home Loan Banks are required to obtain Treasury approval of the terms and timing of specific offerings; the Student Loan Marketing Association has borrowed exclusively from the Federal Financing Bank since the FFB was established.<sup>16</sup> Besides their Federal sponsorship, all of these enterprises have a history of successful financial performance. Hence, despite the absence of Federal guarantees, the obligations of these enterprises are sold at interest rates only a little higher than the rates on comparable Treasury issues.

The three enterprises regulated by the Farm Credit Administration—the Banks for Cooperatives, Federal Intermediate Credit Banks, and Federal Land Banks—have recently changed the form

<sup>15</sup> *Ibid.*, pp. 29-30.

<sup>16</sup> The Student Loan Marketing Association (SLMA) is the only Government-sponsored enterprise whose new securities are currently guaranteed by the Federal Government and can therefore be bought by the FFB. The Education Amendments of 1980 extended the authority of the Secretary of Education to guarantee SLMA securities to any obligations issued prior to October 1, 1984.

in which they borrow. Until September 1977 they borrowed separately on the market under their own names. At that time, however, the Farm Credit banks began to issue consolidated bonds to replace some of their separate offerings, and since January 1979 they have borrowed solely on a consolidated basis. This change was made in order to improve efficiency.

Borrowing by Government-sponsored enterprises has recently risen to a much higher level than in earlier years. Until 1978 the largest amount of borrowing had been \$14.9 billion in 1974. In 1978, however, borrowing sharply increased to \$24.1 billion, and, as shown in table E-10, borrowing then grew further by small amounts in 1979 and 1980. The Government-sponsored enterprises currently estimate that their total borrowing will decline to \$20.7 billion in 1981, still substantially above the 1974 level, and then rise to a new high of \$30.6 billion in 1982. About three-fifths of the borrowing in these years is done by the three enterprises that support housing through the mortgage market, the Federal National Mortgage Association, the Federal Home Loan Banks, and the Federal Home Loan Mortgage Corporation.

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 1981-82 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-10 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 borrowing from the Federal Home Loan Banks.

Table E-10. **BORROWING BY GOVERNMENT-SPONSORED ENTERPRISES**

(In millions of dollars)

Description	Borrowing or repayment (—)				Debt outstanding end 1982 estimate
	1979 actual	1980 actual	1981 estimate	1982 estimate	
Education: Student Loan Marketing Association .....	530	1,070	1,095	1,923	5,363
Housing and Urban Development: Federal National Mortgage Association.....	7,705	6,347	5,169	9,199	66,714
Farm Credit Administration: <sup>1</sup>					
Banks for cooperatives.....	1,089	1,542	777	898	10,060
Federal intermediate credit banks.....	2,725	3,536	3,282	3,657	26,299
Federal land banks.....	4,921	7,076	5,563	6,389	46,209
Federal Home Loan Bank Board:					
Federal home loan banks.....	5,194	6,454	—52	2,553	39,100
Federal Home Loan Mortgage Corporation.....	4,547	3,141	5,971	7,146	34,613
<b>Total.....</b>	<b>26,712</b>	<b>29,165</b>	<b>21,805</b>	<b>31,764</b>	<b>228,359</b>
Less increase in holdings of debt issued by Government-sponsored enterprises.....	962	1,691	1,061	1,148	7,433
<b>Total, borrowing by Government-sponsored enterprises.....</b>	<b>25,750</b>	<b>27,473</b>	<b>20,744</b>	<b>30,617</b>	<b>220,926</b>

<sup>1</sup> The debt represented by consolidated bonds is attributed to the respective Farm Credit banks.

Sharp shifts in Government-sponsored borrowing, such as are estimated to occur in 1981 and 1982, are typical of this sector as a whole. They generally arise from the operations of the three enterprises that borrow to support the housing mortgage market. The degree of tightness in the mortgage market sometimes alters a good deal, and during periods of high and rising interest rates these enterprises usually increase their lending and borrowing substantially. This condition led to much of the rise in the level of Government-sponsored borrowing for recent years.

The estimated \$6.8 billion decrease in borrowing in 1981 is approximately accounted for by a \$7.0 billion decrease in net advances (new advances less repayments) made by the Federal Home Loan Banks to their member savings institutions, primarily savings and loan associations, which lend most of their funds for new mortgages. This decrease in net advances is mostly due to an increase in repayments; new advances to member savings institutions remain about level. For 1982 the \$9.9 billion increase in Government-sponsored borrowing is led by a \$4.1 billion increase in net mortgage purchases by the Federal National Mortgage Association and a \$3.5 billion increase in net advances by the Federal Home Loan Banks. Special Analysis F discusses further the lending by Government-sponsored enterprises.

#### TOTAL FEDERAL AND FEDERALLY ASSISTED BORROWING

Table E-11 summarizes net 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 latter were adjusted 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, since 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.

Table E-11. NET BORROWING BY GOVERNMENT, GOVERNMENT-GUARANTEED BORROWERS, AND GOVERNMENT-SPONSORED ENTERPRISES

(In billions of dollars)

Description	Borrowing or repayment (-)			Debt outstanding end 1982 estimate
	1980 actual	1981 estimate	1982 estimate	
<b>Federal borrowing from the public</b> <sup>1</sup> .....	70.5	72.0	45.0	832.1
Government-guaranteed borrowing <sup>2</sup> .....	47.9	73.3	75.0	510.5
Less increase in guaranteed loans held by Federal agencies:				
Federal Financing Bank .....	14.4	23.1	18.2	102.7
Government National Mortgage Corporation .....	1.1	-1.1	-.1	1.0
<b>Net Government-guaranteed borrowing</b> .....	<b>32.4</b>	<b>51.3</b>	<b>56.9</b>	<b>406.7</b>
Borrowing by Government-sponsored enterprises <sup>3</sup> .....	27.5	20.7	30.6	220.9
Less increase in holdings of Federal debt .....	1.5	-.4	.1	2.1
Less increase in Government-sponsored debt held by Federal agencies:				
Federal Financing Bank .....	1.1	1.1	1.9	5.4
Less increase in holdings of guaranteed loans: <sup>4</sup>				
Federal National Mortgage Association .....	3.6	1.9	3.8	43.3
Federal Home Loan Banks .....	-.*	-.*	-.*	.1
Federal Home Loan Mortgage Corporation .....	-.1	-.1	-.1	.8
<b>Net Government-sponsored borrowing</b> .....	<b>21.4</b>	<b>18.2</b>	<b>24.9</b>	<b>169.2</b>
<b>Total, Federal and federally assisted borrowing</b> .....	<b>124.4</b>	<b>141.5</b>	<b>126.8</b>	<b>1,408.1</b>

\* \$50 million or less.

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

<sup>2</sup> This line is the same as "guaranteed loans (net)" in table F-5 of Special Analysis F. To avoid double counting, it is calculated net of guarantees of loans previously guaranteed and of Federal debt. "Net Government-guaranteed borrowing" in this table is the same as "primary guaranteed loans" in table F-5.

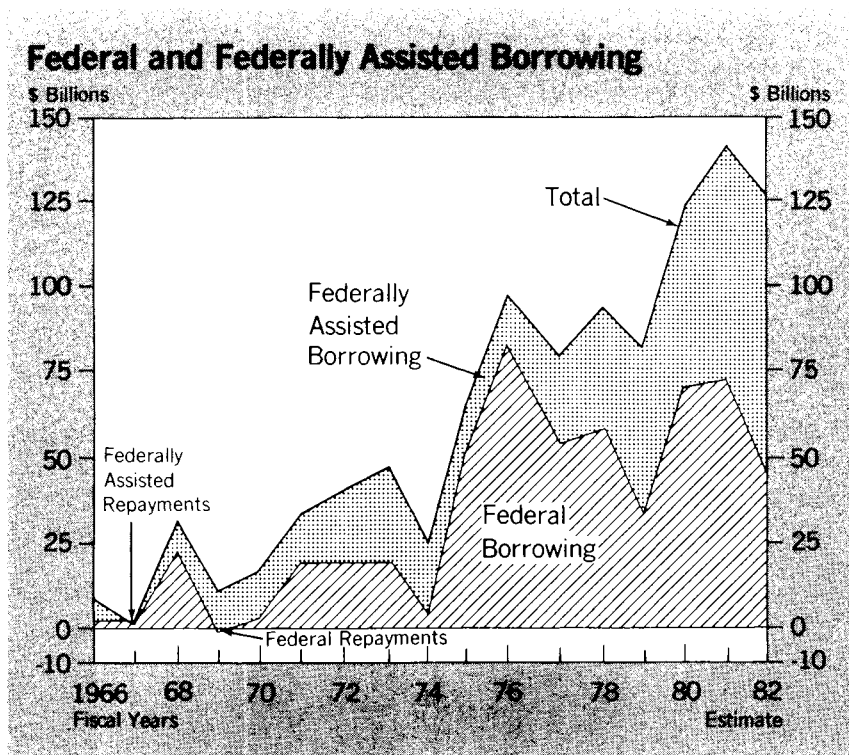
<sup>3</sup> See table E-10.

<sup>4</sup> The increase in holdings of guaranteed loans by the Student Loan Marketing Association is not subtracted out, because these loans are ultimately financed by Federal borrowing (through the FFB) and therefore are classified as direct loans rather than as guaranteed loans.

About one-third of Federal and federally assisted borrowing during 1980-82 is made up of Federal borrowing to finance the budget deficit. Federal borrowing also finances the off-budget deficit, most of which is accounted for by the Federal Financing Bank's purchases of guaranteed obligations. As shown in table E-11, the FFB is estimated to buy about one-quarter of the total increase in guaranteed obligations outstanding during these years. Since the

FFB finances these purchases by borrowing from the Treasury, which in turn borrows from the public, these transactions substitute Federal borrowing in the market for guaranteed borrowing. Federal borrowing for all purposes during 1980-82 comprises 48% of total Federal and federally assisted borrowing; Federal debt held by the public at the end of 1982 is 59% of the total Federal and federally assisted debt outstanding.

The following chart depicts the trends in Federal and federally assisted borrowing from 1966 to 1982. The series are volatile, and the fluctuations are dominated by Federal borrowing. These fluctuations are primarily driven by the Federal deficit. Total Federal and federally assisted borrowing fell sharply in 1974 and, to a lesser extent, in 1979, because of the large drop in the deficit in these years. Total borrowing then rose markedly in the recessions that followed, increasing from \$24.4 billion in 1974 to \$98.2 billion in 1976 and increasing from \$81.7 billion in 1979 to \$124.4 billion in 1980. Federal and federally assisted borrowing is estimated to increase still further in 1981, with Federal borrowing about level but with a very large increase in guaranteed borrowing. Guaranteed borrowing in 1981 is estimated to be twice as large as it was in 1979 and more than twice as large as it was in any earlier year. In 1982, with a sizable fall in the deficit, total Federal and federally assisted borrowing is estimated to return to approximately the 1980 amount.



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 inflation and real growth of the economy and the growth in the total funds raised by the non-financial sector through the sale of debt securities and other forms of borrowing and through the sale of corporate equities. However, although the existence of trends is difficult to discern because of the volatility of the series, the total Federal and federally assisted borrowing seems to have increased as a proportion of the total funds raised. This proportion increased from 16% during 1960-69 to 25% during 1970-79 and was clearly higher in the last half of the 1970's than in the first half. In large part because of the recent recession, the proportion rose to 36% in 1980. Thus, on the average, Government programs recently seem to have influenced the allocation of funds raised in financial markets more than they did in the immediately preceding years.



## SPECIAL ANALYSIS F

### FEDERAL CREDIT PROGRAMS

Federal and federally assisted credit programs play a significant role in the functioning of the economy. These programs are primarily in four forms: direct loans from the Federal Government, Federal guarantees of private lending, lending by privately owned Government-sponsored enterprises, and access to tax-exempt credit. These programs, much like Federal expenditures on goods and services, or transfer payments, can be used to change the allocation of resources and the distribution of income. In this regard, they can be used to overcome market imperfections, to provide additional liquidity for investors, and to furnish funds to maintain stability in a particular sector of the economy during business cycle fluctuations. Credit programs have been designed to fill perceived needs in private capital markets by providing credit to certain classes of borrowers, or on special terms or conditions, or for special activities. An element of subsidy is involved in any Federal credit program since assistance is given on terms or conditions more favorable than would have occurred in private capital markets.<sup>1</sup>

A subsidy is provided, in general, because the Federal Government is willing to accept risks that lenders in private capital markets are unwilling to bear or would bear only at higher interest rates than the Federal Government would charge. Interest subsidies are equivalent to cash grants to the borrower. In a wide variety of instances, similar programmatic objectives of the Federal Government can be achieved either with cash payments, credit assistance, or tax incentives. The interest subsidy is explicit when the Federal credit assistance provides an interest rate lower than could be provided in private capital markets, as in the case of direct loans. The interest subsidy is less explicit, if the Federal credit assistance provides for longer maturities, higher loan-to-value ratios, or greater liquidity than would have been available in private capital markets. For example, Government guarantees of some residential mortgages, combined with special borrowing privileges of Government-sponsored enterprises such as the Federal National Mortgage Association (FNMA) have helped create well organized special markets for mortgage credit. The subsidy is implicit

---

<sup>1</sup> While in theory Federal credit could be provided without an explicit or implicit subsidy. There would be no point in doing so, since it would offer no advantage over private credit.

in the case of guaranteed loans in which the Government assumes most or all of the risk of default.

Direct loans are payments of cash, secured by a promise to repay the Government. The promise to repay may be in the form of a mortgage, a bond, a debenture, or a promissory note. Loan guarantees occur when a Government agency enters into a firm commitment to use Government funds as necessary to repay a lender upon default by the borrower.<sup>2</sup> The amount of the guarantee may be less than the full principal of the loan and may include the guarantee of interest. Loan insurance is a type of guarantee in which a Government agency operates a program of pooled risks, pledging the use of insurance premiums to secure a lender against default on the part of a borrower.<sup>3</sup> Tax-exempt bonds are obligations with below market interest rates due to the tax exemption of the interest income. The amount of the subsidy is the difference between the tax-exempt and taxable interest rates.

This special analysis compiles basic information on Government credit programs and plans over the budget period. It is not an evaluation of such programs and plans. It summarizes major trends in the credit activity of the Federal Government and Government-sponsored enterprises and presents the estimates of direct loans and loan guarantees by major program groupings, agencies, and enterprises from 1980 to 1982.

Reporting on Federal credit activities in the budget has expanded considerably in recent years. Part 2 of the *Budget* contains aggregated data on those Federal credit activities that are part of the administration's new system to control Federal credit. Part 3 discusses the growth and effects of credit programs. Part 5 of the *Budget* integrates information about major credit programs in the context of meeting national needs. Part 5 also shows the lending activities of the Federal Financing Bank according to function. Part 6 of the *Budget* examines the debt transactions of the Federal Government and the role of Government-sponsored enterprises. The *Appendix* volume of the *Budget* shows details and descriptions of the lending activities of individual budgetary accounts.

### TRENDS AND DIRECTIONS

Table F-1 summarizes data on Federal participation in domestic credit markets during the last decade. This table uses two measures of Federal participation—lending (funds advanced) and borrowing (funds raised). The total amount of funds advanced under Federal auspices has risen over four-fold in the last decade, reach-

<sup>2</sup> A loan guarantee can be thought of as the action of attaching a Federal guarantee to a loan. A guaranteed loan refers to the loan, usually contracted in the private sector, with a Federal guarantee attached. In some cases, however, one Federal agency guarantees a loan, and another Federal agency makes the loan.

<sup>3</sup> For the remainder of this analysis, the term loan guarantees will include insurance. The Federal Government is, in essence, the co-signer of a federally-guaranteed loan.

ing \$80.8 billion in 1980 and is estimated to reach \$109.8 billion in 1982. The Federal participation rate for total funds advanced in U.S. credit markets reached a new height for this decade of 23.2% in 1980. This rise is due in part to high and rising interest rates, which increased demand by the public for many credit assistance programs.

The other measure of Federal participation is funds raised (borrowed) under Federal auspices, which includes funds raised for Federal and Government-sponsored credit programs as well as funds raised to finance the Federal deficit. This Federal participation rate is much more volatile, ranging from 19% to 39% of total borrowing over the past decade. The volatility is due primarily to swings in the budget deficit. The participation rate peaked in 1976 and 1980.

Certain credit programs are particularly volatile, since they respond to changes in economic conditions. The Federal home loan banks (a subset of Government-sponsored enterprises), for example, make numerous loans to savings institutions during periods of tight monetary conditions in order to avert undue hardship in the mortgage market and the associated construction and housing industries. As monetary conditions ease, they make fewer loans and experience high repayment flows. Similar patterns occur in other programs related to housing finance, such as those of the FNMA. Such fluctuations have proved difficult to anticipate.

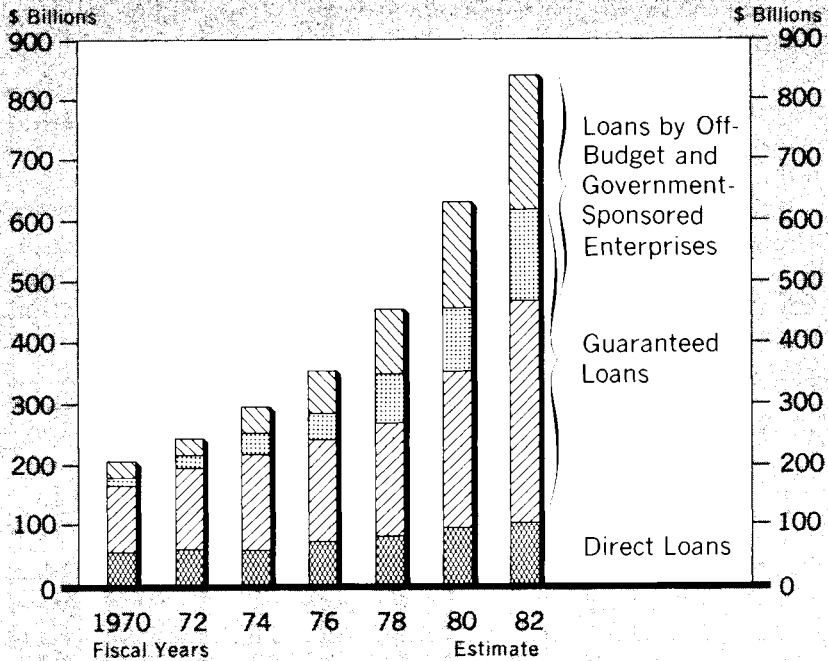
Table F-1. FEDERAL PARTICIPATION IN DOMESTIC CREDIT MARKETS (dollars in billions)

	Actual											Estimates	
	1971	1972	1973	1974	1975	1976	TQ	1977	1978	1979	1980	1981	1982
<b>Total funds advanced in U.S. credit markets<sup>1</sup> (includes equities)</b> .....	125.7	163.5	207.7	193.4	181.3	251.8	66.1	314.4	385.3	414.3	348.0	( <sup>2</sup> )	( <sup>2</sup> )
<b>Advanced under Federal auspices</b> .....	16.5	22.9	27.2	25.7	27.1	27.0	6.7	37.3	58.9	73.8	80.8	98.8	109.8
Direct loans:													
On-budget.....	2.0	3.0	0.9	3.3	5.8	4.2	1.1	2.6	8.6	6.0	9.5	3.9	6.1
Off-budget.....			0.1	0.8	7.0	6.7	2.6	9.0	11.2	13.6	14.7	23.2	18.5
Guaranteed loans.....	16.1	19.8	17.7	10.5	8.7	11.2	-0.1	14.0	13.9	26.1	32.4	51.3	56.9
Government-sponsored enterprise loans.....	-1.7	0.1	8.5	11.2	5.6	4.9	3.1	11.7	25.2	28.1	24.1	20.3	28.3
<b>Federal participation rate including Government-sponsored enterprises (percent)</b> .....	13.1	14.0	13.1	13.3	14.9	10.7	10.1	11.9	15.3	17.8	23.2		
<b>Total funds raised in U.S. credit markets<sup>1</sup></b> .....	125.7	163.5	207.7	193.4	181.3	251.8	66.1	314.4	385.3	414.3	348.0	( <sup>2</sup> )	( <sup>2</sup> )
<b>Raised under Federal auspices</b> .....	33.5	40.0	47.5	24.4	64.9	98.2	19.3	79.6	94.4	81.7	124.4	141.5	126.8
Federal borrowing from public.....	19.4	19.4	19.3	3.0	50.9	82.9	18.0	53.5	59.1	33.6	70.5	72.0	45.0
Borrowing for guaranteed loans.....	16.1	19.8	17.7	10.5	8.7	11.2	-0.1	14.0	13.9	26.1	32.4	51.3	56.9
Government-sponsored enterprise borrowing.....	-2.1	0.7	10.6	10.9	5.3	4.1	1.4	12.0	21.4	21.9	21.4	18.2	24.9
<b>Federal participation rate (percent)</b> .....	26.6	24.5	22.9	12.6	35.8	39.0	29.2	25.3	24.5	19.7	35.7		

<sup>1</sup> Nonfinancial sectors. Source: Federal Reserve Board Flow of Funds Accounts.<sup>2</sup> Not estimated.



### Federal and Federally Assisted Credit Outstanding



The net funds advanced in a given year are simply the difference between the amount of loans outstanding at the beginning and at the end of that year. The accompanying chart shows the growth of Federal and federally-assisted credit outstanding in the last decade. Since 1971, the total amount of loans outstanding has risen by \$387.4 billion to \$613.5 billion in 1980, an increase of 170%.

Most direct Federal outlays are covered within the budget totals and have been subject to periodic review in both the executive and congressional budget processes. Several direct lending programs are excluded from the budget outlay totals, as are all loan guarantees, except for payments of claims on defaults, certain repurchases, interest subsidies, or other installment payments. As a result, the budget understates the extent of Government involvement in credit markets. In the interest of developing a more rational credit policy, the administration established a new system to review and control Federal credit programs in the 1981 Budget. A brief discussion is found in a separate section of this analysis and in Parts 2, 3, 5, and 7 of the *Budget*.

#### DIRECT LOANS

The major Federal agencies and programs that make direct loans are identified in table F-2, which shows estimates of direct loans for 1980-82.

Table F-2. DIRECT LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)

Agency or program		Obligations			Loans		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
<b>ON-BUDGET AGENCIES</b>							
<b>Funds Appropriated to the President:</b>							
International security assistance.....	New transactions.....	1,348	1,375	2,020	1,645	1,620	1,680
	<i>Net outlays</i> .....				<i>886</i>	<i>863</i>	<i>871</i>
	<b>Outstandings</b> .....	<b>1,519</b>	<b>1,299</b>	<b>1,663</b>	<b>4,749</b>	<b>5,612</b>	<b>6,483</b>
International development assistance.....	New transactions.....	449	406	485	393	369	363
	<i>Net outlays</i> .....				<i>112</i>	<i>64</i>	<i>28</i>
	<b>Outstandings</b> .....	<b>1,450</b>	<b>1,472</b>	<b>1,577</b>	<b>11,588</b>	<b>11,652</b>	<b>11,680</b>
<b>Agriculture:</b>							
Farmers Home Administration.....	New transactions.....	15,703	17,186	11,379	15,768	17,171	12,445
	<i>Net outlays</i> .....				<i>958</i>	<i>-3,261</i>	<i>-324</i>
	<b>Outstandings</b> .....	<b>3,820</b>	<b>4,072</b>	<b>3,338</b>	<b>4,096</b>	<b>835</b>	<b>511</b>
Commodity Credit Corporation.....	New transactions.....	4,947	3,596	4,620	4,947	3,596	4,620
	<i>Net outlays</i> .....				<i>-758</i>	<i>-2,506</i>	<i>21</i>
	<b>Outstandings</b> .....				<b>7,069</b>	<b>4,562</b>	<b>4,584</b>
Public Law 480 long-term export credits.....	New transactions.....	877	916	878	877	916	878
	<i>Net outlays</i> .....				<i>651</i>	<i>735</i>	<i>682</i>
	<b>Outstandings</b> .....				<b>7,134</b>	<b>7,869</b>	<b>8,551</b>
Rural Electrification Administration.....	New transactions.....	10	31			18	10
	<i>Net outlays</i> .....					<i>18</i>	<i>10</i>
	<b>Outstandings</b> .....	<b>13</b>	<b>26</b>	<b>16</b>		<b>18</b>	<b>28</b>
<b>Commerce:</b>							
Economic Development Administration.....	New transactions.....	116	116	116	152	115	123
	<i>Net outlays</i> .....				<i>87</i>	<i>-12</i>	<i>47</i>
	<b>Outstandings</b> .....	<b>79</b>	<b>73</b>	<b>66</b>	<b>907</b>	<b>913</b>	<b>960</b>

National Oceanic and Atmospheric Administration .....	New transactions.....	33	47	24	39	47
	<i>Net outlays</i> .....			<i>24</i>	<i>39</i>	<i>47</i>
	<b>Outstandings</b> .....	<b>89</b>	<b>97</b>	<b>50</b>	<b>33</b>	<b>72</b>
Maritime Administration .....	New transactions.....	11	15	15	14	15
	<i>Net outlays</i> .....			<i>6</i>	<i>5</i>	<i>4</i>
	<b>Outstandings</b> .....			<b>130</b>	<b>135</b>	<b>139</b>
Education: Student Assistance .....	New transactions.....	305	186	286	311	283
	<i>Net outlays</i> .....			<i>287</i>	<i>258</i>	<i>184</i>
	<b>Outstandings</b> .....	<b>297</b>	<b>200</b>	<b>276</b>	<b>4,098</b>	<b>4,356</b>
Other education programs .....	New transactions.....	384	452	550	334	438
	<i>Net outlays</i> .....			<i>178</i>	<i>270</i>	<i>316</i>
	<b>Outstandings</b> .....	<b>143</b>	<b>158</b>	<b>205</b>	<b>4,594</b>	<b>4,864</b>
Health and Human Services: Health programs .....	New transactions.....	66	66	93	64	80
	<i>Net outlays</i> .....			<i>18</i>	<i>-10</i>	<i>-1</i>
	<b>Outstandings</b> .....	<b>25</b>	<b>11</b>	<b>2</b>	<b>866</b>	<b>856</b>
Housing and Urban Development: Housing programs .....	New transactions.....	2,553	1,480	1,431	2,443	1,457
	<i>Net outlays</i> .....			<i>869</i>	<i>688</i>	<i>639</i>
	<b>Outstandings</b> .....	<b>830</b>	<b>820</b>	<b>841</b>	<b>5,740</b>	<b>6,428</b>
Government National Mortgage Association .....	New transactions.....	2,201	1,832	314	2,002	1,623
	<i>Net outlays</i> .....			<i>1,021</i>	<i>-528</i>	<i>-244</i>
	<b>Outstandings</b> .....	<b>5,525</b>	<b>5,568</b>	<b>3,312</b>	<b>4,329</b>	<b>3,801</b>
Community planning and development.....	New transactions.....	203	197	215	373	213
	<i>Net outlays</i> .....			<i>170</i>	<i>132</i>	<i>144</i>
	<b>Outstandings</b> .....	<b>125</b>	<b>109</b>	<b>109</b>	<b>697</b>	<b>829</b>
New Communities .....	New transactions.....	10	25		10	25
	<i>Net outlays</i> .....			<i>10</i>	<i>25</i>	
	<b>Outstandings</b> .....			<b>129</b>	<b>154</b>	<b>154</b>

Table F-2. DIRECT LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or program		Obligations			Loans		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Interior .....	New transactions.....	26	40	50	45	42	46
	<i>Net outlays</i> .....				17	22	13
	<b>Outstandings</b> .....	<b>18</b>	<b>16</b>	<b>20</b>	<b>420</b>	<b>442</b>	<b>455</b>
Transportation: Railroad programs .....	New transactions.....	131	108	155	168	108	93
	<i>Net outlays</i> .....				170	110	96
	<b>Outstandings</b> .....	<b>227</b>	<b>226</b>	<b>288</b>	<b>368</b>	<b>479</b>	<b>574</b>
Other .....	New transactions.....	23	14	19	29	55	64
	<i>Net outlays</i> .....				29	55	64
	<b>Outstandings</b> .....	<b>107</b>	<b>66</b>	<b>21</b>	<b>237</b>	<b>292</b>	<b>356</b>
Treasury.....	New transactions.....		100	80	10	10	15
	<i>Net outlays</i> .....				-111	-93	-90
	<b>Outstandings</b> .....	<b>10</b>	<b>100</b>	<b>165</b>	<b>3,705</b>	<b>3,606</b>	<b>3,516</b>
Veterans Administration: Housing loans and default claims.....	New transactions.....	362	408	436	641	725	747
	<i>Net outlays</i> .....				-5	-84	-18
	<b>Outstandings</b> .....	<b>4</b>	<b>1</b>	<b>1</b>	<b>1,721</b>	<b>1,637</b>	<b>1,620</b>
Insurance policy and other loans.....	New transactions.....	264	310	308	264	310	308
	<i>Net outlays</i> .....				119	153	144
	<b>Outstandings</b> .....	<b>*</b>	<b>*</b>	<b>*</b>	<b>1,392</b>	<b>1,545</b>	<b>1,690</b>
To: District of Columbia.....	New transactions.....	90	133	220	130	173	220
	<i>Net outlays</i> .....				46	108	191
	<b>Outstandings</b> .....	<b>40</b>			<b>1,459</b>	<b>1,567</b>	<b>1,758</b>
Export-Import Bank.....	New transactions.....	5,495	7,581	5,000	3,288	3,949	4,316
	<i>Net outlays</i> .....				1,906	2,344	2,528

	<b>Outstandings</b> .....	<b>5,966</b>	<b>9,024</b>	<b>9,007</b>	<b>13,765</b>	<b>16,109</b>	<b>18,637</b>
Federal Deposit Insurance Corporation .....	New transactions.....	325			325		
	<i>Net outlays</i> .....				306	-45	-22
	<b>Outstandings</b> .....				<b>475</b>	<b>431</b>	<b>409</b>
Federal Home Loan Bank Board.....	New transactions.....	589	1,055	190	589	1,055	190
	<i>Net outlays</i> .....				582	904	29
	<b>Outstandings</b> .....				<b>657</b>	<b>1,561</b>	<b>1,590</b>
National Consumer Cooperative Bank.....	New transactions.....	22	187	147	5	182	136
	<i>Net outlays</i> .....				5	123	119
	<b>Outstandings</b> .....	<b>17</b>	<b>23</b>	<b>33</b>	<b>5</b>	<b>128</b>	<b>247</b>
National Credit Union Administration.....	New transactions.....	327	2,227	3,671	217	2,243	3,671
	<i>Net outlays</i> .....				94	216	207
	<b>Outstandings</b> .....	<b>110</b>	<b>93</b>	<b>93</b>	<b>114</b>	<b>330</b>	<b>538</b>
Small Business Administration:							
Business and investment loans.....	New transactions.....	761	789	875	753	795	834
	<i>Net outlays</i> .....				354	407	435
	<b>Outstandings</b> .....	<b>179</b>	<b>148</b>	<b>164</b>	<b>2,354</b>	<b>2,762</b>	<b>3,197</b>
Disaster loans.....	New transactions.....	1,237	2,850	490	1,249	2,887	524
	<i>Net outlays</i> .....				773	2,320	-158
	<b>Outstandings</b> .....	<b>492</b>	<b>385</b>	<b>331</b>	<b>5,343</b>	<b>7,663</b>	<b>7,505</b>
Tennessee Valley Authority Fund.....	New transactions.....	68	81	76	68	81	76
	<i>Net outlays</i> .....				68	78	74
	<b>Outstandings</b> .....				<b>99</b>	<b>177</b>	<b>251</b>
United States Railway Association <sup>1</sup> .....	New transactions.....	641	535	50	641	535	50
	<i>Net outlays</i> .....				641	535	50
	<b>Outstandings</b> .....				<b>3,115</b>	<b>3,650</b>	<b>3,700</b>
Other agencies and programs .....	New transactions.....	31	25	28	16	50	32
	<i>Net outlays</i> .....				-33	15	-3

Table F-2. DIRECT LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or program		Obligations			Loans		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
	<b>Outstandings</b> .....	<b>25</b>	<b>4</b>	<b>4</b>	<b>269</b>	<b>284</b>	<b>281</b>
Subtotal, on-budget agencies.....	New transactions.....	39,608	44,370	34,197	37,796	41,178	36,347
	<i>Net outlays</i> .....				<i>9,482</i>	<i>3,946</i>	<i>6,085</i>
	<b>Outstandings</b> .....	<b>21,109</b>	<b>23,991</b>	<b>21,584</b>	<b>91,663</b>	<b>95,620</b>	<b>101,705</b>
<b>OFF-BUDGET FEDERAL ENTITIES</b>							
Rural electrification and telephone revolving fund.....	New transactions.....	1,175	1,100	1,100	1,207	1,100	1,166
	<i>Net outlays</i> .....				<i>169</i>	<i>210</i>	<i>156</i>
	<b>Outstandings</b> .....	<b>2,086</b>	<b>2,086</b>	<b>2,020</b>	<b>9,486</b>	<b>9,696</b>	<b>9,852</b>
Rural Telephone Bank.....	New transactions.....	200	185	185	200	185	185
	<i>Net outlays</i> .....				<i>191</i>	<i>171</i>	<i>168</i>
	<b>Outstandings</b> .....	<b>449</b>	<b>449</b>	<b>449</b>	<b>931</b>	<b>1,102</b>	<b>1,269</b>
Federal Financing Bank.....	New transactions.....	22,188	30,873	24,846	22,188	30,873	24,846
	<i>Net outlays</i> .....				<i>14,365</i>	<i>23,072</i>	<i>18,206</i>
	<b>Outstandings</b> .....				<b>61,465</b>	<b>84,537</b>	<b>102,743</b>
United States Railway Association.....	New transactions.....	19	7	1	19	7	1
	<i>Net outlays</i> .....				<i>-3</i>	<i>-234</i>	<i>1</i>
	<b>Outstandings</b> .....				<b>384</b>	<b>150</b>	<b>151</b>
Subtotal, off-budget Federal entities.....	New transactions.....	23,583	32,165	26,132	23,614	32,165	26,198
	<i>Net outlays</i> .....				<i>14,722</i>	<i>23,219</i>	<i>18,531</i>
	<b>Outstandings</b> .....	<b>2,535</b>	<b>2,535</b>	<b>2,469</b>	<b>72,266</b>	<b>95,485</b>	<b>114,015</b>

Less loan assets of the Federal Financing Bank <sup>2</sup> .....	New transactions.....	12,110	16,637	8,230	12,110	16,637	8,230
	<i>Net outlays</i> .....						
	<b>Outstandings</b> .....						
Grand total.....	New transactions.....	51,081	59,898	52,099	49,300	56,706	54,315
	<i>Net outlays</i> .....				24,203	27,165	24,615
	<b>Outstandings</b> .....	<b>23,644</b>	<b>26,526</b>	<b>24,053</b>	<b>163,928</b>	<b>191,105</b>	<b>215,720</b>
<b>ADDENDUM</b>							
Foreign currency loans <sup>3</sup> .....	New transactions.....	5			2	6	
	<i>Net outlays</i> .....				-118	-71	-78
	<b>Outstandings</b> .....	<b>6</b>			<b>1,428</b>	<b>1,357</b>	<b>1,280</b>

<sup>1</sup> Includes both debentures and repayable preferred stock of Conrail.

<sup>2</sup> To avoid double counting, new loan assets purchased from agencies by the Federal Financing Bank are deducted. The amount of the loan assets are already recorded as direct loans by the originating agency. This deduction affects new transactions only.

<sup>3</sup> Foreign currency transactions are excluded from the budget totals.

Direct loans are made by both on-budget agencies and off-budget Federal entities and are financed from a variety of sources such as taxation, borrowing, and loan repayments.<sup>4</sup> (For a discussion of off-budget Federal entities, see Part 6 of the *Budget*.) The table shows loan activity by the headings "obligations" and "loans". Obligations are firm written agreements by the Government to extend direct loans. Estimated obligations can be a good indicator of future financial flows. However, obligations in a given year need not always eventually result in an equal volume of new direct loan transactions since the conversion of obligations to loans can take time and plans change. Moreover, some prospective borrowers to whom obligations are made do not convert the obligations into borrowing. Loans, in turn, are the loans actually made in the specified time period.

New transactions are the amount of new loans in a given year. New direct loan transactions are the amount of gross loan disbursements, which in turn are the sum of disbursements to make new loans, disbursements to pay guarantee claims,<sup>5</sup> and purchases of existing loans. Net outlays of direct loans are equal to new transactions less repayments<sup>6</sup> of loans, liquidation of collateral, loan writeoffs, and sales of loan assets. Net outlays of direct loans are also equal to the difference between the volume of loans outstanding at the end of the year and the volume outstanding at the beginning of the year.<sup>7</sup>

Net outlays of direct loans by on-budget Federal agencies are counted as budget outlays. Because net outlays are sometimes much less than the level of new transactions,<sup>8</sup> the latter may be a better indicator of new Federal direct lending activity.

In the case of obligations, new transactions are the new obligations entered into during a given year. Outstanding obligations are the total amount of obligations still outstanding at the end of a particular year.

Net outlays of direct loans on-budget increased by \$9.5 billion in 1980, but are expected to rise only \$3.9 billion in 1981 and \$6.1 billion in 1982. The lower net lending levels in 1981 and 1982 are due primarily to fluctuations in sales of loan assets and repayments rather than changes in program levels. These fluctuations occur

---

<sup>4</sup>Taxation and borrowing are in many cases indistinguishable sources of funds for a specific program. However, the treatment of loan repayments can differ from program to program.

<sup>5</sup> Upon default of a loan guarantee, the Government assumes the guaranteed loan. The lender is reimbursed for the amount of the guarantee, while the borrower owes the Federal Government directly rather than the original lender. Claims paid under insurance or guarantee programs are considered as direct loans until the acquired loans or collateral are paid off or liquidated. Proceeds of liquidation are considered repayments and realized losses are writeoffs.

<sup>6</sup> Loan repayments and receipts from the sale of loans are netted from gross loan disbursements in determining net loan outlays, rather than being counted by budget receipts.

<sup>7</sup> The volume of loans outstanding is thus a stock concept referring to the total of loans that have ever been made, less principal repaid to date, loans written off and receipts from the sale of loans. Net loan outlays is a flow concept, the difference in loans outstanding at the beginning and at the end of a particular year.

<sup>8</sup> The difference between new transactions and net outlays depends on the amount of loan repayments, asset sales, and write-offs relative to new loan disbursements.



primarily in the Farmer's Home Administration, the Commodity Credit Corporation and the Government National Mortgage Association. Disaster lending by the Small Business Administration (SBA) declines due to a shifting of their activities to the FmHA.

#### LOAN ASSET SALES

Loan asset sales are sales of direct loans. A guarantee by the selling agency is usually attached. Under budgetary practices, loan asset sales are treated as if they were the same as loan repayments and are considered offsets to agency outlays rather than borrowing to finance outlays. Loan asset sales reduce the agency's outlay totals, and if the agency is on-budget, reduce total budget outlays. After the sale, the loan is held privately or by a Federal account (usually an off-budget Federal entity), but the Federal Government continues to bear the risk of default of the borrower.

Loan asset sales generally occur in three instances. First, the Farmers Home Administration (FmHA) and Rural Electrification Administration (REA) carry out direct loan programs and issue certificates of beneficial ownership (CBO's). The President's Commission on Budget Concepts recommended that the sale of such securities be treated as borrowing, but in certain cases legislation requires that it be treated instead as the sale of loan assets. The Commission argued, however, that as a means of financing outlays, there is no difference in substance between an agency selling securities labeled "certificates of beneficial ownership," the same agency selling securities labeled "debt" and the Treasury selling securities labeled "debt." Moreover, when CBOs are sold, the ownership of the specific loans is retained by the Government, repayments on the loans continue to be made to the Government, and the Government continues to incur the servicing costs of the loans and to assume fully the risk of default on the loans.

Second, where some direct loans have been made or loans may have been acquired through payments on guarantee claims upon default, or through sale of collateral using purchase money mortgages,<sup>9</sup> these direct loans may subsequently be sold off, usually with guarantees attached. Third, under its "tandem" program, the Government National Mortgage Association (GNMA) purchases designated types of mortgages at below-market yields. These mortgages are then resold to the private market at prices that are sufficiently low to afford a normal return to investors. The outlay occurs—and is recorded—when GNMA purchases the loans. The sale to the private market at below-market interest rates results in collections that offset the outlays, except for the subsidy (losses).

---

<sup>9</sup> A purchase money mortgage is a sale of property for a financial asset, usually a mortgage, instead of for cash.

This purchase and resale mechanism both insures the availability of credit for the designated type of mortgage and provides an explicit interest subsidy. Loan asset sales by the Department of Agriculture and under the GNMA "tandem" plan represent over 90% of all loan asset sales.

Traditionally, loan asset sales meant selling the title to the loans to the public. However, since the creation of the Federal Financing Bank (FFB), most loan assets are sold by on-budget accounts to the off-budget FFB, converting them from direct loans on-budget to loans off-budget.

Table F-3. LOAN ASSETS SALES, LOAN REPAYMENTS, AND OTHER LOAN OFFSETS (in millions of dollars)

Agency or program	Transactions with	Loan assets sales				Repayments and adjustments		
		1980 actual	1981 estimate	1982 estimate		1980 actual	1981 estimate	1982 estimate
<b>ON-BUDGET AGENCIES</b>								
Agriculture:								
Commodity Credit Corporation.....	the Public.....				Repayments, etc. <sup>4</sup> .....	5,882	6,283	4,783
	FFB .....				Non-cash adjustments .....	49	1	11
Agricultural credit insurance fund.....	the Public.....				Repayments, etc. <sup>4</sup> .....	2,376	3,071	3,724
	the FFB .....	5,257	7,121	2,305	Non-cash adjustments .....	10	11	12
Rural housing insurance fund .....	the Public.....	78	60	50	Repayments, etc. <sup>4</sup> .....	893	1,131	1,349
	the FFB .....	4,681	7,341	4,161	Non-cash adjustments .....	4	6	7
Rural development insurance fund.....	the Public.....				Repayments, etc. <sup>4</sup> .....	68	81	95
	the FFB .....	1,443	1,608	1,064	Non-cash adjustments .....	*	*	*
Department of Education.....	the Public.....				Repayments, etc. <sup>4</sup> .....	177	193	213
	the FFB .....				Non-cash adjustments .....	2		
Health and Human Services:								
Health maintenance organization loans.....	the Public.....	- 9			Repayments, etc. <sup>4</sup> .....	*	*	16
	the FFB .....	39	52	76	Non-cash adjustments .....	*	29	1
Housing and Urban Development:								
Federal Housing Administration fund.....	the Public.....				Repayments, etc. <sup>4</sup> .....	249	420	424
	the FFB .....				Non-cash adjustments .....	19	20	21
Other housing programs .....	the Public.....				Repayments, etc. <sup>4</sup> .....	1,507	410	400
	the FFB .....				Non-cash adjustments .....	2	2	2
Veterans Administration:								
Direct loan revolving fund.....	the Public.....				Repayments, etc. <sup>4</sup> .....	56	55	55
	the FFB .....				Non-cash adjustments .....	*	*	*

Table F-3. LOAN ASSETS SALES, LOAN REPAYMENTS, AND OTHER LOAN OFFSETS (in millions of dollars)—Continued

Agency or program	Transactions with	Loan assets sales				Repayments and adjustments		
		1980 actual	1981 estimate	1982 estimate		1980 actual	1981 estimate	1982 estimate
Loan guarantee revolving fund.....	the Public.....	150	280	239	Repayments, etc. <sup>4</sup> .....	383	425	426
	the FFB.....				Non-cash adjustments.....	56	48	44
Export-Import Bank.....	the Public.....				Repayments, etc. <sup>4</sup> .....	1,382	1,605	1,788
	the FFB.....				Non-cash adjustments.....			
Small Business Administration.....	the Public.....				Repayments, etc. <sup>4</sup> .....	649	748	849
	the FFB.....				Non-cash adjustments.....	226	207	232
Other agencies and programs.....	the Public.....	*	2	1	Repayments, etc. <sup>4</sup> .....	1,181	3,380	4,762
	the FFB.....				Non-cash adjustments.....	549	517	530
Subtotal, excluding tandem plans <sup>1</sup> .....	the Public.....	220	342	290	Repayments, etc. <sup>4</sup> .....	14,803	17,803	18,885
	the FFB.....	11,420	16,121	7,606	Non-cash adjustments.....	917	840	860
Housing and Urban Development (GNMA): Tandem plan sales—FHA/VA mortgages.....	the Public.....	833	2,000	2,500	Repayments, etc. <sup>4</sup> .....	121	126	121
	the FFB.....				Non-cash adjustments.....			
Subtotal, with tandem plan.....	the Public.....	1,053	2,342	2,790	Repayments, etc. <sup>4</sup> .....	14,924	17,929	19,006
	the FFB.....	11,420	16,121	7,606	Non-cash adjustments.....	917	840	860
<b>OFF-BUDGET FEDERAL ENTITIES</b>								
Rural electrification and telephone revolving fund.....	the Public.....				Repayments, etc. <sup>4</sup> .....	349	373	387
	the FFB.....	689	516	624	Non-cash adjustments.....			
Other.....	the Public.....				Repayments, etc. <sup>4</sup> .....	7,835	8,049	6,656



Table F-3 shows all loan offsets—all repayments, asset sales, or other credits that reduce the recorded totals of direct loan transactions. Two of the loan entries in table F-2 are “new (direct loan) transactions” and “net (direct loan) outlays”; table F-3 provides a four-way distribution of those loan offsets that are the difference between these two measures of direct lending. The four-way split is as follows:

Loan asset sales to the public result in a flow of cash from the public to the agency in exchange for title to direct loans. In most cases this form of transaction converts direct loans into privately held notes guaranteed by the Government.

Loan asset sales to the FFB shift the title of direct loans (or CBO participation certificates) from the agency to the FFB. For an on-budget agency, this reduces the recorded budget outlays by the amount of the sale but raises the off-budget outlays of the FFB by an equal amount. For an off-budget entity, sales to the FFB reduce the recorded off-budget outlays of the selling entity and raise the off-budget outlays of the FFB by an equal amount. All loans purchased by the FFB are fully guaranteed by some other Federal agency.

Repayments, prepayments, and other capital recoveries are cash paid to the Government, thereby reducing indebtedness. They are counted as a reduction in new transactions of direct loans.

Non-cash adjustments are non-cash accounting entries to take cognizance of losses, write-offs, or other adjustments in cases where the recorded value of the loans is greater than the amount of money collected or collectable on the loans.

As a result, new direct loan transactions (shown in table F-2) less new direct loan offsets (shown in table F-3) equal net outlays of direct loans (shown in table F-2).

### THE FEDERAL FINANCING BANK

The Federal Financing Bank (FFB) began operations in May 1974 and has been a significant factor in financing Federal credit activities. The bank is staffed under the supervision of the Treasury Department and all its personnel are Treasury employees. Its transactions are excluded by law from the budget totals. Hence, its lending transactions are not counted as budget outlays.

The FFB was designed to serve as a financial intermediary for the efficient financing of obligations issued, sold, or guaranteed by

Federal agencies. The FFB performs three functions. First, with some exceptions, the Treasury may require agencies authorized to borrow from the public to borrow from the FFB instead. Second, the Treasury can direct most agencies to sell loan assets to the FFB rather than the public.<sup>10</sup> Third the FFB is authorized to purchase guaranteed loans. Generally, the FFB makes loans directly to borrowers whose obligations are guaranteed by a Federal agency. These guaranteed loans are in effect converted into direct loans outside the budget. The FFB assures the efficient financing of these guaranteed loans and reduces borrowing costs.<sup>11</sup>

---

<sup>10</sup> When the FFB buys loan assets, it effectively converts direct loans that have already been made by another agency into off-budget direct loans of the FFB.

<sup>11</sup> There is a modest (1/8 percentage point) surcharge to cover administrative expenses.

Table F-4. FFB ACQUISITIONS (in millions of dollars)

Agency or program	1980 actual	1981 estimate	1982 estimate
Purchase of loan assets from:			
Overseas Private Investment Corporation (FAP):			
New acquisitions.....			
<i>Net outlays</i> .....	-4	-5	-5
<b>Outstandings</b> .....	<b>33</b>	<b>28</b>	<b>23</b>
Farmers Home Administration CBOs (USDA):			
New acquisitions.....	11,381	16,070	7,531
<i>Net outlays</i> .....	<i>6,881</i>	<i>12,420</i>	<i>6,056</i>
<b>Outstandings</b> .....	<b>37,961</b>	<b>50,381</b>	<b>56,437</b>
Rural Electrification Administration CBOs (USDA):			
New acquisitions.....	689	516	624
<i>Net outlays</i> .....	<i>689</i>	<i>516</i>	<i>624</i>
<b>Outstandings</b> .....	<b>1,912</b>	<b>2,428</b>	<b>3,052</b>
Medical facilities guarantees (HHS):			
New acquisitions.....			
<i>Net outlays</i> .....	-4	-4	-5
<b>Outstandings</b> .....	<b>164</b>	<b>160</b>	<b>155</b>
Health Maintenance Organizations (HHS):			
New acquisitions.....	39	52	76
<i>Net outlays</i> .....	<i>26</i>	<i>51</i>	<i>59</i>
<b>Outstandings</b> .....	<b>105</b>	<b>156</b>	<b>215</b>
Small business development company loans (SBA):			
New acquisitions.....			
<i>Net outlays</i> .....	-15	-15	-15
<b>Outstandings</b> .....	<b>89</b>	<b>74</b>	<b>59</b>
Other agencies and programs:			
New acquisitions.....			
<i>Net outlays</i> .....			
<b>Outstandings</b> .....	<b>177</b>	<b>177</b>	<b>177</b>
Subtotal, purchase of loan assets:			
New acquisitions.....	12,110	16,637	8,230
<i>Net outlays</i> .....	<i>7,572</i>	<i>12,962</i>	<i>6,713</i>
<b>Outstandings</b> .....	<b>40,442</b>	<b>53,405</b>	<b>60,118</b>
Direct loans (purchases of loans guaranteed by agencies):			
Foreign military sales credit (FAP):			
New acquisitions.....	2,380	2,600	3,000
<i>Net outlays</i> .....	<i>1,932</i>	<i>2,010</i>	<i>2,220</i>
<b>Outstandings</b> .....	<b>7,209</b>	<b>9,219</b>	<b>11,439</b>
Rural Electrification Administration (USDA):			
New acquisitions.....	2,498	4,258	5,129
<i>Net outlays</i> .....	<i>2,498</i>	<i>4,258</i>	<i>5,129</i>
<b>Outstandings</b> .....	<b>8,424</b>	<b>12,682</b>	<b>17,810</b>
Guarantees of SLMA obligations (DED):			
New acquisitions.....	1,070	1,095	1,923
<i>Net outlays</i> .....	<i>1,070</i>	<i>1,095</i>	<i>1,923</i>
<b>Outstandings</b> .....	<b>2,345</b>	<b>3,440</b>	<b>5,363</b>



Table F-4. FFB ACQUISITIONS (in millions of dollars)—Continued

Agency or program	1980 actual	1981 estimate	1982 estimate
Electric hybrid vehicles (DOE):			
New acquisitions.....	1		
<i>Net outlays</i> .....	1		
<b>Outstandings</b> .....	1	1	1
Low-rent public housing (HUD):			
New acquisitions.....	119	1,458	957
<i>Net outlays</i> .....	119	1,457	942
<b>Outstandings</b> .....	119	1,576	2,517
Community development grants (HUD):			
New acquisitions.....	45	270	270
<i>Net outlays</i> .....	34	249	232
<b>Outstandings</b> .....	46	295	527
New Communities (HUD):			
New acquisitions.....			
<i>Net outlays</i> .....	-5		
<b>Outstandings</b> .....	34	34	34
Loans to territories (Interior):			
New acquisitions.....	9		
<i>Net outlays</i> .....	9	*	*
<b>Outstandings</b> .....	66	66	66
Railroad programs (DOT):			
New acquisitions.....	1,222	545	325
<i>Net outlays</i> .....	161	210	318
<b>Outstandings</b> .....	1,142	1,352	1,670
Public building CBI's <sup>1</sup> (GSA):			
New acquisitions.....	42	110	6
<i>Net outlays</i> .....	40	109	-1
<b>Outstandings</b> .....	458	567	566
Satellite leases (NASA):			
New acquisitions.....	107	102	144
<i>Net outlays</i> .....	107	102	144
<b>Outstandings</b> .....	530	632	776
Small business investment companies (SBA):			
New acquisitions.....	149	360	360
<i>Net outlays</i> .....	142	342	330
<b>Outstandings</b> .....	478	820	1,150
TVA's Seven States Energy Corporation:			
New transactions.....	2,436	3,437	4,502
<i>Net outlays</i> .....	685	277	257
<b>Outstandings</b> .....	685	962	1,219
Subtotal, direct loans (purchase of loans guaranteed by agencies):			
New acquisitions.....	10,079	14,236	16,616
<i>Net outlays</i> .....	6,792	10,109	11,493
<b>Outstandings</b> .....	21,536	31,646	43,139

Table F-4. FFB ACQUISITIONS (in millions of dollars)—Continued

Agency or program	1980 actual	1981 estimate	1982 estimate
Subtotal, all direct loans and purchases of agency loan assets:			
New acquisitions .....	22,188	30,873	24,846
<i>Net outlays</i> .....	14,365	23,072	18,206
<b>Outstandings</b> .....	<b>61,978</b>	<b>85,050</b>	<b>103,257</b>
<b>AGENCY BORROWING</b>			
<b>ADDENDUM:</b>			
By: on-budget agencies:			
Export-Import Bank:			
<i>Net change</i> .....	2,114	2,582	3,067
<b>Outstandings</b> .....	<b>10,067</b>	<b>12,649</b>	<b>15,716</b>
Tennessee Valley Authority:			
<i>Net change</i> .....	1,810	2,200	2,100
<b>Outstandings</b> .....	<b>8,935</b>	<b>11,135</b>	<b>13,235</b>
National Credit Union Association:			
<i>Net change</i> .....	90	210	300
<b>Outstandings</b> .....	<b>90</b>	<b>300</b>	<b>600</b>
By: off-budget Federal entities:			
U.S. Railway Association:			
<i>Net change</i> .....	36	-258	30
<b>Outstandings</b> .....	<b>482</b>	<b>224</b>	<b>255</b>
Postal Service:			
<i>Net change</i> .....	-67	-232	-67
<b>Outstandings</b> .....	<b>1,520</b>	<b>1,288</b>	<b>1,221</b>
Agency borrowing:			
<i>Net change</i> .....	3,983	4,503	5,430
<b>Outstandings</b> .....	<b>21,094</b>	<b>25,596</b>	<b>31,027</b>

<sup>1</sup> Certificates of beneficial interest.

In certain cases agencies are given authority to borrow from the public as well as the Treasury. Since Treasury borrowing is less expensive than agency borrowing, the use of this authority could be expensive. This additional expense would be avoided if the agency borrows directly from the Treasury or from the FFB which, in turn, borrows from the Treasury. Borrowing by agencies from the FFB is not included in FFB outlays; the use of the proceeds from the borrowing is counted as outlays of the borrowing agency. However, the agency must pay interest to the FFB on these borrowings and in turn the FFB pays interest to Treasury on its borrowing.

Table F-4 lists the activities of the FFB for 1980-82 by agency and account. The first set of entries lists FFB purchases of agency

loan assets. The second set of entries lists the FFB purchases of other loans guaranteed by Federal agencies which are in effect direct loans by the FFB to the public. The addendum lists borrowing (debt issues) by both on-budget agencies and off-budget entities from the FFB.

The FFB's net outlays for the purchase of loan assets are expected to rise from \$7.6 billion in 1980 to \$13.0 billion in 1981 and to \$6.7 billion in 1982. This is due primarily to substantial increases in purchases of CBO's issued by the FmHA between 1980 and 1982 and to increases in FFB purchases of loans guaranteed by the Rural Electrification Administration and for foreign military credit sales. Total FFB lending outlays rise from \$14.4 billion in 1980 to \$23.1 billion in 1981 decreasing slightly to \$18.2 billion in 1982.

### LOAN GUARANTEES

Loan guarantees are agreements in which a Government agency enters into a firm commitment to use Government funds as necessary to secure a lender against default on the part of the borrower. The loan guarantee is the Federal Government's contingent liability, which may be less than the full face value of the loan. A guaranteed loan is the resulting loan, with a guarantee attached. Loan 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.

The major use of loan guarantees has been to support housing, but in recent years guarantees have increasingly been used for other purposes. The effects of loan guarantees on the economy are difficult to assess. Some portion of the private loans that are guaranteed would have been made without the guarantee, and those private loans that would not have been made otherwise tend to divert credit away from other economic activities.

The nature of the loan guarantee differs widely among programs. The loan 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, it may be a security sold in the capital market, or it may be a security sold to the FFB. In the case of fully guaranteed loans, the Government guarantees the repayment of all principal and interest. In the case of partially guaranteed loans, the Government guarantees only partial repayment of principal and interest. Guaranteed loans also include loans on which the Government promises to pay a share of the interest, but none of the principal. Credit may be indirectly guaranteed without being explicitly labeled as a loan guarantee program under various contractual agreements, includ-

ing guarantees of private leases, contracts to make subsidy payments over extended periods and debt service grants. Guaranteed loans include most loan assets sold by Federal agencies.

Loan guarantees are not reflected in the budget outlays when credit is extended. Guaranteed loans generally result in budget outlays only when there is a default, requiring the Government to pay the lender's claims for losses. Losses from more traditional loan guarantee programs have been small, partly because most of the loans were protected with liens on marketable property. Some of the newer loan guarantee programs, such as student loans have suffered greater losses.

Data for loans guaranteed are organized by agency or program and for 1980-82 are presented in table F-5. The table includes the full amount of the principal of guaranteed loans, even though in some cases the Government guarantees are for less than the total amount. The structure of table F-5 is comparable to that for direct loans in table F-2. Detailed information on the amount of the Federal contingent liability under these guarantees may be found in the *Budget Appendix* and Part 5 of the *Budget*.

Commitments for new guaranteed loans are agreements by the Government to guarantee loans upon the prospective borrowers' and lenders' fulfillment of specific conditions. Commitments for new transactions are considered to be a good indicator of future guarantees. The amount of loans guaranteed in a given year is measured by the amount of new guaranteed loans in that year. Commitments in a given year do not always result in new guaranteed loans in that year, since conversion of a commitment to a guaranteed loan can take time and some plans may change. Moreover, some prospective borrowers to whom commitments are made do not ever convert the commitments into borrowing. The net change in loans guaranteed is equal to the amount of new guaranteed loans less repayments and other adjustments. The net change is also equal to the difference in guaranteed loans outstanding at the end and at the beginning of the year.

Table F-5. GUARANTEED LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)

Agency or program		Commitments			Loans guaranteed		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Funds Appropriated to the President:							
International security assistance.....	New transactions.....	1,450	2,546	2,931	2,380	2,600	3,000
	<i>Net change</i> .....				<i>1,880</i>	<i>1,960</i>	<i>2,180</i>
	<b>Outstandings</b> .....	<b>3,767</b>	<b>3,713</b>	<b>3,644</b>	<b>7,550</b>	<b>9,510</b>	<b>11,690</b>
International development assistance.....	New transactions.....	350	320	430	80	186	366
	<i>Net change</i> .....				<i>42</i>	<i>145</i>	<i>323</i>
	<b>Outstandings</b> .....	<b>700</b>	<b>833</b>	<b>897</b>	<b>893</b>	<b>1,039</b>	<b>1,362</b>
Callable capital contributions <sup>1</sup> .....	New transactions.....	830	1,133	9,531	830	1,133	9,531
	<i>Net change</i> .....				<i>830</i>	<i>1,133</i>	<i>9,531</i>
	<b>Outstandings</b> .....				<b>12,375</b>	<b>13,508</b>	<b>23,040</b>
Agriculture:							
Farmers Home Administration.....	New transactions.....	12,833	17,426	8,504	12,404	17,684	8,677
	<i>Net change</i> .....				<i>7,247</i>	<i>12,718</i>	<i>6,175</i>
	<b>Outstandings</b> .....	<b>1,446</b>	<b>1,189</b>	<b>1,016</b>	<b>44,325</b>	<b>57,043</b>	<b>63,217</b>
Commodity Credit Corporation.....	New transactions.....	744	1,947	2,000	673	2,036	2,000
	<i>Net change</i> .....				<i>652</i>	<i>1,792</i>	<i>764</i>
	<b>Outstandings</b> .....	<b>89</b>			<b>706</b>	<b>2,498</b>	<b>3,262</b>
Rural Electrification Administration.....	New transactions.....	5,711	5,148	5,179	3,305	4,884	5,873
	<i>Net change</i> .....				<i>3,305</i>	<i>4,884</i>	<i>5,870</i>
	<b>Outstandings</b> .....	<b>12,312</b>	<b>13,091</b>	<b>13,021</b>	<b>10,839</b>	<b>15,724</b>	<b>21,594</b>
Commerce:							
Economic development assistance.....	New transactions.....	48	425	425	48	425	425
	<i>Net change</i> .....				<i>-86</i>	<i>305</i>	<i>275</i>
	<b>Outstandings</b> .....				<b>589</b>	<b>894</b>	<b>1,169</b>

Table F-5. GUARANTEED LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or program		Commitments			Loans guaranteed		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
National Oceanic and Atmospheric Administration .....	New transactions.....	74	100	100	74	100	100
	<i>Net change</i> .....				65	87	85
	<b>Outstandings</b> .....				<b>171</b>	<b>258</b>	<b>343</b>
Maritime Administration .....	New transactions.....	1,223	1,200	1,400	752	970	1,388
	<i>Net change</i> .....				494	630	1,004
	<b>Outstandings</b> .....	<b>1,282</b>	<b>1,512</b>	<b>1,524</b>	<b>5,933</b>	<b>6,563</b>	<b>7,566</b>
Education: Guarantees of SLMA debt issues .....	New transactions.....	1,070	1,095	1,723	1,070	1,095	1,923
	<i>Net change</i> .....				1,070	1,095	1,923
	<b>Outstandings</b> .....				<b>2,345</b>	<b>3,440</b>	<b>5,363</b>
Student loan insurance fund.....	New transactions.....	4,750	7,185	5,697	4,750	7,185	5,697
	<i>Net change</i> .....				3,347	5,508	2,903
	<b>Outstandings</b> .....				<b>11,649</b>	<b>17,157</b>	<b>20,060</b>
Other education programs .....	New transactions.....						
	<i>Net change</i> .....				-22	-23	-25
	<b>Outstandings</b> .....				<b>1,283</b>	<b>1,260</b>	<b>1,235</b>
Energy: Geothermal resources development fund.....	New transactions.....	78	220	198	78	220	198
	<i>Net change</i> .....				77	211	198
	<b>Outstandings</b> .....	<b>30</b>			<b>91</b>	<b>302</b>	<b>500</b>
Energy Conservation .....	New transactions.....	6	6	6	6	6	6
	<i>Net change</i> .....				6	6	6
	<b>Outstandings</b> .....				<b>6</b>	<b>12</b>	<b>18</b>

Energy production, demonstration, and distribution .....	New transactions.....					6	14
	<i>Net change</i> .....					6	14
	<b>Outstandings</b> .....		14			6	19
Energy Security Reserve .....	New transactions.....		4,500			4,500	
	<i>Net change</i> .....					4,500	
	<b>Outstandings</b> .....					4,500	4,500
Synthetic Fuels Corporation .....	New transactions.....		1,500	2,000		1,500	2,000
	<i>Net change</i> .....					1,500	2,000
	<b>Outstandings</b> .....					1,500	3,500
Health and Human Services:							
Health professions .....	New transactions.....	32	48	100	32	48	100
	<i>Net change</i> .....				32	48	100
	<b>Outstandings</b> .....				41	89	188
Medical facilities guarantees .....	New transactions.....				6	1	
	<i>Net change</i> .....				-229	-45	-48
	<b>Outstandings</b> .....	16			1,091	1,047	998
Health programs.....	New transactions.....	33	52	76	33	52	76
	<i>Net change</i> .....				31	50	58
	<b>Outstandings</b> .....				188	238	296
Housing and Urban Development:							
Subsidized low-rent public housing.....	New transactions.....	17,013	18,423	20,081	14,214	16,095	17,137
	<i>Net change</i> .....				1,440	1,799	2,285
	<b>Outstandings</b> .....	17,335	19,413	22,107	16,490	18,289	20,573
Federal Housing Administration .....	New transactions.....	30,585	39,232	44,284	23,344	25,911	31,840
	<i>Net change</i> .....				14,401	15,838	20,852
	<b>Outstandings</b> .....	14,670	20,327	22,950	124,452	140,290	161,142

Table F-5. GUARANTEED LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or program		Commitments			Loans guaranteed		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Community development grants.....	New transactions.....	157	250	250	45	270	270
	<i>Net change</i> .....				34	259	232
	Outstandings.....	131	109	87	46	305	537
Urban renewal.....	New transactions.....				53	10	
	<i>Net change</i> .....				-191	-96	-65
	Outstandings.....	418	179	114	275	179	114
New Communities.....	New transactions.....						
	<i>Net change</i> .....				-12	-26	-1
	Outstandings.....	11	11	11	130	104	103
GNMA: Mortgage-backed securities.....	New transactions.....	63,165	72,000	72,360	22,996	31,000	31,360
	<i>Net change</i> .....				18,894	25,633	24,100
	Outstandings.....	28,758	26,200	29,000	89,452	115,085	139,185
Interior: Indian programs.....	New transactions.....	9	2	62	18	2	62
	<i>Net change</i> .....				14	-5	53
	Outstandings.....	15			121	116	169
Transportation: Rail programs.....	New transactions.....	278	395	354	223	309	269
	<i>Net change</i> .....				262	209	317
	Outstandings.....	98	184	269	1,369	1,578	1,895
Washington, D.C. METRO bonds.....	New transactions.....						
	<i>Net change</i> .....						
	Outstandings.....				997	997	997



Aircraft loans.....	New transactions.....	273	360	389	274	360	389
	<i>Net change</i> .....				254	316	305
	<b>Outstandings</b> .....				<b>445</b>	<b>760</b>	<b>1,065</b>
Treasury: Guarantee of New York City notes.....	New transactions.....	300	300	756	300	300	756
	<i>Net change</i> .....				277	211	662
	<b>Outstandings</b> .....				<b>777</b>	<b>988</b>	<b>1,650</b>
Chrysler Corporation loan guarantee program.....	New transactions.....	800	700		800	700	
	<i>Net change</i> .....				800	700	
	<b>Outstandings</b> .....				<b>800</b>	<b>1,500</b>	<b>1,500</b>
Biomass energy development.....	New transactions.....		54	35		54	35
	<i>Net change</i> .....					54	35
	<b>Outstandings</b> .....					<b>54</b>	<b>88</b>
NASA: Long term satellite leases.....	New transactions.....	229			107	102	144
	<i>Net change</i> .....				107	102	144
	<b>Outstandings</b> .....	<b>358</b>	<b>256</b>	<b>112</b>	<b>527</b>	<b>629</b>	<b>773</b>
Veterans Administration (housing).....	New transactions.....	14,271	22,685	22,666	14,966	19,907	21,363
	<i>Net change</i> .....				10,271	14,930	15,697
	<b>Outstandings</b> .....	<b>2,345</b>	<b>4,478</b>	<b>5,192</b>	<b>99,429</b>	<b>114,359</b>	<b>130,056</b>
Export-Import Bank.....	New transactions.....	9,360	10,078	11,089	6,032	6,635	7,298
	<i>Net change</i> .....				1,556	1,457	1,314
	<b>Outstandings</b> .....	<b>6,507</b>	<b>7,831</b>	<b>9,096</b>	<b>7,315</b>	<b>8,772</b>	<b>10,086</b>
General Services Administration.....	New transactions.....			121	83	110	6
	<i>Net change</i> .....				65	92	-19
	<b>Outstandings</b> .....	<b>123</b>		<b>115</b>	<b>1,237</b>	<b>1,330</b>	<b>1,311</b>
NCUA: Credit Union share insurance fund.....	New transactions.....	79	50	25	79	50	25
	<i>Net change</i> .....				47	23	-12
	<b>Outstandings</b> .....				<b>60</b>	<b>83</b>	<b>71</b>

Table F-5. GUARANTEED LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT (in millions of dollars)—Continued

Agency or program		Commitments			Loans guaranteed		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Small Business Administration:							
Business loan guarantees .....	New transactions.....	3,608	4,600	4,800	2,944	3,600	3,800
	<i>Net change</i> .....				<i>1,088</i>	<i>1,683</i>	<i>1,717</i>
	<b>Outstandings</b> .....	<b>1,876</b>	<b>2,451</b>	<b>2,991</b>	<b>8,708</b>	<b>10,391</b>	<b>12,108</b>
Lease and surety bond guarantees .....	New transactions.....	1,534	1,600	1,600	1,534	1,600	1,600
	<i>Net change</i> .....				<i>-92</i>	<i>2</i>	<i>2</i>
	<b>Outstandings</b> .....				<b>505</b>	<b>507</b>	<b>509</b>
Lease guarantees.....	New transactions.....						
	<i>Net change</i> .....				<i>-30</i>	<i>-34</i>	<i>-34</i>
	<b>Outstandings</b> .....				<b>197</b>	<b>163</b>	<b>129</b>
Disaster Loan fund .....	New transactions.....	2			2	*	
	<i>Net change</i> .....				<i>-1</i>	<i>-1</i>	<i>-2</i>
	<b>Outstandings</b> .....	<b>*</b>			<b>8</b>	<b>7</b>	<b>5</b>
Pollution control bond guarantees.....	New transactions.....	99	110	125	99	110	125
	<i>Net change</i> .....				<i>99</i>	<i>110</i>	<i>125</i>
	<b>Outstandings</b> .....				<b>156</b>	<b>266</b>	<b>391</b>
Other agencies and programs .....	New transactions.....		2	2		2	2
	<i>Net change</i> .....				<i>-1</i>	<i>1</i>	<i>*</i>
	<b>Outstandings</b> .....	<b>997</b>	<b>997</b>	<b>997</b>	<b>1,020</b>	<b>1,021</b>	<b>1,021</b>
Subtotal, guaranteed loans (gross) .....	New transactions.....	170,994	213,741	219,348	114,629	151,788	152,886
	<i>Net change</i> .....				<i>68,017</i>	<i>99,770</i>	<i>101,041</i>
	<b>Outstandings</b> .....	<b>105,662</b>	<b>116,298</b>	<b>136,182</b>	<b>454,725</b>	<b>554,495</b>	<b>655,537</b>

Less secondary guaranteed loans: <sup>2</sup>

GNMA guarantees of FHA/VA/FmHA pools.....	New transactions.....	63,165	72,000	72,360	22,996	31,000	31,360
	<i>Net change</i> .....				<i>18,894</i>	<i>25,633</i>	<i>24,100</i>
	<b>Outstandings</b> .....	<b>28,758</b>	<b>26,200</b>	<b>29,000</b>	<b>89,452</b>	<b>115,085</b>	<b>139,185</b>
DEd guarantees of SLMA debt issues.....	New transactions.....	1,070	1,095	1,923	1,070	1,095	1,923
	<i>Net change</i> .....				<i>1,070</i>	<i>1,095</i>	<i>1,923</i>
	<b>Outstandings</b> .....				<b>2,345</b>	<b>3,440</b>	<b>5,363</b>
DOT guarantees of USRA debt.....	New transactions.....	158	95	34	148	95	34
	<i>Net change</i> .....				<i>125</i>	<i>- 234</i>	<i>34</i>
	<b>Outstandings</b> .....	<b>15</b>	<b>15</b>	<b>15</b>	<b>668</b>	<b>434</b>	<b>468</b>
Subtotal, guaranteed loans (net).....	New transactions.....	106,601	142,551	145,211	90,416	119,598	124,569
	<i>Net change</i> .....				<i>47,928</i>	<i>73,276</i>	<i>74,984</i>
	<b>Outstandings</b> .....	<b>76,889</b>	<b>90,082</b>	<b>107,167</b>	<b>362,260</b>	<b>435,536</b>	<b>510,521</b>
Less guaranteed loans held as direct loans: <sup>3</sup>							
By budget agency (GNMA).....	New transactions.....	2,195	1,826	305	1,996	1,615	2,389
	<i>Net change</i> .....				<i>1,134</i>	<i>- 1,077</i>	<i>- 135</i>
	<b>Outstandings</b> .....	<b>5,525</b>	<b>5,570</b>	3,314	<b>2,249</b>	<b>1,172</b>	<b>1,037</b>
By off-budget Federal Financing Bank.....	New transactions.....	22,188	30,873	24,846	22,188	30,873	24,846
	<i>Net change</i> .....				<i>14,365</i>	<i>23,072</i>	<i>18,206</i>
	<b>Outstandings</b> .....				<b>61,465</b>	<b>84,537</b>	<b>102,743</b>
Subtotal, primary guaranteed loans.....	New transactions.....	82,217	109,852	120,060	66,231	87,110	97,334
	<i>Net change</i> .....				<i>32,430</i>	<i>51,281</i>	<i>56,912</i>
	<b>Outstandings</b> .....	<b>58,989</b>	<b>71,005</b>	<b>80,813</b>	<b>298,546</b>	<b>349,827</b>	<b>406,741</b>

Table F-5. **GUARANTEED LOAN TRANSACTIONS OF THE FEDERAL GOVERNMENT** (in millions of dollars)—Continued

Agency or program		Commitments			Loans guaranteed		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
<b>ADDENDUM:</b>							
Less guaranteed loans held as direct loans:							
By Government sponsored enterprises:							
Federal National Mortgage Association.....	New transactions.....	6,926	8,285	8,685	5,059	4,769	7,069
	<i>Net change</i> .....				<i>3,587</i>	<i>1,940</i>	<i>3,832</i>
	<b>Outstandings</b> .....	<b>3,285</b>	<b>3,838</b>	<b>3,564</b>	<b>37,558</b>	<b>39,498</b>	<b>48,330</b>
Federal home loan banks.....	New transactions.....						
	<i>Net change</i> .....				<i>-9</i>	<i>-7</i>	<i>-8</i>
	<b>Outstandings</b> .....				<b>82</b>	<b>75</b>	<b>67</b>
Federal Home Loan Mortgage Corporation.....	New transactions.....	1			1		
	<i>Net change</i> .....				<i>-81</i>	<i>-138</i>	<i>-121</i>
	<b>Outstandings</b> .....				<b>1,108</b>	<b>969</b>	<b>848</b>
Total Enterprise holdings.....	New transactions.....	6,927	8,285	8,685	5,060	4,769	7,069
	<i>Net change</i> .....				<i>3,497</i>	<i>1,795</i>	<i>3,703</i>
	<b>Outstandings</b> .....	<b>3,285</b>	<b>3,838</b>	<b>3,564</b>	<b>38,748</b>	<b>40,542</b>	<b>44,245</b>

<sup>1</sup> In previous years, callable capital contributions had been included as a memorandum entry.

<sup>2</sup> Secondary guarantees by the Export-Import Bank of the debt of the Private Export Finance Corporation have not been estimated and are excluded from the table.

<sup>3</sup> When loan guarantees are acquired by a budget account, they are direct loans. However, in this instance, GNMA is acquiring a guaranteed loan not only from different accounts, but different agencies.

The aggregation of loan guarantees for each program to derive a gross total involves some double counting. Elimination of this double counting requires two adjustments. The first deducts loans previously guaranteed, or secondary guaranteed loans. They occur, for example, in the case of the GNMA mortgage-backed securities program that guarantees securities that are backed by pools of federally guaranteed or insured loans held by the seller. The total after deducting secondary guarantees gives net guaranteed loans. The second adjustment deducts guarantees of loans that are also direct loans by the Government—by either on- or off-budget accounts. The total after these two deductions gives primary guaranteed loans. An addendum includes guaranteed loans purchased by a Government-sponsored enterprise. These guaranteed loans held by Government-sponsored enterprises have in past years been deducted from total primary guaranteed loans. They are deducted from direct loans made by Government-sponsored enterprises found in table F-6.

Annual net increases in primary guaranteed loans rise sharply from \$32.4 billion in 1980 to \$56.9 billion in 1982. The increase is dominated by increases in housing activity, but also reflects an aggregate of many small increases in other programs.

#### GOVERNMENT-SPONSORED ENTERPRISES

Government-sponsored enterprises have been established and chartered by the Federal Government to perform specialized credit functions. They are financial intermediaries, designed to facilitate the financing of selected kinds of economic activity, by serving as reserve facilities, or performing secondary market functions. They are all privately owned and most are independent of Federal control to a substantial degree. Since they are private, their activities are not included in the budget totals. They are all subject, however, to some form of Federal supervision and by law or by custom consult with the Treasury Department in planning the marketing of their debt. The enterprises included in this category are the Student Loan Marketing Association (SLMA), the Federal National Mortgage Association (FNMA), three components of the Farm Credit System, and the Federal Home Loan Bank system (FHLBS) which includes the Federal Home Loan Mortgage Corporation (FHLMC). Part 6 of the *Budget* discusses Government-sponsored enterprises.

Government sponsorship has provided these enterprises with characteristics that differentiate them in credit markets from completely private institutions. They have been given special preferences, and certain tax exemptions and their securities may be offered as investments of federally regulated institutions. These advantages give their security obligations a preferred position in

the securities markets, enabling them to borrow at rates only slightly higher than those of the Treasury.

Funds lent by Government-sponsored enterprises are generally obtained from private bond markets. However, SLMA borrows exclusively from the FFB. Sale of capital stock and retained earnings provide only a very small portion of the resources used for lending by these enterprises. The pattern of borrowing and lending varies widely over time. For example, some enterprises, such as FNMA, were created to establish secondary markets, thereby increasing liquidity in mortgage markets; others, such as the Federal home loan banks, are facilities advancing reserves to member institutions; in this case, savings and loan associations.<sup>12</sup> Enterprises in the latter grouping have the basic function of providing liquidity to primary lenders in times of tight monetary conditions, by either purchasing loans from the primary lenders or making advances to the primary lenders. These loans and advances are then paid back as monetary and financial conditions improve. In recent years, this latter group of enterprises has expanded its role by seeking to draw new funds into mortgage markets even in periods of prosperity. By borrowing additional funds themselves, they can provide more funds to the basic mortgage lending institutions.

---

<sup>12</sup> The program of GNMA (a budget entity in HUD) to guarantee mortgage-backed securities achieves a similar purpose of financial intermediation. GNMA guarantees securities issued against privately held pools of Federally guaranteed or insured mortgages. The Federal Reserve Board flow-of-funds data includes this GNMA program within the definition of Government-sponsored enterprises. GNMA data for this activity appear as entries in Table F-5, Guaranteed Loans.

Table F-6. CREDIT ADVANCED AND RAISED BY GOVERNMENT-SPONSORED ENTERPRISES (in millions of dollars)

Agency or program		Obligations			Loans made		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
<b>LENDING (FUNDS ADVANCED)</b>							
Student Loan Marketing Association .....	New transactions .....	1,480	1,605	2,601	1,242	1,373	2,334
	<i>Net change</i> .....				<i>1,039</i>	<i>1,076</i>	<i>1,871</i>
	<b>Outstandings</b> .....	<b>705</b>	<b>937</b>	<b>1,204</b>	<b>2,278</b>	<b>3,354</b>	<b>5,225</b>
Federal National Mortgage Association .....	New transactions .....	10,291	16,225	19,090	8,520	9,469	14,869
	<i>Net change</i> .....				<i>6,458</i>	<i>5,662</i>	<i>9,946</i>
	<b>Outstandings</b> .....	<b>4,789</b>	<b>5,735</b>	<b>4,849</b>	<b>55,632</b>	<b>61,294</b>	<b>71,240</b>
Farm Credit Administration: Banks for cooperatives .....	New transactions .....	26,438	30,305	34,738	26,438	30,305	34,738
	<i>Net change</i> .....				<i>828</i>	<i>972</i>	<i>1,139</i>
	<b>Outstandings</b> .....				<b>9,481</b>	<b>10,453</b>	<b>11,592</b>
Federal intermediate credit banks .....	New transactions .....	15,268	17,573	20,993	15,268	17,573	20,993
	<i>Net change</i> .....				<i>3,337</i>	<i>3,426</i>	<i>3,832</i>
	<b>Outstandings</b> .....				<b>19,912</b>	<b>23,338</b>	<b>27,170</b>
Federal land banks .....	New transactions .....	11,506	11,665	13,185	11,506	11,665	13,185
	<i>Net change</i> .....				<i>8,358</i>	<i>7,559</i>	<i>7,991</i>
	<b>Outstandings</b> .....				<b>39,260</b>	<b>46,819</b>	<b>54,810</b>
Federal home loan bank system: Federal home loan banks .....	New transactions .....	35,387	34,394	37,855	35,387	34,394	37,855
	<i>Net change</i> .....				<i>6,454</i>	<i>- 363</i>	<i>3,097</i>
	<b>Outstandings</b> .....				<b>47,940</b>	<b>47,577</b>	<b>50,674</b>
Federal Home Loan Mortgage Corporation: Corporation accounts .....	New transactions .....	4,274	9,000	11,000	4,274	9,000	11,000
	<i>Net change</i> .....				<i>817</i>	<i>1,009</i>	<i>1,135</i>
	<b>Outstandings</b> .....				<b>4,534</b>	<b>5,553</b>	<b>6,668</b>
Participation certificate pools <sup>1</sup> .....	New transactions .....	3,341	7,434	9,173	3,341	7,434	9,173
	<i>Net change</i> .....				<i>2,310</i>	<i>5,002</i>	<i>5,973</i>
	<b>Outstandings</b> .....				<b>16,770</b>	<b>21,771</b>	<b>27,744</b>

Table F-6. CREDIT ADVANCED AND RAISED BY GOVERNMENT-SPONSORED ENTERPRISES (in millions of dollars)—Continued

Agency or program		Obligations			Loans made		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Subtotal, lending (gross) .....	New transactions .....	107,984	128,201	148,635	105,975	121,213	144,147
	<i>Net change</i> .....				29,602	24,343	34,984
	<b>Outstandings</b> .....	<b>5,494</b>	<b>6,672</b>	<b>6,053</b>	<b>195,807</b>	<b>220,140</b>	<b>225,123</b>
Less loans between sponsored enterprises: Federal home loan banks to FHLMC .....	New transactions .....	1,130	1,105	1,855	1,130	1,105	1,855
	<i>Net change</i> .....				898	1,105	1,105
	<b>Outstandings</b> .....				<b>3,697</b>	<b>4,802</b>	<b>5,907</b>
Less secondary funds advanced from Federal sources: <sup>a</sup> SLMA from FFB .....	New transactions .....	1,070	1,095	1,923	1,070	1,095	1,923
	<i>Net change</i> .....				1,070	1,095	1,923
	<b>Outstandings</b> .....				<b>2,345</b>	<b>3,440</b>	<b>5,363</b>
Less guaranteed loans held as direct loans by: Federal National Mortgage Association .....	New transactions .....	6,926	8,285	8,685	5,059	4,769	7,069
	<i>Net change</i> .....				3,587	1,940	3,832
	<b>Outstandings</b> .....	<b>3,285</b>	<b>3,838</b>	<b>3,564</b>	<b>37,558</b>	<b>39,498</b>	<b>43,330</b>
Federal home loan banks .....	New transactions .....						
	<i>Net change</i> .....				-9	-7	-8
	<b>Outstandings</b> .....				<b>82</b>	<b>75</b>	<b>67</b>
Federal Home Loan Mortgage Corporation .....	New transactions .....	1			1		
	<i>Net change</i> .....				-81	-138	-121
	<b>Outstandings</b> .....				<b>1,108</b>	<b>969</b>	<b>848</b>
Total credit advanced .....	New transactions .....	98,857	117,716	136,172	98,715	114,244	133,300
	<i>Net change</i> .....				24,137	20,347	28,253
	<b>Outstandings</b> .....	<b>2,209</b>	<b>2,834</b>	<b>2,489</b>	<b>151,018</b>	<b>171,355</b>	<b>199,608</b>



**BORROWING (FUNDS RAISED)**

Student Loan Marketing Association .....	<i>Net change</i> .....		1,070	1,095	1,923
	<b>Outstandings</b> .....		<b>2,345</b>	<b>3,440</b>	<b>5,363</b>
Federal National Mortgage Association <sup>a</sup> .....	<i>Net change</i> .....		6,347	5,169	9,199
	<b>Outstandings</b> .....		<b>52,346</b>	<b>57,515</b>	<b>66,714</b>
Farm Credit Administration:					
Banks for cooperatives .....	<i>Net change</i> .....		1,542	777	898
	<b>Outstandings</b> .....		<b>8,385</b>	<b>9,162</b>	<b>10,060</b>
Federal intermediate credit banks .....	<i>Net change</i> .....		3,536	3,282	3,657
	<b>Outstandings</b> .....		<b>19,360</b>	<b>22,643</b>	<b>26,299</b>
Federal land banks .....	<i>Net change</i> .....		7,076	5,563	6,389
	<b>Outstandings</b> .....		<b>34,257</b>	<b>39,820</b>	<b>46,209</b>
Federal home loan bank system:					
Federal home loan banks .....	<i>Net change</i> .....		6,454	-52	2,553
	<b>Outstandings</b> .....		<b>39,599</b>	<b>36,547</b>	<b>39,100</b>
Federal Home Loan Mortgage Corporation .....	<i>Net change</i> .....		3,141	5,971	7,146
	<b>Outstandings</b> .....		<b>21,496</b>	<b>27,467</b>	<b>34,613</b>
Subtotal, borrowing (gross) .....	<i>Net change</i> .....		29,165	21,805	31,764
	<b>Outstandings</b> .....		<b>174,789</b>	<b>196,594</b>	<b>228,359</b>
Less borrowing from other sponsored enterprises: <sup>4</sup>					
FHLMC from FHL banks .....	<i>Net change</i> .....		898	1,000	1,000
	<b>Outstandings</b> .....		<b>3,597</b>	<b>4,597</b>	<b>5,597</b>
Other .....	<i>Net change</i> .....		793	61	148
	<b>Outstandings</b> .....		<b>1,627</b>	<b>1,688</b>	<b>1,836</b>
Less borrowing from Federal sources:					
SLMA from FFB .....	<i>Net change</i> .....		1,070	1,095	1,923
	<b>Outstandings</b> .....		<b>2,345</b>	<b>3,440</b>	<b>5,363</b>
Total borrowing from the public and Government .....	<i>Net change</i> .....		26,403	19,649	28,694
	<b>Outstandings</b> .....		<b>167,220</b>	<b>186,869</b>	<b>215,563</b>
Less investments in Federal securities:					
Investments in Federal securities .....	<i>Net change</i> .....		1,500	-377	121

Table F-6. CREDIT ADVANCED AND RAISED BY GOVERNMENT-SPONSORED ENTERPRISES (in millions of dollars)—Continued

Agency or program		Obligations			Loans made		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
	<b>Outstandings.....</b>				<b>2,362</b>	<b>1,985</b>	<b>2,106</b>
Less borrowings for guaranteed loans held as direct loans by:							
Federal National Mortgage Association.....	<i>Net change.....</i>				<i>3,587</i>	<i>1,940</i>	<i>3,832</i>
	<b>Outstandings.....</b>				<b>37,558</b>	<b>39,498</b>	<b>43,330</b>
Federal home loan banks.....	<i>Net change.....</i>				<i>-9</i>	<i>-7</i>	<i>-8</i>
	<b>Outstandings.....</b>				<b>82</b>	<b>75</b>	<b>67</b>
Federal Home Loan Mortgage Corporation.....	<i>Net change.....</i>				<i>-81</i>	<i>-138</i>	<i>-121</i>
	<b>Outstandings.....</b>				<b>1,108</b>	<b>969</b>	<b>848</b>
Total credit raised.....	<i>Net change.....</i>				<i>21,406</i>	<i>18,231</i>	<i>24,870</i>
	<b>Outstandings.....</b>				<b>126,110</b>	<b>144,342</b>	<b>169,212</b>

<sup>1</sup>All new transactions are loans purchased from FHLMC corporation accounts.

<sup>2</sup>Since all SLMA borrowing comes from the FFB, when credit is extended by Government-sponsored enterprises and added to Federal lending (as in Table F-7), the inclusion of both FFB lending to SLMA and SLMA lending to the public in the totals is double-counting. Hence, lending from the FFB to SLMA must be excluded from the gross total of lending by Government-sponsored enterprises to give the total adjusted for double-counting.

<sup>3</sup>Loans purchased at discount are recorded at their acquisition cost.

<sup>4</sup>These deductions include those borrowings involved in double-counting to give the adjusted total that is carried over to Table F-7.

Table F-6 shows the lending and borrowing of Government-sponsored enterprises for 1980-82.<sup>13</sup> The format of this table closely resembles that used in table F-2 for direct loans. See the section on direct loans for an explanation of terms. Total gross lending and borrowing is further adjusted to avoid the double counting that arises from loans between enterprises and between enterprises and the Federal Government. In addition, where the borrowing or lending of enterprises is added to Federal credit activities (as in table F-7), additional deductions must be made for double counting since SLMA lending is financed by its borrowing from the FFB; also some enterprise cash balances are invested in Federal securities. (In effect, this is enterprise lending to the Federal Government.) The deductions in the table identify the amounts necessary to remove this double counting.

Lending by Government-sponsored enterprises has been growing rapidly in recent years. Sharp increases and decreases in the lending of Federal Home Loan Banks and FNMA to support mortgage credit markets together with sharp continuing increases in lending by FHLMC are the main sources of the overall movements in lending. In 1980 the net change in gross credit advanced is estimated to rise to \$29.6 billion. It falls slightly in 1981 but increases steeply in 1982 to \$35.0 billion. Of that total in 1982, \$1.1 billion represents inter-enterprise lending, and \$3.8 billion is holdings of federally guaranteed mortgages. The FHLMC has been shifting its portfolio to include conventional mortgages only, leaving FNMA as the primary Government-sponsored enterprise holder of FHA and VA insured loans. The economic assumptions on which the estimates rest are not necessarily the same as the administration's economic forecast, which is used for the budget. In order to finance this lending, Government-sponsored enterprises are expected to follow the same general pattern of borrowing in the 1978-80 period. Special Analysis E discusses the borrowing to Government-sponsored enterprises in detail.

#### SUMMARY OF CREDIT ADVANCED AND RAISED UNDER FEDERAL AUSPICES

A summary of credit advanced and raised under Federal auspices is shown in table F-7. Credit advanced by direct and guaranteed loans reached \$56.6 billion in 1980. This lending level is estimated to increase to \$78.4 billion in 1981, and to \$81.5 billion in 1982. Loans by Government-sponsored enterprises grew by \$24.1 billion in 1980; and will increase by \$20.3 and \$28.3 billion in 1981 and 1982 respectively. Outstanding credit advanced to the public under

<sup>13</sup> The Federal Reserve Banks are unique and not projected for budget periods and are hence not included in the table or other tabulations of the Government's operations in the Budget.

Federal auspices is expected to total \$822.1 billion by the end of 1982.

Net credit raised under Federal auspices totaled \$124.4 billion in 1980, and is expected to reach \$127 billion in 1982, following a rise to \$142 billion in 1981.

Table F-7. SUMMARY OF CREDIT ADVANCED AND CREDIT RAISED UNDER FEDERAL AUSPICES

(In billions of dollars)

	Net Change			Outstanding		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
<b>LENDING (Credit advanced)</b>						
Direct loans (from table F-2):						
On-budget agencies .....	9.5	3.9	6.1	91.7	95.6	101.7
Off-budget entities .....	14.7	23.2	18.5	72.3	95.5	114.0
Guaranteed loans (primary, from table F-5) .....	32.4	51.3	56.9	298.5	349.8	406.7
<b>Total Federal Government credit advanced</b> .....	<b>56.6</b>	<b>78.4</b>	<b>81.5</b>	<b>462.5</b>	<b>540.9</b>	<b>622.5</b>
Loans by Government-sponsored enterprises (from table F-6) .....	24.1	20.3	28.3	151.0	171.4	199.6
<b>Total, credit advanced to the public under Federal auspices</b> <sup>1</sup> .....	<b>80.8</b>	<b>98.8</b>	<b>109.8</b>	<b>613.5</b>	<b>712.3</b>	<b>822.1</b>
<b>Outside the budget</b> .....	<b>71.3</b>	<b>94.8</b>	<b>103.7</b>	<b>521.8</b>	<b>616.7</b>	<b>720.4</b>
<b>BORROWING (Credit raised)</b>						
Federal borrowing from the public (from table E-1) .....	70.5	72.0	45.0	715.1	787.1	832.1
Guaranteed borrowing (same as guaranteed loans, above) .....	32.4	51.3	56.9	298.5	349.8	406.7
<b>Total Federal Government credit raised</b> .....	<b>102.9</b>	<b>123.3</b>	<b>101.9</b>	<b>1,013.6</b>	<b>1,136.9</b>	<b>1,238.8</b>
Borrowing by Government-sponsored enterprises (net, from table F-6) .....	21.4	18.2	24.8	126.1	144.3	169.2
<b>Total, credit raised from the public under Federal auspices</b> <sup>1</sup> .....	<b>124.4</b>	<b>141.5</b>	<b>126.7</b>	<b>1,139.7</b>	<b>1,281.2</b>	<b>1,408.0</b>
<b>Net credit advanced</b> .....	<b>-43.6</b>	<b>-42.7</b>	<b>-26.9</b>			

<sup>1</sup> Excludes Federal Reserve credit.

### FEDERAL RESERVE SYSTEM LENDING

The Federal Reserve System, created by Congress in 1913, is the central bank for the United States. Its principal purpose is to conduct the Nation's monetary policy, influencing the cost and availability of money and credit to improve the stability and growth of the economy. The system carries out its monetary policy responsibilities primarily by purchasing and selling Treasury securities in the open market. The system also invests in other Govern-

ment-related securities and makes loans to eligible depository institutions. The System's transactions are conducted for the purpose of monetary control, not for profit. The Federal Reserve System also has many regulatory and supervisory functions, handles the official reserve transactions with foreign central banks, and engages in foreign exchange transactions.

When the Federal Reserve purchases Treasury securities it facilitates an expansion of money and credit in the economy because a purchase of Treasury securities by the Federal Reserve increases reserves. Security transactions are conducted both on an outright basis and on a repurchase basis, the latter being used to supply or withdraw bank reserves on a temporary basis. Over a year, outright purchases exceed sales by a substantial margin, due to the growth in money and credit that is needed to accompany the expansion in income and the volume of transactions. In 1980, the System's outright holdings of U.S. Treasury securities increased by \$5.3 billion to a level of \$120.7 billion. Holdings of Government-related securities rose \$558 million to \$8.8 billion. The system ceased holding banker's acceptances in 1977 on an outright basis and continued to acquire those instruments on a repurchase basis.

In 1972 the Federal Reserve began acquiring Government-related securities other than Treasury debt issues. These securities consist of (a) the direct debt obligations of wholly owned agencies of the Federal Government, such as the Export-Import Bank; (b) loans and securities guaranteed by a Federal agency, such as loan participation certificates guaranteed by the Farmers Home Administration; and (c) the security obligation of Government-sponsored enterprises,<sup>14</sup> such as the Federal National Mortgage Association. Since 1974, the Federal Financing Bank has bought most newly issued securities under the first two categories. The Federal Reserve continued to acquire a small amount of the outstanding securities in these categories until 1976. Since then, the System's holdings have declined as securities have matured.

Sponsored enterprise securities are also acquired by the Federal Reserve in the ordinary performance of its monetary function. The System adds to its holdings of such securities only through purchases of outstanding issues in the open market. Holdings of maturing issues, however, are exchanged directly with the respective agencies at times when they are conducting new financing operations. The System's transactions in these securities are a form of lending. Though not relatively large, they selectively enhance the marketability of the obligations of identifiable borrowers outside the Federal Government and thereby affect the allocation of resources.

---

<sup>14</sup> In Federal Reserve publications, these enterprises are called "Federally Sponsored Credit Agencies."

In addition to transactions in securities markets, the Federal Reserve makes loans to eligible depository institutions under two basic programs: adjustment credit and extended credit. Adjustment credit is advanced for brief periods to help borrowers meet short-term needs for funds when their usual sources are not reasonably available. This form of credit accounts for the great bulk of borrowing from the Federal Reserve Banks. Extended credit is advanced to assist small depository institutions that lack access to long-term capital markets in order to meet seasonal credit needs, and to assist depository institutions facing special difficulties.<sup>15</sup>

In the past loans were extended only to commercial banks that were members of the Federal Reserve System except under highly unusual and exigent circumstances. The Monetary Control Act of 1980 directs the Federal Reserve to open its discount window to any non-member depository institution that maintains transaction accounts or non-personal time accounts. (Such institutions include, in addition to member commercial banks, savings and loan associations, mutual savings banks, credit unions and non-member commercial banks.)

A general principle governing all credit extended by the Federal Reserve is that the borrower should have sought other reasonably available sources of funds, including credit from special industry lenders, before turning to the discount window. Thus, institutions that have access to credit programs by special industry lenders—such as the Federal Home Loan Bank System, credit union centrals, or the facility of the National Credit Union Administration—are expected to seek assistance from these sources before approaching the Federal Reserve's discount window.

Table F-8 shows fiscal year historical data for the Federal Reserve System's investments in securities other than Treasury issues and for its loan acceptances. The first outright purchase of securities other than Treasury debt was made in 1972. The peak year for the purchase of such securities plus loans and acceptances was 1974, when \$3.4 billion was acquired. In 1980 holdings decreased by \$1.0 billion. The combined total of these securities plus loans and acceptances was \$10.5 billion at the end of 1980. Most of this was securities, and almost all of the securities were obligations of the Government-sponsored enterprises. The combined total is much less than the \$120.7 billion of Treasury securities held at the end of 1980; the \$9.3 billion increase in the combined total from 1972 is much less than the \$55.2 billion increase in Treasury securities.

Federal Reserve lending and other transactions are excluded from the aggregates of Federal credit shown in tables F-1 and F-7. This is partly because current and budget year estimates cannot usefully be made, since they would depend upon future economic developments and Federal Reserve policy decisions.

---

<sup>15</sup> An important loan of this type was the \$1.7 billion loan to the Franklin National Bank in 1975.

Table F-8. FEDERAL RESERVE BANK LENDING <sup>1</sup>

(In millions of dollars)

	1972	1973	1974	1975	1976	TQ	1977	1978	1979	1980
<b>AMOUNTS OUTSTANDING:</b>										
"Agency issues" held outright:										
<b>Government-sponsored enterprises</b> .....	<b>974</b>	<b>1,213</b>	<b>2,415</b>	<b>4,490</b>	<b>6,113</b>	<b>6,064</b>	<b>6,720</b>	<b>7,423</b>	<b>7,761</b>	<b>8,320</b>
Farm Credit System <sup>2</sup> .....	192	236	439	953	1,395	1,395	1,648	2,014	2,245	2,559
Federal Home Loan Banks (FHLBs).....	134	194	525	1,216	1,810	1,783	1,871	2,210	2,271	2,442
Federal National Mortgage Association (FNMA).....	648	783	1,451	2,321	2,908	2,886	3,202	3,199	3,245	3,319
<b>Federally guaranteed loans</b> .....	<b>17</b>	<b>76</b>	<b>244</b>	<b>354</b>	<b>425</b>	<b>425</b>	<b>379</b>	<b>327</b>	<b>327</b>	<b>326</b>
Farmers Home Administration.....	17	60	173	263	294	294	248	196	196	196
DOT—WMATA bonds.....		16	67	82	117	117	117	117	117	117
GSA—Public building certificates.....			4	9	14	14	14	14	14	14
<b>Federal agency debt</b> .....	<b>95</b>	<b>160</b>	<b>201</b>	<b>241</b>	<b>268</b>	<b>268</b>	<b>230</b>	<b>201</b>	<b>136</b>	<b>136</b>
Export-Import Bank.....	64	98	117	130	142	142	106	81	16	16
GNMA—participation certificates.....	25	38	59	86	89	89	87	83	83	83
Postal Service.....	6	24	25	25	37	37	37	37	37	37
Total, "agency issues" held outright.....	1,106	1,449	2,858	5,085	6,806	6,757	7,329	7,950	8,224	8,782
"Agency issues" held under repurchase agreements <sup>3</sup> .....			270	61	277	323	310	647	1,099	271
Loans and acceptances.....	203	1,836	3,514	1,243	1,343	1,160	1,551	2,078	2,210	1,481
Combined total.....	1,309	3,285	6,642	6,389	8,426	8,240	9,190	10,675	11,533	10,534
<b>NET INCREASES:</b>										
"Agency issues" held outright.....	1,106	343	1,409	2,227	1,721	— 49	572	621	274	558
"Agency issues" held under repurchase agreements.....			270	— 209	216	46	— 13	337	452	— 828
Loans and acceptances.....	— 305	1,633	1,678	— 2,271	100	— 183	391	527	132	— 729
Combined total.....	801	1,976	3,357	— 253	2,037	— 186	950	1,485	858	— 999

Source: Federal Reserve Board (Fiscal year detail by issuing agency is unpublished; calendar data available in FRB annual report).

<sup>1</sup> Data exclude certain special classes of loans not separately published. See text.<sup>2</sup> Consolidated obligations of the three members of the Farm Credit System.<sup>3</sup> Detail by issuing agency is unavailable.

## TAX-EXEMPT CREDIT

Since the adoption of the Federal income tax in 1913, interest on State and local government obligations generally has been exempt from Federal income tax.<sup>16</sup> The resulting subsidy to borrowers has historically been a saving of 30% to 35% of the interest rate. Through the first 50 years, this exemption was confined mainly to State and local governmental borrowing for public purposes. During the 1960's however, tax exempt financing was extended to certain private uses. These uses were curtailed by the 1968 and 1969 tax acts, but a number of exceptions were permitted that have allowed major growth of some private uses.

Industrial development bonds (IDB's) are the principal form of obligations nominally issued by a State or local government to raise funds for private purposes. In almost all cases of IDB's, the State or local authority is a conduit for providing tax-exempt financing to the private borrower. The authority lends its name to the private borrower's debt obligations, but is not responsible for the payment of interest and principal in the event of default.

As table F-9 shows, the sale of tax-exempt bonds used for private purposes have increased greatly in recent years, while nominal State and local government debt (adjusted for advanced refunding) for public purposes has remained relatively constant. Tax-exempt bonds issued for private purposes in five activities—owner occupied and rental housing, private nonprofit hospitals, pollution-control facilities, student loans, and business financed with “small-issue” IDB's—will reach an estimated \$31.6 billion of new obligations in 1980, accounting for over half (56%) of the total long-term tax-exempt market. This compares with \$8.5 billion in new issues and 24% of the long-term tax-exempt market just 4 years earlier. The Omnibus Reconciliation Act of 1980 imposed major restrictions on the use of tax-exempt credit for owner-occupied housing, where the largest growth has occurred in recent years. This Act reduced tax-exempt financing for private housing from an expected \$55 billion in new issues in calendar 1981 to less than \$17 billion. Now, the “small-issue” exemption on industrial development bonds has the largest potential for growth. A conservative estimate of the volume of new issues would exceed \$8 billion in 1980 and reach \$10 billion in 1982. Forty-seven States permit “small-issue” IDB's and at least 18 States have virtually no limits on the projects that they can finance.

Table F-9 also shows the annual revenue loss to the Treasury from all tax-exempt bonds issued each year, as are the value of the long-term subsidy received by the borrower and the present value of the tax loss from newly issued tax-exempt bonds. The revenue

---

<sup>16</sup> Tax exempt interest is one type of tax expenditure, the subject of Special Analysis G.



loss reflects the reduction in receipts resulting from the issuance of tax-exempt rather than taxable debt. The tax loss (and subsidy) from tax-exempt financing occurs over the entire life of the security. The present value of the total tax loss is substantially larger than the annual revenue loss. The cost to the Treasury in lost tax revenues also exceeds the financial benefits to the borrower. (See Special Analysis G for a discussion of revenue losses attributable to special provisions of the tax code, including tax-exempt bonds.)

Subsidies of the magnitudes shown in table F-9 create a strong incentive to allocate credit to the assisted borrowers, just as do Federal direct loan and loan guarantee programs. Borrowers aided by tax exemption gain a position of preferred access to credit resources over competing taxable borrowers, just as with other forms of Federal credit assistance.

While direct and guaranteed loan programs are subject to the newly created credit control system, tax-exempt credit is not. Although tax-exempt financing has market effects and costs similar to other credit assistance, its current statutory structure is of entitlement forms and its use is unilaterally elected by the borrower. Thus effective control can only be achieved through legislated changes to the tax code. (See Part 4 of the *Budget* for a discussion of proposals to restrict the use of tax exempt obligations for private purposes.)

Although tax-exempt credit is the most visible and direct form of tax expenditure influencing credit allocations, others not treated here but described in Special Analysis G are also important. These include: (1) investment tax credits, (2) personal deductions for mortgage interest and property taxes, and (3) various depreciation methods.

Table F-9. TAX EXEMPT FINANCING; PRESENT VALUE OF TAX SUBSIDIES TO NEW ISSUES

(In billions of dollars)

	Calendar years <sup>1</sup>												
	Actual										Estimated		
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Total new Issues, long-term tax exempts.....	18.1	24.9	23.6	23.9	24.2	30.5	34.9	46.8	49.1	48.3	56.2	57.7	62.6
State and local government uses <sup>2</sup> .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	26.4	34.4	34.2	23.3	24.6	25.8	27.1
State and local uses less advance refunding.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	26.4	28.0	26.6	23.1	24.4	25.8	27.1
Private purpose tax-exempts.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	8.5	12.4	14.9	25.0	31.6	31.9	35.5
Housing bonds.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.0	3.8	5.9	12.2	17.5	16.8	18.7
Private hospitals.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.9	3.3	2.2	2.4	2.8	3.1	3.4
Student loans.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	.1	.1	.3	.6	.9	1.1	1.2
Pollution control.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.1	3.0	2.8	2.5	2.3	2.2	2.2
Other private business (IDBs).....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.4	2.2	3.5	7.3	8.1	8.7	10.0
Subsidy estimates: (new issues only) <sup>3</sup>													
All new issues:													
Annual tax loss, all new issues.....	.6	.8	.7	.7	.9	1.1	1.2	1.6	1.8	2.0	2.8	3.1	3.2
Present value, new issue tax loss.....	5.7	7.6	7.1	7.3	7.8	10.0	11.2	14.8	16.1	16.4	20.5	21.5	23.0
Present value, borrower benefit.....	3.2	5.3	5.1	5.7	5.9	6.5	8.8	12.4	14.1	15.1	16.9	16.4	16.5
Private purpose issues only:													
Present value, private use tax loss.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.7	3.9	4.9	8.5	11.5	11.9	13.1
<b>MEMORANDUM</b>													
AAA State and local bond yields (Moody's), percent.....	6.12	5.22	5.04	4.99	5.86	6.42	5.66	5.20	5.52	5.92	7.80	8.70	8.60
AAA corporate bond yields (Moody's), percent.....	8.04	7.39	7.21	7.44	8.57	8.83	8.43	8.02	8.73	9.63	11.92	12.80	12.30
Outstanding, long-term tax-exempt issues.....	131.1	146.1	160.7	175.1	188.9	205.3	225.1	251.3	279.0	300.2	330.0	364.0	400.0
Outstanding, all tax-exempt issues.....	144.4	161.8	176.5	191.2	207.7	223.8	239.5	263.2	291.4	312.7	343.0	377.0	414.0

<sup>1</sup> 1976 and 1979 estimates of tax-exempt volume and distribution and 1980-82 projections are by the Treasury Office of Tax Analysis. Estimates are unavailable for the amount of private purpose tax-exempts before 1976.<sup>2</sup> Includes some private purpose tax-exempt debt, and advance refunding, that could not be identified or classified.<sup>3</sup> Assumed: Average marginal tax rate = .42; taxable securities of comparable quality; average maturity = 18 years; discount rate = Aaa corporate bond yield.

Sources: Federal Reserve Board, Public Securities Association; subsidy estimates by Office of Management and Budget.

## FUNCTIONAL AREAS SUPPORTED BY FEDERAL CREDIT ASSISTANCE

The functional distributions of direct and guaranteed loans by major function are given in table F-10. Table F-10 records the levels of new transactions taken from tables F-2 and F-5 for 1980-82. The grand total for new direct loans is the same as total new direct loans in table F-2. The grand total for guaranteed loans is the same as primary guaranteed loans in table F-5. The functions in which the largest Federal credit activity occurs are commerce and housing credit, international affairs, and veterans benefits. These three functions are expected to comprise almost three-fourths of total new transactions in 1982. In addition, Part 5 of the *Budget* discusses Federal credit activities by function.

Table F-10. DIRECT LOANS AND GUARANTEED LOANS BY FUNCTION

(In millions of dollars)

Function	New direct loans			New guaranteed loans		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
National defense.....					30	30
International affairs:						
Security Assistance.....	1,645	1,620	1,680	2,380	2,600	3,000
Export-Import Bank.....	3,288	3,949	4,316	6,032	6,635	7,298
Other.....	1,281	1,296	1,242	909	1,319	9,897
<b>Total.....</b>	<b>6,214</b>	<b>6,865</b>	<b>7,238</b>	<b>9,321</b>	<b>10,554</b>	<b>20,195</b>
Natural resources and environment.....	30	25	30			
Energy.....	1,279	1,193	1,273	3,389	11,159	8,106
Agriculture:						
Farm income stabilization.....	4,947	3,596	4,620	673	2,036	2,000
Other.....	7,543	8,713	5,841	5,431	7,490	2,700
<b>Total.....</b>	<b>12,490</b>	<b>12,310</b>	<b>10,461</b>	<b>6,104</b>	<b>9,526</b>	<b>4,700</b>
Commerce and housing credit:						
Mortgage credit.....	9,853	9,612	9,087	51,111	64,347	67,417
Advancement of commerce and thrift insurance.....	1,890	4,276	4,831	5,530	6,160	5,650
<b>Total.....</b>	<b>11,743</b>	<b>13,888</b>	<b>13,918</b>	<b>56,641</b>	<b>70,507</b>	<b>73,067</b>
Transportation:						
Ground transportation.....	857	705	208	223	309	269
Air transportation.....				274	360	389
Water transportation.....	14	15	15	752	970	1,388
<b>Total.....</b>	<b>871</b>	<b>720</b>	<b>224</b>	<b>1,249</b>	<b>1,638</b>	<b>2,046</b>
Community and regional development.....	3,519	5,150	2,157	2,358	3,477	2,508
Education, training, employment, and social services.....	644	720	713	5,820	8,280	7,620
Health.....	64	80	103	71	101	176
Income security.....	1,319	305	305	14,214	16,095	17,137

Table F-10. DIRECT LOANS AND GUARANTEED LOANS BY FUNCTION—Continued

(In millions of dollars)

Function	New direct loans			New guaranteed loans		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Veterans benefits and services.....						
Veterans housing.....	641	725	747	14,966	19,907	21,363
Other.....	264	310	308			
<b>Total.....</b>	<b>905</b>	<b>1,035</b>	<b>1,055</b>	<b>14,966</b>	<b>19,907</b>	<b>21,363</b>
General purpose fiscal assistance and justice.....	133	173	220	300	300	756
General government.....	22,198	30,879	24,850	92	110	37
<b>Subtotal before deductions..</b>	<b>61,410</b>	<b>73,318</b>	<b>62,545</b>	<b>114,629</b>	<b>151,788</b>	<b>158,076</b>
Less secondary guaranteed loans.....				24,213	32,190	33,317
Less loans held by:						
GNMA.....				1,996	1,615	2,389
FFB.....	12,110	16,637	8,230	22,188	30,873	24,846
<b>Grand total <sup>1</sup>.....</b>	<b>49,300</b>	<b>56,706</b>	<b>54,315</b>	<b>66,232</b>	<b>87,110</b>	<b>97,334</b>

<sup>1</sup> Off-budget accounts are included (except sponsored agencies).

### INTEREST SUBSIDIES

Federal credit programs provide credit to selected groups on more favorable terms than would be otherwise available in private capital markets. A rough estimate of these interest rate subsidies is calculated in this section. The favorable subsidy terms of Federal credit assistance however may involve other factors besides interest and these are not included in these estimates. For example, the Government accepts higher loan to value ratios, riskier projects, and longer maturities than would the private market. Other types of credit subsidies may result from fees or premiums inadequate to cover costs of administration and losses on loan guarantee programs, waivers of such fees or premiums, or forgiveness of part or all of the loan principal. This section does not consider other kinds of subsidies such as direct grants that may accompany Federal credit assistance.

The interest subsidy in this analysis is defined as the difference between the present value of the loan repayments that the borrower makes under Government assistance and the present value of the loan repayments that would have been paid under a comparable private loan. These interest differentials arise for many reasons. In most direct loan programs, the interest rates are set by law either at a fixed ceiling or in relation to the Treasury borrowing rate. In loan guarantee programs, the guarantee itself provides a subsidy by eliminating the risk of default.

Calculation of interest subsidies requires estimating the interest rate that borrowers would have paid in private capital markets. For some loans, particularly in housing, private credit market interest rates are readily ascertainable and could be used in estimation, although the Federal loan may be made to higher risk groups than would be serviced in the private market. For many other programs, no comparable loans are made in private markets. The difficulty in determining the level of private, unassisted interest rates on a program by program basis has led to the arbitrary selection of a 15% interest rate. In some cases, the relevant market rates may well exceed 15%, and, in others, private markets may not exist in the absence of Government assistance. The table indicates the approximate value of the subsidy because the true measure cannot be calculated exactly.

The rate selected approximates the market yield prevailing in December 1980 for long-term guaranteed loans that are mainly serviced by private lenders. These are primarily FHA and VA housing loans. Insurance fees are not included; thus risk is not implicit or explicitly covered in the evaluation.

Interest subsidies occur throughout the life of the loan. The measurement of interest subsidies therefore requires that the interest payments be converted into a single discounted present-value that capitalizes the interest payments. This conversion is computed by discounting the subsidy that occurs in each future year by the selected interest rate (constant over the life of the loan) and then adding all the discounted subsidies into a single present value.

Using this technique, table F-11 shows the estimated value of Federal subsidies for new direct loan obligations and guaranteed loan commitments by agency and program for 1980-82. The first two columns of the table give the average interest rate and maturity for loans in the agency or program listed. The next three columns give the obligations or commitments for 1980-82, the annual subsidy in millions of dollars per \$100 million, and the present value of the subsidy stream. The grand total for the present value of the interest subsidy for new activity is \$21.2 billion in 1982.

Table F-11. INTEREST SUBSIDY COSTS FOR NEWLY COMMITTED FEDERAL CREDIT ASSISTANCE

(In millions of dollars)

Agency and programs	Average loan terms		Obligations or commitments			15,000 discount			
	Percent	Years	1980	1981	1982	Annual subsidy per \$100 million	Present value of subsidy stream		
							1980	1981	1982
<b>DIRECT LOANS</b>									
Funds appropriated to the President:									
Economic support fund .....	2.8	33.2	713	735	1,000	10.5	496	511	696
Foreign military sales credit .....	12.0	8.0	635	640	1,020	2.0	60	60	96
Functional development assistance .....	2.8	33.2	445	396	475	10.5	310	275	330
Agriculture:									
Price support & related programs .....	11.9	5.3	4,947	3,596	4,620	2.2	375	272	350
Agricultural credit insurance fund .....	8.0	8.4	7,528	8,810	5,658	4.6	1,655	1,936	1,244
Rural housing insurance fund .....	3.3	17.0	6,751	6,707	5,390	8.6	3,575	3,551	2,854
Farm export credit—P.L. 480 .....	2.3	33.0	876	916	878	10.8	625	654	627
Rural development insurance fund .....	5.0	40.0	1,422	1,667	326	9.3	875	1,026	201
Rural telephone bank .....	10.3	35.0	160	185	185	4.5	48	56	56
Rural electric & telephone rev. fd .....	4.4	35.0	1,175	1,100	1,100	9.5	738	691	691
Rural communication .....	5.0	35.0	10	31	.....	9.0	6	9	.....
Commerce:									
Coastal energy impact fund .....	6.0	25.0	33	47	.....	7.6	16	23	.....
Economic development assistance .....	11.5	25.0	116	116	116	3.2	24	24	24
Education:									
Student financial assistance .....	3.0	40.0	305	186	286	10.7	218	133	204
Student loan insurance fund .....	7.0	13.0	271	3,460	455	5.8	8.9	1,142	150
College housing .....	3.0	40.0	1,140	1,060	95	10.7	814	757	68
Energy:									
Energy supply nuclear fuels .....	7.4	10.0	5	10	14	5.2	1	3	4
Health and Human Services:									
Health maintenance organizations .....	12.0	20.0	35	520	92	2.6	6	85	15
Other health programs .....	6.7	14.5	30	15	1	6.1	11	5	*
Housing and Urban Development:									
Federal Housing Administration .....	10.0	20.0	3,010	282	278	4.2	804	75	74
Government National Mortgage Assn .....	13.0	39.8	2,201	1,832	314	2.0	287	239	41

Table F-11. INTEREST SUBSIDY COSTS FOR NEWLY COMMITTED FEDERAL CREDIT ASSISTANCE—  
Continued

(In millions of dollars)

Agency and programs	Average loan terms		Obligations or commitments			15,000 discount			
	Percent	Years	1980	1981	1982	Annual subsidy per \$100 million	Present value of subsidy stream		
							1980	1981	1982
Housing for elderly & handicapped .....	9.3	40.0	933	896	851	5.6	344	331	314
New communities fund .....	11.4	9.8	10	25	.....	2.6	1	3	.....
Housing rehabilitation	3.0	20.0	203	197	215	9.1	117	114	124
Low rent public housing .....	0.0	40.3	1,318	300	300	12.6	1,101	250	250
Interior:									
Water resources .....	0.0	40.0	12	25	34	12.5	10	21	28
Indian loan funds .....	10.4	19.1	14	15	16	3.9	3	4	4
Transportation:									
Highway programs .....	5.5	14.9	23	14	19	7.0	10	6	8
Rail programs .....	2.8	23.6	132	108	155	9.6	82	67	97
Veterans Administration:									
Veterans housing programs .....	13.5	29.9	362	408	435	1.4	34	38	41
Veterans insurance policy loans .....	5.0	20.0	256	300	298	7.9	128	150	149
Other veterans loans .....	5.2	7.7	8	10	9	6.2	2	3	3
Community Services Administration .....	0.3	5.0	25	9	8	8.3	7	3	2
District of Columbia .....	9.3	30.0	90	133	220	5.3	31	46	77
Export-Import Bank .....	8.9	11.3	5,495	7,581	5,000	4.3	1,297	1,789	1,188
Federal Home Loan Bank Board .....	10.0	3.0	589	1,055	190	2.9	41	73	13
National Consumer Cooperative Bank .....	11.6	9.4	23	187	147	2.4	3	22	18
NCUA: Central Liquidity Fund .....	14.5	1.0	310	2,208	3,650	.3	1	6	9
Small Business Administration:									
Business and investment loans .....	9.3	8.5	761	789	875	3.8	140	145	161
Disaster loan fund .....	5.0	9.8	1,236	2,850	490	6.6	417	961	165
Tennessee Valley Authority .....	3.7	0.9	680	81	76	6.3	37	4	4
U.S. Railway Association	7.6	30.4	660	542	51	6.7	289	238	22
Other agencies and programs .....	13.8	5.1	357	52	58	.8	10	1	2
Add:									
Federal financing bank acquisitions of loans otherwise guaranteed .....	14.2	18.0	10,078	14,236	16,616	.7	429	606	708
<b>Total—Major direct loan subsidies <sup>1</sup></b>							<b>15,568</b>	<b>16,422</b>	<b>11,104</b>



Table F-11. INTEREST SUBSIDY COSTS FOR NEWLY COMMITTED FEDERAL CREDIT ASSISTANCE—  
Continued

(In millions of dollars)

Agency and programs	Average loan terms		Obligations or commitments			15,000 discount			
	Percent	Years	1980	1981	1982	Annual subsidy per \$100 million	Present value of subsidy stream		
							1980	1981	1982
<b>LOAN GUARANTEES</b>									
Education:									
Student loan insurance fund .....	7.0	13.0	2,760	3,960	2,160	5.8	911	1,307	713
Health and Welfare:									
Health prof. grad. student loan fund...	12.0	13.0	32	48	100	2.3	4	6	13
Housing and Urban Development:									
Low rent public housing .....	0.0	31.0	2,918	3,786	3,883	11.9	2,296	2,979	3,056
Interior: Indian loan G & I fund .....	7.3	10.0		3	31	5.3		1	8
Small Business Administration:									
Pollution equipment guarantees .....	6.0	20.0	40	50	50	7.2	18	23	23
<b>Total—guaranteed loan subsidies<sup>1</sup></b> .....							<b>3,230</b>	<b>4,317</b>	<b>3,813</b>
<b>SUBSIDY CONTRACTS:</b>									
HUD: Section 8 housing assistance <sup>2</sup> .....									
	na	18.3	787	971	1,020	na	4,857	5,972	6,253
<b>Grand total</b> .....							<b>23,655</b>	<b>26,710</b>	<b>21,170</b>

<sup>1</sup> Only explicit subsidies are represented; implicit subsidies arising from the Government's assumption of risks are not included. (See text).<sup>2</sup> Amounts shown in obligations columns for Section 8 housing subsidy contracts are the actual annual subsidy payments newly contracted, rather than the principal amount of financing supported by payments.

### CONTROLLING FEDERAL CREDIT

In the 1981 *Budget*, the administration introduced a credit control system for reviewing and regulating new credit activity on a program by program basis. The control system works through appropriations limitations on new direct loan obligations and loan guarantee commitments. Requests for these limitations are produced through the Administration's budget review process, submitted in the *Budget Appendix* and acted on by Congress through regular appropriations bills. The credit control system and the credit budget are discussed in part 2 and part 3 of the *Budget*. The greater scrutiny and control of the limitations system will help achieve the following goals:

First, at the program level, the system should insure that credit programs meet the purposes for which they are intended, that they do so efficiently, and that the level of resources is justified.

Second, the system should result in a more systematic examination and rationalization of the distribution of Federal Credit among sectors of the economy. The control system will be the framework for analyzing the relative distribution of Federal Credit resources among economic sectors, e.g., education, housing, industrial development and export promotion.

Third, on the aggregate level, the system will be a framework for analyzing the impact of total credit activity on the economy as a whole—on public versus private needs, and on economic growth, inflation and employment.

The Federal credit control system integrates Federal credit programs more completely into the budget process. The budget is the chief instrument for allocating fiscal resources between the public and private sectors and among different functions or needs; it also sets fiscal policy.

In its initial phases, the credit control system only covered certain Federal credit activities. Hence, the credit control coverage differs from the coverage in previous budgets and in this Special Analysis. The difference in coverage arises from three primary causes.

(1) The credit activities of the privately owned Government-sponsored enterprises are excluded from the credit control system because of their private ownership.

(2) In a number of programs, Federal loan guarantees cover less than the full principal of the loan. The credit control system includes only the amount of the loan guarantee, since that is the amount of the Government's contingent liability.

(3) A number of credit related activities have significant non-credit program characteristics. For example, Federal price or rental guarantees have significant non-credit characteristics as well as credit attributes. Transactions of this type are currently excluded from the credit control system. The following kinds of direct loan and loan guarantee transactions are excluded from the credit control system:

- sale of Federal assets on credit terms for more than 90 days duration;
- investments in obligations or preferred stock of any privately owned enterprises;
- deferred or delinquent interest that is capitalized,
- long term Government contracts for the purchase or lease of goods or services or of real property where beneficial interests of such contracts are pledged or assigned to lenders or investors;

- loans supported by contracts to pay any portion of the debt service;
- callable capital contributions to multilateral development banks;
- contingency-type direct loan commitments;
- price guarantees;
- guarantees to purchase unsold output; and
- project completion guarantees.

Table F-12 reconciles the Federal credit activity reported in this Special Analysis to the activity of the credit control system shown in Part 2 of the *Budget*. There are four kinds of programs included in the credit control system that are excluded from appropriation limitations. For these programs, control is exercised only through authorizing legislation rather than through both authorizations and appropriations. The first kind are clear and unambiguous entitlements to qualified applicants such as veterans mortgage guarantees. The second kind provide insurance against unforeseen circumstances, such as insurance of bank deposits.

These two exemptions preclude the appearance of control where none can exist without changing the basic nature of the programs. If they were included in the credit control system limits, the need for mandatory supplemental appropriations actions would arise whenever the limitations authorized for these programs proved insufficient. These two exemptions are similar in nature to those budgetary activities considered relatively uncontrollable, many of which are also not acted on in annual appropriations bills.

The third kind exempts guarantees of certificates of beneficial ownership (CBO's) issued by the FmHA and the REA. The President's Commission on Budget Concepts recommended the sale of CBO's be treated as borrowing but current legislation requires REA and FmHA to treat them as the sales of loan assets. While in a technical sense they are guaranteed, they are primarily financing. Since the credit activity they finance is covered in the control system, they need not be limited.

The fourth kind are export promotion loans by CCC. Under present circumstances, the administration did not wish to unduly restrict these activities.

As table F-12 indicates, the two significant differences between total Federal credit activity and total activity in the control system are the deduction of loans by Government sponsored enterprises and the difference between the full principal of guaranteed loans and the Government's contingent liability.

Table F-12. RECONCILIATION: TOTAL FEDERAL CREDIT ACTIVITY TO FEDERAL CREDIT ACTIVITY IN THE CREDIT CONTROL SYSTEM

(In billions of dollars)

	1982		
	New transactions	Net change	Outstanding
<b>Total lending:</b>			
Total credit advanced to the public under Federal auspices (from table F-7) .....	284.9	109.8	822.1
Less loans by Government sponsored enterprises (from table F-6) .....	133.3	28.3	199.6
Less the difference between the full principal of guaranteed loans and the Government's contingent liability:			
Veterans Administration .....	10.1	7.4	49.4
Federal Housing Administration .....	.8	.8	8.4
Export-Import Bank .....	1.1	.2	1.5
Less guaranteed loan transactions excluded from the control system:			
IFI: Callable capital subscriptions .....	9.5	9.5	23.0
Less direct loan transactions excluded from the control system:			
Veterans Administration .....	.3	*	1.2
Other .....	.9	.3	25.1
<b>Total, credit advanced to the public in the credit budget (from Part 2 of the Budget) .....</b>	<b>128.9</b>	<b>63.3</b>	<b>513.9</b>
Less transactions in programs exempt from appropriations control:			
Entitlements:			
VA programs .....	11.9	8.4	64.5
Public housing .....	17.1	2.3	20.6
Insurance:			
C.C.C. ....	6.6	.8	7.9
FHLBB .....	.2	*	1.6
FmHA .....	8.2	*	.3
International security assistance .....	1.5	.8	5.9
Guarantees of FmHA and REA CBO's .....	8.6	6.1	62.7
Housing programs .....	.9	.4	4.6
Small business programs .....	.9	.4	8.8
Public Law 480 export sales .....	.9	.7	8.6
Education programs .....	6.0	3.2	25.5
FFB .....	24.8	18.2	102.7
Synthetic Fuels Corporation .....	2.0	2.0	3.5
Railroad programs .....	.1	.1	.6
Plus:			
Secondary loans in programs exempt from appropriations control .....	1.9	1.9	5.4
Total transactions in programs under appropriations control .....	37.3	18.0	190.7

\*Less than \$50 million.

---

**PROPOSED LEGISLATION**

Legislative proposals that are covered in the budget plan are also reflected in this special analysis. Included in the 1982 budget is a proposal to change the form of the "tandem plan" mortgage assistance programs of the Government National Mortgage Association (GNMA) so that the interest subsidy is provided as a direct grant to originating lenders. Under the present tandem mechanism GNMA purchases multifamily mortgages at below market interest rates and resells them at a discount sufficient to raise the yield to market rates. In absorbing the difference in yield, GNMA provides a subsidy to encourage multifamily or other housing construction. Under the new proposal financial institutions will be given lump sum payments compensating them for originating below market rate mortgages. The new method will simplify the Federal support mechanism and will require outlays only to cover the subsidy rather than for the entire loan. About \$1.7 billion of the \$2 billion in tandem plan mortgages will be affected.

The Small Business Administration is proposing a major restructuring of its direct and guaranteed business lending programs. The changes emphasize guarantees over direct lending and orient lending to socially or economically disadvantaged business-owners and to businesses in industries where competition or innovation is inadequate. The agency will seek legislation to consolidate its business loan program into one program, increase the interest rates on direct loans to a rate equal to that charged for guaranteed loans, and raise its limits on guaranteed loans from \$500,000 to \$750,000.

**RECENTLY ENACTED LEGISLATION**

This section lists and briefly describes new credit and credit related legislation enacted during the 1980 session of the Congress.

Only new programs or major revisions of existing ones are included, simple extensions or changes in funding are excluded. Several statutes enacted in 1979 but omitted from last year's analysis have also been included.

*Special International Security Assistance Act of 1979, Public Law 96-35.*—This legislation authorizes up to \$3.7 billion in loan guarantees to Egypt and Israel for the purchase of weaponry in conjunction with the 1979 Egyptian-Israeli Peace Treaty. The Federal Financing Bank is expected to be the lender for these loans.

*Higher Education Technical Amendments of 1979, Public Law 96-49.*—This legislation removes the 5% limitation on the guaranteed student loan special allowance paid to lenders and gives the Department of Education direct authority to collect payment on defaulted national direct student loans.

*International Security Assistance Act of 1979, Public Law 96-92.*—This legislation extends the foreign military sales credit program through 1981. Included in the act is a provision relieving Israel of the requirement to repay half of its \$1 billion sales credit debt and allowing a 10-year grace period before beginning repayment of the remainder.

*An Act To Extend the Emergency Agricultural Credit Adjustment Act of 1978, Public Law 96-220.*—This legislation extended direct and guaranteed loans for economic emergencies to farmers and ranchers who are unable to obtain sufficient private credit during periods of economic stress. The act stipulates that interest on these loans be assessed at prevailing market rates. The authority expires September 30, 1981 and is being replaced by expanded availability of crop insurance and other farm credit programs.

*Depository Institutions Deregulation and Monetary Control Act of 1980, Public Law 96-221.*—This legislation authorizes the automatic transfer of funds; allows Federal savings and loan associations to make and hold unsecured consumer loans, commercial paper, corporate debt securities and bankers acceptances; provides for negotiable order of withdrawal accounts at depository institutions; and authorizes federally insured credit unions to receive share draft deposits.

*Agricultural Act of 1949—Farmer-Held Reserve Program, Public Law 96-234.*—This legislation authorizes long-term price support loans under the farmer-held reserve program to corn and wheat producers who did not participate in the 1979 set-aside program for these commodities.

*Rock Island Railroad Transition and Employee Assistance Act, Public Law 96-254.*—This legislation requires that at least \$25 million of the Department of Transportation's rail rehabilitation funding be lent to State or local governments or non-railroad carrier groups for purchase of Rock Island properties for rail service.

*Inter-American and Asian Development Banks and African Development Fund, Public Law 96-259.*—This legislation increases U.S. participation in the Inter-American and Asian Development Banks and African Development Fund which generate capital to be lent to less developed countries.

*Asbestos School Hazard Detection and Control Act of 1980, Public Law 96-270.*—This legislation establishes an Asbestos Hazards Control Loan Program within the Department of Education to provide loans to local educational agencies for the mitigation of asbestos hazards in school buildings.

*Energy Security Act, Public Law 96-294.*—This legislation authorizes loans and loan guarantees for the expansion of energy productivity and supply capacity through the Synthetic Fuels Corporation and the Department of Energy. Such financing mechanisms include:

- Direct and guaranteed construction loans for development of municipal waste energy projects.
- Price support loans for existing waste energy projects.
- Creation of credit associations and other lending institutions under the Farm Credit Administration for the purpose of extending loans for commercialization of biomass energy projects. Interest rates approximate FCA borrowing costs.
- Creation of the Solar Energy and Energy Conservation Bank in the Department of Housing and Urban Development (HUD) to subsidize interest and principal on loans for residential mortgages with solar energy systems. Subsidies will approximate 40 to 50% of the cost of the energy conservation or passive solar system investment.
- Loans for geothermal energy development.

*Small Business Administration Authorizations of 1980, Public Law 96-302.*—This legislation extends authorization for small business loan programs through 1984, raising authorized loan levels for most programs. Changes to the disaster loan programs of SBA and FMHA return agricultural clientele to the latter agency.

*Ocean Thermal Energy Conversion Act of 1980, Public Law 96-320.*—This legislation amends the Merchant Marine Act of 1936 to authorize commitments to guarantee payment of obligations for commercial demonstration projects for ocean thermal energy conversion.

*Wind Energy Systems Act of 1980, Public Law 96-345.*—This legislation establishes a direct loan program in the Department of Energy to construct power generating projects which will develop and test new wind energy technologies.

*Agricultural Subterminal Facilities Act of 1980, Public Law 96-358.*—This legislation amends the Consolidated Farm and Rural Development Act to provide guaranteed loans at market interest

rates for the construction and improvement of agricultural subterminal facilities and for purchase of transport equipment used for facility operations.

*Education Amendments of 1980, Public Law 96-374.*—This legislation extends the provisions of the guaranteed and insured student loan program for 5 years. The act increases annual loan limits, allows State agencies and nonprofit institutions to serve as lenders of last resort, expands the number of individuals eligible for loan repayment deferrals, increases the graduate student loan interest rate from 7% to 9%, establishes a new unsubsidized loan program for parents of dependent undergraduate students, amends the special allowance rate for lenders and alters the role of the Student Loan Market Association.

Administration of the national direct student loan program is transferred to the new National Direct Student Loan Association. Need-based loan programs are to be expanded. The new Association will have direct authority to collect on defaulted loans.

In addition, loans and loan insurance are authorized for construction and renovation of academic facilities.

*Housing and Community Development Act of 1980, Public Law 96-399.*—This legislation reauthorizes Federal Housing Administration programs. Amendments raise FHA mortgage limits for single family units from \$67,500 to as high as \$90,000 in some areas; increase loan limits for the rehabilitation program; authorize public housing operating subsidies; and require that FHA interest rates be adjusted as needed to minimize discount points.

*Consolidated Farm and Rural Development Act Amendments, Public Law 96-438.*—This legislation authorizes guaranteed farm ownership loans at market interest rates for renewable resource energy facilities and residential structures on family farms. The existing law is amended to include stricter eligibility requirements for emergency loans. The disaster loan program for creditworthy borrowers through the Farmers Home Administration (FmHA) is extended and loss loans will bear a 5% interest rate while subsequent loans will bear interest at Treasury borrowing rates.

*Staggers Rail Act of 1980, Public Law 94-448.*—This legislation reauthorizes \$700 million for the Department of Transportation's rail rehabilitation program. Direct loans under this program are in the form of purchases of "redeemable preference shares" that yield an effective return to the Government of approximately 2%. The new act relaxes certain eligibility criteria, and requires earmarking of 5% of funding for a new rail branch line program.

*Methane Transportation, Research, Development, and Demonstration Act of 1980, Public Law 96-512.*—This legislation establishes a direct loan program in the Department of Energy for private sector



costs associated with installing methane transmission, storage, and dispensing facilities.

*International Security and Development Cooperation Act of 1980, Public Law 96-553.*—This legislation extends various security assistance and economic development programs through 1982. The new act eliminates the requirement for appropriation of a 10% fractional reserve for foreign military sales guaranteed loans.

*American Fisheries Preservation Act of 1980, Title II of Public Law 96-561.*—This legislation authorizes loan guarantees for shore-side and ocean-going fishery facilities under the title XI ship financing program of the Merchant Marine Act of 1936. Less stringent economic soundness criteria are authorized for guarantees of credit for fishing vessels and facilities that are to be used in the development of domestic markets for under-utilized fish species. Title II also authorizes direct loans from the Fisheries loan fund to prevent default by fishing vessel owners on guaranteed and conventional ship mortgages, and to cover operating losses.



## 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 tax liability." Tax expenditures are so designated because they are one means by which the Federal Government pursues public policy objectives and, in most cases, can be viewed as alternatives to budget outlays, credit assistance or other policy instruments.

Tax expenditures have objectives similar to those programs funded through direct appropriations. There are numerous examples of this. Direct and tax expenditures reduce the cost of ship acquisition by shipping companies; CETA grant programs and the jobs tax credit are designed to increase employment of targeted groups in the labor force; direct interest subsidies and the issuance of tax-exempt bonds result in lower financing costs for eligible issuers of mortgage bonds or for eligible businesses. Similarly, State and local governments benefit both from direct grant programs and from the ability to borrow funds at tax-exempt rates, and individuals benefit both from direct medicare payments and from the deductibility of medical expenses for income tax purposes.

The benefits of tax expenditures designed to encourage particular types of economic activity may not rest fully or even mainly with the corporations or individuals whose taxes are initially affected. Benefits often accrue to others in the form of lower prices for particular goods or services, or in other ways become widely diffused. For example, to the extent that the investment tax credit stimulates capital formation, productivity may increase and real wages may rise, benefiting recipients of labor income as well as capital income.

This special analysis contains quantitative estimates of tax expenditures but does not attempt to evaluate their effectiveness. It should be emphasized that the listing of specific tax expenditure items does not imply either approval or disapproval of specific provisions of the tax system.

## DEFINING TAX EXPENDITURES

Income tax provisions resulting in tax expenditures are further defined in the legislative history of the Congressional Budget Act as exceptions to the "normal structure" of the individual and corporate income taxes. They reduce tax liabilities for particular groups of taxpayers to encourage certain economic activities or in recognition of special circumstances. No estimates are made in this analysis for negative tax expenditures or tax penalties—that is, exceptions to the normal structure of income taxes that result in increased tax liabilities for certain groups of taxpayers to discourage specified kinds of activities. At present there are only a few such exceptions. One example is the nondeductibility of gambling losses in excess of gambling gains where gambling is engaged in for profit. Also, under the Tax Reform Act of 1976 deductions for the costs associated with the demolition of certain historic buildings were disallowed and crediting of foreign taxes paid was denied taxpayers who cooperate with or participate in an international boycott.

The Internal Revenue Code contains individual income, corporate income, estate and gift, excise and employment taxes. This analysis deals only with deviations from the "normal structure" in the taxation of individual and corporate income.

The "normal structure" is not defined in the tax code. The concept has evolved from various Congressional and public reviews of the U.S. tax system focusing on the definition of the income tax base and the rates applied to that base. Tax expenditures might in principle be defined as departures from a theoretical income tax base. "Economic income," defined as receipts available to support consumption or additions to net wealth including the imputed value of in-kind consumption and imputed changes in net wealth, might be used for this purpose. Such theoretically pure treatment, however, is not possible in practice.

The concept of the normal tax structure recognizes that it is impractical for individual taxpayers to make the necessary imputations as, for instance, the imputed income derived from owner-occupied homes. Furthermore, for historical and administrative reasons the normal structure allows separate taxation of individual and corporate incomes even though it would be possible to define a normal income tax structure that would integrate these two taxes.

Although a theoretically pure as well as normal structure for an income tax base can be specified with reference to generally accepted rules of income measurement, there is no similar point of reference for regarding as theoretically pure or normal any particular structure of income tax rates. However, for purposes of identifying tax expenditures, the progressive rate structure and the provisions

that eliminate the tax liability of low-income persons are considered to be part of the normal tax structure. When the rate structure and threshold levels for tax liability are changed, for whatever reason, the new rates and threshold levels become part of the normal structure used in the analysis of tax expenditures. Reductions in the tax rates for individuals and increases in the personal exemption and the standard deduction (now called the zero bracket amount) tend to reduce the estimated revenue losses associated with some tax expenditure items. This occurs because fewer taxpayers itemize their deductions, because tax preferences have less value at lower marginal rates, and because these two factors reduce the amount of tax liability that may be offset by tax credits.

Distinctions between the normal tax structure and exceptions leading to tax expenditures do not imply that the features of the normal tax system should be exempt from periodic analysis and review. Many features of what is now defined as the normal tax structure, such as rate structure and exemption levels, have major effects upon the level and composition of economic activity and the distribution of income. Budget outlays and other policy instruments are alternative means to achieve the objectives of certain features of the normal tax structure just as they are often a potential substitute for tax expenditures.

Tax rates cannot be presumed to be independent of either direct outlays or current tax expenditures. If either major tax expenditure items or direct spending programs were repealed, tax rates could be set at lower levels to maintain an appropriate fiscal policy.

Several issues relating to the distinction between the normal structure of the income tax system and tax expenditure provisions are discussed in the following paragraphs.

- *Threshold levels for tax liability.* The normal structure includes those tax code provisions that determine threshold levels of income below which no tax liability is imposed for the different types and sizes of taxpaying units. These threshold levels have been affected by legislated changes in personal exemptions and standard deductions in recent years. The additional personal exemptions for taxpayers 65 and over and the blind result in tax expenditures because they are special provisions directed at groups in special circumstances.
- *The progressive rate schedules for the individual income tax.* A progressive rate schedule for the individual income tax is considered to be part of the normal tax structure, as would a proportional or even a regressive rate schedule, because the concept of tax expenditures is not characterized by any specific rate schedule. Therefore, tax expenditures do not result

because some income is taxed at lower rates than other income. The income averaging provision of the code is also considered to be part of the normal structure. The maximum tax of 50% on personal service income is treated as a tax expenditure item because it is a "preferential rate of tax" as defined in the Congressional Budget Act.

- *The limited progressive rate schedule for corporations.* The first \$100,000 of corporate income is taxed at progressive rates ranging from 17% to 40%; all amounts over \$100,000 are taxed at 46%. Consistent with the treatment of the corporate surtax exemption in prior years, corporate tax rates below the 46% top rate are viewed as giving rise to a tax expenditure.
- *Separate rate schedules for single and married taxpayers, married taxpayers filing separately, and heads of households.* Existing provisions regarding the definition of taxpaying units and separate rate schedules for different types of taxpayers are considered part of the normal tax structure. The concept of tax expenditures is not characterized by any specific set of rate schedules applicable to the particular tax filing units.
- *Imputed income from owner-occupied housing and other sources.* A theoretically pure income concept would include imputations for income received in kind from the occupancy of a home owned by the taxpayer and for in-kind income from the ownership of other durable assets. Because such imputations are difficult to make, they are not considered in the computation of tax expenditures, even though the exclusion of imputed income from income subject to tax affects the allocation of the economy's resources, particularly by stimulating owner-occupied housing. If income from owner-occupied housing were imputed, deductions for mortgage interest and property taxes would be an appropriate part of the normal structure in order to measure the amount of net income that should be included in the tax base. In the absence of an income imputation, those two deductions result in tax expenditures.
- *The value of government benefits received in kind.* The exclusion from income subject to tax of most direct cash payments to individuals by the government, such as social security payments, results in tax expenditures. Other government programs such as medicare and public education extend benefits in kind to individuals which are excluded from income, but this exclusion does not result in tax expenditures. The dividing line is not clear cut between nontaxable government benefits that result in tax expenditures and those that do not. Food stamps, for example, are so nearly the equivalent of cash that their exclusion from income subject to tax might be

considered to result in a tax expenditure, but in this analysis they are not so considered.

- *Capital gains and losses.* Although the base of a theoretically pure income tax would include net capital gains as they accrue, practical problems generally prevent the identification and taxation of unrealized capital gains. Hence, the normal structure taxes such gains only when "realized." However, the exclusion from taxable income of 60% of capital gains results in a tax expenditure.

An individual's assets held at death may have appreciated in value. Since these gains are not deemed to have been realized in the year of death under current law, they are completely excluded from the decedent's income subject to tax. Moreover, the basis of the decedent's assets in the hands of the estate, heir or other beneficiary is their market value at the date of death. Thus, gains that accrued before death are never subject to tax. The failure to include these unrealized capital gains in income is considered for purposes of this analysis to result in a tax expenditure.

- *Gifts and bequests.* The tax system subjects gifts in excess of a minimum amount and bequests to taxes separate from the income tax. Therefore their exclusion from the recipient's taxable income under the individual income tax does not result in a tax expenditure. While another set of tax expenditures could be defined for departures from a "normal structure" of gift and estate taxes, this would be beyond the scope of this analysis.
- *Forms of business organization.* The tax law recognizes different forms of business organization including corporations, partnerships, subchapter S corporations treated in a manner somewhat similar to partnerships, cooperatives, mutual insurance companies and individual proprietorships. The provisions of the tax law that accommodate different forms of business organization do not generally result in tax expenditures so long as income is subject to tax at either the corporate or the individual level.
- *Treatment of individuals and corporations as separate taxpaying entities.* It is possible to define a tax structure in which individual and corporate taxes are completely integrated in the sense that all corporate income would be allocated and taxed to shareholders. However, for purposes of this analysis, separate taxation of regular corporate entities is considered to be part of the normal tax structure.
- *Deduction of depreciation expenses.* The tax code allows a reasonable allowance for depreciation. Depreciation is defined as "the exhaustion, wear and tear (including a reasonable

allowance for obsolescence) on property used in a trade or business or for the production of income." To measure actual depreciation the changes in market values of assets are required. This information is generally not available, so that estimates of an asset's useful life and its probable rate of depreciation are used instead. Depreciation over the useful life of an asset may be taken at a uniform rate, known as straight line depreciation, or at a rate that is faster in the earlier years of an asset's life, known as accelerated depreciation. For depreciation purposes a distinction is made between the treatment of machinery and equipment and that of buildings. The use of accelerated depreciation for machinery and equipment is considered to be part of the normal tax structure because they tend to lose more of their actual value in the first few years of useful life. However, under the asset depreciation range (ADR) system, a taxpayer may select a life for an asset of up to 20% shorter than the guideline life published by the Internal Revenue Service without having to justify the choice. If an asset life within the 20% range but shorter than the guideline life is chosen, a tax expenditure is assumed to result. In the case of buildings no comparable guideline lives are published. Thus, to the extent that lives claimed by taxpayers are justified on the basis of "facts and circumstances," tax expenditures do not result. For certain types of buildings, such as rehabilitated low income housing, a rapid amortization period in place of useful lives is permitted by the tax code, thereby giving rise to tax expenditures. Furthermore, for all buildings the straight-line method of depreciation is considered to be part of the normal tax structure, and the additional deductions resulting from the use of accelerated depreciation are regarded as tax expenditures.

- *Deduction of other business expenses.* The deduction of business expenses is necessary to determine taxable income. Tax expenditures do not ordinarily result when deductions for "ordinary and necessary" business expenses are taken. No attempt was made in this analysis to determine whether certain expenses such as those for entertainment and meals should not only reduce the taxable income of employers, but should also be excluded from the taxable income of the employees receiving these in-kind benefits. Tax expenditures do occur when the tax code permits business or investment expenditures that are capital outlays in economic terms to be treated as current expenses.
- *Foreign tax credits.* The normal structure of the income tax includes tax credits for foreign income taxes paid; this prevents the double taxation of income earned abroad. While



there are some limitations on the credit, it generally conforms to the principle that total taxes paid by a U.S. resident should be independent of the source of his income.

- *Income of controlled foreign corporations.* The income of foreign corporations controlled by U.S. corporations or citizens is generally not subject to U.S. tax until that income is repatriated. There are certain exceptions in order to avoid abuse in tax-haven countries. The deferral of income of controlled foreign corporations is included as a tax expenditure in this analysis, because it is an exception to the basic precept of our tax system that U.S. corporations and citizens are subject to tax on their worldwide income when earned.

This discussion does not exhaust the definitional issues inherent in the tax expenditure concept nor does this analysis consider all special tax provisions. Also, some items are omitted because the revenue loss is relatively small (\$5 million or less).

#### MEASURING TAX EXPENDITURES

The tax expenditure estimates reported in table G-1 have been prepared by the Treasury Department and are based upon tax law enacted as of December 31, 1980. The estimates show the loss of budget receipts by fiscal year resulting from each of these particular features of the tax system. For those tax expenditures resulting from the exclusion from taxable income of Federal Government payments to individuals, the estimates of such payments upon which the tax expenditure estimates are based are those shown elsewhere in the budget; hence they reflect any proposed changes in these programs.

The tax expenditure estimating procedure uses the same implicit assumption that governs estimates of out-year budget outlays, namely that the existing tax structure and all other institutional determinants of resource costs are given. In effect, the estimating procedure answers the question, "How much more tax liability would be incurred by taxpayers if the preferential tax rule were not in force, but all other features of the tax system, including the structure of rates, remained the same?" When the special tax rule involves an extraordinary deduction or exclusion of income receipts, the tax expenditure is estimated to be the excess deduction or excluded income times an applicable marginal tax rate. However, in the case of individual taxpayers, account is taken of the likelihood that some will no longer have remaining deductions sufficient to itemize and, hence, would elect the standard deduction, absent the preferential deduction in question. When the special tax rule is a preferential credit against taxes otherwise due,

the tax expenditure estimate is equal to the credits claimed by all taxpayers.

Tax expenditures, like budget outlays, are intended to reallocate income or output. It is, therefore, assumed that as a result of offsetting fiscal or other policies aggregate output and incomes remain at the levels that underlie the 1982 budget estimates. For this reason, no "second order" effects on tax receipts are needed or estimated.

As is the case with estimates of proposed changes in tax law, tax expenditure estimates are computed on a budget receipts or "cash-flow" basis. However, for purposes of the present analysis, the estimates show the difference between budget receipts under current law and budget receipts under the assumption that a law without the particular tax expenditure provision had always been in effect. These figures, therefore, generally show larger revenue losses than could be obtained in the first years of transition from one tax law to another.

Some tax expenditures result from the timing of deductions or the receipt of taxable income. Examples are depreciation in excess of straight line for buildings and rental housing and the deferral of income by domestic international sales corporations (DISC's). These provisions create a tax expenditure even though for a particular taxpayer, transaction, or asset the special provision defers a tax rather than eliminates it. The deferral of tax liability is equivalent to an interest-free loan from the government to the taxpayer. Thus, such tax expenditures may be compared with lending transactions of the government. (See the discussion of credit programs in Special Analysis F). For a stable or growing business, the deferral of taxes continues indefinitely under most of these provisions.

Estimating tax deferral items on a cash flow basis is consistent with the way that direct lending transactions are treated in the budget. Thus, when extensions of new loans exceed repayments of old loans, budget outlays are positive, and when loans repaid exceed loans made, budget outlays are negative. Similarly, negative tax expenditures arise in situations where taxpayers, whose tax liabilities were reduced in earlier years, have larger tax payments than they otherwise would have in later years. While tax expenditures reflect the amount of taxes deferred each period, they do not show the subsidy to taxpayers of interest free borrowing from the government, just as implicit interest subsidies are not shown for direct loan outlays.

Sample data from tax returns have been used to estimate tax expenditures whenever possible. These data, however, are not yet available for the years presented in this analysis. Consequently, the estimates have been made by extrapolating forward sample tax return data from past years by means of other more current infor-

mation, including the economic forecast used in estimating budget receipts and outlays. In addition, many tax expenditures result from excluded income not reported on tax returns. In these cases data for the estimates must be derived from other sources. The estimates take into account any changes scheduled under existing law, such as the phasing in or out of specific provisions.

The estimates are reduced by any minimum tax liabilities associated with particular items. An "add-on" minimum tax on tax preferences assures that individuals and corporations receiving tax preferences do not escape bearing some share of the tax burden. It has the effect of reducing the amount of the subsidy provided by the tax preference itself. Intangible drilling costs for oil and gas and geothermal wells are not minimum tax preference items to the extent that net income from the production of these wells offsets intangible drilling costs deductions.

Capital gains and excess itemized deductions are excluded as preference items subject to the minimum tax for individuals. However, an alternative minimum tax add-on may be applicable, levied on the sum of taxable income, certain deductions in excess of specified income limits and the capital gains deduction. The alternative minimum tax is paid if tax liabilities under this tax exceed the sum of tax liabilities under the ordinary income tax and the add-on minimum tax. The alternative minimum tax may be offset by the foreign tax credit and by other tax credits such as the investment tax credit, attributable to the active conduct of a trade or business. Any revenue gain under the alternative tax is assumed to offset the tax expenditures that would otherwise result from the capital gains preference.

"At-risk" rules limit deductions attributable to a taxpayer's investment to the amount of cash investment plus the debts for which the taxpayer is personally liable. These rules, which apply to all taxpayers other than widely held corporations and to all activities other than equipment leasing by closely held corporations and real estate, have the effect of reducing tax expenditures.

Tax expenditure estimates cannot simply be added together to obtain totals for functional areas or a grand total. However, where tax expenditures for both individuals and corporations result from the same tax code provision, such as the investment tax credit, the two estimates may be added together.

Simply adding tax expenditures produces inaccurate totals because tax expenditures affect the value of other tax expenditures. This interaction may be demonstrated by comparing the result of deleting two tax expenditures simultaneously to that of deleting them separately. In some cases, the revenue gained from the deletion of two tax expenditure items simultaneously would be greater than the sum of the gains from the deletion of the two items

separately. For example, if interest income from State and local government securities were made taxable and capital gains were taxed at ordinary rates, many more individuals would be pushed into higher tax brackets than if just one of these sources of income became fully taxable; the combined effect on revenue would be greater than the sum of the two separate effects. In other cases, the revenue gain from the deletion of two items together would be smaller than the sum of the gains considered separately. For example, if the deductibility of mortgage interest payments and homeowner property taxes were both repealed and the standard deduction were left unchanged, more individuals who now itemize their deductions would opt for the standard deduction than if only one preference were repealed. The revenue gain would therefore be lower from repealing both preferences together than the sum obtained from repealing each one separately.

In general, elimination of several itemized deductions would increase revenue by less than the sum of the revenue gains measured by eliminating each item separately because more taxpayers would use the standard deduction. Conversely, elimination of multiple items that are exclusions from adjusted gross income would increase revenue by more than the sum of the individual gains because more taxpayers would be pushed into higher tax brackets.

As a measure of this aggregation problem, the revenue loss resulting from all itemized deductions that result in tax expenditures would be \$62.3 billion in 1982, whereas the sum of these tax expenditures, taking each item separately, is \$81.8 billion. The aggregations of related tax expenditure items that are presented and discussed in the text have been estimated using special procedures which take account of interaction effects.

The estimates of tax expenditures shown in table G-1 are based on procedures similar to those used in past years. However, because of improvements in data sources, estimating methodology, and a number of disaggregations and functional reclassifications, the estimates may not be strictly comparable to those published in previous years. Tax expenditures may also be measured on the basis of outlays that provide an equivalent subsidy. This is discussed below with reference to housing and energy tax expenditures.

#### TAX EXPENDITURES BY FUNCTION

Estimates of tax expenditures for 1980-82 are grouped together by functional category in table G-1. The estimates are shown separately for individuals and corporations. Each tax expenditure has been classified in the functional category used for budget outlays into which it most closely fits.

The functional classification of several tax expenditures has been changed this year. Exclusion of interest on State and local housing

bonds is separated into rental housing, which remains in the income security function, and owner-occupied housing, which is now in the commerce and housing function. Exclusions of interest on State and local debt issued to finance student loans, hospital construction, and certain energy facilities have been separated from that for general purpose State and local debt and are now in education, health, and energy functions. Expensing of exploration and development costs and the excess of percentage over cost depletion formerly in the energy function have now been separated into nonfuel and fuel categories. The former are in the natural resources and environment function and the latter are in the energy function and further separated into oil and gas and other fuels. The exclusion of capital gains on home sales for persons age 55 and over and the exclusion of interest on life insurance savings have been changed from income security to the commerce and housing function, while tax credits on rehabilitated housing have been reclassified from commerce and housing to community and regional development. A brief description follows of the special tax provisions shown in table G-1.

*National defense.*—The housing and meals provided military personnel, either in cash or in kind, are excluded from income subject to tax. Most of the disability-related military pension income received by current retirees is also excluded.

*International affairs.*—A U.S. citizen or a U.S. resident alien who is a resident of a foreign country or remained outside the United States for 17 months in an 18-month period is allowed deductions for certain foreign living costs.

Eligible taxpayers may deduct expenses for annual home leave travel, the cost of schooling from kindergarten through grade 12 equivalent to that prevalent in the United States, the excess of foreign living costs other than housing and education over those in the highest U.S. mainland city and the excess of reasonable housing costs over one-sixth of earned income less the special deductions. Taxpayers living in hardship areas are allowed an additional deduction of \$5,000. Taxpayers living in hardship areas in camps set up by their employers may elect to exclude \$20,000 plus the value of meals and lodging furnished by the employer in lieu of taking the special deductions. Individuals who perform charitable services in lesser developed countries may elect to exclude up to \$20,000 of earned income attributable to the services rather than taking the special deductions. The tax-exempt status of certain allowances received by Federal employees working abroad has not changed. These exemptions also result in tax expenditures.

The profits of a domestic international sales corporation (DISC) are not taxed to the DISC but instead are taxed to the shareholders when distributed or deemed distributed to them. For DISC's with

more than \$150,000 in otherwise taxable income, the deemed distribution equals all income attributable to base-period exports plus 50% of income attributable to exports in excess of the base-period exports. Base period exports equal 67% of average annual exports during an earlier 4-year base period. For DISC's with less than \$150,000 in otherwise taxable income, the deemed distribution equals 50% of total income.

Except for certain tax-haven provisions, the income of foreign corporations controlled by U.S. shareholders is exempt from U.S. taxation until that income is distributed to the shareholders. The tax expenditure estimate assumes that if deferral were terminated the earnings of a controlled foreign corporation would be taxed to the parent corporation.

*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. Businesses may deduct all research and development expenditures in the year when they are incurred rather than amortize them over several years.

*Energy.*—Certain capital costs necessary to discover and develop certain mineral properties may be deducted as current expenses rather than amortized over the useful life of the property. Included in this category are the intangible drilling costs of oil wells, such as the wages of drilling crews, and the cost of developing other mineral deposits, such as expenditures for mine shafts, tunnels and stripping. Intangible drilling costs for oil and gas wells are a preference item for purposes of the minimum tax to the extent that such costs exceed either cost depletion or 10-year amortization. Individuals, however, may exclude intangible drilling costs from their minimum tax base to the extent that the deductions did not exceed oil and gas income. The same rules apply to intangible drilling costs of geothermal wells.

Extractive industries generally use percentage depletion rather than cost depletion. Under cost depletion, actual outlays, to the extent not immediately recovered through expensing of exploration and discovery and development costs, may be deducted over the productive life of the property, much as businesses may take deductions for the depreciation of other capital goods. Percentage depletion is not likewise limited to the cost of the investment. Under percentage depletion, taxpayers may deduct a percentage of gross income from mineral production at rates ranging from 22% for oil and gas and certain other minerals to 5%; however, the deduction is limited to 50% of net income from the property or 65% of taxable income in the case of oil and gas. Percentage depletion is available only to limited quantities of output by independent oil and gas producers and royalty owners. In addition, the percentage

depletion rate for oil and gas is being phased out from 22% through 1980 to 15% in 1984 and thereafter. Production from geothermal deposits is eligible for percentage depletion at the same rate as for oil and gas, but with no limit on output and no limitation with respect to qualified producers. In lieu of percentage depletion, royalties from coal deposits are treated 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 may take a 15% income tax credit for home insulation and other energy-conserving components up to a maximum credit of \$300. The Crude Oil Windfall Profit Tax Act of 1980 increased the credit allowed under prior law for expenditures on solar and other renewable energy source property to 40% of the first \$10,000 of qualifying expenditures.

In addition to the investment tax credit, prior law allowed a 10% credit for business investments in specified energy property. Such property includes alternative energy property (i.e., property using fuel other than oil or natural gas); solar or wind energy property; 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; and equipment for producing natural gas from geopressurized brine.

The Crude Oil Windfall Profit Tax Act of 1980 made several modifications to these subsidies. The 10% credit for solar, wind or geothermal energy property is increased to 15% and facilities which produce process heat from solar energy in agricultural and industrial applications are made eligible for the credit. The credit is extended to the end of 1985. In addition, cogeneration equipment, alumina electrolytic cells and certain intercity buses are made eligible for the 10% credit. A 15% credit is now available for ocean thermal equipment installed at two sites to be designated by the Secretary of the Treasury; and an 11% credit is available for certain small-scale hydroelectric generating property. Furthermore, a 10% credit for biomass property is extended through 1985. A \$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 is available notwithstanding this price limitation for processed wood fuel and steam produced from solid agricultural byproducts. The 1980 act extends the 4 cents per gallon Federal excise tax exemption for gasohol from October 1, 1984 through December 31, 1992 and provides a corresponding production income tax credit for alcohol used as a fuel in application where the excise tax is not assessed. The 1980 act also permits the financing of certain proper-

ty with tax exempt industrial development bonds—certain small-scale hydroelectric generating facilities owned by a governmental unit and facilities which produce steam or alcohol from solid waste.

*Natural resources and environment.*—As is true for fuel-minerals, certain capital costs associated with exploration and development of nonfuel-minerals may be expensed rather than depreciated over the life of the asset. Most nonfuel-mineral extractors also make use of percentage depletion rather than cost depletion.

Interest on State and local government debt issued to finance the pollution control facilities of private firms is excluded from income subject to tax.

Certain payments made by customers to water and sewage disposal utilities for the purpose of aiding the construction of new facilities are treated by utilities as contributions to capital rather than as gross income from the sale of a constructed asset. Payments of this kind to public gas and electric utilities are given the same treatment.

Pollution control facilities installed in existing buildings may be amortized over 5 years instead of over their longer useful lives. This results in a deferral of taxable income. The revenue effect of this deferral reflects the net effect of the revenue reduction attributable to the excess of amortization over normal depreciation and the revenue gain resulting from the disallowance of depreciation deductions after the end of the amortization period. In a growing economy in which taxpayers consistently elect rapid amortization, the annual revenue reduction from the amortization of current investments exceeds the revenue increase from the lower depreciation deductions for past investments.

Expenditures to preserve and restore certain historic structures are eligible for special accelerated depreciation. This provision does not apply to owner-occupied housing.

The gains on the cutting of timber and royalties from iron ore deposits are taxed at rates applicable to long-term capital gains rather than ordinary income.

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 may be amortized over a 7-year period. The \$10,000 of costs are also eligible for the investment tax credit.

*Agriculture.*—Farmers, other than certain corporations and partnerships engaged in agriculture, are allowed to deduct certain costs as current expenses even though these expenditures are for inventories held at the end of the year or for capital improvements under normal accrual accounting. Capital gains treatment generally applies to the sale of livestock, orchards, vineyards, and other agricultural products.



Rural electric and telephone cooperatives are exempt from the corporate income tax. Payments of noncash patronage dividends to their patrons generally need not be considered income by the patron until received in cash. Other cooperatives are subject to corporate income tax but may deduct cash and noncash patronage dividends based on business done with patrons provided 20% of total dividends are paid in cash and the patron has agreed to include the entire dividend in income. Cooperatives marketing products for patrons also may deduct amounts retained by the cooperative on a per-unit basis ("per unit retains") if the patron has agreed to take the stated amount of the retain in income. Farmers' marketing and purchasing cooperatives meeting certain requirements are permitted to deduct dividends on capital stock and payments to patrons from nonpatronage income. The tax expenditures result from the deductibility of noncash patronage dividends, retains, dividends on capital stock and payments to patrons out of nonpatronage income. If noncash patronage dividends and retains were not deductible by cooperatives, they would no longer be taken into current income by patrons and hence individual income taxes would be lower.

Certain payments made under various Federal and State cost-sharing conservation programs may be excluded from gross income. Payments may be excluded to the extent they serve specified conservation purposes and do not substantially increase the annual income derived from the property.

*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 some depreciation rules and the investment tax credit, might alternatively have been classified under the natural resources and environment, energy, agriculture, or transportation categories.

Prior to passage of the Crude Oil Windfall Profit Tax of 1980 the first \$100 (\$100 per spouse on a joint return) of dividend income could be excluded from income subject to tax. Effective January 1, 1981, the act raised the exclusion to \$200 (\$400 in case of a joint return) and extended the coverage to most interest income.

The interest on industrial development bonds issued by State and local governments is excluded from income subject to tax.

Credit unions are exempt from Federal income taxes. Commercial banks, mutual savings banks, and savings and loan associations 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% of income provided they maintain stipulat-

ed fractions of their assets in "qualifying assets," primarily residential mortgages.

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.

Interest paid on consumer credit is allowed as an itemized deduction for individuals.

Owner-occupants of homes may deduct mortgage interest and property taxes (but not maintenance outlays or depreciation) as itemized nonbusiness deductions. The 1982 tax expenditure from these two items combined is \$35.5 billion. This is less than the \$36.2 billion sum of the two separately because if both were deleted fewer taxpayers would itemize deductions.

Interest on State and local government debt issued to finance below market rate mortgages for owner occupied housing is excluded from income subject to tax. The Omnibus Budget Reconciliation Act of 1980 restricts the use of mortgage subsidy bonds with a State-by-State ceiling on the annual volume of such use for single family housing equal to 9% of the average of all mortgages that originated in the State during the preceding 3 years or \$200 million, whichever is greater. A total ban on mortgage subsidy bonds for single family housing becomes effective January 1, 1984.

Prior to the Tax Reform Act of 1976 taxpayers deducted interest and property tax payments made while a building was under construction rather than including them with other costs of construction to be depreciated over the building's useful life. The 1976 act reduced this tax expenditure by requiring that construction period interest and taxes be capitalized and amortized over a 10-year period for noncorporate taxpayers. The provision is being phased in over a 7-year period with more generous transition rules available for Government-subsidized housing projects.

To the extent that allowable depreciation for tax purposes exceeds the rate at which assets actually depreciate, business tax liabilities are deferred. Businesses may employ a variety of depreciation schedules for tax purposes, some of which cause a much larger part of asset values to be written off in early years of the asset's useful life than do others. An extra first-year depreciation deduction of 20% of the cost may be claimed for \$10,000 of tangible personal property (\$20,000 on a joint return) having a useful life of at least 6 years. The revenue costs of allowing buildings and rental housing to be depreciated for tax purposes by methods that reduce asset value more rapidly than straight-line depreciation (the method typically used in financial statements) are shown as tax expenditures. The asset depreciation range (ADR) system permits

the guideline lives of depreciable equipment to be reduced by 20%. The ADR system does not apply to property used abroad.

Sixty percent of net long-term gains from the sale of capital assets may be excluded from income. The excluded 60% of net long-term capital gains is no longer included as a preference item in computing the minimum tax for individuals. However, the capital gains exclusion is treated as a preference item in the new "alternative minimum tax." This new tax is applicable only if the sum of a taxpayer's regular income and minimum tax is less than his alternative minimum tax. Half of net long-term capital losses and 100% 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 carry-forward.

Corporations may elect a 28% 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 18 months before or after the sale. If a new house is constructed, it must be occupied within 2 years after the sale. The "adjusted sales price" is the amount realized (gross proceeds less selling expenses) minus qualified "fixing up" expenses. To the extent that the gain on the sale of a home is not recognized, the basis of the home purchased is reduced, thereby resulting in a deferral of the gain. A loss on the sale of a home is not deductible.

A taxpayer who is 55 years of age or older at the time of the sale of his principal residence may elect to exclude up to \$100,000 of gain from the sale. This is a once in a lifetime election that replaces the prior exclusion of gain allocated to the first \$35,000 of adjusted sales price for taxpayers 65 years of age or older.

Capital gains on assets held at the owner's death escape income tax to the extent that the gains are attributable to increases in value that occurred during the owner's lifetime. The estimate assumes that such gains would be taxed as ordinary income in the year of death.

The Revenue Act of 1978 changed the corporate income tax structure for the first \$100,000 of taxable corporate income. Beginning January 1, 1979, the first \$100,000 of taxable income is taxed progressively at rates from 17 to 40%. Income over \$100,000 is taxed at 46%. Estimates are separately shown for revenue losses resulting from the surtax exemption of prior law for taxable income up to \$50,000.

The 10% investment tax credit is applied to the cost of qualifying property (generally, tangible personal property used in a trade or business) having a useful life of 7 years or more. Assets with

shorter lives are entitled to a reduced credit. As a general rule, the credit cannot be claimed for investments in land or buildings or for property used abroad.

The investment tax credit is available for investments in single purpose livestock and horticultural structures or enclosures. Certain vans used to transport employees to and from work are also entitled to the investment credit. The investment tax credit may be claimed as progress payments are made on property that takes 2 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% of tax liability in excess of \$25,000. The 1978 act raised the excess liability percentage to 60% for 1979 and increases it through annual increments of 10 percentage points to 90% by 1982. Excess credits may generally be carried back 3 taxable years and forward 7 taxable years, after which unused credits expire.

*Transportation.*—Specified classes of railroad rolling stock were eligible for amortization over a 5-year period rather than their longer expected useful life, whether owned by railroad companies or by lessors. If 5-year amortization was elected, the investment tax credit could not be claimed. These provisions applied only to rolling stock placed in service before January 1, 1976. Greater amounts of tax are currently paid than if this provision had not been enacted because in most cases the 5-year amortization period has expired. Hence, negative figures appear in table G-1.

Certain companies that operate U.S.-flag vessels on foreign trade routes receive an indefinite deferral of income taxes on that portion of their net income which is used for shipping purposes, primarily construction, modernization and major repairs of ships. An investment credit of one-half the regular credit may be claimed on the tax-deferred amounts withdrawn from capital construction funds.

*Community and regional development.*—Under certain conditions, taxpayers may elect to amortize rehabilitation expenditures for low- and moderate-income rental housing over a 5-year period. Rehabilitation expenditures may not exceed \$20,000 per dwelling unit and must exceed \$3,000 to qualify. This provision expires on January 1, 1984.

The 10% investment tax credit is allowed for the rehabilitation of buildings that are at least 20 years old and used for business or productive activities (other than for residential purposes).

*Education, training, employment, and social service.*—Scholarships and fellowships are generally excluded from a recipient's taxable income, unless the recipient agrees to perform services for the grantor. The Tax Treatment Extension Act of 1980 provides a permanent exemption from gross income for scholarships received

under Federal programs which require future Federal service by the recipients to the extent that the scholarships are used for tuition, fees, and related expenses. In addition, the act extends the tax-exempt scholarship treatment of National Research Service Awards through 1981. The exclusion of educational benefits under the GI bill is included in the veterans benefits and services function. Interest on State and local government debt issued to finance student loans is excluded from income subject to tax.

Taxpayers may claim personal exemptions for dependent children 19 or over who receive income 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, thus providing a double exemption. The extra exemption for parents results in a tax expenditure.

Many employers provide employee benefits that are excluded from employee income. The employer's costs for these benefits are deductible business expenses. The exclusion from an employee's income of the value of meals and lodgings provided by an employer for his own convenience is a tax expenditure, as is the exclusion of housing allowances and the rental value of parsonages from the taxable income of ministers. An employer may set up an educational assistance program to provide educational benefits to his employees from January 1, 1979, through December 31, 1983. The program can pay for tuition, fees, books, and supplies. Amounts received under the program are excluded from an employee's gross income. Employer contributions to prepaid legal services plans and the value of legal services received under the plans are also excluded from employee income.

A corporation may claim an additional 1% investment tax credit if an equivalent amount of its common stock is set aside in an employee stock ownership plan (ESOP). A further one-half of 1% investment tax credit may be claimed to the extent that additional employer contributions to an ESOP are matched by employee contributions. Employees are generally prohibited from withdrawing their share of an ESOP for 7 years.

Contributions to charitable, religious and certain other nonprofit organizations are allowed as an itemized deduction for individuals, generally up to 50% of adjusted gross income. Taxpayers whose contributions to charitable or educational organizations are in the form of capital assets, usually securities that have appreciated in value above their cost, obtain a deduction for the contribution at the appreciated value of the asset without taxation on the appreciation in value. Corporations may deduct charitable contributions up to 5% of their income. Tax expenditures resulting from the deductibility of contributions are shown separately here for contributions to educational and other institutions. Contributions to health institutions are reported under the health function.

The 50% maximum tax rate on personal service income applies to earned income and certain pensions, annuities and deferred compensation. The amount to which the maximum tax applies is reduced by preference items included in the base of the minimum tax. Where the income is from a trade or business in which capital as well as personal service generates income, the maximum tax applies to reasonable compensation for personal services rendered.

A 20% 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 of \$2,000 for one dependent and \$4,000 for two or more dependents are eligible for the 20% credit. The credit may be taken for payments to relatives of the taxpayer even if their services are not qualified for coverage under the social security laws.

The AFDC-WIN job credit allows an employer to take tax credits on wages paid to individuals employed under the WIN (work incentive) program and other recipients of AFDC (aid for families with dependent children). An income tax credit of 50% of first-year and 25% of second-year wages, up to 100% of the tax liability, can be claimed as a credit by the employer if the wages are paid for work performed in a trade or business. A credit can be claimed for wages paid for work performed outside a trade or business equal to 35% of an employee's first year wages up to \$6,000 with no more than \$12,000 of total wages paid by an employer eligible for the credit. The employer must reduce his deduction for wages by the amount of the tax credit.

The targeted jobs credit allows tax credits for qualified wages paid to individuals certified as members of any of seven target groups, principally disadvantaged youths under 25. A credit of 50% of first-year wages and 25% of second-year wages up to \$6,000 of each employee's wages (the wage base for unemployment taxes) can be taken by the employer to offset up to 90% of his tax liability, provided that the credit may not be taken for first-year wages in excess of 30% of the employer's total unemployment tax wage base. For a given employee, either this credit or the AFDC-WIN credit can be taken, but not both. The employer's deduction for wages is reduced by the amount of the credit.

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

Medical expenses in excess of 3% of adjusted gross income, including payments for prescribed drugs and medicines in excess of 1% of adjusted gross income, may be deducted by individuals as

itemized nonbusiness deductions. Individuals may also deduct half of the premiums they pay for medical care insurance up to a maximum deduction of \$150 per year without regard to the 3% limit.

Interest on State and local government debt issued to finance hospital construction is excluded from income subject to tax.

Expenditures up to \$25,000 per year for removing architectural and transportation barriers to the handicapped and the elderly in any facility or public transportation vehicle used in a trade or business that otherwise would have been treated as a capital outlay can be treated as a current expense prior to January 1, 1983.

Contributions to nonprofit health institutions are allowed as a deduction for individuals and corporations. Contributions to other charitable institutions are discussed under the education, training, employment, and social services function.

*Income security.*—Most government transfer payments to individuals, such as social security and welfare benefits, are excluded from taxable income. If the taxpayer had no other source of income, these payments, even if taxable, would not generally be large enough to result in tax liability, given present levels of personal exemptions and the zero bracket amount. However, because some recipients have property income, receive earnings (in some instances for only part of a year), or file jointly with working spouses, tax expenditures result from these exclusions.

If the sum of a taxpayer's adjusted gross income, unemployment compensation and excludable disability income is over \$20,000 (\$25,000 for a joint return), the lesser of his unemployment benefits or one-half of the amount over the \$20,000 (or \$25,000) limit is taxable.

Certain payments up to \$100 per week financed by an employer in lieu of wages during periods of employee injury or sickness are excluded from the taxable income of persons under the age of 65 who are permanently and totally disabled. For these individuals the exclusion is reduced dollar for dollar by adjusted gross income plus disability income in excess of \$15,000.

Certain contributions to pension plans by employers and amounts set aside by the self-employed and those not covered by an employer's plan 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% of their income up to a maximum of \$7,500 per year. Employees not covered by an employer's plan may deduct annual contributions of 15% of compensation up to a maximum of \$1,500, or \$1,750 if the retirement account is owned jointly by a husband and wife. The investment income earned by pension funds is not taxable when earned. Tax expenditures result from the lower effec-

tive tax rates after retirement, resulting from the lower incomes and special tax provisions received by the aged, and from the excess of aggregate current contributions and investment earnings over amounts paid out in benefits.

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 fringe 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% 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 tax exempt retirement income, e.g., social security payments, and 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 aggregate effect of excluding social security and railroad retirement benefits for retirees, the additional exemption for persons 65 years of age or older, and the credit for the elderly results in a 1982 tax expenditure of \$15.8 billion. This effect is greater than the \$14.3 billion sum of the individual estimates because more elderly persons would be pushed across the threshold of tax liability or into higher tax brackets if all of these items were simultaneously deleted from the tax code.

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

The earned income credit, which low-income workers with minor dependents may claim, is 10% of earned income up to \$5,000, with a phaseout at the rate of 12.5% per dollar earned over \$6,000. The maximum annual credit is \$500.

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 which offsets tax liabilities is included as a tax expenditure. Only the latter appears in table G-1. In 1982 the tax expenditure will be \$755 million; the outlay will be \$1,115 million. For 1980 and 1981 the estimated tax expenditures are \$720 million and \$635 million and the estimated outlays are \$1,275 million and \$1,205 million, respectively.



Rental housing assistance is provided through State and local housing authorities for eligible families. The Omnibus Budget Reconciliation Act of 1980 restricts the use of tax-exempt bonds for multi-family rental housing projects to those that include a substantial number of units for low and moderate income individuals. The restrictions apply to such bonds issued after April 25, 1979 with exceptions allowed for bonds in process as of that date.

*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.

*General Government.*—A 50% credit may be claimed on 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. Both corporations, mainly commercial banks, and individuals receive this tax-exempt income. As a result, these 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 issued to finance pollution control facilities, other industrial development bonds, and housing bonds is classified elsewhere. Only the effect of excluding interest on general purpose obligations and revenue bonds for public purposes such as toll roads is included in this function. The estimated revenue loss from all tax-exempt bonds is \$15.2 billion for 1982.

The deductibility of nonbusiness State and local taxes gives indirect assistance to these governments. 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.

Table G-1. TAX EXPENDITURE ESTIMATES BY FUNCTION

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1980	1981	1982	1980	1981	1982
<b>National defense:</b>						
Exclusion of benefits and allowances to Armed Forces personnel.....				1,470	1,585	1,715
Exclusion of military disability pensions.....				135	170	200
<b>International affairs:</b>						
Exclusion of income earned abroad by United States citizens.....				555	640	665
Deferral of income of domestic international sales corporations (DISC).....	1,430	1,600	1,830			
Deferral of income of controlled foreign corporations.....	450	480	520			
<b>General science, space, and technology:</b>						
Expensing of research and development expenditures.....	1,760	2,015	2,230	35	40	45
<b>Energy:</b>						
Expensing of exploration and development costs:						
Oil and gas.....	1,505	1,875	1,895	670	860	1,030
Other fuels.....	20	25	25			
Excess of percentage over cost depletion:						
Oil and gas.....	370	545	535	1,120	1,580	1,725
Other fuels.....	455	530	540	20	20	25
Capital gains treatment of royalties on coal.....	10	10	10	70	80	90
Exclusion of interest on State and local government industrial development bonds for certain energy facilities.....	*	*	5	*	*	5
Residential energy credits:						
Supply incentives.....	*	*	5	55	115	190
Conservation incentives.....				430	425	420
Alternative, conservation and new technology credits:						
Supply incentives.....	140	220	290	10	15	20
Conservation incentives.....	190	305	375			
Alternative fuel production credit.....	5	25	55			
Alcohol fuel credit <sup>1</sup> .....		*	*		*	10
Energy credit for intercity buses <sup>2</sup> .....	*	5	5			
<b>Natural resources and environment:</b>						
Expensing of exploration and development costs, nonfuel minerals.....	20	25	25			
Excess of percentage over cost depletion, nonfuel minerals.....	345	390	380	15	15	15
Exclusion of interest on State and local government pollution control bonds.....	425	490	500	210	230	255

Table G-1. TAX EXPENDITURE ESTIMATES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1980	1981	1982	1980	1981	1982
Exclusion of payments in aid of construction of water, sewage, gas and electric utilities.....	60	110	110			
Five-year amortization on pollution control facilities.....	15	35	65			
Tax incentives for preservation of historic structures.....	10	20	30	25	45	70
Capital gains treatment of iron ore...	10	10	10	10	10	10
Capital gains treatment of certain timber income.....	420	470	535	120	135	150
Investment credit and seven-year amortization for reforestation expenditures.....		*	10		*	*
<b>Agriculture:</b>						
Expensing of certain capital outlays..	75	80	85	430	475	545
Capital gains treatment of certain income.....	20	25	25	385	405	425
Deductibility of noncash patronage dividends and certain other items of cooperatives.....	540	625	630	-175	-190	-200
Exclusion of certain cost-sharing payments.....				30	75	80
<b>Commerce and housing credit:</b>						
Dividend and interest exclusion.....				430	1,325	3,170
Exclusion of interest on State and local industrial development bonds.....	730	1,000	1,245	180	230	310
Exemption of credit union income.....	110	115	125			
Excess bad debt reserves of financial institutions.....	470	340	470			
Exclusion of interest on life insurance savings.....				3,490	4,080	4,770
Deductibility of interest on consumer credit.....				4,745	5,260	6,040
Deductibility of mortgage interest on owner-occupied homes.....				15,615	19,805	25,295
Deductibility of property tax on owner-occupied homes.....				7,310	8,915	10,920
Exclusion of interest on State and local housing bonds for owner-occupied housing.....	245	470	655	202	370	565
Expensing of construction period interest and taxes.....	555	585	615	140	160	160
Excess first-year depreciation.....	50	50	55	135	145	150
Depreciation on rental housing in excess of straight line.....	75	80	80	310	330	350
Depreciation on buildings (other than rental housing) in excess of straight line.....	135	140	150	120	125	135
Asset depreciation range.....	2,880	3,585	3,895	150	180	225
Capital gains (other than agriculture, timber, iron ore and coal)...	715	940	1,020	15,415	16,230	18,990
Deferral of capital gains on home sales.....				1,010	1,110	1,220

Table G-1. TAX EXPENDITURE ESTIMATES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1980	1981	1982	1980	1981	1982
Exclusion of capital gains on home sales for persons age 55 and over .....				535	590	650
Capital gains at death .....				4,750	5,085	5,440
Surtax exemption (through 1978) .....	110					
Reduced rates on the first \$100,000 of corporate income.....	7,210	7,395	7,590			
Investment credit, other than ESOP's and rehabilitation of structures and energy .....	15,200	16,395	17,340	3,050	3,130	3,425
Investment credit for rehabilitation of structures .....						
Amortization of start-up costs .....		*	10		20	65
<b>Transportation:</b>						
Five-year amortization on railroad rolling stock .....	-40	-40	-40			
Deferral of tax on shipping companies .....	75	75	75			
<b>Community and regional development:</b>						
Five-year amortization for housing rehabilitation .....	5	10	15	10	15	20
Investment credit for rehabilitation of structures .....	120	145	160	60	65	65
<b>Education, training, employment, and social services:</b>						
Exclusion of scholarship and fellowship income .....				355	410	490
Exclusion of interest on State and local student loan bonds .....	30	55	85	15	25	40
Parental personal exemption for students age 19 or over .....				1,030	1,045	1,055
Exclusion of employee meals and lodging (other than military) .....				350	380	410
Employer educational assistance .....				30	35	40
Exclusion of contributions to pre-paid legal services plans .....				20	35	10
Investment credit for ESOP's .....	695	770	820			
Deductibility of charitable contributions (education) .....	305	310	310	785	950	1,150
Deductibility of charitable contributions, other than education and health .....	375	385	385	5,895	7,135	8,630
Maximum tax on personal service income .....				1,320	1,655	2,105
Credit for child and dependent care expenses .....				885	1,025	1,175
Credit for employment of AFDC recipients and public assistance recipients under work incentive programs .....	45	50	50	5	10	10
General jobs credit .....	190	85	25	*		
Targeted jobs credit .....	130	255	150	25	50	30

Table G-1. TAX EXPENDITURE ESTIMATES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1980	1981	1982	1980	1981	1982
<b>Health:</b>						
Exclusion of employer contributions for medical insurance premiums and medical care .....				12,075	14,165	16,610
Deductibility of medical expenses .....				3,150	3,580	4,080
Exclusion of interest on State and local hospital bonds .....	285	395	450	140	185	220
Deductibility of charitable contributions (health) .....	190	195	190	1,180	1,425	1,725
<b>Income security:</b>						
Exclusion of social security benefits:						
Disability insurance benefits .....				690	815	955
OASI benefits for retired workers .....				6,890	9,020	11,265
Benefits for dependents and survivors .....				1,015	1,250	1,480
Exclusion of railroad retirement system benefits .....				320	380	435
Exclusion of workmen's compensation benefits .....				2,200	2,675	3,260
Exclusion of special benefits for disabled coal miners .....				90	100	105
Exclusion of untaxed unemployment insurance benefits .....				3,350	5,275	4,530
Exclusion of public assistance benefits .....				390	465	510
Exclusion of disability pay .....				170	170	170
Net exclusion of pension contributions and earnings:						
Employer plans .....				19,785	23,605	27,905
Plans for self-employed and others .....				1,925	2,105	2,305
Exclusion of other employee benefits:						
Premiums on group term life insurance .....				1,675	1,855	2,055
Premiums on accident and disability insurance .....				90	100	105
Income of trusts to finance supplementary unemployment benefits .....				15	20	20
Additional exemption for the blind .....				30	30	30
Additional exemption for elderly .....				2,040	2,260	2,505
Tax credit for the elderly .....				130	125	120
Deductibility of casualty losses .....				570	715	895
Earned income credit <sup>a</sup> .....				720	635	755
Exclusion of interest on State and local housing bonds for rental housing .....	135	195	240	175	235	315
<b>Veterans benefits and services:</b>						
Exclusion of veterans disability compensation .....				1,065	1,300	1,575
Exclusion of veterans pensions .....				75	85	95
Exclusion of GI bill benefits .....				190	180	160

Table G-1. TAX EXPENDITURE ESTIMATES BY FUNCTION—Continued

(In millions of dollars)

Description	Fiscal years					
	Corporations			Individuals		
	1980	1981	1982	1980	1981	1982
<b>General government:</b>						
Credits and deductions for political contributions .....				80	100	80
<b>General purpose fiscal assistance:</b>						
Exclusion of interest on general purpose State and local debt .....	3,300	4,035	4,315	1,625	1,885	2,165
Deductibility of nonbusiness State and local taxes other than on owner-occupied homes .....				14,690	18,405	23,060
Tax credit for corporations receiving income from doing business in United States possessions .....	905	1,005	1,095			
<b>Interest:</b>						
Deferral of interest on savings bonds .....				80	-75	335
<b>Memorandum</b>						
<b>Combined effect of provisions disaggregated above:</b>						
Capital gains .....	1,175	1,455	1,600	22,295	23,645	26,975
Exclusion of interest on State and local debt .....	7,150	9,025	10,020	3,565	4,340	5,195
Deductibility of State and local non-business taxes .....				20,495	25,480	31,680
Deductibility of charitable contributions .....	870	890	885	7,860	9,510	11,505
Itemized deductions <sup>4</sup> .....				40,915	50,955	62,315
Deductibility of mortgage interest and property tax on owner-occupied homes .....				22,170	28,065	35,465
Benefits for the elderly <sup>5</sup> .....				10,320	12,965	15,760
Fringe benefits <sup>6</sup> .....				35,010	41,335	48,550
Government benefits and payments <sup>7</sup> .....				18,280	23,765	26,450

\*\$5 million or less. All tax expenditure estimates have been rounded to the nearest \$5 million.

<sup>1</sup> In addition, the exemption from the excise tax for alcohol fuels results in a reduction in excise tax receipts of \$50 million in 1980, \$120 million in 1981, and \$190 million in 1982.

<sup>2</sup> In addition, the exemption from excise tax for buses, bus parts and certain items used in connection with buses results in a reduction in excise tax receipts of \$40 million in 1980, \$50 million in 1981, and \$50 million in 1982.

<sup>3</sup> The figures in the table indicate the effect of the earned income tax credit on receipts. The effect on outlays is: 1980, \$1,275 million; 1981, \$1,205 million; 1982, \$1,115 million.

<sup>4</sup> Interest on consumer loans; mortgage interest and property taxes on owner-occupied homes; charitable contributions; medical expenses; casualty losses; nonbusiness State and local taxes other than on owner-occupied homes.

<sup>5</sup> Exclusion of social security and railroad retirement plus the additional exemption and tax credit for the elderly.

<sup>6</sup> Employer contributions for medical insurance, medical care, pensions and earnings plus premiums on group life, accident and disability insurance.

<sup>7</sup> Exclusion of military benefits, allowances, and disability pensions; OASDI disability insurance; OASI for retirees, dependents and survivors; Railroad retirement; workman's compensation, benefits for disabled coal miners; untaxed unemployment benefits; public assistance benefits; veterans disability compensation, pensions and GI bill benefits.

## PROPOSED CHANGES IN TAX EXPENDITURES

The administration has made several proposals as part of the 1982 budget that would create new tax expenditures and delete or change the value of currently existing tax expenditures. The estimates for these proposed changes are shown in table G-2.

On August 28, 1980, the President proposed an economic revitalization program. Through a series of tax and spending initiatives, this program is expected to put people to work and restore growth without rekindling inflation. The tax expenditure measures included in this program are designed to increase productivity, lower unemployment and reduce inflation.

The Administration also proposes to restrict the use of tax-exempt financing in certain private purpose activities. The use of tax-exempt bonds to finance private projects has grown rapidly in recent years. Tax-exempt financing adversely affects the efficient allocation of scarce capital resources and the control of the Federal budget. Two additional Administration proposals lower tax expenditures resulting from deductions of charitable contributions of tangible personal property and the investment tax credit on property not "at risk". Each of the proposed changes in tax expenditures is described briefly below:

Table G-2. ESTIMATES OF PROPOSED CHANGES IN TAX EXPENDITURES

(In millions of dollars)

Description	Fiscal Years			
	Corporations		Individuals	
	1981	1982	1981	1982
Constant rate depreciation .....	2,290	6,720	635	2,315
Refundable investment tax credit <sup>1</sup> .....	65	10	*	-5
Exclusion of income earned in specified areas abroad.....			65	320
Expanded earned income tax credit.....				10
Working spouse deduction.....				420
Total of tax expenditures from the proposed economic revitalization program.....	2,355	6,730	700	3,055
Limit the issuance of small issue industrial development bonds.....	-65	-270	-10	-60
Disallow the use of tax-exempt financing by tax-exempt organi- zations.....	-25	-95	-10	-40
Disallow tax-exempt financing of student loans.....	-10	-35	-5	-15
Limit charitable contributions of tangible personal property.....			-20	-225
Extend "at risk" to the investment tax credit.....			-20	-55

\*\$5 million or less. All tax expenditure estimates have been rounded to the nearest \$5 million.

Note: Details may not add to totals due to rounding.

<sup>1</sup> The figures in the table indicate the effect of the refundable investment tax credit on receipts. The effect on outlays is: 1981, \$225 million; 1982, \$2,335 million.

*Constant rate depreciation.*—Under current law depreciation is computed either under the asset depreciation range system (ADR) or based upon facts and circumstances established by each taxpayer. The proposed program provides for a constant annual rate of

depreciation (CRD) for each of 30 asset classes. Procedures for using accelerated depreciation are simplified and the allowable depreciation rate is increased by approximately 40%. Also the full 10% investment tax credit is made available to all eligible machinery and equipment investments with lives longer than 1 year. The CRD system is proposed to be fully effective and required for all assets placed in service after December 31, 1980.

*Refundable investment tax credit.*—The 10% investment tax credit that is permitted under current law is of little immediate value to firms that have little or no earnings yet have substantial investment needs. Under the Administration's proposal, up to 30% of the earned but unused credit for investments placed in service after December 31, 1980, will be refundable. The portion of the credit not made refundable would be available for carryover as under present law.

*Exclusion for Americans working abroad.*—Under this proposal Americans working abroad in certain areas are exempt from tax on the first \$25,000 of foreign earned income plus 60% of the next \$60,000, for a maximum exemption of \$61,000. The exemption is provided for places where the State Department authorizes a hardship allowance of 10% or more for U.S. Government employees. The special deductions provided under current law will continue for Americans working abroad in areas where the new exemption does not apply. The proposed effective date is January 1, 1981.

*Expanded earned income tax credit.*—To offset the rise in social security taxes paid by individuals who have dependent children and no tax liability, an expansion of the earned income tax credit is proposed. Under current law, taxpayers with dependent children are eligible for the credit, which is 10% of the first \$5,000 or earnings and phases out at the rate of \$1.25 for each \$10 of earned income above \$6,000. Under this proposal the credit is increased to 12% of the first \$5,000 of earnings and phases out at the rate of \$1.50 for each \$10 of earned income above \$7,000. The effective date for the proposed expansion of the earned income credit would be January 1, 1982.

*Working spouse deduction.*—Under current law married couples with two earners generally pay higher taxes than if they were single unless one earns substantially more than the other. As a result, two earner families may be subject to a work disincentive—or marriage disincentive—created by the tax law. To reduce this “marriage penalty,” a tax deduction equal to 10% of the first \$30,000 of earnings (5% of \$15,000 for 1982) of the spouse with the lower earnings is proposed. The proposed deduction would be made effective for tax years beginning January 1, 1982.

*Limit the issuance of small-issue industrial development bonds.*—Under current law interest paid on “small issue” industrial devel-



opment bonds is exempt from tax. The exemption applies to obligations issued in amounts of \$1 million or less that are used for the acquisition or construction of land or depreciable property. Under certain circumstances, this limitation may be increased to \$10 million at the election of the issuer. The Administration proposes to restrict the categories of projects that qualify for the "small issue" exemption as follows:

(1) Small industrial firms, defined as those engaged in construction, manufacturing, mining, or utility activities and processes, with total assets of less than \$10 million may issue up to a lifetime limit of \$5 million in exempt small issues; or

(2) Any businesses located in targeted distressed areas may issue up to a lifetime limit of \$10 million of exempt small issues in each targeted area.

*Disallow the use of tax-exempt financing by tax-exempt organizations.*—Eliminating the current exemption allowing non-governmental tax-exempt (Section 501(c)(3)) organizations to issue tax-exempt bonds would reduce non-governmental use of tax-exempt financing. The largest use of this exemption is private, non-profit hospital construction. This proposal is also intended to close access to tax-exempt financing to other private non-profit organizations. Issuance of tax-exempt bonds for public universities by State-sponsored authorities would continue to be allowed.

*Disallow tax-exempt financing of student loans.*—The Administration proposes to prohibit the issuance of tax-exempt bonds for financing student loans. This would eliminate profits State governments currently earn from the difference between the yield on student loans—the interest rate on the student loans plus the special allowance Federal interest subsidy payment—and expenses consisting of the tax-exempt interest rate and administrative expenses. The current student loan program of federally guaranteed loans and direct interest subsidies provides adequate compensation for States as well as private lenders to service student loans, without the need for tax-exempt bonds.

*Charitable contributions of tangible personal property.*—Under current law a taxpayer making a contribution of tangible personal property held for more than one year may claim the fair market value of the property, instead of being limited to deducting its cost. To prevent taxpayers from claiming excessive valuation for contributions of tangible personal property, the Administration proposes to limit the deduction to the taxpayer's adjusted basis (that is, cost plus improvements) in the property on the date of the contribution. The effective date of this proposal is January 1, 1981.

*Extension of "at risk" to the investment tax credit.*—Individuals electing to file as small business corporations and certain other closely held corporations are limited in the amount of losses from business activities they may deduct to their amounts "at risk" in the activity at the close of the taxable year. In general, amounts at risk are direct contributions and loans to the activity for which the taxpayer is personally liable. Under current law, however, a taxpayer is able to claim investment tax credits for property for which losses are disallowed by the at risk limit. The Administration proposes that effective January 1, 1981 only amounts at risk be included in the basis of property for purposes of computing the investment tax credit and amounts not at risk be excluded from the basis.

#### OUTLAY EQUIVALENTS OF TAX EXPENDITURES

One important purpose served by accounting for budget outlays on a program basis is to measure the extent and purposes of Government efforts to reallocate resources. In addition to the direct Government use of resources to provide "public goods"—such as the building of highways or provision of national defense—certain public outlays are designed to reduce market prices of particular goods and services. These outlays are subsidies in the sense that they permit goods and services to be bought at less than the cost of the resources used to produce them.

One use of budget outlay figures is for program evaluation and for comparison with other program outlays. But these comparisons are valid only to the extent that budget outlays are consistent and comprehensive measures of resource costs used for public purposes.

Government outlays as reported in the budget may be deficient as measures of total program costs in two respects. First, certain Government outlays give rise to income which is exempt from tax, and this causes the amounts displayed in the budget to understate the resource cost of these programs in comparison with those which generate taxable income. Second, the outlay totals exclude resources allocated to public use by special tax rules, Government regulations and credit policies rather than by appropriations.

Tax expenditures as conventionally calculated and displayed in table G-1 may also fail to reflect program costs accurately. Three types of adjustment to conventional tax expenditure estimates are required to improve comparability with Federal outlays. First, the year-to-year estimates of tax expenditures depend on the collection time pattern of corporate and individual tax liabilities. This may be quite different from the pattern of payments under a comparable direct-spending program. Thus, to facilitate comparisons with direct spending, the timing of the tax subsidy is spread evenly over the year.

Second, tax subsidies that involve a deferral of tax liability, such as rapid amortization, give benefits to the taxpayer that are equivalent to interest-free loans. To be comparable with outlays, these benefits should be measured in the same way that the budget treats such Government lending transactions. The general budget treatment of a subsidized loan is to record as an outlay both the amount of new loans made less previous loans repaid and the interest payments on the stock of loans outstanding. For tax expenditures, the equivalent treatment is to measure the net increase in the amount of taxes deferred and the implicit interest subsidy on the stock of tax deferrals outstanding.

Finally, tax expenditures are normally measured in "after-tax dollars" rather than in market prices and "pretax dollars". In other words, the tax expenditure is the tax saving to the taxpayer, which normally differs from the (taxable) payment that would be required under a direct spending program to generate the same after tax income and hence the same incentive effect. Thus, for many tax expenditures, the amount of the tax subsidy must be expressed in pretax market prices to be consistent with direct expenditure programs.

Not all tax expenditure estimates require an adjustment to reflect market prices. For example, tax subsidies for items of consumption by households may correctly measure the reduction in prices consumers pay for the subsidized goods and thus be equal to the direct payment to either consumers or producers that would result in the same price reduction.

For calculating tax expenditures on a basis that permits direct comparison with budget outlays, that is, on an "outlay equivalent" basis, three adjustments are required: (1) the timing of the subsidy is spread evenly over the year, (2) items involving deferral of tax liability are treated as Government lending transactions, and (3) the subsidies provided through the tax system are converted to pretax dollars where appropriate.

On an experimental basis, and to illustrate how budget totals may more accurately reflect resource costs, consistent and comprehensive measures of resource costs have been estimated in two program areas of the budget—housing and energy. For these areas, tax preferences previously identified as tax expenditures have been converted into outlay equivalents that are comparable with, and additive to, budget outlays intended to accomplish the same program objective.

Brief descriptions of the several tax expenditure elements for housing and energy are presented below. Summary numerical results are shown in table G-3.

Table G-3. HOUSING AND ENERGY TAX EXPENDITURES AND BUDGET OUTLAYS

(In millions of dollars)

Description	Fiscal year		
	1980	1981	1982
<b>Housing:</b>			
Owner-occupied housing:			
Tax expenditures (outlay equivalent).....	26,840	33,170	41,655
Outlays.....	115	150	310
Total.....	26,955	33,320	41,965
Tax expenditures as a percent of total .....	99.6	99.6	99.3
Rental housing:			
Tax expenditures (outlay equivalent).....	1,965	2,155	2,410
Outlays.....	6,025	7,280	8,680
Total.....	7,990	9,435	11,090
Tax expenditures as a percent of total .....	24.6	22.8	21.7
Total:			
Tax expenditures (outlay equivalent).....	28,805	35,325	44,065
Outlays.....	6,140	7,430	8,990
Total.....	34,945	42,755	53,055
Tax expenditures as a percent of total .....	82.4	82.6	83.1
<b>Energy:</b>			
Conservation:			
Tax expenditures (outlay equivalent).....	720	825	895
Outlays.....	570	750	1,065
Total.....	1,290	1,575	1,960
Tax expenditures as a percent of total .....	55.9	52.3	45.7
Supply:			
Tax expenditures (outlay equivalent).....	7,715	9,520	10,875
Outlays.....	4,575	5,725	6,235
Total.....	12,290	15,245	17,110
Tax expenditures as a percent of total .....	62.8	62.4	63.6
Total:			
Tax expenditures (outlay equivalent).....	8,435	10,345	11,770
Outlays.....	5,140	6,480	7,300
Total.....	13,575	16,825	19,070
Tax expenditures as a percent of total .....	62.1	61.5	61.7

\*\$5 million or less. All estimates have been rounded to the nearest \$5 million.

Note: Details may not add to totals due to rounding.

*Budget resources devoted to housing*

Housing programs have different objectives. Some housing programs aim to subsidize the private cost of shelter quite broadly; others aim to improve the economic status of target population groups by providing them low-cost housing. However, all such Government housing programs reduce the private costs of housing occupancy below the market value of the resources consumed. The budget cost of housing programs is, therefore, the market value of resources that the Government must reallocate to achieve these results. (Subsidies to owner-occupied housing are distinguished from subsidies to rental housing in the estimates.)

The particular tax expenditure items that provide subsidies to homeowners have been discussed above. To enumerate briefly, they are: (1) deductions for mortgage interest and property taxes; (2) deferral of capital gains on home sales where the proceeds are used to buy another home of at least equal value; (3) exclusion of up to \$100,000 of gains from the sale of a home for taxpayers 55 years of age or older; (4) the issuance of tax-exempt bonds to provide reduced mortgage interest rates for owner-occupied dwellings; (5) preferences for thrift institutions that hold residential mortgages. In the calculations presented here, these preferences for thrift institutions have been divided between owner-occupied and rental housing according to the share of single family and multifamily mortgages held by these institutions.

For rental housing, the tax preferences, in addition to those provided to thrift institutions, are: (1) accelerated depreciation for rental property; (2) expensing of construction period interest and taxes; and (3) tax-exempt financing of multifamily housing projects.

Table G-3 presents the results of adjusting these tax expenditures to outlay equivalents. These results are shown along with comparable direct spending for support of owner-occupied and rental housing. In the aggregate for 1982, resources channeled through special tax provisions amount to 83.1 percent of total public support for housing. Direct spending is relatively more important in the case of rental housing (78.3 percent) and tax subsidies are relatively more important for owner-occupied housing (99.3 percent).

#### *Budget resources devoted to energy programs*

The analysis is limited to two energy subfunctions of the budget, energy supply and energy conservation. These subfunctions involve activities funded both by appropriations and through the use of special tax provisions. Although both activities have as their final objective reduced dependence on oil imports, supply programs emphasize increasing domestic production while conservation programs emphasize reducing demand for energy resources.

The particular tax expenditure items that encourage energy supply are: (1) expensing of exploration and development costs; (2) the excess of percentage over cost depletion; (3) capital gains treatment of royalties on coal; (4) investment tax credits for investment in shale oil production facilities, cogeneration equipment, equipment for producing energy from biomass or natural gas from geopressurized brine, solar, and wind utilization equipment, equipment for the production and distribution of geothermal and ocean thermal energy; (5) tax-exempt financing for local furnishing of electrical energy, facilities used to produce alcohol for use as a motor fuel, solid waste energy producing facilities, and certain

hydroelectric facilities; (6) the 40-cents-per-gallon subsidy for alcohol used as a motor fuel accomplished either through exemption from excise taxation or through a credit against income tax; and (7) the \$3-per-barrel-of-oil equivalent for specified fuels taken as a credit against income tax.

For energy conservation, the tax expenditures are: (1) investment tax credits provided to businesses for the acquisition of energy conservation equipment; (2) investment tax credits provided to homeowners who invest in insulation and make similar other outlays to improve the energy efficiency of their residences; (3) tax subsidies to encourage more effective use of buses and vanpools to reduce usage of private automobiles, thereby increasing energy efficiency in transportation.

Again, the results are shown in table G-3. In 1982 special tax provisions constitute 61.7% of total public support for energy supply and conservation. For energy supply, subsidies provided through the tax system amount to 63.6% of total public resource costs. For energy conservation tax subsidies are lower as a share, approximately 45.7%.

## SPECIAL ANALYSIS H

### FEDERAL AID TO STATE AND LOCAL GOVERNMENTS <sup>1</sup>

State and local governments play a vital role in meeting the Nation's needs. The Federal Government contributes directly to that role by providing grants-in-aid and loans to State and local governments, and it contributes indirectly through policies designed to improve the economy.

Federal grant-in-aid outlays to State and local governments are estimated to be \$99.8 billion in 1982, \$4.5 billion above the estimated 1981 total of \$95.3 billion, and \$8.4 billion higher than the 1980 total of \$91.5 billion. During the 20 years from 1958 to 1978, grants grew at an average annual rate of 14.6%. The slower growth in grants planned from 1978 to 1982 of 6.4% per year is a result of several factors:

- a phasedown of outlays associated with economic stimulus grants enacted in response to the 1976 recession;
- the elimination of general revenue sharing payments to States beginning in 1981; and
- the need for overall budget restraint as part of a major effort to hold down inflation.

Accompanying this restraint has been a continual effort to improve the administration of grant programs.

The administration has sought to improve the Federal grants-in-aid system by pursuing grant consolidations and grant management simplification. The basic approach of the administration's grant consolidation policy has been to improve the efficiency and effectiveness of the Federal Government by:

- simplifying grant administration;
- increasing discretion for State and local governments in the use of Federal funds;
- increasing responsibility at the State and local levels of governments, with approved accountability to voters; and
- reducing overlap in the services provided by government.

Consolidations have already been achieved for elderly assistance, vocational rehabilitation and are in progress for forestry programs. The administration's proposals to consolidate economic development, energy, environment, airport development, health plan-

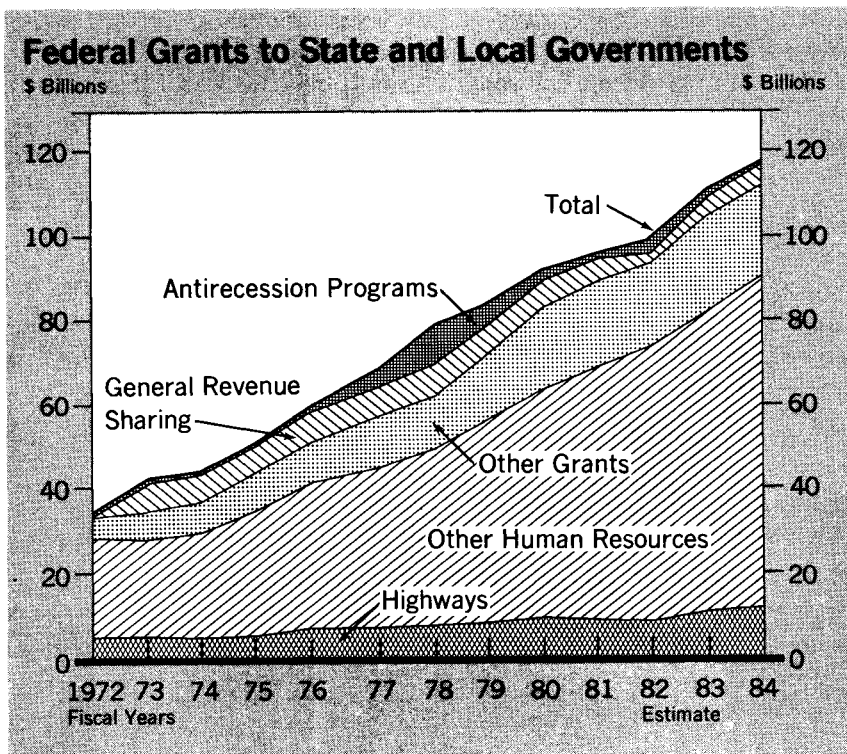
---

<sup>1</sup> 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. Unless specifically indicated to the contrary, reference to "Federal aid" or "grants" in this analysis is confined only to grants-in-aid (including shared revenues).

ning, and fish and wildlife programs were not approved by the Congress. Further consolidation proposals are made in this budget for youth training and employment, health planning and services, and a major consolidation initiative in the transportation area where 44 separate categorical programs will be reduced to nine.

In addition to grants-in-aid, Federal lending to State and local governments and loan guarantees are also significant. In 1982 the Federal Government is expected to disburse \$1.5 billion for new loans to State and local governments. Loan outlays net of repayments and sales are expected to be \$133 million. New guaranteed loans to State and local governments are estimated to be \$18.4 billion in 1982.

The chart shows trends in major grant categories since 1971. Grants for highways remained fairly level through 1975, but have increased substantially since then. Grants for human resources, which include those under education, training, employment, and social services; health; income security; and veterans programs, account for 63% of the increase from 1972-82. General revenue sharing has accounted for more than \$6 billion in grants per year from 1973 through 1980. However, under recently renewed legislation outlays are estimated to be \$5.1 billion for general revenue sharing in 1981. The legislation excludes the payment to States in 1981, but authorizes payments to States to be resumed in 1982 and 1983 if funds are appropriated. No funds are requested for the State share in 1982.





## HIGHLIGHTS OF THE FEDERAL AID PROGRAM

**Summary of changes.**—When this administration took office economic stimulus was needed to reduce unemployment and promote economic recovery. The economic stimulus programs proposed at that time were primarily grant programs, and total grant outlays increased 14% in just 1 year, from 1977 to 1978. These stimulus programs were designed to be temporary, and their phasedown after 1978 reflects this. Table H-1 shows that, excluding stimulus programs, grant outlays increase from \$63.8 billion in 1977 to an estimated \$98.7 billion in 1982, an average annual rate of growth of 9.1%.

Table H-1. FEDERAL GRANTS, EXCLUDING STIMULUS

(Outlays in billions of dollars)

	Actual				Estimate	
	1977	1978	1979	1980	1981	1982
Total grants .....	68.4	77.9	82.9	91.5	95.3	99.8
Less stimulus grants:						
Local public works .....	0.6	3.1	1.7	.4	0.2	0.1
Temporary employment assistance .....	2.3	4.8	3.3	1.8	1.0	1.1
Antirecession fiscal assistance .....	1.7	1.3	*	.....	*	.....
Subtotal, stimulus grants .....	4.6	9.2	5.0	2.2	1.2	1.2
Total, excluding stimulus .....	63.8	68.7	77.8	89.3	94.1	98.6

\* \$50 million or less.

Table H-2 shows outlay changes from 1980 to 1981 and 1981 to 1982 divided into two categories: those grants that finance State or local payments for individuals, and all other grants.

Grants that are subsequently paid as income support for individuals—mainly the medicaid, housing assistance, and assistance to help low income persons pay high fuel bills—are estimated to increase \$5.7 billion from 1980 to 1981 and \$2.9 billion from 1981 to 1982. This increase covers changes caused primarily by inflation (especially for the cost of fuel) and increases in the beneficiary populations. These grants, which will amount to \$42.8 billion in 1982, take a substantial financial burden off State and local governments and provide large supplements to the economies of the area in which the beneficiaries live.

All other grants are expected to decrease by \$1.8 billion from 1980 to 1981 and increase \$1.6 billion from 1981 to 1982.

Table H-2. FEDERAL GRANT-IN-AID CHANGES, 1980-82

(In billions of dollars)

	Outlays
Total grants, 1980 actual .....	91.5
<b>Changes</b>	
Payments for individuals:	
Medicaid .....	2.5
Housing programs .....	1.2
Low income energy assistance .....	1.7
Other .....	0.3
Subtotal payments for individuals .....	5.7
Other programs:	
General revenue sharing .....	-1.7
Employment and training .....	-0.6
Other .....	0.5
Subtotal, other programs .....	-1.8
Total grants, 1981 estimate .....	95.3
<b>Changes</b>	
Payments for individuals:	
Medicaid .....	1.7
Housing programs .....	0.9
Other .....	0.4
Subtotal, payments for individuals .....	2.9
Other programs:	
General revenue sharing .....	-0.6
Employment and training .....	0.9
Refundable tax credits to governments .....	0.5
Other .....	0.8
Subtotal, other programs .....	1.6
Total grants, 1982 estimate .....	99.8

**Major proposals.**—The major grant funding in this budget is designed to:

- initiate a major grant consolidation in the transportation area;
- help low-income, unemployed youth acquire the basic education and training needed to find and hold a job;
- meet continuing needs relating to energy problems, especially to increase aid for mass transit;
- increase funding for the special supplemental food program for needy women, infants and children; and
- provide general purpose aid through general revenue sharing.

**Youth employment.**—As part of a major effort to counter the ill effects of youth unemployment, a new grant program is again being proposed to help local school districts provide intermediate and secondary school students with the basic mathematics and language competence required by employers. Schools with the greatest number of students needing such assistance will compete for the \$900 million proposed for this new program in 1982.

As the other part of this effort, the Congress is being asked to consolidate into a single grant program three of the experimental youth authorities enacted as part of the stimulus program in 1977. Requested budget authority in the Department of Labor for the

new program for 1982 is \$1.1 billion, an increase of \$250 million over the amount that would otherwise be needed for current programs. States and localities will be able to mount a concentrated effort to provide those youth who have the hardest time finding and keeping a job with the basic work skills required by employers. Since the primary requisite is competence in language and mathematics, the new program will be operated in close conjunction with the proposed new education grant program described above.

*Transportation.*—The budget assumes the major restructuring of the Federal-aid to highways program to provide substantially greater flexibility to States and localities. The number of separate funding categories would be reduced from 44 to 9, along with the simplification of certain Federal grant requirements. In addition, a greatly expanded effort directed at preserving the Federal investment in the interstate highway system is also in the budget.

*Energy.*—The budget proposes grants that would provide additional aid for mass transportation, and proposes continuation of assistance to low-income persons to meet increased energy costs and for energy-related emergencies. The aid to low income persons would be distributed by the States, which are expected primarily to use existing public assistance agencies. Grant outlays are expected to be \$1.7 billion in 1982.

The budget provides weatherization assistance to low-income individuals and to public and nonprofit schools and hospitals. Budget authority of \$200 million would be provided in 1982 for the low-income weatherization program. The same amount of budget authority in 1982 is provided for the schools and hospitals program.

The budget also includes funding for the energy management partnership program, which would consolidate three existing State energy conservation planning and public education "outreach" programs and extend the assistance to include State emergency preparedness and supply planning activities. This proposal, for which authorizing legislation is necessary, will give States more flexibility to use these funds to meet their needs. Budget authority of \$102 million is included in 1982 for the proposal.

*Aid to the disadvantaged.*—The 1982 budget provides increases in a number of programs that aid the disadvantaged.

Budget authority for the special supplemental food program for women, infants, and children (WIC) is proposed to increase \$141 million to \$1.1 billion in 1982. This represents a \$310 million increase in budget authority since 1980. Recent studies suggest the program leads to reductions in infant mortality and in the incidence of low birth-weight babies.

Funding for *training and employment* has, in general, grown steadily over the years, with large temporary increases in 1977 and 1978 as part of the President's economic stimulus effort. In 1980,

the training and employment programs were changed to direct more resources to the economically disadvantaged and the long-term unemployed and emphasis was placed on finding jobs in the private sector for program participants. Continued emphasis will be placed on improvements in management and the control of fraud and abuse.

Outlays for *employment and training assistance* grant programs, including the initiatives for youth described above, which are primarily to meet the needs of the most disadvantaged, are estimated to be \$7.0 billion in 1982, \$0.7 billion higher than the 1981 estimate.

Grants to States for *social services* are designed to assist the disadvantaged and disabled to be self-sufficient. Outlays for 1982 are estimated to be \$3.1 billion, about the same as the 1981 estimate. Grants to improve the quality of child welfare services are proposed to increase substantially in 1982. Budget authority for this program is estimated to be \$220 million in 1982, an increase of \$56 million over the 1981 estimate and \$154 million over the 1980 level.

*Revenue sharing.*—From 1972 through 1980, general revenue sharing has provided States and localities with more than \$6 billion per year in grants with virtually no Federal restrictions on their use. However, recently renewed legislation provides general revenue sharing payments for 1981 to local governments only, excluding payments for States in that year. The legislation authorizes payments to States in 1982 and 1983 if funds are appropriated. Furthermore, it requires that for a State to receive revenue sharing payments, it must forego or return to the Federal Government an equal amount of categorical grant funds. The budget, however, does not anticipate any further revenue sharing payments to the States. Outlays for general revenue sharing are estimated to decrease from \$6.8 billion in 1980 to \$4.6 billion in 1982.

*Tax credit payments to State and local governments.*—As part of the economic revitalization program, the administration proposed an 8% tax credit for social security taxes paid, effective in January 1982. This credit would be refundable to State and local governments. Payments, which are reflected in budget outlays, are estimated at \$495 million in 1982.

*Other highlights.*—Outlays for the Environmental Protection Agency's program for construction of *sewage treatment plants* are expected to be \$4.2 billion in 1982, about the same as in 1981. The budget requests budget authority of \$3.7 billion for the program in 1982, which, together with funds available from prior years, is estimated to make over \$6.1 billion available to the States for obligation in 1982. This program provides grants to both State and local governments for 75% of the cost of planning, designing,

and constructing sewage treatment plants. Under the Federal Water Pollution Control Act, as amended, more than \$31 billion has been provided to continue this program. With more than 11,000 projects currently underway, the administration is encouraging the States to assume responsibility for program management and implementation.

Grants to support the control of *hazardous wastes*, such as industrial chemicals, and to control air and drinking water pollution are proposed to increase substantially in 1982. Budget authority for these three programs is estimated to be \$159 million in 1982, an increase of almost \$12 million over the 1981 estimate.

Grants through the land and water conservation fund, the urban parks program, the historic preservation fund and other programs assist States and localities in the management of natural resources.

Outlays for *highways* are estimated to be \$8.4 billion in 1982. Most of these funds go directly to State governments, and about half are used for construction or preservation of the interstate highway system.

Grant outlays for *urban mass transportation*, including the new proposals noted above, are estimated to be \$3.7 billion in 1982, \$0.1 billion higher than the 1981 estimate. Grant funds go primarily to the 279 urbanized areas with a population of 50,000 or more. Some funds also go to smaller cities for public transportation projects.

The *community development block grant* funds will continue to provide assistance directly to local governments through either entitlement or discretionary grants. Recipients have considerable freedom in selecting projects for this program, so long as they are within the general guidelines of community development and mainly assist people with low and moderate incomes. Outlays for the program for 1982 are estimated to be about \$4.0 billion, an increase of almost \$0.1 billion over 1981.

The *urban development action grant* program provides one-time grants to severely distressed cities and urban counties to supplement local government and private sector financing for major economic development and community revitalization projects. Budget authority proposed for 1982 for this program is \$675 million.

The administration proposes to maintain resources for *economic development assistance* program in 1982. The planning, public works, adjustment and technical assistance grants offered under the program assist State and local governments in their efforts to foster private investment, job creation, and job preservation in distressed areas. Outlays proposed for the program would increase from \$411 million in 1981 to \$500 million in 1982.

Outlays for *elementary, secondary, and vocational* education are estimated to be \$6.9 billion in 1982, \$377 million more than in 1981.

The largest part of that amount will go to State and local education agencies for supplementary education services to low-income, low-achieving students.

The budget also includes a substantial reduction in the *impact aid* program that is intended to compensate school districts for the burdens imposed by federally related activities. Much of the aid now goes to school districts where the Federal activity does not place a special burden on the local community. The budget provides for limiting impact aid only to those districts where the aid is a significant part of their financing needs.

The budget continues proposals for administrative consolidations for *health planning requirements* and *health services* grant programs. The Department of Health and Human Services would enter into comprehensive performance contract agreements with State and local governments for primary health care grants. In addition, actions are proposed to unify current requirements that States submit eleven separate health care plans.

The *medicaid* program continues to be a large grant-in-aid with estimated outlays of \$18.1 billion in 1982. This program supports State efforts to provide health services to low-income residents. The budget includes funds for an expanded child health assurance program (CHAP) to provide early and periodic screening, diagnosis, and treatment to an additional 2 million low-income children and youth under the age of 18 currently not eligible for medicaid. Eligibility will also be expanded for low-income pregnant women.

In addition, legislation is recommended to improve services for the mentally ill by mandating case management service and coordination of medicaid with services provided under the recently enacted Mental Health Systems Act of 1980.

Increased efforts to limit waste, fraud, and abuse will provide significant savings in the medicaid program. Federal savings are estimated at about \$204 million in medicaid in 1982, including \$100 million from improved financial management.

Other health grant initiatives in the 1982 budget include an increase of \$55 million for community health centers, and \$59 million for the Mental Health Systems Act.

Outlays for *assistance payments* (aid to families with dependent children) are expected to be \$7.7 billion in 1981 and \$7.6 billion in 1982.

Outlays for the *public housing* and the State agency low-income housing assistance components of the Department of Housing and Urban Development's assisted housing programs are estimated to increase 19%, from \$3.6 billion in 1981 to \$4.3 billion in 1982. The budget also contains an increase in estimated outlays for public housing operating subsidies, from \$972 million in 1981 to \$1.1 billion in 1982. These increases reflect the additional number of low-income families receiving housing services from public housing

and State agency housing projects and the increased costs of providing those services.

Because of limited Federal resources the administration proposed, and the Congress approved, elimination of most of the *law enforcement assistance* grants in 1981. The remaining grant programs are proposed for termination in 1982. However, to preserve the most effective programs, funding for the Office of Juvenile Justice and Delinquency Prevention will be increased to continue several programs previously funded through law enforcement assistance grants.

Additional information on many of these grant programs is in Part 5 of the Budget, which describes all major Federal programs and many minor ones.

**Loans.**—Another form of Federal aid to State and local governments is assistance in obtaining credit, either directly or through loan guarantees. Direct loan disbursements (excluding repayments) are estimated to be \$1.5 billion in 1982, and \$18.4 billion of new guaranteed loans are estimated for 1982.

One of the large guarantee loan programs was proposed by the administration and enacted by Congress to assist New York City. The legislation allows for the guarantee of principal and interest for \$1,650 million through 1982 for loans not to exceed a period of 15 years.

**Tax Expenditures.**—Federal aid is also provided through tax expenditures. (More information on tax expenditures is provided in Special Analysis G and, on the assistance from tax-exempt financing, in Special Analysis F.) The two major tax expenditures are the deductibility of many 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. The 1982 tax expenditure for property taxes on owner-occupied homes is estimated to be \$10.9 billion and the tax expenditure for other nonbusiness State and local taxes—primarily income and sales taxes—is estimated to be \$23.1 billion. The Revenue Act of 1978 eliminated the individual income tax deduction for gasoline. In 1979, the last year for this provision, the tax expenditure was \$350 million.

Interest on virtually all State and local government securities is tax exempt. This permits State and local jurisdictions to borrow at reduced interest rates. The tax expenditure for the exclusion of interest on State and local general purpose debt is estimated to be \$7.0 billion in 1982.

Interest on State and local industrial revenue bonds is also tax exempt. These bonds finance industrial and transportation projects, pollution control facilities, and public and, more recently, selected private housing. Tax expenditures in 1982 are estimated to be \$1.6 million for industrial facilities, \$0.8 billion for pollution control facilities, and \$0.6 billion for State and local rental housing bonds.

State and local governments have been using the proceeds of tax-exempt borrowing to provide mortgage funds for private housing. The tax exemption of interest on State and local securities makes it possible to provide such funds at interest rates well below the rates for private mortgages. At first, tax-exempt housing bonds were used mainly to assist low-income, multifamily housing; recently, there has been a dramatic increase in the use of such bonds for owner-occupied housing, including housing purchased by middle and upper income families. The 1982 tax expenditure is estimated to be \$1.2 billion.

The Omnibus Reconciliation Act of 1980 places various restrictions on the use of tax-exempt mortgage subsidy bonds. The most important restriction is a ceiling by State on the volume of single family housing bonds equal to the greater of \$200 million or 9% of the mortgage market in the State, and a total ban on tax-exemption of single family mortgage bonds as of January 1, 1984. The legislation also restricts the use of tax-exempt bonds for multifamily housing to projects in which at least 20% of the residents qualify as low income under present definitions of the Department of Housing and Urban Development.

#### FEDERAL GRANTS-IN-AID BY FUNCTION, AGENCY, AND REGION

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. Part 5 of the budget discusses the entire Federal budget by function, and the associated national needs met by these programs.

In the 1980 budget, the President initiated a 3-year budget planning system, to provide an improved means of planning for the longer term. Consequently, the discussions and data in many parts of this budget include the 1982-84 planning period. Consistent with that approach, this Special Analysis shows estimates through 1984 in many of the tables and the chart on a previous page.

Table H-3 shows a functional distribution of Federal grant-in-aid outlays. Major trends in 1982 are discussed above. The total shows strong continued growth throughout the planning period. The increases beyond 1982 are primarily for income security, education, training, employment and social services, and health.



Table H-3. FEDERAL GRANT-IN-AID OUTLAYS BY FUNCTION

(In millions of dollars)

Function	Actual 1980	Estimate			
		1981	1982	1983 <sup>1</sup>	1984 <sup>1</sup>
National defense.....	93	51	66	66	69
Energy.....	499	618	826	814	713
Natural resources and environment.....	5,362	5,298	5,294	5,463	5,513
Agriculture.....	569	761	594	636	680
Commerce and housing credit.....	3	4	4	4	4
Transportation.....	13,087	12,886	12,794	15,356	16,891
Community and regional development.....	6,486	6,215	6,434	6,064	6,147
Education, training, employment, and social services.....	21,862	21,697	23,454	25,722	27,457
Health.....	15,758	18,607	20,170	23,064	26,238
Income security.....	18,495	21,771	22,937	25,090	26,917
Veterans benefits and services.....	90	80	65	65	70
Administration of justice.....	530	420	263	198	212
General government.....	160	210	236	192	201
General purpose fiscal assistance.....	8,478	6,726	6,690	7,227	7,487
<b>Total outlays.....</b>	<b>91,472</b>	<b>95,343</b>	<b>99,829</b>	<b>109,961</b>	<b>118,599</b>

<sup>1</sup> Data for 1983 and 1984 are included here to be consistent with the multi-year planning system. They have not received as much review as the estimates for 1981 and 1982.

The functional composition of the grant programs has changed significantly over the years, as shown in table H-4. The most dramatic growth has occurred in the health function, which has increased from 3% of Federal aid in 1960 to an estimated 20% in 1982 and in the education, training, employment and social services function, which increased from 7% in 1960 to an estimated 23% in 1982. Other changes are the addition of general revenue sharing, increases in outlays for environmental protection, and the relative decline in grants for highways and income security. The latter is primarily due to the assumption by the Federal Government of the food stamp program and the public assistance programs for the aged, blind, and disabled. The trends are similar through 1984.

Table H-4. PERCENTAGE DISTRIBUTION OF FEDERAL GRANT-IN-AID OUTLAYS BY FUNCTION

	Actual					Estimate			
	1960	1965	1970	1975	1980	1981	1982	1983 <sup>1</sup>	1984 <sup>1</sup>
Energy.....	*	*	*	*	*	1	1	1	1
Natural resources and environment.....	1	2	2	5	6	6	5	5	5
Agriculture.....	5	6	4	1	1	1	1	1	1
Transportation.....	41	37	22	12	14	14	13	14	14
Community and regional development.....	1	5	5	6	7	7	6	6	5
Education, training, employment, and social services.....	7	8	25	22	24	23	23	23	23
Health.....	3	5	16	17	17	20	20	21	22
Income security.....	39	34	24	20	20	23	23	23	23
General purpose fiscal assistance.....	2	2	2	16	9	7	7	7	6
Other.....	*	1	1	2	2	*	1	*	*
<b>Total.....</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

\* 0.5% or less.

<sup>1</sup> Data for 1983 and 1984 are included here to be consistent with the new multi-year planning system. They have not received as much review as the estimates for 1981 and 1982.

Table H-5 shows grant outlays by agency. The Department of Health and Human Services will provide 36% of total estimated grant-in-aid outlays in 1982, far more than any other agency.

Table H-5. FEDERAL GRANT-IN-AID OUTLAYS BY AGENCY

(In millions of dollars)

Agency	Actual 1980	Estimate	
		1981	1982
Funds appropriated to the President.....	710	605	626
Department of Agriculture.....	6,446	6,636	6,804
Department of Commerce.....	1,114	814	724
Department of Education.....	7,122	7,862	8,284
Department of Energy.....	390	511	721
Department of Health and Human Services.....	28,553	33,936	35,837
Department of Housing and Urban Development.....	7,847	9,171	10,300
Department of the Interior.....	1,210	1,528	1,476
Department of Justice.....	513	394	236
Department of Labor.....	9,952	9,719	10,705
Department of Transportation.....	12,987	12,812	12,719
Department of the Treasury.....	7,324	5,459	5,366
Environmental Protection Agency.....	4,603	4,407	4,461
Community Services Administration.....	1,726	538	499
Other.....	974	951	1,070
<b>Total outlays.....</b>	<b>91,472</b>	<b>95,343</b>	<b>99,829</b>

*Distribution of grants by region.*—Table H-6 shows that Federal aid on a per capita basis varies widely among regions. The thinly populated Western States traditionally rank high because of highway construction grants and shared revenues from Federal land holdings. For example, the Rocky Mountain States have the lowest regional population density, extensive Federal land holdings and, until recently, the highest per capita aid.

This effect has diminished in recent years, however, as human resource programs have grown relative to physical resource programs. Further, the addition of general revenue sharing has tended to equalize per capita figures among the regions. Region VIII, which had per capita grants 33% above the national average in 1970, now has grants only 13% over the average, while Region V has risen from 27% below the average to only 6% below. Grants to Region V have grown the most during the period, averaging 16.0% per year.

Table H-6. DISTRIBUTION OF GRANTS BY REGION, SELECTED FISCAL YEARS

	Federal Region	1980 <sup>1</sup> Total grants	Dollars per capita		Average annual percent increase, 1970-80
			1970	1980	
I:	Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island.....	\$5.7	\$119	\$467	14.7%
II:	New York, New Jersey, Puerto Rico, Virgin Islands.....	14.1	120	502	15.0
III:	Virginia, Pennsylvania, Delaware, Maryland, West Virginia, District of Columbia.....	10.6	127	435	13.3
IV:	Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida.....	14.1	117	368	13.8
V:	Illinois, Indiana, Michigan, Ohio, Wisconsin, Minnesota.....	17.1	85	377	16.0
VI:	Arkansas, Louisiana, Oklahoma, New Mexico, Texas.....	8.2	127	328	11.9
VII:	Iowa, Kansas, Missouri, Nebraska.....	4.1	99	346	13.5
VIII:	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming.....	3.1	156	451	13.3
IX:	Arizona, California, Nevada, Hawaii, other territories.....	10.6	150	377	11.5
X:	Idaho, Oregon, Washington, Alaska.....	3.7	140	464	14.8
	<b>United States.....</b>	<b>91.5</b>	<b>117</b>	<b>400</b>	<b>13.8</b>

<sup>1</sup> Preliminary estimate, in billions of dollars.

See "Federal Aid to States," Department of the Treasury, for additional information concerning State distribution of Federal grants.

### HISTORICAL PERSPECTIVES

Although grants from the National Government predate the Constitution, they were very small until the end of the 19th century and did not become a significant factor in Government expenditure until after World War II. In 1950, Federal grants to State and local governments were \$2 billion, and by 1965 they had risen to \$11 billion. In 1978, partially because of the economic stimulus grants, they were \$77.9 billion, an average annual increase of 16% since 1965. In 1982 Federal grants are expected to be 14% of total Federal outlays and 18% of domestic Federal outlays. Table H-7 shows historical data for grant outlays since 1950.

Table H-7. HISTORICAL TREND OF FEDERAL GRANT-IN-AID OUTLAYS

(Fiscal years; dollar amounts in millions)

	Total grants-in-aid	Composition of Grants-in-Aid		Federal grants as a percent of		State and local expenditures <sup>3</sup>
		Grants for payments to individuals <sup>1</sup>	Other	Budget outlays		
				Total	Domes-tic <sup>2</sup>	
<b>Five-year intervals:</b>						
1950 .....	\$2,253	\$1,257	\$996	5.3%	8.8%	10.4%
1955 .....	3,207	1,623	1,584	4.7	12.1	10.1
1960 .....	7,020	2,479	4,541	7.6	15.9	14.7
1965 .....	10,904	3,931	6,972	9.2	16.5	15.3
1970 .....	24,014	9,023	14,991	12.2	21.1	19.4
1975 .....	49,834	17,441	32,392	15.3	21.3	23.1
<b>Annually:</b>						
1976 .....	59,093	21,023	38,070	16.1	21.7	24.4
1977 .....	68,414	23,860	44,555	17.0	22.7	25.8
1978 .....	77,889	25,981	51,908	17.3	22.9	26.4
1979 .....	82,858	28,765	54,093	16.8	22.4	25.6
1980 .....	91,472	34,174	57,298	15.8	21.1	26.3
1981 estimate .....	95,343	39,855	55,488	14.4	19.4	NA
1982 estimate .....	99,829	42,751	57,077	14.0	18.4	NA
1983 estimate <sup>4</sup> .....	109,961	47,841	62,120	13.5	18.5	NA
1984 estimate <sup>4</sup> .....	118,599	52,840	65,759	13.3	18.6	NA

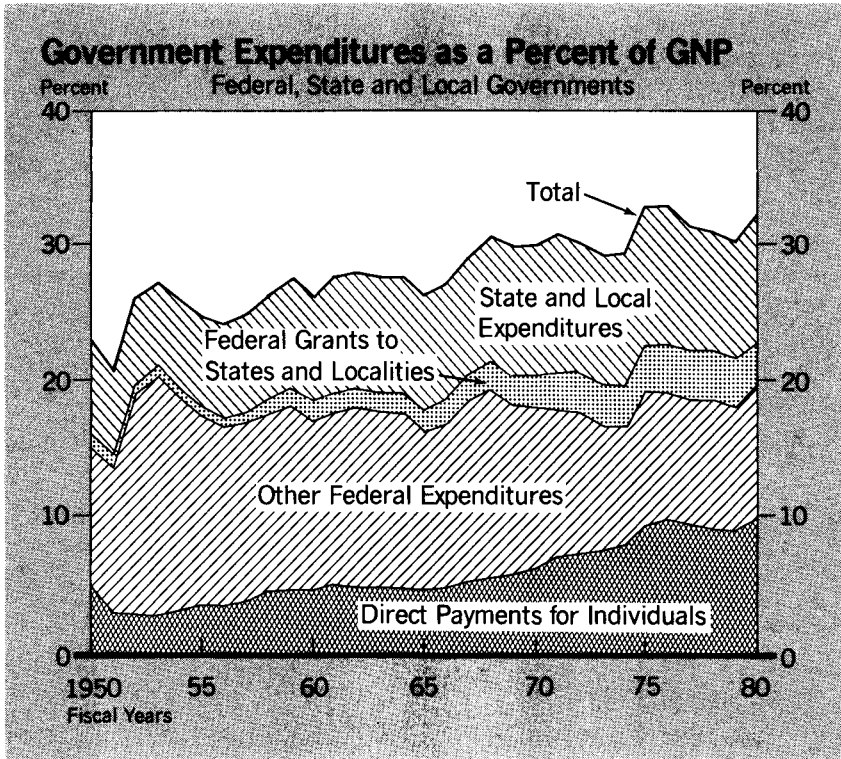
<sup>1</sup> For an identification of accounts in this category, see Table H-11 and footnotes.<sup>2</sup> Excludes outlays for the national defense and international affairs functions.<sup>3</sup> As defined in the national income and product accounts.<sup>4</sup> Data for 1983 and 1984 are included to be consistent with the multi-year planning system. They have not received as much review as the estimates for 1981 and 1982.

NA = Not available.

About two-fifths of estimated 1982 grants are to States and localities for payments to individuals.<sup>2</sup> Most such grants are accompanied by State or local matching payments. Among the larger of these programs are medicaid, assistance payments, housing assistance, and nutrition programs for children and the elderly. Supplemental security income became a direct Federal program in January 1974, as did the food stamps program in 1971. Almost all of the outlays for these programs were included as grants through the year prior to their assumption by the Federal Government, but not since then.

Table H-7 also shows grants-in-aid as a percent of State and local expenditures. This percent increased from 15% in 1965 to 26% in 1978.

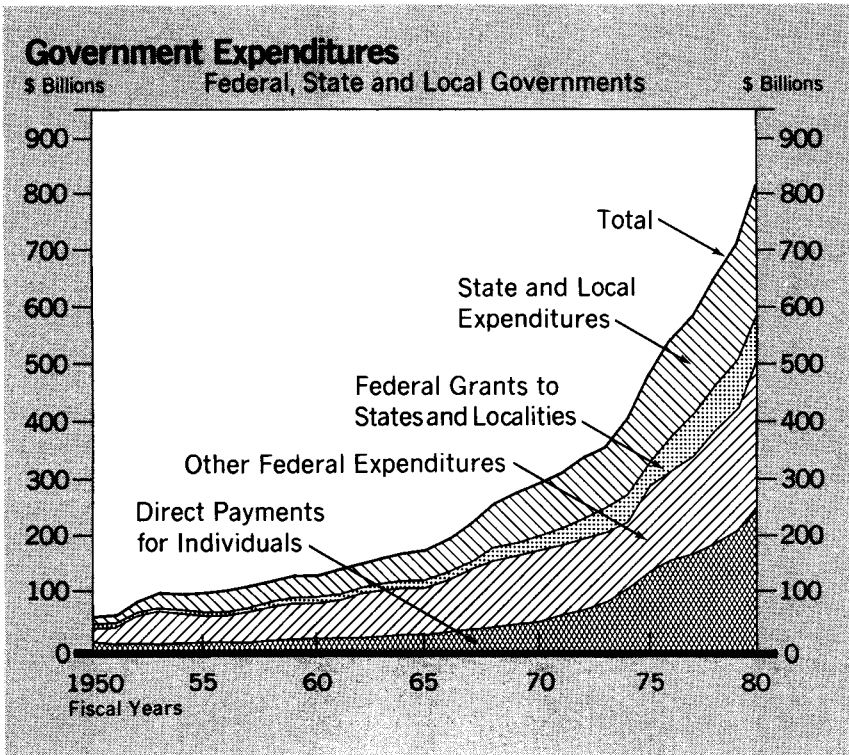
<sup>2</sup> Payments for individuals are defined as Federal Budget outlays providing benefits in cash or in-kind that constitute income transfers to individuals or families.



The charts show the growth of total governmental expenditures since 1950, and these expenditures as a percent of gross national product. Federal expenditures including grants have increased as a percent of GNP from 16% in 1950 to 23% in 1980, while State and local expenditures including grants have increased from 8% in 1950 to 12% in 1980.

#### GRANTS ADMINISTRATION

After World War II, most grants were designated for specific categories by Federal legislation or regulation, and came to be known as categorical grants. These grants usually required matching funds from the recipient governments and gave little discretion in their use to State and local officials. In the 1960's and early 1970's, the number of categorical grants increased dramatically. This rapid growth of the grant system was accompanied by increasingly complex administrative requirements.



The burdens imposed on State and local governments by the increasing inflexibility of fiscal and administrative requirements attached to categorical grants prompted calls for changes in the grant system.

Table H-8 shows the much greater importance of general-purpose and broad-based grants since 1972. General-purpose grants give State and local governments almost complete discretion in determining their use; broad-based grants give State and local governments considerable discretion within a broadly defined program area, such as health or community development. In 1972 there were virtually no general-purpose or broad-based grants. Currently, these grants are approximately one-fifth of total grants-in-aid. Their share of the total declined somewhat after the economic stimulus program reached its peak in 1978. With the elimination of States from general revenue sharing, this percentage declines through 1982.

Table H-8. OUTLAYS FOR GENERAL-PURPOSE, BROAD-BASED, AND OTHER GRANTS

(Dollar amounts in millions)

	Actual						Estimate	
	1972	1976	1977	1978	1979	1980	1981	1982
<b>General-purpose grants:</b>								
General revenue sharing.....	0	\$6,243	\$6,758	\$6,823	\$6,848	6,829	5,156	4,559
Other general purpose fiscal assistance and TVA <sup>1</sup> .....	516	907	2,748	2,780	1,485	1,765	1,707	2,295
<b>Subtotal, general-purpose grants.....</b>	<b>516</b>	<b>7,150</b>	<b>9,506</b>	<b>9,603</b>	<b>8,333</b>	<b>8,594</b>	<b>6,863</b>	<b>6,854</b>
<b>Broad-based grants:</b>								
Community development block grants.....		983	2,089	2,464	3,161	3,902	3,938	3,998
Comprehensive health grants.....	90	128	65	88	73	62	29	16
Employment and training <sup>2</sup> .....		1,698	1,756	1,992	1,845	2,144	2,000	2,011
Social services <sup>3</sup> .....	1,930	2,251	2,534	2,809	3,634	2,763	3,136	3,075
Criminal justice assistance.....	233	674	519	417	368	372	284	167
School aid in federally affected areas.....	602	558	719	706	858	622	718	346
Local public works.....			577	3,057	1,741	416	150	60
<b>Subtotal, broad-based grants.....</b>	<b>2,855</b>	<b>6,292</b>	<b>8,259</b>	<b>11,533</b>	<b>11,680</b>	<b>10,281</b>	<b>10,255</b>	<b>9,673</b>
<b>Other grants.....</b>	<b>31,001</b>	<b>45,651</b>	<b>50,649</b>	<b>56,753</b>	<b>62,845</b>	<b>72,597</b>	<b>78,225</b>	<b>83,302</b>
<b>Total.....</b>	<b>34,372</b>	<b>59,093</b>	<b>68,414</b>	<b>77,889</b>	<b>82,858</b>	<b>91,472</b>	<b>95,343</b>	<b>99,829</b>
<b>ADDENDUM: PERCENT OF TOTAL</b>								
General-purpose grants.....	1.5%	12.1%	13.9%	12.3%	10.1%	9.4%	7.2%	6.9%
Broad-based grants.....	8.3%	10.6%	12.1%	14.8%	14.1%	11.2%	10.8%	9.7%
Other grants.....	90.2%	77.3%	74.0%	72.9%	75.8%	79.4%	82.0%	83.4%
<b>Total.....</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100%</b>

<sup>1</sup> For detail, see grants in the general purpose fiscal assistance function, Table, H-11. Amounts in Table H-8 above include shared revenues from the Tennessee Valley Authority, shown in the energy function.

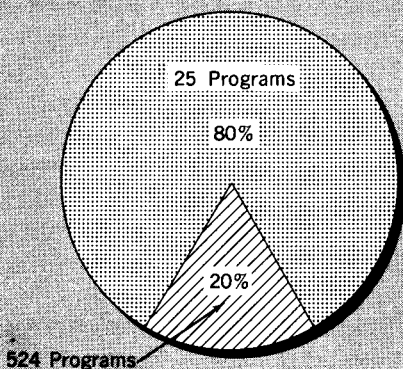
<sup>2</sup> Comprehensive Employment and Training Act (CETA), Title II A, B, and C. An additional \$6.1 billion of CETA grant-in-aid outlays are estimated for 1982, but they are limited to particular types of service (e.g., public service employment) or clientele (e.g., youth) and therefore are included in other grants, not broad-based grants.

<sup>3</sup> Includes \$543 million in 1979 only for retroactive social services claims, appearing in the Department of the Treasury.

Most general-purpose and broad-based grants reduce significantly or eliminate entirely 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 not changed significantly. In 1980, State and local governments were estimated to provide approximately \$1 of matching funds for \$2.50 of Federal aid, and this ratio is virtually unchanged for 1980. The decrease in matching requirements for general-purpose and broad-based aid has been offset by the significant growth in programs such as medicaid that require a larger than average matching share.

The chart shows that 80% of the aid is in only 25 programs. Nevertheless, there continue to be hundreds of categorical grants with different matching requirements, timing difficulties, application procedures, duplication of programs, and other administrative problems.

### Most Grants are Concentrated in a Few Programs Percent of 1981 Estimated Obligations



Source: 1980 Catalog of Federal Domestic Assistance

In March of 1980, OMB completed a major study of assistance practices and forwarded a report to the Congress entitled, "Managing Federal Assistance in the 1980's." The study, which had strong participation by State and local governments, concluded that OMB must assume a stronger role in assistance management. It contained a list of actions that would be taken. These actions, which are well under way, include creating new policies for:

- managing the way national policies and administrative standards are applied to assistance programs.
- resolving assistance related conflicts and disputes.
- selecting grants, cooperative agreements, and procurement contracts to reflect the appropriate relationships between Federal and non-Federal parties.

Numerous additional efforts undertaken recently or in the last few years to correct assistance problems include:

- a major revision of audit requirements. Nearly 100 audit guides have been replaced with a single guide, and a 6-month time limit has been set on audit resolution, with procedures for prompt settlement of differences. These new procedures will result in a major improvement in grants administration.



- the adoption of the single audit approach for State and local governments.
- standard financial requirements. Hundreds of inconsistent and duplicative financial requirements of individual grant programs have been replaced by standard application forms, uniform cost principles, and streamlined reporting rules. These standardized requirements form a comprehensive system of financial guidance for assistance programs. They lighten substantially the burden these programs place on State and local financial systems.
- expanded use of letters of credit. Almost all grants now use letters of credit, which have the effect of practically eliminating a delay in the receipt of approved funds to grantees.
- establishment by statute of Inspectors General in 15 departments and agencies to uncover and eliminate fraud, abuse, and waste in Federal programs. As this concept becomes fully operational, other agencies will follow. The President has directed all departments and agencies to step up their audit and investigation efforts and the Inspectors General have a major role in this effort.
- improvements in the *Catalog of Federal Domestic Assistance*, the reference document used by communities and individuals applying for Federal assistance. Improvements include publishing in the Catalog a bridge of program deletion and additions to the Catalog made from 1965–80, expansion of the functional and subject indices, and expansion of the agency index to include the responsibilities of each agency and sub-agency mentioned in the Catalog.
- improvements in the Federal Assistance Programs Retrieval System (FAPRS). With FAPRS, one can (by using a computer terminal) match the characteristics of a community with the requirements of Federal programs, and automatically identify those programs from the *Catalog* for which a community might apply. Changes include more functional categories for program selection, and more information advisory bulletins for users.
- revised procurement standards. OMB Circular A-102, “Uniform administrative requirements for grants to State and local governments”, now includes streamlined procurement standards that place greater reliance on State and local purchasing systems. The new standards permit governments with good systems to have them certified in advance, keeping Federal involvement in procurement under grants to a minimum.
- efforts to share the benefits of applicable Federal research and development programs with States and localities through the Intergovernmental Science, Engineering and Technology Advisory Panel (ISETAP).

- the Federal Assistance Award Data System (FAADS) is being installed nationally to provide better information about current grant funding to States. This follows a successful 12 State test. Data on all direct assistance awards will be transferred quarterly to the States for further transmittal to the local level.
- strengthened joint funding, which allows grants from several agencies to be combined for the applicant into one coordinated grant. Revised instructions have been issued to Federal agencies regarding this program.

#### 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 (NIA) series (published in Special Analysis B of this document 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 series. They both omit the following items that the budget series includes:

- Federal aid to the Governments of Puerto Rico and U.S. territories;
- payments in-kind, primarily commodities purchased by the Department of Agriculture and donated to the school lunch and other nutrition programs; 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 NIA 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. Since both Census and the NIA 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. These items were either new or became large in 1976, when they were first included in the Census data. One major kind of outlay included in the budget and Census definitions but excluded from the NIA 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 NIA rather than as grants. Table H-9 shows these and other minor differences among the

three series, but the differences are largely offsetting and, thus, these three series exhibit similar patterns.

Table H-9. THREE MEASURES OF FEDERAL GRANTS-IN-AID TO STATE AND LOCAL GOVERNMENTS, 1975-79

(In billions of dollars)

	1975	1976	1977	1978	1979
<b>Budget (Special Analysis H)</b> .....	<b>49.7</b>	<b>59.0</b>	<b>68.4</b>	<b>77.9</b>	<b>82.9</b>
Less principal exclusions:					
Agricultural commodities.....	-0.5	-0.5	-0.6	-0.6	-0.7
Geographical exclusions.....	-0.9	-1.0	-1.2	-1.6	-1.8
Plus payments for research.....	1.5	1.8	1.8	2.2	2.4
Federal unemployment benefits and related.....		10.6	5.2	1.2	0.8
All other (net).....	-0.2	-0.8	-0.6	0.9	-0.3
<b>Federal payments (Census)</b> .....	<b>49.6</b>	<b>69.1</b>	<b>73.0</b>	<b>80.0</b>	<b>83.3</b>
Less low-rent public housing.....	-1.3	-1.6	-1.8	-2.3	-2.8
Federal unemployment benefits and related.....		-10.6	-5.2	-1.2	-0.8
All other (net).....		0.6	0.2	-1.8	-0.6
<b>Grants-in-aid (national income and product accounts)</b> .....	<b>48.4</b>	<b>57.5</b>	<b>66.3</b>	<b>74.7</b>	<b>79.1</b>

In addition to these data sources, *Federal Aid to States*, published by the Department of the Treasury, lists grant outlays for the most recently completed year by State for more than 90 programs, using the budget definition of grants. The *Catalog of Federal Domestic Assistance*, prepared by the Office of Management and Budget and available from the Government Printing Office, 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. This source also provides information on eligibility criteria and application procedures.

*Geographic Distribution of Federal Funds* (formerly entitled *Federal Outlays*), compiled by the Community Services Administration and available from the Government Printing Office, uses various proration techniques and financial concepts, primarily obligations, to estimate total Federal expenditures as well as grant payments at the State, county, and large-city level. Their grant estimates therefore differ from those in the budget. These estimates are cross-referenced where possible with the program identification number in the *Catalog of Federal Domestic Assistance*.

THE STATE AND LOCAL GOVERNMENT SECTOR OF THE NATIONAL  
INCOME AND PRODUCT ACCOUNTS <sup>3</sup>

The national income and product accounts (NIA) 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. The State and local data are presented here to provide a context in which to compare the grants-in-aid.

There are three major differences between NIA 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 NIA data but are generally included in budgetary data. Second, a large number of transactions in the NIA accounts are recorded on an accrual basis, while many governments show transactions on a cash basis. Third, NIA data aggregate total State and local transactions, whereas many governments separate their general fund from special funds. As a result of these differences, NIA totals are not the same as an aggregate of these governments' financial budgets. However, the NIA data do provide timely estimates of total State and local fiscal transactions not otherwise available and, with care, can be used as financial indicators.

*NIA State and local sector.*—Table H-10 is a historical tabulation of State and local data with the surplus or deficit divided between two components, social insurance funds and the operating account.<sup>4</sup> The social insurance funds, primarily retirement programs, have been in surplus since before 1950. The funds accumulate assets to pay for their future liabilities. However, despite their cash surpluses the accrued liability of many of these social insurance funds exceeds their assets, posing a serious potential threat to future State and local finances. Because these social insurance fund surpluses are not generally available to pay for deficits in operating accounts, the operating account is generally thought to be a better measure of State and local fiscal condition than the surplus or deficit for the sector as a whole.

---

<sup>3</sup> Special Analysis B of this volume provides general information on the Federal sector of the national income and product accounts.

<sup>4</sup> The operating account contains all transactions except those of social insurance funds, including expenditures for capital investment.

Table H-10. NATIONAL INCOME AND PRODUCT ACCOUNTS, STATE AND LOCAL SECTOR

(Calendar years; in billions of dollars)

	Receipts	Expenditures	Surplus or deficit (-)		
			Total sector	Social insurance funds	Operating account
Five-year intervals:					
1950 .....	21.3	22.5	-1.2	0.7	-1.9
1955 .....	31.7	32.9	-1.3	1.3	-2.6
1960 .....	49.9	49.8	0.1	2.3	-2.2
1965 .....	75.1	75.1	-*	3.4	-3.4
1970 .....	134.9	132.2	2.8	6.8	-4.0
1975 .....	237.7	232.2	5.5	13.1	-7.6
Annually:					
1976 .....	267.8	251.2	16.6	15.6	0.9
1977 .....	298.0	270.0	28.1	17.9	10.1
1978 .....	327.4	298.4	29.0	20.0	9.0
1979 .....	351.2	324.4	26.7	23.9	2.9

## SEASONALLY ADJUSTED, ANNUAL RATES

1978:					
I .....	316.9	285.8	31.1	19.0	12.0
II .....	328.0	295.7	32.3	19.4	12.9
III .....	327.2	303.3	23.9	20.2	3.7
IV .....	337.7	309.0	28.7	21.2	7.4
1979:					
I .....	340.9	311.4	29.5	22.4	7.1
II .....	342.7	320.8	21.9	23.6	-1.7
III .....	355.4	328.9	26.5	24.5	2.1
IV .....	365.6	336.7	28.9	25.0	4.0
1980:					
I .....	372.1	345.4	26.6	25.3	1.3
II .....	373.9	350.0	23.9	25.7	-1.7
III .....	386.8	358.2	28.5	27.7	0.9

\* \$50 million or less.

It is reasonable for the operating account to be in deficit since it includes capital expenditures, often financed through borrowing, and the account was in deficit in the 1950's and 1960's.

In the 1970's however, the account was in surplus several years. Surpluses in 1972 and 1973 resulted from the first general revenue sharing distributions and higher tax receipts generated by tax rate increases and the rapidly expanding economy. In 1974, the operating account returned to a deficit. In part, this reflected a return to previous patterns, as State and local expenditure increases absorbed the increased revenues. It also reflected the recession, with State and local governments choosing to draw down balances accumulated during 1972-73 rather than enact new tax increases. Their fiscal position improved substantially in 1976 compared with 1975, and surpluses have continued into 1979. The operating account had a surplus of \$9.0 billion in 1978, and \$2.9 billion in 1979. The surplus is expected to decline in 1980.

**DETAILED FEDERAL AID TABLES**

The following two tables present detailed Federal aid data for the three budget years. Table H-11, "Federal Grants to State and Local Governments—Outlays and Budget Authority," provides detailed budget authority and outlay data for grants and shared revenues. 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—OUTLAYS AND BUDGET AUTHORITY

(In millions of dollars)

1980 actual	1981 estimate	1982 estimate	Function, agency and program	Func- tional code *	1980 actual	1981 estimate	1982 estimate
<b>OUTLAYS</b>			<b>BUDGET AUTHORITY</b>				
			<b>National defense:</b>				
			Department of Defense—Military:				
54	13	17	National Guard centers construction.....	051	13	13	17
39	37	49	Federal Emergency Management Agency .....	054	39	39	51
<b>93</b>	<b>51</b>	<b>66</b>	<b>Total, national defense.....</b>	<b>050</b>	<b>52</b>	<b>52</b>	<b>68</b>
			<b>Energy:</b>				
382	462	654	Department of Energy: Energy conservation.....	272	444	469	564
2	18	8	Economic regulation .....	276	16	4	12
116	137	164	Tennessee Valley Authority (shared revenue) .....	271			
<b>499</b>	<b>618</b>	<b>826</b>	<b>Total, energy.....</b>	<b>270</b>	<b>459</b>	<b>473</b>	<b>576</b>
			<b>Natural resources and environment:</b>				
			Department of Agriculture:				
57	59	50	Watershed planning and flood prevention.....	301	48	50	45
14	16	16	Resource conservation and development.....	302	15	18	15
39	32	37	Forest management, protection and utilization .....	302	39	32	37
			Department of Commerce:				
41	59	39	NOAA—Coastal zone management.....	302	64	45	39
69	81	62	NOAA—Operations research and facilities.....	306	71	78	72
			Department of the Interior:				
2	49	52	Urban park and recreation grants .....	303	108	19	72
307	323	301	Land and water conservation fund .....	303	312	228	193
124	119	137	Fish and Wildlife grants .....	303	134	132	157
56	54	36	Historic preservation.....	303	53	31	31
16	18	18	Youth conservation corps .....	302	16	18	18

Table H-11. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—OUTLAYS AND BUDGET AUTHORITY—Continued

(In millions of dollars)

1980 actual	1981 estimate	1982 estimate	Function, agency and program	Func- tional code <sup>1</sup>	1980 actual	1981 estimate	1982 estimate
<b>OUTLAYS</b>					<b>BUDGET AUTHORITY</b>		
24	72	60	Office of Surface Mining, Reclamation, and Enforcement.....	302	68	79	144
1	1	*	Bureau of Mines.....	306			
250	207	231	Environmental Protection Agency:				
10			Abatement and control.....	304	219	224	248
4,343	4,200	4,230	Enforcement.....	304			
8	8	23	Sewage treatment plant construction.....	304	3,400	3,305	3,700
			Water Resources Council.....	301	10	10	25
<b>5,362</b>	<b>5,298</b>	<b>5,294</b>	<b>Total, natural resources and environment.....</b>	<b>300</b>	<b>4,558</b>	<b>4,270</b>	<b>4,795</b>
			<b>Agriculture:</b>				
			Department of Agriculture:				
110	126	134	Cooperative research.....	352	110	129	143
288	302	303	Extension activities.....	352	286	304	305
169	330	157	Commodity Credit Corporation—Donations.....	351	169	330	157
2	3		Agricultural Marketing Service—Cooperative Projects in Marketing.....	352	2	2	
<b>569</b>	<b>761</b>	<b>594</b>	<b>Total, agriculture.....</b>	<b>350</b>	<b>566</b>	<b>765</b>	<b>604</b>
			<b>Commerce and housing credit:</b>				
1	2	2	Department of Agriculture: Rural housing supervisory assistance.....	371	2	2	2
2	2	2	Department of Commerce: Minority business development.....	376	2	2	2
<b>3</b>	<b>4</b>	<b>4</b>	<b>Total, commerce and housing credit.....</b>	<b>370</b>	<b>4</b>	<b>4</b>	<b>4</b>
			<b>Transportation:</b>				
1	1	1	Department of Commerce: Maritime Administration.....	403	1	1	1
		50	Department of Transportation:				
			Interstate transfer grants—highways.....	401			300
2	*		State boating safety assistance.....	403			
590	524	535	Airport and airway trust fund.....	402	677	722	750



26	28	15	Highway beautification .....	401	8	6	
98	59	39	Off-systems roads .....	401	54		
8,675	8,222	7,955	Federal aid highways (trust fund) .....	401	8,513	8,922	9,900
28	27	27	Highway related safety grants .....	401	24	24	
198	162	137	Other highway aid .....	401	89	47	10
184	172	213	National Highway Traffic Safety Administration .....	401	197	239	245
54	58	72	Federal Railroad Administration .....	401	84	82	80
3,129	3,556	3,672	Urban Mass Transportation Administration .....	401	2,430	4,790	5,049
3	3	3	Research and special programs .....	407	3	3	4
100	73	75	Washington Metropolitan Area Transit Authority .....	401	66	66	52
<b>13,087</b>	<b>12,886</b>	<b>12,794</b>	<b>Total, transportation .....</b>	<b>400</b>	<b>12,147</b>	<b>14,902</b>	<b>16,389</b>
			<b>Community and regional development:</b>				
			Funds appropriated to the President:				
335	318	311	Appalachian regional development programs .....	452	347	329	330
375	287	314	Disaster relief .....	453	585	166	161
*			Public works acceleration .....	452			
			Department of Agriculture:				
12	12	9	Rural development grants .....	452	10	5	
325	319	279	Rural water and waste disposal .....	452	290	200	100
5	6	5	Rural development planning .....	452	6	5	6
3	4	2	Rural community fire protection grants .....	452	4	4	
			Department of Commerce:				
452	411	500	Economic development assistance .....	452	417	466	466
416	150	60	Local public works .....	452			
1	1	*	Drought assistance program .....	453			
4	2	3	NOAA—Coastal energy impact fund .....	452			
104	81	32	Regional Development Program .....	452	104	71	
			Department of Energy:				
7	30	59	Energy conservation .....	452	43	62	50
			Department of Housing and Urban Development:				
3,902	3,938	3,998	Community development block grants .....	451	3,752	3,695	3,960
214	175	161	Urban renewal .....	451			
18	25	7	Other categorical programs replaced by block grants .....	451			
225	365	610	Urban development action grants .....	451	675	675	675

See footnotes at end of table.

SPECIAL ANALYSIS H

265

Table H-11. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—OUTLAYS AND BUDGET AUTHORITY—Continued

(In millions of dollars)

1980 actual	1981 estimate	1982 estimate	Function, agency and program	Functional code	1980 actual	1981 estimate	1982 estimate
<b>OUTLAYS</b>			<b>BUDGET AUTHORITY</b>				
52	40	35	Planning assistance.....	451	38	34	35
*	2	1	New Communities Development Corporation.....	451			
2	15	9	Neighborhood self-help program.....	451	10	9	9
18	18	19	Department of the Interior: Bureau of Indian Affairs.....	452	18	18	19
5	3	3	Federal Emergency Management Agency.....	453	5	3	4
12	12	15	Neighborhood Reinvestment Corporation.....	451	12	12	15
<b>6,486</b>	<b>6,215</b>	<b>6,434</b>	<b>Total, community and regional development.....</b>	<b>450</b>	<b>6,315</b>	<b>5,754</b>	<b>5,830</b>
			<b>Education, training, employment, and social services:</b>				
			Department of Commerce:				
5	5	2	Job opportunities program.....	504			
20	21	22	Public communications facilities, planning and construction.....	503	24	22	22
			Department of Education:				
			Compensatory programs for disadvantaged students.....	501			3,859
3,536	3,345		Elementary and secondary education.....	501	3,570	3,766	
90	51	78	Indian education.....	501	72	77	97
622	718	346	School assistance in federally affected areas.....	501	742	542	294
315	283	288	Equal educational opportunities.....	501	296	290	297
136			Library resources.....	503	*		
810	1,061	1,075	Education for the handicapped.....	501	1,039	1,089	1,213
427	960	1,003	Rehabilitation services and handicapped research.....	506	574	966	1,011
854	927	1,079	Vocational and adult education.....	501	919	913	896
78	77	77	Student financial assistance <sup>2</sup> .....	502	77	77	77
20	14	5	Higher and continuing education.....	502	29	4	
38			Special projects and training.....	503	1		
66	172	2	School improvement programs.....	501	160	147	

4	5	6	American Printing House for the Blind.....	501	4	5	6
		163	Special programs and populations.....	501			120
		92	Educational improvement.....	501			154
		50	Youth education and training.....	501			900
		166	Bilingual and minority language education.....	501			198
126	250	263	Libraries and learning technologies.....	503	250	257	264
			Department of Health and Human Services:				
383	351	371	Work incentives.....	504	352	351	371
2,763	3,136	3,075	Grants to States for social services.....	506	2,889	2,562	3,091
2,077	1,432	1,909	Human development services.....	506	1,877	1,623	2,002
7	8	8	Department of the Interior: Bureau of Indian Affairs, Indian education programs.....	501	7	8	8
			Department of Labor:				
6,191	6,365	7,047	Employment and training assistance.....	504	5,532	6,400	7,311
45	62	67	Community service employment for older Americans.....	504	65	67	67
1,796	974	1,096	Temporary employment assistance.....	504	1,627	729	1,142
24	25	26	Grants for employment services.....	504	22	24	26
710	782	853	Unemployment trust fund: employment service.....	504	736	797	853
547	492	499	Community Services Administration.....	506	503	491	497
152	162	172	Corporation for Public Broadcasting.....	503	152	162	172
20	20	23	National Foundation on the Arts and Humanities.....	503	23	23	26
<b>21,862</b>	<b>21,697</b>	<b>23,454</b>	<b>Total, education, training, employment, and social services.....</b>	<b>500</b>	<b>21,541</b>	<b>21,391</b>	<b>24,975</b>
			<b>Health:</b>				
*	*		Special Action Office for Drug Abuse Prevention.....	554			
30	32	34	Department of Agriculture: Food Safety and Quality Service—Meat and Poultry.....	554	30	32	34
			Department of Health and Human Services:				
916	996	1,066	Health Services Administration <sup>2</sup> .....	551	1,077	994	1,066
93	114	90	Center for Disease Control.....	551	99	108	90
10	12	11	Center for Disease Control.....	552	12	13	11
679	662	580	Alcohol, Drug Abuse, and Mental Health Administration <sup>2</sup> .....	551	626	573	624
7	195	148	Health Resources Administration.....	551	60	138	147
18	96	68	Health Resources Administration.....	553	91	70	54
13,957	16,452	18,120	Medicaid <sup>2</sup> .....	551	14,445	17,236	18,802
			Department of Labor:				
42	42	46	Occupational Safety and Health Administration.....	554	42	44	47

See footnotes at end of table.

SPECIAL ANALYSIS H

267

Table H-11. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—OUTLAYS AND BUDGET AUTHORITY—Continued

(In millions of dollars)

1980 actual	1981 estimate	1982 estimate	Function, agency and program	Functional code <sup>1</sup>	1980 actual	1981 estimate	1982 estimate
<b>OUTLAYS</b>			<b>BUDGET AUTHORITY</b>				
6	6	6	Mine Safety and Health Administration .....	554	6	6	6
<b>15,758</b>	<b>18,607</b>	<b>20,170</b>	<b>Total, health .....</b>	<b>550</b>	<b>16,490</b>	<b>19,213</b>	<b>20,882</b>
<b>Income security:</b>			<b>Department of Agriculture:</b>				
13	14	21	Rural housing for domestic labor <sup>2</sup> .....	604	25	25	25
6	6	7	Mutual and self-help housing <sup>2</sup> .....	604	-5		5
456	365	365	Food Safety and Quality Service—Funds for strengthening markets, income and supply—donations (child nutrition) <sup>2</sup> .....	605	306	377	463
412	434	472	Food stamps—administration <sup>2</sup> .....	605	423	462	502
155	112	114	Special milk program <sup>2</sup> .....	605	152	116	122
3,233	3,213	3,390	Child nutrition program <sup>2</sup> .....	605	3,037	3,208	3,586
716	901	991	Special supplemental food program (WIC) <sup>2</sup> .....	605	755	924	1,065
101	125	139	Food donations <sup>2</sup> .....	605	106	129	144
<b>Department of Health and Human Services:</b>			<b>Supplemental security income <sup>2</sup> .....</b>				
39	45		Public assistance—maintenance <sup>2</sup> .....	609	39	45	
7,273	7,747	7,638	Refugee assistance <sup>2</sup> .....	609	7,664	7,692	5,684
338	541	618	Low-income energy assistance <sup>2</sup> .....	609	482	652	615
	1,714	1,714	Cuban and Haitian entrants .....	609		1,714	1,714
	153	83	Payments for child support .....	609	100	90	88
*	*	*	Human development services <sup>2</sup> .....	609	*	*	*
	289	346	<b>Department of Housing and Urban Development:</b>				
2,610	3,626	4,327	Subsidized housing programs <sup>2</sup> .....	604	17,376	28,616	18,457
824	972	1,141	Operation of housing projects <sup>2</sup> .....	604	755	1,071	1,265
*	5	5	Congregate services program <sup>2</sup> .....	604	10		

1,138	1,462	1,564	Department of Labor: Unemployment trust fund: administration of payments <sup>2</sup> .....	603	1,185	1,335	1,564
1,180	46		Community Services Administration <sup>2</sup> .....	609	1,214		
<b>18,495</b>	<b>21,771</b>	<b>22,937</b>	<b>Total, income security</b> .....	<b>600</b>	<b>33,624</b>	<b>46,768</b>	<b>35,646</b>
			<b>Veterans benefits and services:</b>				
			Veterans Administration:				
35	44	46	Medical care <sup>2</sup> .....	703	35	44	46
1	*	*	Medical administrative expenses .....	703	1	*	*
14	6	9	Grants for construction of State nursing homes <sup>2</sup> .....	703	8	15	18
40	24	7	Health training .....	703			
*	5	3	Veterans cemetery construction .....	705	5	5	
<b>90</b>	<b>80</b>	<b>65</b>	<b>Total, veterans benefits and services</b> .....	<b>700</b>	<b>48</b>	<b>65</b>	<b>64</b>
			<b>Administration of justice:</b>				
	7	6	Department of Housing and Urban Development: Fair housing assistance .....	751	4	6	6
			Department of Justice:				
9	8	9	National Institute of Corrections .....	754	8	8	10
504	385	226	Law enforcement assistance .....	754	378	85	118
*	*	*	Research and statistics .....	754	6		10
16	19	21	Equal Employment Opportunity Commission .....	751	15	19	24
<b>530</b>	<b>420</b>	<b>263</b>	<b>Total, administration of justice</b> .....	<b>750</b>	<b>411</b>	<b>118</b>	<b>168</b>
			<b>General government:</b>				
			Department of the Interior:				
73	72	104	Administration of Territories .....	806	86	73	100
68	118	110	Trust Territory of the Pacific Islands .....	806	120	95	94
19	21	22	Office of Personnel Management (intergovernmental personnel assistance) .....	806	20	20	20
<b>160</b>	<b>210</b>	<b>236</b>	<b>Total, general government</b> .....	<b>800</b>	<b>226</b>	<b>188</b>	<b>214</b>
			<b>General purpose fiscal assistance:</b>				
280	223	275	Department of Agriculture: Forest Service (shared revenue) .....	852	280	223	275
5	5	5	Department of Defense: Flood Control Act (shared revenue) .....	852	5	5	5
*	*	*	Department of Energy: Payments under Federal Power Act .....	852	*	*	*
			Department of the Interior:				
103	108		Payments in lieu of taxes .....	852	108	103	*
370	454	576	Miscellaneous (shared revenues) .....	852	371	454	576
7	12	4	Fish and Wildlife Service .....	852	7	12	4

See footnotes at end of table.

Table H-11. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS—OUTLAYS AND BUDGET AUTHORITY—Continued

(In millions of dollars)

1980 actual	1981 estimate	1982 estimate	Function, agency and program	Func- tional code <sup>1</sup>	1980 actual	1981 estimate	1982 estimate
<b>OUTLAYS</b>			<b>BUDGET AUTHORITY</b>				
40	104	48	Payments to U.S. territories .....	852	90	54	48
9	*	*	Internal revenue collections for the Virgin Islands (shared revenues) .....	852	2		
Department of the Treasury:							
278	76	82	Customs receipts for Puerto Rico and the Virgin Islands (shared revenue) .....	852	262	76	82
		495	Refundable social security tax credits .....	852			495
217	225	230	Internal revenue collections for Puerto Rico (shared revenues) .....	852	228	225	230
6,829	5,156	4,559	General revenue sharing .....	851	6,855	4,570	4,570
	2		Antirecession financial assistance fund .....	852			
339	360	415	Federal payment to the District of Columbia .....	852	339	360	415
<b>8,478</b>	<b>6,726</b>	<b>6,690</b>	<b>Total, general purpose fiscal assistance .....</b>	<b>850</b>	<b>8,546</b>	<b>6,083</b>	<b>6,701</b>
<b>91,472</b>	<b>95,343</b>	<b>99,829</b>	<b>Total, grants-in-aid .....</b>		<b>104,987</b>	<b>120,046</b>	<b>116,917</b>

\$500 thousand or less.

<sup>1</sup> For a description of these codes, see Table 13 in the *Budget of the United States Government, 1982*.<sup>2</sup> Programs included in the "Grants for payments to individuals" category shown in Table H-7.

Table H-12. CREDIT ASSISTANCE TO STATE AND LOCAL GOVERNMENTS <sup>1</sup>

(In millions of dollars)

Function, agency and program		Direct loans			Guaranteed loans		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Natural resources and environment:							
Department of the Interior: Drought emergency loan fund.....	New loans.....						
	Net loans.....	*	-1	-1			
	Outstandings.....	30	29	28			
Agriculture:							
Department of Agriculture:							
Agriculture credit insurance fund.....	New loans.....				3	3	2
	Net loans.....	-1	*	*	-1	*	*
	Outstandings.....	1		*	10	10	9
Commerce and housing credit:							
Department of Agriculture:							
Rural housing insurance fund.....	New loans.....		5	2	21	30	40
	Net loans.....	-6	*		-9	-10	-5
	Outstandings.....	2	2	2	23	13	8
Transportation:							
Federal aid highways (trust fund).....	New loans.....	3	15	19			
	Net loans.....	3	15	19			
	Outstandings.....	3	18	37			
Right-of-way revolving fund.....	New loans.....	26	40	45			
	Net loans.....	26	40	45			
	Outstandings.....	187	227	272			
Total, transportation.....	New loans.....	29	55	64			
	Net loans.....	29	55	64			
	Outstandings.....	190	245	309			
Community and regional development:							
Department of Agriculture:							
Rural development insurance fund.....	New loans.....	862	817	818	1,253	1,408	929
	Net loans.....	-12	-56	-106	840	839	890

Table H-12. CREDIT ASSISTANCE TO STATE AND LOCAL GOVERNMENTS <sup>1</sup>—Continued

(In millions of dollars)

Function, agency and program		Direct loans			Guaranteed loans		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
	<b>Outstandings</b> .....	<b>232</b>	<b>176</b>	<b>71</b>	<b>3,972</b>	<b>4,811</b>	<b>5,701</b>
Department of Commerce:							
Coastal energy impact fund .....	New loans .....	24	39	47			
	Net loans .....	24	39	47			
	<b>Outstandings</b> .....	<b>33</b>	<b>71</b>	<b>118</b>			
Department of Housing and Urban Development:							
Urban renewal programs .....	New loans .....	159	30	5	53	10	
	Net loans .....	43	-10	-11	-191	-96	-65
	<b>Outstandings</b> .....	<b>21</b>	<b>11</b>		<b>275</b>	<b>179</b>	<b>114</b>
Revolving fund (liquidating programs) .....	New loans .....		*	*			
	Net loans .....	-14	-15	-16			
	<b>Outstandings</b> .....	<b>485</b>	<b>470</b>	<b>454</b>			
Community development loans .....	New loans .....				90	270	270
	Net loans .....				87	259	232
	<b>Outstandings</b> .....			<b>99</b>	<b>358</b>	<b>590</b>	
Other programs .....	New loans .....	1	1				
	Net loans .....	-9	-10	-11			
	<b>Outstandings</b> .....	<b>127</b>	<b>116</b>	<b>105</b>			
Total, community and regional development	New loans .....	1,047	887	871	1,395	1,688	1,199
	Net loans .....	32	-52	-97	735	1,002	1,057
	<b>Outstandings</b> .....	<b>897</b>	<b>845</b>	<b>748</b>	<b>4,345</b>	<b>5,347</b>	<b>6,404</b>
Education, training, employment, and social services:							
Department of Education:							
Student loan insurance fund .....	New loans .....	7		4			
	Net loans .....	7		4			
	<b>Outstandings</b> .....	<b>63</b>	<b>63</b>	<b>67</b>			



Student financial assistance.....	New loans.....	*					
	<i>Net loans</i> .....	*					
	<b>Outstandings</b> .....	<b>20</b>	<b>20</b>	<b>20</b>			
Higher and continuing education.....	New loans.....						
	<i>Net loans</i> .....				-16	-17	-19
	<b>Outstandings</b> .....				<b>962</b>	<b>945</b>	<b>926</b>
Higher education facilities loan fund.....	New loans.....	1	1	1			
	<i>Net loans</i> .....	-6	-5	-6			
	<b>Outstandings</b> .....	<b>165</b>	<b>160</b>	<b>154</b>			
Total education, training, employment, and social services.	New loans.....	8	1	5			
	<i>Net loans</i> .....	2	-5	-2	-16	-17	-19
	<b>Outstandings</b> .....	<b>248</b>	<b>243</b>	<b>241</b>	<b>962</b>	<b>945</b>	<b>926</b>
Health:							
Department of Health and Human Services:							
Medical facilities guarantee and loan fund.....	New loans.....						
	<i>Net loans</i> .....	-4	-4	-5			
	<b>Outstandings</b> .....	<b>186</b>	<b>182</b>	<b>177</b>			
Income security:							
Department of Housing and Urban Development:							
Low-rent public housing.....	New loans.....	1,318	300	300	14,214	16,095	17,137
	<i>Net loans</i> .....	38			1,440	1,799	2,285
	<b>Outstandings</b> .....	<b>94</b>	<b>94</b>	<b>94</b>	<b>16,490</b>	<b>18,289</b>	<b>20,573</b>
General Government:							
Department of the Interior:							
Administration of territories.....	New loans.....	2	2		9		31
	<i>Net loans</i> .....	-18	1	-18	9	*	30
	<b>Outstandings</b> .....	<b>17</b>	<b>18</b>		<b>66</b>	<b>66</b>	<b>96</b>
General purpose fiscal assistance:							
Department of the Treasury:							
New York City loan guarantees.....	New loans.....				300	300	756
	<i>Net loans</i> .....				277	211	662
	<b>Outstandings</b> .....				<b>777</b>	<b>988</b>	<b>1,650</b>
Loans to the District of Columbia.....	New loans.....	130	173	220			
	<i>Net loans</i> .....	46	108	191			
	<b>Outstandings</b> .....	<b>1,459</b>	<b>1,567</b>	<b>1,758</b>			
Grand total.....	New loans.....	2,534	1,23	1,461	15,941	18,116	19,165

Table H-12. CREDIT ASSISTANCE TO STATE AND LOCAL GOVERNMENTS <sup>1</sup>—Continued

(In millions of dollars)

Function, agency and program		Direct loans			Guaranteed loans		
		1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
	<i>Net loans</i> .....	<i>118</i>	<i>99</i>	<i>133</i>	<i>2,435</i>	<i>2,984</i>	<i>4,010</i>
	<b>Outstandings</b> .....	<b>3,125</b>	<b>3,224</b>	<b>3,357</b>	<b>22,673</b>	<b>25,657</b>	<b>29,667</b>

<sup>1</sup> Only direct loans are included in budget outlays. New direct loans 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", in the *Special Analyses* volume of the 1982 Budget.

## SPECIAL ANALYSIS I

### CIVILIAN EMPLOYMENT IN THE EXECUTIVE BRANCH

Full-time permanent employment in the executive branch at the end of 1982 is estimated to be 1,879,500, excluding 527,000 Postal Service employees. (Postal Service employees are not under the President's jurisdiction.) Actual full-time permanent employment as of September 30, 1980 was 1,866,773, a reduction of nearly 45,100 full-time permanent employees since January 31, 1977, when this administration came into office. Full-time permanent employment is discussed in greater detail under "Full-time Permanent Civilian Employment, End-of-Year."

Total Federal civilian employment in the executive branch is estimated to be 2,131,500 by the end of 1982, excluding 651,300 Postal Service employees. Within the category of "total employment", full-time permanent employees account for 88% of the workforce. 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 1 year).

The 1981 and 1982 estimates shown for total employment in this analysis reflect the fractional counting of part-time permanent positions (based on the number of hours per regularly scheduled workweek) as required by the Federal Employees Part-Time Career Employment Act of 1978 (Public Law 95-437).

#### EMPLOYMENT LIMITATIONS

As a part of the Civil Service Reform Act of 1978 (section 311), the Congress placed an employment limitation on the executive branch. The limitation requires that "The total number of civilian employees in the executive branch on September 30, 1979, on September 30, 1980, and on September 30, 1981, shall not exceed the number of such employees on September 30, 1977." It includes all civilian employees within the executive branch of the Government (other than the United States Postal Service and the Postal Rate Commission), whether employed on a full-time, part-time, or intermittent basis. It also includes those employed on an indirect hire basis under master labor contracts with foreign governments. (The latter applies to the Defense Department.) The limitation excludes employment programs established for students and disadvantaged youth.

The statutory limitation also provides that the President may authorize employment in excess of the limitation, based on the percentage increase of the U.S. population since September 30, 1978, as estimated by the Bureau of the Census. Using this criterion, the September 30, 1979 employment level could have exceeded that for September 30, 1977 by about 16,000 employees (0.7%). Another 18,200 employees could have been added by September 30, 1980, while remaining within the statutory limit. The calculated statutory upper limit for 1981 is about 20,700 above that for 1980, based on the population data shown in table I-5.

Finally, the law provides that the number of part-time employees in excess of the number of such employees on September 30, 1977, may be counted on a full-time equivalent basis. Since this calculation will yield a smaller number than an actual count of such employees on a specific date, this provision permits additional part-time employees to be included in the allowable executive branch totals.

The basis for determining the actual statutory limitation is the Monthly Report of Civilian Employment published by the Office of Personnel Management. A derivation of the statutory limitation on total employment follows:

Executive branch total employment, as of September 30, 1977 .....	2,789,057
Less:	
U.S. Postal Service.....	- 657,832
Postal Rate Commission .....	- 81
Special employment programs—primarily disadvantaged youth .....	- 23,406
Plus:	
Indirect hires (Department of Defense) .....	83,383
Statutory limitation on total employment:	
Unadjusted for population growth .....	2,191,121

As indicated in the table below, executive branch employment subject to the limitation was and is below the statutory limit, adjusted for growth in the U.S. population, for the 3 years shown.

	September 30		
	1979 actual	1980 actual	1981 estimate
Statutory limitation on total employment, adjusted for population growth.....	2,207,121	2,225,300	2,246,000
Actual and planned employment.....	<sup>1</sup> 2,203,901	<sup>1</sup> 2,199,151	2,189,300
Below limitation .....	3,220	26,149	56,700

<sup>1</sup> Includes an allowable adjustment for part-time employees, added since September 30, 1977, on a full-time equivalent basis.

The estimate for executive branch employment for 1981 is also below the unadjusted statutory limit, i.e., below the September 30, 1977 level (2,191,121) by nearly 2,000.

During the latter half of fiscal year 1980, President Carter imposed a hiring limitation that allowed executive branch agencies to fill not more than one of every two full-time permanent vacancies that occurred after February 29, 1980. The announced goal was to reduce the level of full-time permanent employment that existed on February 29 by 20,000 by the end of fiscal year 1980. As of September 30, 1980, the net reduction in full-time permanent employment under the hiring limitation was 20,700.

#### FULL-TIME EQUIVALENT EMPLOYMENT

Control of Federal civilian employment will shift to a full-time equivalent (FTE) or workyear basis for the entire executive branch beginning with fiscal year 1982.

The FTE controls are designed to accomplish two objectives: (1) to permit improved personnel management, overcoming some of the difficulties under the existing end-of-year control system, and (2) to break down artificial barriers that may have inhibited the employment of permanent part-time workers.

In September 1977, the Office of Management and Budget and the Office of Personnel Management were directed by the President to conduct an experiment in a few agencies for the purpose of testing the ability of the FTE control system to achieve these objectives. Shortly thereafter, the Congress passed the Part-Time Career Employment Act of 1978, which supported the second objective. The agencies selected for the test were given full-time equivalent employment ceilings and, commencing with fiscal year 1979 (October 1, 1978), began to measure and report on their employment in terms of the number of hours worked.

Preliminary findings indicated that, within the initial group of test agencies, progress was being made toward the achievement of both of the experiment's goals. In these agencies, personnel management did improve and more part-time workers were employed. As a result, five cabinet level agencies were placed under FTE controls in 1981, and the remainder of the executive branch will follow in 1982.

**FULL-TIME EQUIVALENT OF TOTAL FEDERAL EMPLOYMENT**

The estimated workyears for the executive branch, excluding employment exempt from ceilings, are:

	Fiscal year		
	1980	1981	1982
Full-time equivalent employment in the executive branch:			
Full-time permanent.....	1,882,300	1,879,600	1,888,600
Other than full-time permanent.....	245,400	253,400	252,400
Total.....	2,127,700	2,133,000	2,141,000

Postal Service employment, which by law is not subject to Presidential control, is excluded.

**FULL-TIME EQUIVALENT OF FULL-TIME PERMANENT EMPLOYMENT**

Table I-1 is a tabulation of full-time equivalent estimates for the major departments and agencies of the executive branch excluding the Postal Service. Temporary employment, (full-time or part-time) as well as part-time permanent and intermittent (work performed on an irregular basis) employment, is also excluded.

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

(Excluding the Postal Service)

(Full-time equivalent basis)

Agency	Fiscal year			Change 1981-82
	1980 actual	1981 estimate	1982 estimate	
Agriculture .....	85,400	86,500	87,000	500
Commerce .....	29,300	32,300	32,700	400
Defense—military functions <sup>2</sup> .....	880,000	865,000	865,000	.....
Defense—civil functions .....	27,700	27,800	27,600	-200
Education .....	6,400	6,100	6,100	.....
Energy .....	19,600	19,700	20,200	500
Health and Human Services .....	136,400	135,700	136,100	400
Housing and Urban Development .....	15,600	16,000	16,300	300
Interior .....	53,800	53,600	55,000	1,400
Justice .....	53,400	54,200	54,400	200
Labor .....	22,100	22,300	22,600	300
State .....	21,800	22,000	22,000	.....
Transportation .....	68,800	68,800	69,100	300
Treasury .....	109,400	110,400	113,600	3,200
Environmental Protection Agency .....	10,700	11,200	11,700	500
National Aeronautics and Space Administration .....	22,600	22,300	22,300	.....
Veterans Administration .....	193,100	195,600	195,800	200
Other:				
General Services Administration .....	32,300	32,200	32,200	.....
International Communication Agency .....	8,000	7,900	7,900	.....
International Development Cooperation Agency .....	5,700	5,700	5,700	.....
Nuclear Regulatory Commission .....	2,800	3,200	3,400	200
Office of Personnel Management .....	6,400	6,200	6,200	.....
Panama Canal Commission .....	7,700	8,300	8,400	100
Small Business Administration .....	4,400	4,700	4,700	.....
Tennessee Valley Authority .....	16,500	16,600	16,600	.....
Miscellaneous .....	42,400	43,300	44,000	700
Subtotal .....	1,882,300	1,877,600	1,886,600	9,000
Contingencies <sup>3</sup> .....	.....	2,000	2,000	.....
Total .....	1,882,300	1,879,600	1,888,600	9,000

<sup>1</sup> Excludes developmental employees under the worker-trainee opportunity program (WTOP) as well as certain statutory exemptions.

<sup>2</sup> Entries for Department of Defense, military functions do not reflect a technical change in conversion to the FTE system that will result in a decrease of about 25,000.

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

Because a limitation on the hiring of full-time permanent employees has been in effect since March 1980, the 1980 and 1981 workyear levels are quite constrained.

Several agencies show increases from 1981 to 1982, related to workload and/or programmatic considerations as noted below.

- *The Department of Agriculture*—Increases amounting to 500 workyears are planned for; the Farmers Home Administration (increased loan service workload), the Food Safety and Quality Service (inspection and grading of meat, poultry, etc.), the Federal Crop Insurance Corporation (expansion, under new legislation, to all crops and all countries), the Food and Nutrition Service, and the Forest Service.
- *The Department of Commerce*—A planned increase of about 400 workyears is to reduce backlogs in the Patent and Trademark Office; to implement export development activities and the multinational trade negotiations in the International Trade Administration; and for enhancements of the Inspector General's office.
- *The Department of Energy*—A net increase of about 500 workyears is planned. Overall increases of 850 workyears are provided for expanded workload and improved project management of various atomic defense and energy programs. These increases are partially offset by a decrease of 350 workyears for the phaseout of petroleum regulations that will result from the decontrol of oil.
- *The Department of Health and Human Services*—The increase of 400 workyears is primarily for civil rights enforcement, health research and service programs, and management of medicare and medicaid.
- *The Department of Housing and Urban Development*—An increase of 300 workyears to improve the timeliness and quality of housing services is planned.
- *The Department of the Interior*—An increase of 1,400 workyears is distributed throughout the agency to support implementation of the Alaska lands legislation, initiation of the oil and gas leasing program in the National Petroleum Reserve in Alaska, operation of other energy leasing and regulatory programs on Federal lands, and increases in maintenance and visitor safety at national parks.
- *The Department of Justice*—A net increase of 200 workyears is for the Federal Bureau of Investigation, for investigative support and for fingerprint identification activities. Selective decreases are planned in the Law Enforcement Assistance Administration (phaseout of grant programs) and in the U.S. Marshall's Service (for transfer of responsibilities for support of the District of Columbia Superior Court to the District government).
- *The Department of Labor*—A planned increase of 300 workyears reflects the full year effect of personnel to be added in the latter part of 1981, primarily to assure sufficient



workplace health and safety inspections and provision of equal employment opportunity by government contractors.

- *The Department of Transportation*—The largest component of a net increase of 300 workyears is for an additional 200 air traffic controllers to meet growing aviation demands. Other, smaller increases are associated with new enforcement responsibilities involving the regulation of hazardous wastes and for managing an expanding mass transit grant program.
- *The Department of the Treasury*—An increase of 3,200 workyears, nearly all in the Internal Revenue Service for increased staff to: process tax returns, collect revenues under the Crude Oil Windfall Profits Tax Act, continue emphasis on IRS revenue production programs (especially, collection of unpaid tax accounts), and begin the first phase of a major conversion of computers used for processing tax returns in the IRS service centers.
- *The Environmental Protection Agency*—The increase of 500 workyears is for implementation of the newly-enacted Comprehensive Environmental Response Compensation and Liability Act of 1980. The act establishes systems of notification, emergency response, enforcement, liability and compensation for hazardous substance spills and uncontrolled hazardous waste sites. A broad-based cleanup effort will be initiated.
- *The Veterans Administration*—The increase of 200 workyears is for staffing of new medical facilities and for increased debt collection activities.
- *The Nuclear Regulatory Commission*—An increase of nearly 200 workyears is due primarily to an expanded inspection program that will provide a Federal presence at all nuclear power plants that are either operating or under construction. Additional staff will be needed for increased inspection of fuel facilities and shipments of special nuclear materials as well as expanded efforts in waste management.

#### CIVILIAN EMPLOYMENT END-OF-YEAR

This part of the analysis of Federal civilian employment displays employment as of the end of each fiscal year, i.e., the actual or estimated count as of September 30.

Table I-2 shows Government-wide Federal civilian employment, exclusive of the indirect hire component of the statutory limitation, since indirect hire employees (i.e., persons hired under overseas master labor contracts) are not Federal employees. Estimates for indirect hire employment are, however, reflected in a footnote. Information on Postal Service employment (including that of the Postal Rate Commission) is also shown, together with data for the legislative and judicial branches and for active duty military personnel.

Table I-2. TOTAL FEDERAL EMPLOYMENT END-OF-YEAR

Description	September 30		
	1980 actual	1981 estimate	1982 estimate
<b>Executive branch (less Postal Service):</b>			
Full-time permanent.....	1,866,773	1,873,600	1,879,500
Other than full-time permanent .....	266,963	237,400	252,000
Subtotal.....	2,133,736	2,111,000	2,131,500
<b>Postal Service:</b>			
Full-time permanent.....	535,050	532,800	527,000
Other than full-time permanent .....	125,035	127,800	124,300
Subtotal.....	660,085	660,600	651,300
<b>Exempt from ceilings <sup>1</sup>.....</b>	27,535	28,000	28,000
Subtotal, executive branch civilian employ- ment <sup>2 3</sup> .....	2,821,356	2,799,600	2,810,800
<b>Military personnel on active duty: <sup>4</sup></b>			
Department of Defense.....	2,050,127	2,065,400	2,093,600
Department of Transportation (Coast Guard) .....	39,375	39,800	39,500
Subtotal, military personnel .....	2,089,502	2,105,200	2,133,100
<b>Total, executive branch employment .....</b>	<b>4,910,858</b>	<b>4,904,800</b>	<b>4,943,900</b>
<b>Legislative and judicial personnel: <sup>5</sup></b>			
Full-time permanent.....	32,779		
Other than full-time permanent .....	21,998		
Subtotal, legislative and judicial branches .....	54,777		
<b>Grand total .....</b>	<b>4,965,635</b>		

<sup>1</sup> 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.

<sup>2</sup> Excludes indirect hire foreign nationals working under master labor contracts overseas. Actual employment for 1980 was 74,570. Such employment for 1981 is estimated to be 78,300.

<sup>3</sup> For 1981 and 1982, reflects fractional counting of part-time permanent positions, pursuant to the provisions of Public Law 95-437.

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

<sup>5</sup> 1981 and 1982 estimates are not available for the legislative and judicial branches. Also, excludes members and officers of the Congress.

Note: Within the subtotal for executive branch civilian employment, the "other than full-time permanent" entries for 1981 and 1982 include adjustments to account for part-time permanent positions on a fractional basis, as required by the Federal Employees Part-Time Career Employment Act of 1978 (Public Law 95-437).

#### FULL-TIME PERMANENT CIVILIAN EMPLOYMENT END-OF-YEAR

Table I-3 shows actual 1980 full-time permanent employment and estimated 1981 and 1982 employment—as of the end of each fiscal year—for the major departments and agencies of the executive branch. The table also contains an estimate of the anticipated lapse to take account of the fact that, on a Government-wide basis, end-of-year employment has ranged, over the past 10 years, from 0.3% to 2.3% below the budget estimates. The estimates for 1981 and 1982 anticipate lapses of slightly under 0.7% for full-time permanent employment.

Table 1-3. SUMMARY OF FULL-TIME PERMANENT CIVILIAN EMPLOYMENT IN THE EXECUTIVE BRANCH <sup>1</sup>

(Excluding the Postal Service)

(End-of-year basis)

Agency	As of September 30				Change 1981-82
	1979 actual	1980 actual	1981 estimate	1982 estimate	
Agriculture .....	83,899	82,528	87,500	87,500	.....
Commerce .....	29,127	29,270	29,900	30,100	200
Defense—military functions .....	885,990	867,750	865,000	865,000	.....
Defense—civil functions .....	28,592	27,730	27,600	27,600	.....
Education <sup>2</sup> .....	5,639	5,639	6,400	6,100	-300
Energy .....	19,005	19,827	20,200	20,200	.....
Health and Human Services <sup>2</sup> .....	136,306	136,364	135,700	136,100	400
Housing and Urban Development .....	16,101	15,613	15,500	15,800	300
Interior .....	54,343	53,210	55,000	55,000	.....
Justice .....	52,743	53,444	54,200	54,500	300
Labor .....	22,148	22,112	22,600	22,600	.....
State .....	22,130	22,048	22,000	22,400	400
Transportation .....	70,166	68,924	69,300	69,600	300
Treasury .....	109,382	107,463	111,500	114,700	3,200
Environmental Protection Agency .....	10,153	10,678	11,300	11,700	400
National Aeronautics and Space Administration .....	22,633	22,613	22,500	22,500	.....
Veterans Administration .....	193,641	195,255	199,400	199,800	400
Other:					
General Services Administration .....	32,787	32,413	32,200	32,300	100
International Communication Agency .....	8,020	7,997	7,900	7,900	.....
International Development Cooperation Agency <sup>2</sup> .....	5,753	5,614	5,700	5,700	.....
Nuclear Regulatory Commission .....	2,839	3,029	3,300	3,400	100
Office of Personnel Management .....	6,276	6,235	6,200	6,200	.....
Panama Canal Commission .....	11,666	7,673	8,400	8,300	-100
Small Business Administration .....	4,372	4,408	4,700	4,700	.....
Tennessee Valley Authority .....	17,065	16,523	16,500	16,500	.....
Miscellaneous .....	42,615	42,413	44,100	44,300	200
Subtotal .....	1,893,391	1,866,773	1,884,600	1,890,500	5,900
Contingencies <sup>3</sup> .....			2,000	2,000	.....
Subtotal .....	1,893,391	1,866,773	1,886,600	1,892,500	5,900
Expected lapse .....			-13,000	-13,000	.....
Total .....	1,893,391	1,866,773	1,873,600	1,879,500	5,900

<sup>1</sup> Excludes developmental employees under the worker-trainee opportunity program (WTOP) as well as certain statutory exemptions.<sup>2</sup> The 1979 entries for these agencies are allocations based on the employment of the agencies that preceded them.<sup>3</sup> Subject to later distribution.

## PERSONNEL COMPENSATION AND BENEFITS

Direct compensation of the 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. Related compensation in the form of personnel benefits consist primarily of the Government's share (as employer) of health insurance, term life insurance, and Federal retirement and old-age survivors' disability insurance.

Additional benefits include uniform allowances (when paid in cash), cost-of-living and overseas quarters allowances, and, in the case of uniformed military personnel, reenlistment bonuses.

Obligations for civilian personnel compensation and benefits in 1982 are projected to reach \$61.0 billion, excluding the Postal Service. The estimated costs for civilian and military pay raises for 1982 are covered by lump sum allowances in the 1982 Budget.

The administration is again proposing comprehensive legislation to reform and improve Federal compensation systems and procedures. The proposal would broaden the principle of comparability and relate Federal compensation more closely to compensation in the non-Federal sector. Comparability as currently defined would require an October 1981 pay increase estimated at 13.5%. Under the proposed changes the comparability increases would be an estimated 9.1% for military employees and 8.6% for civilian employees. As part of an overall effort to restrain inflation, the budget estimates reflect a further reduction in the civilian employee pay raise, to 5.5%.

As required by law, the Commission on Executive, Legislative, and Judicial Salaries has submitted recommendations to the President on salaries for Senators, Representatives, Federal judges, cabinet officers and other agency heads, and certain other officials in the executive, legislative, and judicial branches. The statute requires the President to set forth, in the budget next submitted by him after receipt of the report of the Commission, his recommendations for adjustment of these salaries. These recommendations appear in Part VII of the 1982 Budget Appendix.

Table I-4. PERSONNEL COMPENSATION AND BENEFITS

[In millions of dollars]

Description	1980 actual	1981 estimate	1982 estimate
<b>Civilian personnel costs:</b>			
Executive branch: <sup>1</sup>			
Direct compensation.....	43,928	47,878	49,174
Personnel benefits <sup>2 3</sup> .....	7,615	8,637	8,883
Subtotal.....	51,543	56,515	58,057
Legislative and judiciary: <sup>4</sup>			
Direct compensation.....	786	884	939
Personnel benefits <sup>3</sup> .....	75	87	93
Subtotal.....	861	971	1,032
Allowance for civilian pay raise <sup>7</sup> .....			1,901
Total, civilian personnel costs.....	52,404	57,486	60,990
<b>Military personnel costs: <sup>5</sup></b>			
Direct compensation.....	26,958	31,404	32,371
Personnel benefits <sup>6</sup> .....	1,989	2,504	2,640
Subtotal.....	28,947	33,908	35,011
Allowance for military pay raise.....			2,828
Total, military pay costs.....	28,947	33,908	37,839
<b>Grand total, personnel costs.....</b>	<b>81,351</b>	<b>91,394</b>	<b>98,829</b>

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

<sup>2</sup> In addition to the employing agency's contributions for the costs of life and health insurance, and retirement, 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 \$2,788 million in 1980 and are estimated to be \$2,785 million in 1981 and \$3,298 million in 1982.

<sup>3</sup> Excludes transfers for interest on unfunded liability for executive, legislative, and judiciary branches, which amounted to \$8,444 million in 1980, and are estimated to be \$9,667 million in 1981 and \$10,872 million in 1982, and, for 1982 — \$712 million for the estimated effect of the COLA adjustment proposal.

<sup>4</sup> Excludes members and officers of Congress.

<sup>5</sup> Excludes reserve components.

<sup>6</sup> Excludes payments to current military retirees which amounted to \$11,920 million in 1980 and are estimated to be \$13,851 in 1981 and \$16,049 in 1982.

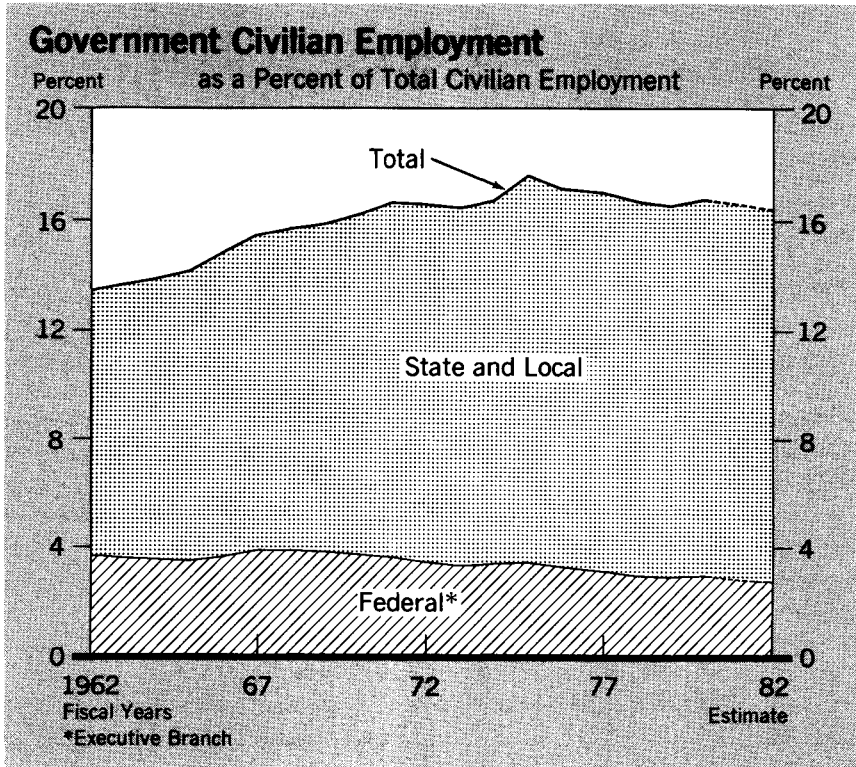
<sup>7</sup> The allowances assume some absorption.

GOVERNMENT EMPLOYMENT AND LABOR FORCE COMPARISONS

As shown on the following chart, Government employment—Federal, State, and local—will comprise about 16.4% of the total employed civilian labor force in 1982.

Within this segment, Federal civilian employment in the executive branch accounts for 2.8% of the total employed civilian labor force in 1982, down from a high of 3.8% in 1968.

The percentage of the total employed civilian labor force attributable to State and local government has grown from 9.6% in 1962 to 13.6% in 1982.



### GOVERNMENT EMPLOYMENT AND POPULATION COMPARISONS

As illustrated in the following chart and in table I-5, the Federal share of total governmental employment has declined significantly over the last three decades, from 38.4% in 1952 to an estimated 17.0% in 1982. Employment for all government has been rising steadily due to increases in State and local government employment.

The ratio of Federal civilian employment to the total U.S. population is expected to be 12.4 per thousand in 1982.

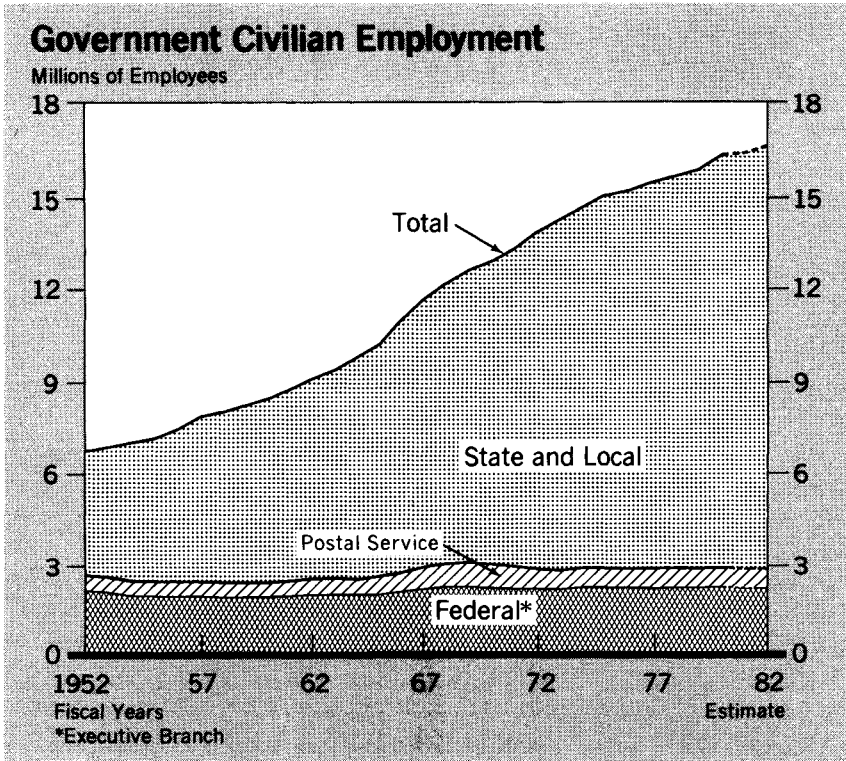


Table I-5. GOVERNMENT EMPLOYMENT AND POPULATION, 1952-82

Fiscal year	Government employment				Population	
	Federal executive branch <sup>1</sup> (thousands)	State and local governments (thousands)	All governmental units (thousands)	Federal as percent of all governmental units	Total United States (thousands)	Federal employment per 1,000 population
1952.....	2,574	4,134	6,708	38.4	157,553	16.3
1953.....	2,532	4,282	6,814	37.2	160,184	15.8
1954.....	2,382	4,552	6,934	34.4	163,026	14.6
1955.....	2,371	4,728	7,099	33.4	165,931	14.3
1956.....	2,372	5,064	7,436	31.9	168,903	14.0
1957.....	2,391	5,380	7,771	30.8	171,984	13.9
1958.....	2,355	5,630	7,985	29.5	174,882	13.5
1959.....	2,355	5,806	8,161	28.8	177,830	13.2
1960 <sup>2</sup> .....	2,371	6,073	8,444	28.1	180,671	13.1
1961 <sup>2</sup> .....	2,407	6,295	8,702	27.7	183,691	13.1
1962.....	2,485	6,533	9,018	27.6	186,538	13.3
1963 <sup>3</sup> .....	2,490	6,834	9,324	26.7	189,242	13.2
1964 <sup>3</sup> .....	2,469	7,236	9,705	25.4	191,889	12.9
1965.....	2,496	7,683	10,179	24.5	194,303	12.8
1966.....	2,664	8,259	10,923	24.4	196,560	13.6
1967.....	2,877	8,730	11,607	24.8	198,712	14.5
1968.....	2,951	9,141	12,092	24.4	200,706	14.7
1969 <sup>4</sup> .....	2,980	9,496	12,476	23.9	202,677	14.7
1970 <sup>2</sup> .....	2,944	9,869	12,813	23.0	204,878	14.4
1971 <sup>2</sup> .....	2,883	10,372	13,255	21.8	207,053	13.9
1972.....	2,823	10,896	13,719	20.6	208,846	13.5
1973.....	2,775	11,286	14,061	19.7	210,410	13.2
1974.....	2,847	11,713	14,560	19.6	211,901	13.4
1975.....	2,848	12,114	14,962	19.0	213,559	13.3
1976.....	2,832	12,282	15,114	18.7	215,152	13.2
1977 <sup>5</sup> .....	2,789	12,704	15,493	18.0	217,422	12.8
1978.....	2,820	13,050	15,870	17.8	219,247	12.9
1979.....	2,823	13,308	16,131	17.5	221,180	12.8
1980 <sup>2</sup> .....	2,821	13,445	16,266	17.3	<sup>a</sup> 222,672	12.7
1981 (est.) <sup>2</sup> .....	<sup>7</sup> 2,800	.....	.....	<sup>e</sup> 17.1	<sup>a</sup> 224,744	12.6
1982 (est.).....	<sup>7</sup> 2,811	.....	.....	<sup>e</sup> 17.0	<sup>a</sup> 226,883	12.4

<sup>1</sup> 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.

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

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

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

<sup>5</sup> Data for 1952 through 1976 are as of June 30; for 1977 through 1981, as of Sept. 30.

<sup>6</sup> The percentages shown for these years are consistent with reasonable estimates based on recent trends in State and local government.

<sup>7</sup> Reflects fractional counting of part-time permanent positions, pursuant to the provisions of Public Law 95-437.

<sup>a</sup> U.S. population data for 1980-1982 are the latest available from the Census Bureau. Revised estimates, based on the 1980 Census, were not available in time for publication in this analysis.



---

**PART 3**

**SELECTED**

**FEDERAL PROGRAMS**

---

289

## INTRODUCTION

*Part 3* furnishes Government-wide program and financial information in selected program areas—civil rights and research and development, designated J and K.

*Special Analysis J* (Civil Rights Activities) summarizes Federal spending for 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.

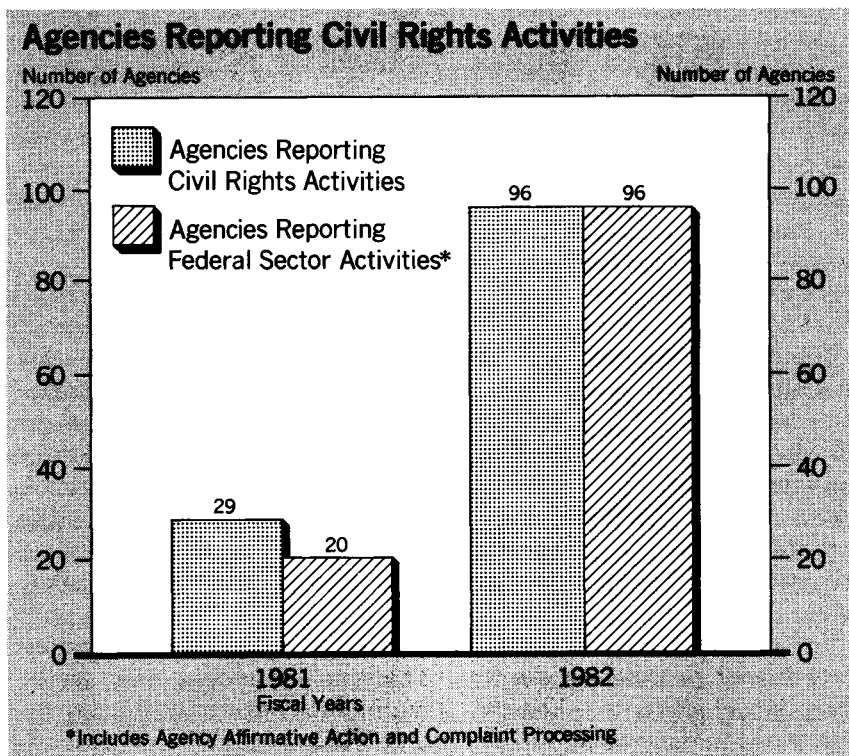
SPECIAL ANALYSIS J  
CIVIL RIGHTS ACTIVITIES

COVERAGE AND SCOPE

The Federal Government enforces or administers over 130 statutes and Executive orders prohibiting discrimination based on race, color, sex, national origin, handicap, and social or economic status. Discrimination is prohibited in major areas of American life—employment, housing, voting, education, public accommodations, access to credit, and jury service. In addition, discrimination may not occur whenever Federal financial assistance of any kind is involved e.g., health services, forestry projects, and public transportation.

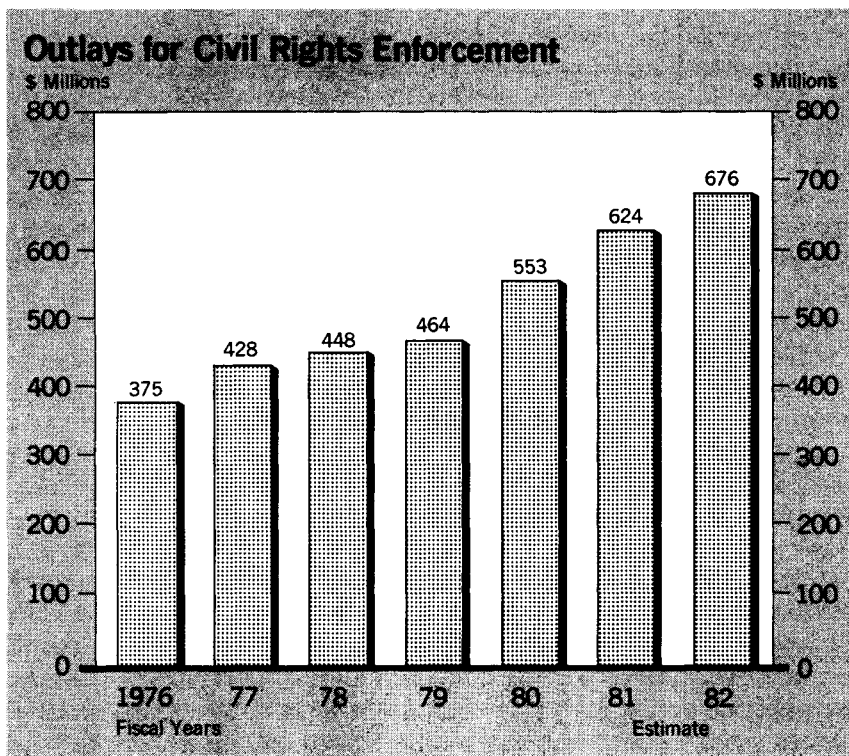
Unfortunately, many of these laws are duplicative, or agency enforcement jurisdiction overlaps. Therefore, in recent years (especially since 1977), the Federal Government has concentrated on improving management of civil rights resources and program efforts by eliminating waste and duplication and ensuring consistent interpretation of the laws and Executive orders.

Illustrative of this effort is the decision by the Director of the Office of Management and Budget (OMB) to establish a unit within his office to oversee the Federal civil rights effort. This unit, through both the budget and the management oversight functions of OMB, addresses crosscutting issues that affect the spectrum of Federal civil rights efforts. During 1980, the OMB Civil Rights Office substantially revised OMB's instructions to agencies for the preparation of budget estimates to require, for the first time, detailed performance as well as expenditure information on civil rights activities. This resulted in 67 more departments and agencies reporting civil rights expenditures for this special analysis than had previously reported. Seventy-six more agencies reported on their internal equal employment expenditures. As a result of this expanded data base and the unit's oversight activities in 1980, this analysis provides a much more accurate and detailed view of civil rights expenditures and their effects. Performance reporting will be further refined in 1981 to allow for more precise assessments of the cost effectiveness of civil rights activities in the 1983 special analysis.



Another illustration of this effort to manage civil rights resources more efficiently is the emphasis placed on “coordination” and “leadership” of civil rights activity so that one, not several agencies interpret the various laws and Executive orders. For example, in 1978, the Equal Employment Opportunity Commission (EEOC) became the “lead” agency for equal employment through the adoption of Executive Order 12067. Now, when the Departments of Energy or Education want to establish guidelines on how handicapped workers should be accommodated, only EEOC provides official guidance.

Special Analysis J focuses first, on the enforcement of laws prohibiting employment discrimination. Second, the analysis focuses on enforcement of laws prohibiting discrimination in federally assisted programs. In addition, it covers enforcement of Fair Housing and Equal Credit Opportunity laws. Third, the analysis is expanded this year to cover Federal programs that encourage the development of minority and female businesses, and those programs designed to assist communities in complying with civil rights requirements.



### *Employment*

The principal statutes or Executive orders prohibiting employment discrimination are:

- Title VII of the Civil Rights Act of 1964, as amended, which prohibits discrimination based on race, color, religion, sex or national origin by public and private employers, unions, and employment agencies.
- The Age Discrimination in Employment Act Amendments of 1978 (ADEA), which prohibit discrimination against persons aged 40 through 70.
- The Equal Pay Act of 1963 (EPA), which prohibits discrimination in payment of wages based on sex.
- Executive Order 11246, as amended, section 503 of the Rehabilitation Act of 1973, section 402 of the Vietnam Veterans Readjustment Act, which together require Federal contractors to take affirmative action to assure equal employment opportunity regardless of race, color, sex, national origin, religion, handicap, service-connected disability, or Vietnam era military service.

In 1977, the President's Reorganization Project studied the administration of these laws by the 18 Federal departments and agencies that had major equal employment responsibilities. The study identified major problems of duplication and inconsistency in

standards and procedures; lack of accountability; burdensome paperwork requirements, and inconsistent compliance, investigation and enforcement procedures. Congress responded by approving Reorganization Plan No. 1, effective May 5, 1978. The Plan reduced the number of departments and agencies responsible for equal employment from 18 to 3, and established accountability mechanisms as depicted in table J-1.

Table J-1. COMPARISON OF EQUAL EMPLOYMENT AUTHORITIES BEFORE AND AFTER REORGANIZATION PLAN NO. 1

Equal Employment Authorities		Agency	
Program	Employees covered	Before	After
Title VII.....	Private and public non-Federal employers and unions.	EEOC.....	EEOC
Equal Pay Act, Age Discrimination in Employment Act.	Private and public non-Federal employers and unions.	Labor (Wage and Hour) ...	
Title VII, Executive Order 11478, Equal Pay Act, Age Discrimination in Employment Act, Rehabilitation Act.	Federal Government.....	Civil Service Commission ...	
Coordination of all Federal equal employment programs.*	.....	EEOC.....	
Vietnam Veterans Readjustment Act, Rehabilitation Act.	Federal contractors.....	Labor (OFCCP).....	
Executive Orders 11246, 11375.....	Federal contractors.....	Commerce, Defense, Energy, EPA, GSA, HHS, ED, HUD, Interior, SBA, DOT, Treasury.	Labor (OFCCP)
Title VII, Executive Order 11246, Selected Federal Grant Programs.	Public non-Federal employers. Federal contractors and grantees.	Justice.....	Justice

\* A number of Federal grant statutes prohibit employment discrimination, or include other non-discrimination provisions having equal employment implications. Any interpretations relating to employment by agencies enforcing these statutes must be coordinated with the EEOC.

In addition, Executive Order 12067 assigned the Equal Employment Opportunity Commission (EEOC), responsibility for eliminating duplication, conflict, and inconsistency by developing uniform standards, regulations, definitions, and procedures. Since the Executive order was issued, EEOC has reviewed more than 130 proposed issuances to assure consistency and clarity. These reviews have led to significant increases in:

- Joint issuances by agencies providing uniform guidance to employers covered by more than one statute;
- Multiagency use of common reporting forms and other interagency data sharing which eliminates duplication and reduce reporting burdens on the public; and
- Agency sharing of data on complaints and findings of discrimination to eliminate duplicative reviews and investigations.

During 1980, the EEOC surveyed over 1,300 employers to obtain their recommendations on current EEO enforcement.

*Federal Employment.*—Each Federal department and agency is responsible for taking affirmative action to prevent discrimination based on race, color, religion, sex, national origin, age, or handicap.

In addition to EEOC's lead responsibility to coordinate equal employment opportunity policies and procedures under Reorganization Plan Number 1, the Office of Personnel Management (OPM) is responsible, under the Civil Service Reform Act, for coordinating agency implementation of the Federal Equal Opportunity Recruitment Program (FEORP). FEORP requires agencies to make special efforts to increase the number of minorities and women applying for positions where they are underrepresented.

Significant progress has been made in making the requirements applying to Federal Government and private employers consistent. Since implementation of Reorganization Plan Number 1, for example, the Uniform Guidelines on Employee Selection Procedures used by Federal agencies, and the development and implementation of affirmative action plans by Federal agencies now parallel the requirements placed upon private, State, and local employers.

Through application of affirmative recruitment and merit selection principles, the representation of minorities and women in Federal employment has increased steadily without increases in total number of Federal employees. For example, while full-time permanent civilian employment in the Executive branch has decreased by 2.4 percent since 1977, the representation of women and minorities has increased by 2 percent and 2.2 percent respectively.

From October 1, 1976 through March 30, 1980, Federal agencies hired more than 225,000 Vietnam era veterans. During the first half of 1980, Vietnam era veterans represented 20 percent of all Federal hires, compared with 15.5 percent in 1976.

Progress has been made in removing barriers to the employment of handicapped persons. Medical standards unrelated to successful job performance have been eliminated. Procedures for remedying discrimination based on handicap in Federal employment have been established. Legislation authorizing Federal agencies to employ readers and interpreters, and to provide other auxiliary aids for disabled employees has enabled the Federal Government to more fully utilize the skills and qualifications of handicapped persons. Finally, an Executive order was signed that allows agencies to convert mentally retarded and severely disabled employees to permanent positions after two years of successful service.

Steps have been taken to improve the cost effectiveness of Federal discrimination complaint procedures. During 1980, the EEOC initiated a pilot program similar to the rapid charge processing procedures pioneered by EEOC in the private sector. The pilot procedures emphasize early resolution of allegations of discrimina-

tion through informal conference. In the pilot program, 260 out of 400 complaints were closed by the end of the fiscal year. Compared with traditional time-consuming investigations, more complaints were resolved in shorter periods of time to the satisfaction of all parties. For example, charges closed through voluntary settlements and withdrawals increased from 43.3 percent to 60.6 percent, while the percentage of closed cases involving voluntary relief for complainants increased from 22.8 percent to 41.4 percent. Also, the average processing time dropped from an average of 440 days to 100 days. Additionally, the EEOC eliminated a large backlog of Federal complaint appeals that it had inherited.

The military services continue to reflect an increasing number of minorities and women within their ranks. Over 163,000 women serve on active duty as the services strive toward a goal of 254,000 women by 1985. The percentage of minority enlisted personnel approached 30 percent, which is greater than their percentage in the overall population. Minorities and women are participating in ROTC programs in greater numbers and they are being selected for military jobs and positions of greater responsibility. Forty-five minorities and seven women currently hold flag and general rank.

*Private sector equal employment opportunities.*—Since 1977, EEOC has planned and implemented several major improvements in its organization and procedures. Improvements included a new, expedited procedure for resolving charges of discrimination filed under title VII, and increased cooperation with State and local deferral agencies. In addition, EEOC:

- Achieved and sustained a permanent reduction in its backlog of title VII charges. By the conclusion of 1980, 65 percent of the backlog that existed in January 1979, had been eliminated. Settlements of these charges involved over \$36 million in benefits;
- Resolved over 85 percent of the new charges in initial face to face factfinding conferences. The time required to resolve charges of discrimination has been reduced from an average of 2 years to 3 months;
- Closed 17 percent more charges than it received annually. During 1980, EEOC received 45,000 charges and resolved 50,000; and
- Increased the remedies through conciliation from 14 percent to 42 percent. Average benefits increased from \$1,400 per person to \$3,600. During 1980, 29,000 persons received \$43 million in backpay and other financial benefits.

During 1980, EEOC continued its progress in processing title VII charges. It filed 247 suits to enforce title VII, and legal settlements produced \$18 million in financial benefits.

EEOC's first full year of enforcement responsibility for ADEA and the Equal Pay Act (EPA) was 1980. EEOC resolved 5,800



ADEA cases, and filed 53 suits under the Act. There were 1,650 cases resolved under EPA; 314 compliance reviews were initiated by the EEOC; and 93 suits were filed to enforce the Act. Efforts were made to increase productivity further and eliminate the burden and cost of investigating the same charge twice. This included the EEOC's implementation of procedures for processing title VII charges that also allege ADEA or EPA violations.

Major changes have also occurred in enforcement of laws and Executive orders prohibiting discrimination by Federal contractors. Reorganization Plan No. 1 transferred over 1,000 employees from 11 Federal agencies to the Department of Labor's Office of Federal Contract Compliance Programs (OFCCP). Before this consolidation, each agency had its own regulations, interpretations, and procedures. Additional confusion resulted from the Department of Labor's separate enforcement of contractual requirements relating to handicapped workers and disabled and Vietnam era veterans. Since program responsibility was divided among 11 compliance agencies based solely on industry, Federal contractors were often required to deal with three or more compliance agencies. Preconsolidation compliance reviews frequently concentrated on minutia and the petty details of "paper compliance," resolving no major problems while creating an unnecessary workload for Federal contractors.

Since October 1978, OFCCP has developed and trained all personnel in review and investigative procedures that focus on major compliance issues. All contractual equal employment requirements are now handled in a single review. As evidence of this shift in focus, financial settlements recovered for identified victims of discrimination quadrupled during the 2 years following consolidation, or from \$4 million in 1978 to over \$16 million during 1980.

During 1980, OFCCP completed 2,632 compliance reviews and 1,726 complaint investigations. These actions affected personnel policies and practices for approximately 1,050,000 workers. Discriminatory policies or practices were identified in 113 reviews, and appropriate remedies were obtained or are being negotiated. Potential discrimination issues were identified in an additional 467 reviews, and investigations to resolve them are being completed.

Major initiatives by OFCCP to increase cost effectiveness and to decrease the burden of compliance on the public include:

- A program designed to link contractors having employment opportunities with federally funded programs that will train persons in the skills they need. This should increase employment of Vietnam era veterans, minorities, women, and the handicapped, while increasing the cost effectiveness of both the contract compliance and federally assisted training programs.

OFCCP has established 541 linkages benefiting 1,751 employees to date.

- A program to help small contractors comply with equal employment requirements by eliminating inappropriate paperwork and other burdens. OFCCP tested this program in 1980, and will implement it nationwide in 1981.
- Cooperative seminars with private industry designed to promote voluntary compliance with equal opportunity requirements. During 1980, 650 representatives of Federal contractors participated in these sessions.
- A comprehensive compliance manual, which was made available to contractors and the public.
- A major outreach program that brought construction contractors, unions, and civil rights groups together as a committee to recommend changes in OFCCP's procedures for the construction industry. Changes in current OFCCP procedures based on two committee's recommendations will be issued in 1981. Similar cooperation efforts have been completed or are underway with other employers.

The Women's Bureau of the Department of Labor was responsible for yet another initiative. During 1980, it completed a major demonstration project showing that women can successfully perform a wide range of jobs in the coal industry which have traditionally been held by men. The Bureau also made significant improvements in its regional offices which will enhance its ability to identify major developments affecting the economic status of women.

During 1980, the Civil Rights Division of the Department of Justice initiated 23 employment discrimination suits and settled 17 suits through consent decrees. These suits primarily involve alleged patterns and practices of employment discrimination by State and local governments. Settlements negotiated by the Department addressed such problems in State and local governments employing a total of more than 1,150,000 persons.

#### *Nondiscrimination in Federally Assisted Programs*

Four statutes apply to almost all agencies providing Federal financial assistance: title VI of the 1964 Civil Rights Act; title IX of the Education Amendment of 1972, as amended; section 504 of the Rehabilitation Act of 1973, as amended; and the Age Discrimination Act of 1975. These laws are enforced by each Federal agency granting financial assistance. In addition, an agency may be responsible for enforcing an antidiscrimination statute that applies only to its programs. For example, section 401 of the Energy Reorganization Act of 1974 prohibits sex discrimination in Department

of Energy programs not covered by any other sex discrimination prohibition.

Until recently, there were no procedures to ensure that all of these statutes were interpreted uniformly and enforced consistently. No agency was responsible for ensuring that interpretations of these statutes were consistent with other civil rights laws. As previously mentioned, in 1978 EEOC was designated as the overall coordinator of the employment discrimination aspects of all of these statutes. To close the gap in the nonemployment areas, Executive Order 12250 was issued in 1980. It designated the Attorney General as the overall coordinator for the interpretation and implementation of titles VI and IX, section 504, and all other statutes prohibiting discrimination in federally assisted programs or activities based on race, color, national origin, handicap, religion, or sex. Discrimination based on age could not be included because the statute assigns this authority to the Department of Health and Human Services (HHS).

Table J-2. COMPARISON OF EQUAL OPPORTUNITY AUTHORITIES (OTHER THAN EMPLOYMENT) BEFORE AND AFTER EXECUTIVE ORDERS

Program/scope	Enforcement agencies	Coordination	
		Before	After
Title VI (federally assisted programs).....	37 agencies.....	DOJ.....	DOJ
Section 504 (federally assisted programs) .....	All agencies.....	HEW.....	
Title IX (federally assisted education programs)....	28 agencies.....	None.....	
126 program specific provisions (individual assistance programs).	15 agencies.....	None.....	
Age Discrimination Act (federally assisted programs).	37 agencies.....	HHS.....	HHS
Title VIII (housing) .....	15 agencies.....	HUD.....	HUD*
Equal Credit Opportunity Act (credit) .....	13 agencies.....	FRB.....	FRB

\*Prior to issuance of the Executive order, HUD was designated the coordinating agency for title VIII but lacked the authority necessary to assure meaningful coordination.

The Departments of Education and Justice have the primary responsibility for assuring nondiscrimination in education programs and activities.

In 1980, the Office for Civil Rights (OCR) of the Department of Education (ED) received 3,354 complaints of discrimination and 2,750 complaints were resolved. About 121,000 persons benefited as a result of the resolutions. During 1981, it is anticipated that 4,090 complaints will be received, 4,452 will be resolved and 201,000 persons will benefit.

During 1980, the Department initiated 96 and closed 208 compliance reviews. Estimates for 1981 indicate that 120 reviews will be initiated and 221 will be closed.

OCR also helps recipients to comply voluntarily with civil rights laws and regulations. ED estimates that 9.5 million persons will benefit from the results of this technical assistance.

During 1980, Justice continued to focus on the desegregation of school districts in nonsouthern metropolitan areas, reinforcing the requirements for full desegregation of northern and western school districts that had previously practiced unlawful segregation. This was in addition to its efforts to enforce court-ordered desegregation in Southern States. Other major litigation involves desegregation of higher education in Mississippi and Louisiana. Justice is defending the Department of Education's efforts to enforce the law regarding higher education systems in North Carolina, Maryland, and Georgia. In addition, Justice is also suing two universities alleging the denial of equal educational and athletic opportunities for female students.

During 1980, the Department of Justice's coordination unit assisted two major departments in making major program improvements. Previously, each subunit of the Departments of Energy and Labor was individually responsible for enforcing civil rights requirements regarding grants that they awarded. This resulted in considerable duplication and inconsistency. Now, both departments have established central offices to enforce these requirements regarding all grants awarded by these agencies. In addition, the Department of Labor is developing a comprehensive regulation detailing requirements of all applicable civil rights laws. This will enable recipients of Federal financial assistance to find, in one document, requirements that were previously scattered throughout several regulations.

During 1981, Justice will continue to address the problems that led to the issuance of the Executive order enhancing its coordination responsibility. It will work to centralize enforcement responsibility in agencies where it remains diffused among subunits. Responsibility for enforcement among agencies will be more clearly divided, so that recipients of Federal financial assistance are not subject to compliance activities of several different agencies. Guidelines and procedures requiring Federal agencies to develop consistent regulations will be issued, and other steps will be taken to assure consistency in enforcement actions, investigations, and compliance reviews among agencies. The Department of Justice is also developing recordkeeping, reporting, and data sharing requirements to increase cooperation among agencies, and reduce unnecessary burdens on grantees.

#### *Fair Housing*

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 provision of brokerage services. The Department of Housing and Urban Development (HUD)

investigates complaints alleging such discrimination, and attempts to resolve violations of the Act through informal conference, conciliation, and persuasion. The Department of Justice files suit to enjoin patterns and practices of discrimination prohibited by the Act. Other Federal departments and agencies are responsible for administering their housing and urban development programs in a manner that affirmatively promotes fair housing. Like the areas of employment and federally assisted programs, there have been significant advances in improving cost effectiveness and eliminating duplication in fair housing enforcement.

During 1980, HUD initiated three major programs to increase its cost effectiveness:

- Under the Act, complaints are referred to State and local fair housing agencies with statutory authority substantially equivalent to the Act. HUD has implemented a program of technical and financial assistance which will increase the number of referral agencies from 32 to 83 by 1982. This will allow more complaints to be handled at the State and local level.
- HUD's new "rapid response" procedures significantly shortened the time required to process complaints by focusing on early discussion and resolution of issues. Based on the success of these procedures in 5 regions, HUD will extend them to its other 5 regions in 1981.
- In 5 of its 10 regions, HUD formed systemic teams to address complaints of patterns and practices of discrimination. This approach will be extended to the other 5 regions in 1981.

During 1980, HUD received 3,039 complaints and closed 2,890. There were 494 successful conciliations out of 703 attempts to resolve complaints through conciliation. Resolutions generally included actions to eliminate any discriminatory practices found as a result of the complaint, as well as relief for individual complainants.

During 1981, HUD will begin to implement a new Executive order assigning it leadership and coordinating responsibility for Fair Housing similar to the EEOC's for equal employment opportunity. HUD will require that agencies develop consistent regulations to assure that their programs affirmatively further the purposes of the Fair Housing Act. HUD will also complete issuance, during 1981, of a full set of substantive title VIII regulations that will, for the first time, provide authoritative guidance to the public on the requirements of the Fair Housing Act. These actions will eliminate duplication and inconsistencies in the fair housing efforts of Federal agencies, and promote more uniform application of the Act by state and local jurisdictions.

During 1980, the Department of Justice, the other major agency responsible for fair housing, filed several suits alleging pattern and practice violations of the Act. These suits alleged prohibited prac-

tices such as refusal to sell or rent housing based on race, sex, or religion; zoning to exclude housing because of the race of potential residents; and failure to count the income of women on the same basis as the income of men in determining whether to make housing available to applicants.

A major obstacle still remains to cost effective enforcement of the Act. Neither HUD nor Justice has the authority to seek legal or other sanctions to enforce the rights of individuals under the Act when conciliation fails. Meaningful sanctions would greatly enhance HUD's ability to negotiate voluntary remedies.

#### *Equal Credit Opportunity*

More serious resource efficiency problems are posed by the present structure for enforcing the Equal Credit Opportunity Act of 1974. This Act prohibits discrimination in all aspects of credit transactions. Lending institutions cannot discriminate because of an individual's race, color, national origin, sex, marital status, or derivation of all or part of their income from public assistance. This Act vests enforcement responsibility in 13 different departments and agencies. Information submitted by the agencies themselves indicates that very few complaints under the Act receive more than perfunctory attention, and that resources devoted to enforcing the Act are scattered too widely to be effective.

During 1981, authority for coordinating enforcement of this Act will be reexamined. In addition, an in-depth assessment will be made of the resources expended on enforcing the Act and the results obtained. Reduction in the number of agencies presently responsible for enforcing the Act and reassignment of coordination responsibility will be seriously considered.

#### *Voting*

The Voting Rights Act of 1965 prohibits discrimination in registration and voting based on race, color, membership in a language minority group, or age. The Act also requires that jurisdictions submit all proposed changes in voting practices or procedures to either the U.S. District Court for the District of Columbia or the Attorney General for review. During 1980, Justice received 2,422 submissions, involving 7,312 voting changes. These figures represent an increase over 1979 of 26.5 percent and 113.8 percent, respectively. Justice objected to 32 proposed changes, including a redistricting plan that would have guaranteed a white majority in the Selma, Ala., city council.

#### FEDERAL PROCUREMENT INITIATIVES

Federal procurement totals \$100 billion per year. Several statutes and Executive orders require departments and agencies to

encourage increased participation by minority and women-owned businesses in Federal contracting and subcontracting. Diversification of the supplier base stimulates competition, increases productivity, creates jobs and leads to long-term cost savings critical to America's economic health. The Office of Federal Procurement Policy (OFPP) within OMB coordinates these efforts by working closely with the Minority Business Development Agency (MBDA) at Commerce and the Small Business Administration (SBA).

Significant accomplishments in furthering utilization of minority and women-owned businesses include:

- Each Federal agency with procurement authority has established an Office of Small and Disadvantaged Business Utilization.
- All firms with Federal contracts exceeding \$10,000 in value are required to make efforts to include small businesses and those owned by socially and economically disadvantaged persons (largely minority) in all aspects of contract work. Those with contracts exceeding \$500,000 in value are required to develop written plans and percentage goals for subcontracting with minorities. A consolidated form was developed to provide an efficient cost-effective means for collecting information.
- Federal loans, loans guarantees, and grants to minority business enterprises by SBA have increased 110 percent from \$850 million in 1977 to \$1.8 billion in 1979. In 1979, SBA made \$163 million in direct loans and \$240 million in guaranteed loans to socially and economically disadvantaged individuals. For 1980, these figures were \$172 million for direct loans and \$261 million for guaranteed loans. SBA is also targeting direct and guaranteed loans to socially and economically disadvantaged persons, the handicapped, and women. Under section 8(a) of the Small Business Act, SBA will make available up to 100 percent guaranty loans to recipients of section 8(a) contracts. MBDA coordinates Federal minority business development programs with specific emphasis on enterprise development, policy and market development and research and information. For 1982, the MBDA budget of \$65 million will permit it to continue its existing services and focus on assisting medium and larger sized minority firms to diversify and strengthen their business potential.
- Procuring agencies are required to set procurement goals for utilization of minority-owned businesses as part of a comprehensive goal setting process that includes utilization of goals for women business owners, small business owners and Labor Surplus Areas (LSA) businesses also. SBA, MBDA, and OFPP cooperated with the agencies in this process. As a result, awards of contracts to minority-owned businesses rose from \$1.1 billion, or 1 percent of total procurements in 1977, to \$3

billion or 3 percent of total 1980 procurements. For 1981, the goal is \$4.2 billion. If this rate can be maintained, the goal of reaching 10 percent by 1990, endorsed by the White House Conference on Small Business and sanctioned by President Carter, can be achieved. Next year, the goal setting process will be refined further and institutionalized as part of the OMB budget process.

- Executive Order 12138, issued on May 18, 1979, required greater involvement of women-owned businesses in Federal procurement. As a result of this and other efforts to increase involvement of women in Federal (procurement) total contracts awarded to female owned firms increased from \$40.5 million in 1977 to over \$212 million in 1980. The SBA's Office of Women Business Enterprise is responsible for coordinating efforts to provide management and financial assistance and to increase utilization of women business enterprises throughout the Government.
- Standardized efforts to increase utilization of minority, women, handicapped, and socially and economically disadvantaged entrepreneurs will be included in the Uniform Procurement System (UPS) now in preparation under the leadership of OFPP. The UPS will also simplify the procurement process making significant management improvements to expedite the acquisition and distribution of goods and services.

Table J-3. CIVIL RIGHTS OUTLAYS BY DEPARTMENT AND AGENCY

(In millions of dollars)

	1980 actual	1981 estimate	1982 estimate
Department of Agriculture.....	15.0	16.4	16.4
Department of Commerce.....	6.2	8.5	9.2
Department of Defense.....	127.6	136.9	146.3
Department of Education.....	40.5	43.5	51.1
Department of Energy.....	3.9	5.2	6.0
Department of Health and Human Services.....	32.5	36.1	44.9
Department of Housing and Urban Development.....	16.8	28.5	27.4
Department of the Interior.....	11.2	16.7	18.8
Department of Justice.....	33.0	37.0	40.0
Department of Labor.....	56.6	60.7	59.2
Department of State.....	1.6	1.8	1.9
Department of Transportation.....	9.6	11.8	12.5
Department of the Treasury.....	9.7	11.2	12.1
Equal Employment Opportunity Commission.....	*130.8	*143.3	*156.3
Commission on Civil Rights.....	11.6	12.0	13.9
Office of Personnel Management.....	4.4	4.5	6.2
Small Business Administration.....	2.2	2.4	2.9
All other Executive agencies.....	<sup>1</sup> 39.6	<sup>1</sup> 47.1	<sup>1</sup> 51.1
(U.S. Postal Service).....	<sup>2</sup> (27.7)	<sup>2</sup> (30.1)	<sup>2</sup> (32.7)
(Legislative Branch—GAO, GPO).....	<sup>2</sup> (1.3)	<sup>2</sup> (.5)	<sup>2</sup> (.6)
<b>Total.....</b>	<b>552.8</b>	<b>623.6</b>	<b>676.2</b>

\*Estimated total internal equal employment opportunity outlays are not included in EEOC's outlay figures as in previous special analyses. Actual outlays are now included in each agency's total.

<sup>1</sup> Includes outlays by 29 agencies.

<sup>2</sup> U.S. Postal Service and Legislative Branch outlays appear in the Annexed Budget and are included here for memorandum purposes only.



## SPECIAL ANALYSIS K

### RESEARCH AND DEVELOPMENT

This analysis summarizes the funding of research and development (R. & D.) across all departments and agencies. It consists of two parts. The first highlights the R. & D. programs and trends in the 1982 budget. The second describes in more detail the R. & D. programs of the 15 agencies whose 1982 obligations account for 99% of total Federal funding for R. & D.

The Federal Government does not budget separately for R. & D. Rather, R. & D. programs are reviewed primarily in the context of the missions of individual agencies and funded on the basis of their importance in meeting those missions. However, during the budget process, the total Federal support for R. & D. and particularly for basic research is reviewed and adjustments are made to insure that the overall level of support is consistent with the Federal role in advancing science and technology in the national interest.

Federal R. & D. ranges from support for basic research to discover new scientific knowledge and applied research to use scientific knowledge in meeting specific needs to the development and demonstration of specific devices, systems or methods. These activities meet needs in three broad categories:

- Direct Federal needs—where the Government is the primary user of the R. & D. (e.g., national defense).
- General economic and social needs—where the major responsibility lies with the Government because other sectors do not have sufficient incentive or resources to make adequate investments (e.g., basic research).
- Specific national needs—where the Government augments private sector investments to accelerate R. & D. in a particular area of national concern (e.g., energy R. & D.).

#### PART I. HIGHLIGHTS AND TRENDS

The 1982 budget reaffirms the Administration's commitment to provide for growth in the support of basic research as an investment in the Nation's long-term economic growth. Obligations for the conduct of basic research are estimated to be \$5.9 billion in 1982. This represents an increase of \$739 million, 14.4% over the 1981 dollar level, or 4.3% growth above projected inflation.

Obligations for the conduct of all R. & D. (including basic research) and R. & D. facilities are estimated to total \$44.2 billion in 1982, an

increase of \$7.1 billion or 18.9% over 1981. Obligations for R. & D. facilities are estimated to be \$2.4 billion in 1982.

Table K-1. TOTAL FEDERAL FUNDING FOR CONDUCT OF R. & D. AND RELATED FACILITIES

(In billions of dollars)

	Obligations			Outlays		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Conduct of R. & D.....	31.7	35.2	41.7	30.4	34.0	39.6
R. & D. facilities.....	1.6	1.9	2.4	1.5	1.9	2.3
<b>Total.....</b>	<b>33.2</b>	<b>37.1</b>	<b>44.2</b>	<b>31.9</b>	<b>35.9</b>	<b>42.0</b>

### CONDUCT OF RESEARCH AND DEVELOPMENT

The 1982 budget includes \$41.7 billion in obligations for the conduct of R. & D., an increase of \$6.5 billion over 1981. Included within this total is support for the conduct of basic research, but not the funding for R. & D. facilities which is reported separately in this analysis.

Table K-2. CONDUCT OF RESEARCH AND DEVELOPMENT BY MAJOR DEPARTMENTS AND AGENCIES

(In millions of dollars)

Department or agency	Obligations			Outlays		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Defense-military functions.....	13,943	16,226	20,033	13,451	15,874	18,925
National Aeronautics and Space Administration.....	5,084	5,422	6,589	4,711	5,130	6,207
Energy.....	4,737	5,167	5,642	4,682	4,932	5,734
Health and Human services.....	3,790	3,964	4,285	3,518	3,676	3,964
(National Institutes of Health).....	(3,182)	(3,350)	(3,596)	(2,954)	(3,163)	(3,397)
National Science Foundation.....	888	1,015	1,157	837	926	1,027
Agriculture.....	687	775	871	659	754	854
Interior.....	438	465	496	453	465	485
Transportation.....	374	413	474	377	387	424
Commerce.....	341	365	411	355	375	405
Environmental Protection Agency.....	348	364	345	388	343	347
Labor.....	215	153	330	150	251	303
Nuclear Regulatory Commission.....	190	216	232	179	208	223
Agency for International Development.....	119	120	230	106	117	134
Veterans Administration.....	133	147	163	132	140	155
Education.....	132	141	154	123	139	143
All other <sup>1</sup> .....	264	273	324	269	289	320
<b>Total, conduct of R. &amp; D.....</b>	<b>31,682</b>	<b>35,226</b>	<b>41,734</b>	<b>30,389</b>	<b>34,002</b>	<b>39,648</b>

<sup>1</sup> Includes the Departments of Housing and Urban Development, Justice, Treasury, and State; the Tennessee Valley Authority, the Smithsonian Institution, the Corps of Engineers, the Federal Emergency Management Agency, the U.S. Office of Personnel Management, the Library of Congress, the Consumer Product Safety Commission, the Arms Control and Disarmament Agency, the Federal Communications Commission, the Advisory Committee on Intergovernmental Relations, and the Federal Trade Commission.

As shown in table K-2 above, the increase in funding for the conduct of R. & D. is reflected in the 1982 budgets of almost all the

agencies. Included within this increase are additional funds to cover cost increases due to inflation. However, in addition to these cost increases, the 1982 budget would provide a real growth on the order of 8.0% over 1981 in governmentwide funding for R. & D.

Highlights of the programs of major R. & D. agencies are presented below:

*Department of Defense.*—Obligations for total conduct of R. & D. by the Department of Defense will rise to \$20.0 billion, an increase of \$3.8 billion or 23% over 1981. The total conduct of R. & D. by the Department of Defense will account for approximately half of total Federal funding for R. & D. In addition to providing for anticipated increased costs due to inflation in 1982, the budget provides for significant real growth in defense R. & D. obligations over 1981. This increase is generally across all activities and includes:

- Additional funds for the development of strategic weapons, mainly for the M-X intercontinental ballistic missile, from \$3.2 billion in 1981 to \$4.1 billion in 1982;
- Increased support for the development of various tactical weapon systems, including for example prototypes for new fighter aircraft, antisubmarine helicopters and a new class of attack submarines; and
- Growth in dollar support for basic research by 16% over 1981 consistent with the continuing need to provide the scientific base for meeting future defense needs.

*National Aeronautics and Space Administration.*—Obligations for conduct of R. & D. in NASA are estimated to total \$6.6 billion in 1982, \$1,167 million or 22% over 1981. The budget provides for continued development of the Space Shuttle, and procurement of a fleet of Space Shuttle orbiters to meet national space transportation needs in areas such as space science, communications, remote-sensing of the Earth's environment and natural resources, and defense. It also provides for:

- Initiation of the Venus Orbiting Imaging Radar mission (VOIR) that will be launched in 1986 to obtain fundamental knowledge of the nature and origin of Venus;
- Continued support for major ongoing projects initiated in recent years, e.g., the Space Telescope and the Galileo mission to Jupiter;
- Increased support for projects to enhance significantly the application of space technology for practical uses including ways to use space technology to improve the understanding of the Earth's geology, ocean and climate, and its agriculture; and
- New projects in aeronautical R. & D., e.g., development of a Numerical Aerodynamic Simulator to advance the state-of-

the-art of aircraft aerodynamic design through computerized modeling.

*Department of Energy.*—Obligations for the conduct of R. & D. by the department are estimated to total \$5.6 billion, an increase of \$475 million over 1981. Obligations for the support of R. & D. facilities increase sharply from \$1.4 billion in 1981 to \$1.8 billion in 1982.

The R. & D. budget covers a broad mix of programs to serve the various objectives of the department:

- In the national defense program, increased support is provided for the development of nuclear weapons, and of new technologies related to monitoring nuclear weapons treaties and safeguarding, storage and disposal of nuclear materials.
- In the general science programs, real growth is proposed for basic research to study fundamental forces and constituents of matter in nuclear and high energy physics.
- In the energy programs of the department, significant real growth is provided for the long-term program of fusion R. & D. and for the buildup of large coal liquefaction and gasification demonstrations, which accounts chiefly for the increase in support for R. & D. facilities in the 1982 budget. Modest increases or reduced funding are proposed for nearer term technologies for which commercial acceptance is expected to be accelerated significantly by the decontrol and rapid rise of energy prices.

*Department of Health and Human Services.*—Obligations for the conduct of R. & D. in the Department of Health and Human Services (HHS) are estimated to total \$4.3 billion in 1982, a \$321 million increase over 1981. The HHS R. & D. programs represent a broad based effort in biomedical and life sciences. The largest component of the HHS budget for R. & D. is the National Institutes of Health (NIH). The 1982 budget proposal for NIH programs maintains a strong national effort in biomedical research, increasing from \$3.4 billion in 1981 to \$3.6 billion in 1982. In 1982, NIH plans to give continued emphasis to basic and applied research in such areas as nutrition, genetic research, diabetes, radiation and other environmental hazards, aging and senile dementia.

*National Science Foundation.*—Obligations for the conduct of R. & D. by the National Science Foundation are estimated to total \$1,157 million in 1982 including \$1,057 million for the support of basic research. This total represents an increase of \$142 million or 14% over 1981. In addition to a large increase in R. & D. facilities funding for upgrading university research instrumentation, the 1982 budget provides for:

- Special emphasis on research support in engineering and computer science as well as in the mathematical and physical sciences; and
- Continuation and buildup of ocean drilling programs that will provide the scientific framework for future resource exploration.

*Interagency R. & D. programs.*—Among the R. & D. programs proposed in the 1982 budget are a number of interagency efforts that illustrate the many areas in which agencies cooperate in research and development to assure effective overall use of Federal funds.

R. & D. plays an important role in increasing industrial productivity and strengthening the Nation's economy. Therefore, the 1982 budget provides for new or expanded programs in several agencies for the economic revitalization of the Nation. The key features of this thrust are:

- The emphasis on governmentwide support for real growth in basic research;
- Increased emphasis through the National Science Foundation on cooperation in research by industrial, university and government scientists;
- Increased support for innovative research in the small high-technology firms; and,
- Initiation of a university research equipment upgrading program at the National Science Foundation. This is complemented by an engineering and computer science training equipment upgrading program as part of the National Science Foundation's science and engineering education effort.

Also contributing to economic revitalization and productivity over the long term are the following three interagency programs:

- *Cooperative automotive research.*—The government/industry program in basic automotive research proposed in 1981 will continue in 1982 with support from both the Government and the automobile industry. The research program, through the joint efforts of industry and government agencies, e.g., Department of Transportation and the National Science Foundation, will contribute to the automotive technologies of the future. The Government share of the costs of the program, provided in the budget of the Department of Transportation for fiscal year 1982, is estimated to be \$17 million, with matching funds to be provided from industry.
- *Experimental computer science.*—Special emphasis will be provided in 1982 by the Department of Defense and the National Science Foundation to strengthen experimental computer science in academic institutions. Computation and communications form a large and growing component of the economic,

intellectual, and military strength of the Nation, and the results of this research will help to maintain U.S. supremacy in these areas in the future. The two agencies are expected to obligate approximately \$19 million in 1982 for this effort.

- *Microelectronics and submicron science and technology.*—Programs of the Department of Defense, the National Science Foundation and the National Bureau of Standards in the field of microelectronics and submicron science and technology, begun in 1980 and strengthened in 1981, will be continued in 1982. These research programs will assist in the further development of submicron technology that is important to the industrial strength and defense of the Nation. This technology is the next step in the development of faster and less expensive electronic devices, as well as applications of other small-scale devices and structures, such as in biomedical and chemical research. Combined obligations for these programs across the three agencies are estimated to total about \$69 million in 1982.

Other significant interagency efforts that are supported in 1982 include:

- *Geological Applications Program (GAP).*—The GAP program represents a significant new initiative in the 1982 budget involving coordinated research activities in the U.S. Geological Survey of the Department of the Interior and the National Aeronautics and Space Administration. Under the GAP program, measurement techniques based on remote sensing developed by NASA will be tested in mineral appraisal projects conducted by the U.S. Geological Survey. NASA and USGS geologists will jointly develop new models and analyze remote sensing and ground truth data to provide an overall evaluation of the utility of space techniques for mineral resource assessment. Obligations for this program are expected to total \$19 million in 1982.
- *Agriculture and resources inventory surveys through aerospace remote sensing (AgRISTARS).*—Five agencies will continue efforts to assess the value of space remote sensing data in two areas: obtaining early warnings and timely quantitative estimates of crop conditions and improving worldwide agricultural production forecasting capabilities. This program features the development of improved yield models using satellite-obtained weather, soil moisture and crop spectral data. The Departments of Agriculture, Commerce, Interior, and NASA and AID are the participating agencies. Total obligations for this program are estimated to be \$54 million in 1982.
- *National Oceanic Satellite System (NOSS).*—In 1982 development of NOSS will continue as a joint effort involving the

National Aeronautics and Space Administration and the Departments of Defense and Commerce. This satellite system will provide global ocean data for use in marine weather forecasting and climate studies, marine transportation, and defense applications. Obligations for this program are estimated to be \$95 million in 1982.

- *Minority research apprenticeship program.*—A joint effort among the National Science Foundation, the National Institutes of Health, the National Aeronautics and Space Administration, the Environmental Protection Agency, and the Departments of Agriculture, Energy, and Defense, this program is intended to stimulate broader interest in minority communities in science and engineering and to establish individual working relationships between high school students and active researchers. In 1980, over 1,300 students participated and over 200 research centers were involved. The participating agencies plan to obligate \$5 million for this program in 1982 to support more than 2,000 students.

#### CONDUCT OF BASIC RESEARCH

Included within the funding for R. & D. is support for the conduct of basic research. Obligations for the conduct of basic research are estimated to increase from \$5.1 billion to \$5.9 billion in 1982, an increase of 14.4%, providing a growth of 4.3% in real terms. The Federal Government continues to support about 70% of the Nation's basic research effort. Research in such fields as chemistry, physics, biology, astronomy, materials, oceanography, and Earth sciences precedes and underlies new inventions, advances in health care, nutrition and agricultural production, many new products of commerce, and new technologies for defense, space, energy, and environmental protection.

Many institutions outside the Federal Government also support basic research, including major corporations, universities and private foundations. However, as a whole, these institutions do not provide sufficient support because of limited resources (as in the case of universities and private foundations) or because the benefits from basic research are long term and of general applicability and cannot be fully captured by individual firms. Therefore, the Federal Government continues to play a key role in the support of basic research in the broad interest of the Nation.

The allocation of funds in the 1982 budget for basic research recognizes the need not only to maintain a vigorous national research effort in all areas of scientific inquiry as provided through programs of the National Science Foundation, but also to strengthen basic research in specific areas of national concern and Government responsibility (e.g., defense). Special emphasis is also being

given in several of the agencies for strengthening basic research in the physical sciences and engineering because of the importance of these areas in industrial productivity and economic revitalization.

Table K-3 summarizes Federal support for the conduct of basic research by agency.

Table K-3. CONDUCT OF BASIC RESEARCH BY MAJOR DEPARTMENTS AND AGENCIES

(In millions of dollars) <sup>1</sup>

Department or agency	Obligations			Outlays		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Health and Human Services .....	1,758	1,887	2,053	1,657	1,742	1,911
(National Institutes of Health) .....	(1,639)	(1,759)	(1,909)	(1,530)	(1,641)	(1,795)
National Science Foundation .....	812	923	1,057	768	842	946
Energy .....	523	591	710	526	586	709
Defense-military functions .....	539	605	704	476	540	632
National Aeronautics and Space Administration .....	559	555	681	519	526	614
Agriculture .....	275	322	367	259	309	362
Interior .....	79	85	99	76	82	96
Smithsonian Institution .....	40	44	53	39	43	50
Commerce .....	29	33	41	32	35	41
Education .....	18	18	24	18	20	23
Veterans Administration .....	14	16	18	15	16	18
Transportation .....		12	17		6	12
Environmental Protection Agency .....	14	15	13	15	17	15
All other <sup>2</sup> .....	21	16	25	20	20	25
<b>Total .....</b>	<b>4,682</b>	<b>5,121</b>	<b>5,861</b>	<b>4,419</b>	<b>4,782</b>	<b>5,452</b>

<sup>1</sup> Amounts reported in this Table are included in Totals for conduct of R. & D.

<sup>2</sup> Includes the Departments of Justice and Labor; the Veterans Administration, the Tennessee Valley Authority, the Federal Emergency Management Agency, the Corps of Engineers, the Federal Trade Commission, and the Library of Congress.

### FUNDING OF R. & D. AT COLLEGES AND UNIVERSITIES

Within the \$41.7 billion proposed for R. & D. in 1982, \$5.1 billion will be obligated by Federal agencies for the conduct of research and development in colleges and universities (including medical schools). More than two-thirds of the direct support of R. & D. (not including funds that flow to colleges and universities through national laboratories or other intermediaries) in these institutions is provided by the Federal Government.

Scientists at universities and colleges are important performers of R. & D., particularly of basic research. Universities and colleges spend more than one-half of all basic research funds in the Nation, with most of the financing being provided by the Federal Government. The Department of Health and Human Services and the National Science Foundation are the largest sponsors.

The real growth in basic research funding provided for in the 1982 budget will significantly benefit academic researchers. The budget also provides special emphasis on industry-university cooperative research to encourage joint efforts by industrial and aca-



demographic scientists in addressing scientific problems of mutual interest.

It is recognized that the effective conduct of research in universities and colleges depends not only on funds provided for research, but also on modern research instrumentation and facilities. Therefore, the 1982 budget provides for a special emphasis, through the National Science Foundation, on upgrading university research instrumentation and facilities. This and other efforts of the Government related to R. & D. facilities are reported in the section on R. & D. facilities.

Table K-4 summarizes Federal R. & D. support at universities and colleges by agency.

Table K-4. FUNDING OF RESEARCH AND DEVELOPMENT IN UNIVERSITIES AND COLLEGES

(In millions of dollars) <sup>1</sup>

Department or agency	Obligations			Outlays		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Health and Human Services.....	2,076	2,185	2,354	1,961	2,007	2,213
(National Institutes of Health).....	(1,897)	(2,011)	(2,159)	(1,779)	(1,857)	(2,042)
National Science Foundation.....	666	761	868	620	708	807
Defense-Military Functions.....	451	528	639	430	503	608
Energy.....	293	312	351	291	310	352
Agriculture.....	221	241	283	206	238	272
National Aeronautics and Space Administration.....	171	188	204	147	169	184
Education.....	65	71	79	55	65	68
Agency for International Development.....	53	60	68	37	44	50
Commerce.....	45	44	44	43	42	43
Interior.....	43	43	44	40	40	42
Environmental Protection Agency.....	47	50	40	31	40	36
Transportation.....	19	20	23	19	18	21
All other <sup>2</sup> .....	41	39	54	37	37	51
<b>Total.....</b>	<b>4,190</b>	<b>4,541</b>	<b>5,053</b>	<b>3,915</b>	<b>4,219</b>	<b>4,747</b>

<sup>1</sup> Amounts reported in the table are included in totals for Conduct of R. & D.

<sup>2</sup> Includes the Departments of Labor, Justice, Housing and Urban Development, State, and Treasury; the Nuclear Regulatory Commission, the Smithsonian Institution, the Corps of Engineers, the Federal Emergency Management Agency, the U.S. Office of Personnel Management, the Veterans Administration, the Arms Control and Disarmament Agency, the Tennessee Valley Authority, and the Consumer Product Safety Commission.

## R. & D. FACILITIES

The successful conduct of R. & D. is significantly dependent on the instrumentation and facilities that are available to the research community. In addition, many R. & D. programs require the building of demonstration plants or testing and evaluation facilities. Equipment and facilities support is needed for the conduct of R. & D., but should be distinguishable from the funds allocated for the conduct of R. & D. Therefore, during the budgetary process, support for R. & D. facilities is reviewed separately but is coordinated with decisions on funds for the conduct of R. & D.

Obligations for R. & D. facilities in 1982, including the construction or renovation of facilities, acquisition of major equipment and construction or modification of plants, will amount to \$2.4 billion.

The majority of the funds for R. & D. facilities are for applied research and development projects and demonstrations. Included in the 1982 budget, for example, are funds for:

- The buildup in support of several coal liquefaction and coal gasification demonstration plants by the Department of Energy.
- Continuing support for major ongoing high energy physics projects by the Department of Energy.
- Design and development by NASA of the Numerical Aerodynamic Simulator, for advancing the state-of-the-art of aircraft design.
- Modification and modernization of NASA wind tunnels to increase their productivity.

The 1982 budget also proposes funds to support basic research facilities that will upgrade the Nation's capability and capacity to seek new knowledge at the frontiers of science, for example:

- Initiation of a \$75 million program in the National Science Foundation for the support of modern scientific apparatus and instrumentation at universities needed to replace outdated equipment and pursue forefront research in many fields of science and engineering.
- Continued funding by the Department of Energy of the intersecting storage accelerator (ISABELLE), at Brookhaven National Laboratory, which will be the most powerful physics research facility of its type in the world;
- Initial funding by the National Science Foundation of a special 25-meter telescope to be located at Mauna Kea, Hawaii. The telescope will be the world's most powerful millimeter wave telescope to be used by astronomers to study star formation and the evolution and structure of the Galaxy.

Table K-5 summarizes Federal support for R. & D. facilities by major departments and agencies.

Table K-5. RESEARCH AND DEVELOPMENT FACILITIES BY MAJOR DEPARTMENTS AND AGENCIES

(In millions of dollars)

Department or agency	Obligations			Outlays		
	1980 actual	1981 estimate	1982 estimate	1980 actual	1981 estimate	1982 estimate
Energy.....	1,021	1,410	1,763	968	1,382	1,718
Defense-military functions.....	208	236	280	205	204	230
National Aeronautics and Space Administration.....	159	115	137	140	156	157
National Science Foundation.....	19	11	95	18	11	81
Agriculture.....	57	37	40	28	53	39
Health and Human Services.....	32	61	36	77	43	49
(National Institutes of Health).....	(30)	(29)	(15)	(76)	(37)	(36)
All Others <sup>1</sup> .....	64	53	88	57	65	76
<b>Total.....</b>	<b>1,560</b>	<b>1,922</b>	<b>2,438</b>	<b>1,493</b>	<b>1,915</b>	<b>2,349</b>

<sup>1</sup> Includes the Department of Transportation, Interior, and Commerce; the National Science Foundation, the Veterans' Administration, the Tennessee Valley Authority, the Agency for International Development, the Consumer Product Safety Commission, and the Smithsonian Institution.

## PART II. AGENCY R. & D. PROGRAMS

Summaries follow of the R. & D. activities of the 15 agencies that support more than 99% of federal funded R. & D.

### DEPARTMENT OF DEFENSE

The Department of Defense plans to obligate a total of \$20.0 billion for the conduct of R. & D. in 1982, an increase of \$3.8 billion, or 23% over 1981. The total is larger than that of any other Federal agency and makes up about 48% of the R. & D. funding in the 1982 budget.

In 1982, funding for basic research will be increased by \$99 million, or 16%, to a total of \$704 million. Funding for new R. & D. facilities will be increased by \$44 million over 1981 to \$280 million in 1982.

The purposes of the department's R. & D. are to develop new strategic and tactical weapons and supporting systems, to avoid technological surprise by potential enemies, and to be aware of technological options for future systems, in order to advance the state of the Nation's security. The department's major R. & D. efforts include:

*Technology base and advanced technology development.*—Real growth is included in funding for basic research, including research in electronics, materials research, environmental research, computer science, information sciences, behavioral research, and research on lasers and particle beams.

*Strategic programs.*—Full-scale development of the M-X intercontinental ballistic missile will continue. Work also will be continued on ballistic missile technology and systems integration, ballistic missile defense, and space defense systems. Options are being explored for a Trident follow-on missile, a second-generation air-launched cruise missile, and a new manned bomber.

*Tactical programs.*—The Air Force is developing submunitions for use by interdiction forces, avionics for precise delivery of munitions at night and in all weather conditions, ground and air-launched cruise missiles, the C-X transport aircraft, and prototypes for new fighter aircraft. The Navy continues development of the LAMPS III anti-submarine helicopter, a sea-launched cruise missile, a new class of attack submarine, an advanced lightweight anti-submarine torpedo, and undersea surveillance systems. The Army is nearing completion of development of a larger XM-1 tank gun and is continuing development of new anti-tank missiles. The Army also is beginning development of a lightweight tank and a long-range artillery rocket system.

*Intelligence and communication, program management and support.*—Work on enhancement of strategic communications will be continued, as will upgrading of tactical communications. Increased emphasis will be placed upon the integration of command networks for both strategic and tactical forces. Work will be continued on the use of technology to reduce manufacturing and maintenance costs and to extend the life and capability of existing weapon systems.

*NATO cooperation.*—To promote greater efficiency and standardization within the alliance: (1) the U.S. and 10 allies have agreed to lessen restrictions on defense trade so that U.S. and European contractors may compete to develop and produce defense goods for use by nations in the alliance; (2) the U.S. and European nations are arranging to license the domestic production of particular foreign-developed systems; and (3) by seeking to divide responsibility for development of selected families of weapons systems the U.S. and NATO allies aim to achieve R. & D. savings that may be applied to other new defense systems.

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	1980 actual	1981 estimate	1982 estimate
<b>OBLIGATIONS</b>			
Conduct of R. & D.:			
Research, development test and evaluation:			
Technology base.....	2,235	2,534	2,998
Advanced technology development.....	618	613	796
Strategic programs.....	2,250	3,248	4,093
Tactical programs.....	5,296	5,630	6,955
Intelligence and communications.....	1,162	1,522	1,958
Programwide management and support.....	1,914	2,081	2,618
Other appropriations.....	468	598	615
Total, conduct of R. & D.....	13,943	16,226	20,033
Total conduct of basic research, included above.....	(539)	(605)	(704)
R. & D. facilities.....	208	236	280
<b>Total obligations.....</b>	<b>14,151</b>	<b>16,462</b>	<b>20,312</b>
<b>OUTLAYS</b>			
Conduct of R. & D.....	13,451	15,874	18,925
R. & D. facilities.....	205	204	230
<b>Total, outlays.....</b>	<b>13,656</b>	<b>16,078</b>	<b>19,155</b>

## NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

The entire NASA budget constitutes support for research and development. The budget plan for the conduct of R. & D. will increase by \$1,167 million in 1982 to a total of \$6.6 billion, and the plan for R. & D. facilities by \$22 million to a total of \$137 million.

*Space transportation.*—The testing and procurement of a fleet of four Shuttle Orbiters will continue in 1982. In addition, the budget provides funds for long-lead procurement to maintain the option to buy a fifth Shuttle Orbiter if needed. Because of its unique capability to be reused and to allow repair, service and retrieval of satellites in space, the Shuttle will provide greater flexibility and cost savings for both civil and military space programs. The First Manned Orbital Flight is planned for March 1981. NASA plans to achieve an operational capability to launch and land Shuttle Orbiters from the Kennedy Space Center in Florida in late 1982 or early 1983 and from the Vandenberg Air Force Base in California during 1984. The 1982 budget also provides for continuing the design and development of the Solar Electric Propulsion System (SEPS) which will provide a very low thrust, solar powered propulsion system suitable for some possible future very long duration space missions.

*Space science.*—The 1982 budget provides funds to continue several major ongoing space science projects and to undertake new missions.

In space astronomy, the Space Telescope now well underway is expected to be launched by the Shuttle in 1985. The telescope, from an Earth orbit well above the obscuring effects of the Earth's atmosphere, will be capable of viewing objects as far away as 60 billion light-years. In addition, fabrication work will continue on astronomy experiments to be flown inside the European-built Spacelab in the Shuttle and on the International Solar Polar mission. The Gamma Ray Observatory (GRO) will be initiated in 1981 with design and fabrication continued in 1982. The GRO will be launched in 1986 to study objects in the universe in the gamma ray spectral region.

In planetary exploration, the Galileo mission to Jupiter will continue in the fabrication phase for separate launches of its two major components planned for 1985. In addition, the 1982 budget provides for the initiation of the Venus Orbiting Imaging Radar mission (VOIR). VOIR will fly advanced microwave instruments in orbit around Venus to permit for the first time photographing and mapping the surface of Venus through the planet's heavy clouds. The 1982 budget also provides for U.S. participation in an international activity called Comet Halley Watch in 1986 to observe Comet Halley through terrestrial telescopes.

*Space and terrestrial applications.*—The 1982 budget continues to emphasize the application of space technology to national needs. The Landsat-D satellite, scheduled for launch in the third quarter of 1982, is expected to enhance the experimental use of space platforms for a variety of applications, such as crop forecasting and mineral exploration. The Landsat-D series of satellites is expected to provide the continuity of Landsat data for domestic and foreign users through the 1980's. In addition, NASA's program in upper atmospheric research will be expanded to start ground and space system studies, and instrument design and testing for a future satellite mission to study the interactions among the chemistry, radiation, and dynamics of the upper atmosphere. In other applications areas (e.g., communications, materials processing in space), the research base will be enhanced to demonstrate new technology and techniques for future flight missions.

*Aeronautical research and technology.*—Aeronautical research and technology programs will continue to advance technology for greater fuel efficiency, safety and reduced noise in future civil aircraft and to maintain the U.S. technological lead in the field of aeronautics. A significant initiative included in the 1982 budget is the design and fabrication of the Numerical Aerodynamic Simulator—a computer system significantly more powerful than commer-

cially available systems—to advance the state-of-the-art of aircraft aerodynamic design through computerized modeling. The new system also would contribute to research on weather and climate modeling and computational chemistry. Further emphasis has been placed in the 1982 budget on aircraft energy efficiency through a new program, cost-shared with industry, to demonstrate technology that would allow the use of weight-saving composite materials in aircraft primary structures such as wings and fuselages.

Table K-7 provides the details of NASA's R. & D. funding.

Table K-7. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—RESEARCH AND DEVELOPMENT

(In millions of dollars)

Program and type of activity	1980 actual	1981 estimate	1982 estimate
<b>BUDGET PLAN</b>			
Conduct of R. & D.:			
Space transportation systems.....	2,385	2,681	3,304
Space science.....	600	563	757
Space and terrestrial applications.....	344	365	488
Space research and technology.....	116	111	141
Aeronautical research and technology.....	308	276	324
Energy technology.....	3	4	4
Supporting activity.....	332	341	435
Research and program management.....	996	1,081	1,136
Total, conduct of R. & D.....	5,084	5,422	6,589
Total conduct of basic research, included above.....	(559)	(555)	(681)
R. & D. facilities.....	159	115	137
<b>Total, budget plan.....</b>	<b>5,243</b>	<b>5,537</b>	<b>6,726</b>
<b>OUTLAYS</b>			
Conduct of R. & D.....	4,711	5,130	6,207
R. & D. facilities.....	140	156	157
<b>Total, outlays.....</b>	<b>4,851</b>	<b>5,286</b>	<b>6,364</b>

#### DEPARTMENT OF ENERGY

The Department of Energy is the major Federal agency for the support of energy R. & D. by DOE also supports a general science program largely for basic research in high energy physics and nuclear sciences and funds a substantial program of R. & D. related to the development and testing of nuclear weapons.

Obligations for the conduct of R. & D. by DOE will total \$5.6 billion in 1982, an increase of \$475 million over 1981. Obligations for research facilities including funds for the buildup of energy demonstration projects will total \$1.8 billion in 1982, an increase of \$353 million over 1981.

*Energy.*—The Department supports a broad R. & D. program across all major energy technologies to complement extensive private investments. Obligations for the conduct of energy R. & D. are estimated to increase from \$3.4 billion in 1981 to \$3.7 billion in 1982.

The 1982 budget provides for an increased emphasis on R. & D. related to solar and fusion technology. This reflects the Administration's belief that these technologies can, in time, make a significant contribution as environmentally attractive, renewable energy supplies. Solar applications will help to establish cost and performance goals in the marketplace and to facilitate market development. Emphasis in solar technology will include systems development for strengthening the technological base, research and development in photovoltaics and solar thermal electric, and support for international solar projects.

The increase in the magnetic fusion program reflects increased confidence in this high-potential-payoff technology. The bulk of these funds will be used to strengthen the science and technology base for successful technology development. Funds will also be provided to plan for a Fusion Engineering Device which will explore the problems that must be solved if fusion is to become a viable energy source.

R. & D. on other non-nuclear technologies will also be increased in 1982. R. & D. on coal processes continues to emphasize development of new techniques for converting coal to liquid and gaseous fuels and improvement of coal combustion technologies. Support for basic and longer term R. & D. has been maintained, even with the budgetary pressures of large demonstration projects. Improvements in coal liquefaction science are expected from fundamental studies of coal structure, chemistry, mechanisms of hydrogen transfer, catalysts, and improved instrumentation and reaction diagnostics. Exploratory research in indirect liquefaction to produce hydrocarbons similar to gasoline from synthesis gas will be expanded.

R. & D. on nuclear technologies will focus on safety and waste management research. The Department in cooperation with the Nuclear Regulatory Commission will conduct technical investigations associated with disabled reactors. This will permit a better understanding of such accidents as occurred at Three Mile Island and will help to prevent them in the future. The disabled Three Mile Island plant will serve as a source of useful data to aid this research.

In the conservation program, studies and analyses of diverse building types will be conducted to provide information on energy savings from conservation measures. In industrial conservation, R. & D. on waste heat reduction, industrial cogeneration, and process efficiency improvements should contribute to further energy



savings. In transportation conservation, developmental activities will continue on electric and hybrid vehicles and advanced automobile engines.

In the basic energy sciences, support for nuclear science, chemistry, engineering, materials science, and mathematics will be increased significantly in real terms in order to strengthen the long-term scientific and technical base for future advances in energy technologies.

*General science.*—The general science programs of the Department of Energy include high energy and nuclear physics, life sciences research and nuclear medicine applications. The research effort will be increased above the 1981 level to permit increased use of existing facilities and thus permit further exploration of the subnuclear particles and nuclear structures.

Obligations for these general science programs are estimated to increase from \$384 million in 1981 to \$445 million in 1982. More than half of this increase is to cover anticipated inflation.

*National defense.*—The nuclear weapons programs will support the continued development and production of new nuclear weapons. These programs also support the development of improved technologies for monitoring nuclear weapons treaties and of improved methods for safeguarding nuclear materials. Increased efforts are proposed to develop improved technologies and methods for the safe storage and disposal of radioactive wastes produced by the national defense programs. Efforts will also continue to develop improved propulsion reactors for naval vessels.

Obligations for these activities are proposed to increase from \$1.4 billion in 1981 to \$1.5 billion in 1982 to assure an effective long term overall nuclear weapons program.

*Facilities.*—The increase in obligations for R. & D. facilities, from \$1.4 billion in 1981 to \$1.8 billion in 1982, covers all DOE programs: energy, general science, and national defense.

The energy R. & D. budget includes funds to continue construction of two solvent-refined coal demonstration plants and of a high Btu gas demonstration plant. The construction of these demonstration plants accounts for most of the increase in 1982 over 1981.

The general science program includes funds for continuation of the Isabelle accelerator at the Brookhaven National Laboratory and the Energy Saver project at the Fermi National Laboratory. In addition, 1982 funds will be used to continue the Tevatron project at Fermilab and the Argonne Tandem Linear Accelerator system (ATLAS) project at Argonne National Laboratory.

Table K-8 provides the details of the R. & D. funding of the Department of Energy.

Table K-8. DEPARTMENT OF ENERGY—RESEARCH AND DEVELOPMENT

(In millions of dollars)

Type of activity	1980 actual	1981 estimate	1982 estimate
<b>OBLIGATIONS</b>			
Conduct of R. & D.:			
Energy .....	3,265	3,422	3,678
General sciences .....	340	384	445
National defense .....	1,132	1,361	1,519
Total, Conduct of R. & D. ....	4,737	5,167	5,642
Total conduct of basic research, included above .....	(523)	(591)	(710)
R. & D. facilities .....	1,021	1,410	1,763
<b>Total, obligations .....</b>	<b>5,757</b>	<b>6,577</b>	<b>7,405</b>
<b>OUTLAYS</b>			
Conduct of R. & D. ....	4,682	4,932	5,734
R. & D. facilities .....	968	1,382	1,718
<b>Total, outlays .....</b>	<b>5,651</b>	<b>6,314</b>	<b>7,451</b>

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Department of Health and Human Services (HHS) obligations in 1982 for the conduct of R. & D. will increase by \$321 million above the 1981 level to \$4.3 billion. Within this total, basic research funding will increase by 9% to \$2.1 billion. Obligations for R. & D. facilities will be \$36 million.

More than 80% of the department's R. & D. funds are devoted to the National Institutes of Health (NIH) whose primary mission is to advance through biomedical research the Nation's capabilities for the prevention, diagnosis, and treatment of disease. The level of R. & D. obligations by NIH in 1982 is estimated to be \$3.6 billion, an increase of \$246 million above the 1981 level of \$3.4 billion. This increase will insure stability and continuity in the biomedical research enterprise, permitting approximately 5,000 new and competing awards to individual researchers or research teams. Among the most significant activities to be supported are:

- Studies of the cause and prevention of diseases associated with such environmental agents as chemicals and radiation;

- Studies to provide a better understanding of the role of nutrition in cancer, cardiovascular disease, childhood development, and aging;
- Research in the neurosciences and genetics, including areas related to neurological disorders such as Huntington's disease and spinal cord injury;
- Increased research on reversible causes of mental deterioration in the elderly;
- Emphasis on research into the causes, treatments, and prevention of diabetes; and
- Emphasis on development of procedures for the conduct of recombinant DNA research.

R. & D. programs in health-related research also are supported by several other agencies within the department. The 1982 funding will permit limited expansion of research efforts of the Alcohol, Drug Abuse, and Mental Health Administration, the Food and Drug Administration, the Centers for Disease Control, the Health Services Administration, the Health Care Financing Administration, and the Office of the Assistant Secretary for Health. Among these efforts are:

- Continuing studies of mental disease and neurological disorders, biomedical factors and health effects of drug abuse, and causes and consequences of alcohol abuse;
- Continuing support of research designed to back up the Food and Drug Administration's regulation of food, drug, biological, and radiological products;
- Studies by the National Institute for Occupational Safety and Health to develop criteria on toxic materials and other workplace hazards;
- Community health research involving primarily the community health center and maternal and child health programs; and
- Studies to test alternative methods of payment for hospitals and physicians, to evaluate the impact of Medicare and Medicaid on the health care system, and possible changes in coverage and payments for community health centers.

The department's obligations for R. & D. in human services programs will be increased by \$20 million to a total of \$115 million. These funds will be devoted to research related to the missions of the Office of Human Development Services and the Social Security Administration and to policy research conducted in behalf of departmental management.

Table K-9 provides the 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)

Program areas and organizational units	1980 actual	1981 estimate	1982 estimate
<b>OBLIGATIONS</b>			
Conduct of R. & D.:			
Health:			
National Institutes of Health.....	3,182	3,350	3,596
Alcohol, Drug Abuse, and Mental Health Administration.....	235	237	277
Centers for Disease Control.....	87	87	96
Food and Drug Administration.....	75	75	81
Health Care Financing Administration.....	46	50	56
Office of Assistant Secretary for Health.....	31	45	48
Health Services Administration.....	30	26	16
Health Resources Administration.....	5		
Subtotal, Health.....	3,691	3,869	4,170
Human Services:			
Office of Human Development Services.....	52	47	42
Social Security Administration.....	23	26	48
Departmental Management.....	24	23	25
Subtotal, Human Services.....	98	95	115
Total, conduct of R. & D. ....	3,790	3,964	4,285
Total conduct of basic research, included above.....	(1,758)	(1,887)	(2,053)
R. & D. facilities.....	32	61	36
<b>Total, obligations.....</b>	<b>3,821</b>	<b>4,025</b>	<b>4,321</b>
<b>OUTLAYS</b>			
Conduct of R. & D.....	3,518	3,676	3,964
R. & D. facilities.....	77	43	49
<b>Total, outlays.....</b>	<b>3,595</b>	<b>3,719</b>	<b>4,013</b>

### NATIONAL SCIENCE FOUNDATION

The National Science Foundation supports long term fundamental research in all fields of science and engineering, selected applied research, and efforts to improve the teaching of science and engineering. Its role is particularly important because it is the only Federal agency whose primary objective is to maintain and enhance the vigor of the national basic research effort. Its budget is designed to assure that governmentwide support of fundamental research is balanced among different scientific disciplines.

NSF obligations for the conduct of R. & D. will be increased from \$1,015 million in 1981 to \$1,157 million in 1982, an increase of 14%. An additional \$95 million will be obligated for research facilities in 1982, including \$75 million for a new program to upgrade and modernize university research instrumentation.

In its support of basic research in 1982, the Foundation plans to provide increased emphasis on support for the mathematical and

physical sciences and for fundamental engineering and computer sciences—disciplines that underlie advances in productivity and contribute to economic revitalization in the long term. Special emphasis will also be placed on other programs that contribute to national economic revitalization over the long term and further promote research cooperation among industry, government, and universities. Total funding for the conduct of basic research will increase from \$923 million in 1981 to \$1,057 million in 1982, an increase of 15% or about 4% in real terms.

Additional highlights of the Foundation's 1982 budget include:

- Initiation of a 25-meter telescope sensitive in the millimeter wavelength region of the electromagnetic spectrum to permit observation of molecular species in outer space not previously observed from Earth.
- A buildup in support for the Ocean Margin Drilling program to obtain fundamental scientific information that would provide a framework for future resource exploration.
- Expansion of the University-Industry Cooperative Research program to support joint research ventures by university and industry scientists.
- Expansion of the Small Business Innovation Research program to provide support to small high-technology firms for research on innovative new concepts that could then attract private venture capital for commercialization.

#### DEPARTMENT OF AGRICULTURE

Nearly all of the R. & D. funded by the Department of Agriculture is conducted by three agencies: the Science and Education Administration, the Forest Service, and the Economics and Statistics Service. In 1982, these agencies expect to obligate 98% of the Department's R. & D. funding which will be increased from \$775 million in 1981 to \$871 million, an increase of \$96 million, or 12%.

The Science and Education Administration plans to obligate \$674 million in 1982, about 77% of the department's funding for the conduct of R. & D. In turn, the Forest Service and the Economics and Statistics Service expect to obligate \$144 million and \$40 million, respectively, or together about 21% of the department's R. & D. funds.

The 1982 budgets for each of these agencies contain several areas of emphasis for R. & D. funding:

- The Science and Education Administration will support research on food production, needs of action and regulatory agencies, enhancement of natural resources, tropical and subtropical agriculture, and beneficial uses of aerospace technology.

- The Forest Service will emphasize research on more efficient reforestation practice, rehabilitation of desert land, air and water quality management, recreation, genetics, silviculture and timber management.
- The Economics and Statistics Service will support research related to data collection and management of natural resources, farm sector economic indicators, agricultural markets and food system regulation, and yield modeling and domestic crop estimation.

#### DEPARTMENT OF THE INTERIOR

R. & D. activities of the Department of the Interior stem from two broad responsibilities: (1) encouraging wise development of the national mineral, water, land, and recreation resources and (2) managing those resources on the public lands in the public interest.

The department expects to obligate in 1982 a total of \$496 million for the conduct of R. & D., an increase of \$31 million, or about 7% over 1981. For 1982, the department's research objectives include:

- Accurate appraisal of national mineral resources, with emphasis upon new or improved methods and instruments for mineral exploration on land and in the continental margins.
- Development of basic data on geologic principles and processes, terrain and foundation conditions.
- Application of environmental resource data to public decision-making in urban areas, and application of data acquired by satellite to the Earth sciences and the analysis of marine resources.
- Investigation of new technologies for surface and underground mining, with emphasis upon improved environmental control and mine safety.
- Studies on extraction, processing, and use of nonenergy minerals designed to assure an adequate supply of raw materials to meet expanding national needs.
- Continuation of studies on the efficient allocation and conservation of scarce water and water-related resources.
- Studies of the causes and effects of geologic and environmental hazards such as earthquakes, volcanoes, ground failure, acid rain, and toxic wastes.

#### DEPARTMENT OF TRANSPORTATION

Obligations for the conduct of research and development for the Department of Transportation are estimated at \$413 million for 1981 and \$474 million in 1982. The Department's R. & D. program is oriented toward providing the information and new technology

needed for its own operational (e.g., air traffic control) and regulatory (e.g., automotive safety standards) programs, with a smaller effort designed to support new or improved transportation options for the Nation (e.g., automated guideway transit). The Department's 1982 budget includes:

- \$131 million for the Federal Aviation Administration to continue engineering work on the national air traffic control system and to maintain the thrust toward emerging technology needed for a nationwide network of flight services stations. R. & D. activities will be undertaken to address the issue of replacement computers at enroute air traffic control centers. Advances in technology are expected to enhance safety of air travel, reduce delays, and expand airport capacity.
- \$91 million for the National Highway Traffic Safety Administration for motor vehicle, traffic safety, auto fuel economy, and statistical and analytical research. Fuel economy research will concentrate on improved engines and drivetrains. A fuel conservation research program will aid in driver practices to conserve energy.
- \$83 million for the Urban Mass Transportation Administration to assist in the development of improved mass transportation systems, equipment, and procedures.
- \$32 million for the Research and Special Programs Administration for emphasis on advanced transportation technology, transportation of hazardous materials and pipeline transportation of gas and hazardous liquids. Direction and support for the Cooperative Automotive Research Program being conducted by the U.S. Government and the automotive industry will also be provided.
- \$48 million for the Federal Highway Administration to conduct research programs in highway planning, construction, and safety and in commercial motor carrier safety. A major goal will be increased highway, vehicle, driver, and pedestrian safety.
- \$46 million for the Federal Railroad Administration with principal emphasis upon safety research. Other increases in the agency's effort will be devoted to improvements in freight and passenger systems and in the Transportation Test Center for work on electrification of the Facility for Advanced Service Testing (FAST) track.
- \$30 million for the U.S. Coast Guard to support research to maintain and improve search and rescue systems, environmental protection, vessel safety, aids to navigation, port safety and security, and polar and domestic icebreaking.

## DEPARTMENT OF COMMERCE

The principal objectives of the R. & D. programs in the Department of Commerce are to continue to improve the Nation's environmental prediction and warning capabilities, support generic technology to strengthen the competitive position of U.S. industry, including the maritime industry, encourage technological advancement through improved performance and measurement standards, and develop a better understanding of marine environment, especially the long-term effects of pollution.

The Department of Commerce obligations for R. & D. will be increased from \$365 million in 1981 to \$411 million in 1982, an increase of \$46 million. Most of the increase will fund expanded R. & D. programs in the National Oceanic and Atmospheric Administration and the National Bureau of Standards. In 1982 the National Bureau of Standards will obligate \$96 million, an increase of \$12 million or 14% over 1981 for R. & D. programs. The National Oceanic and Atmospheric Administration obligations for R. & D. will grow from \$196 million in 1981 to \$229 million in 1982. Highlights include:

- Research at NBS on the fundamental sciences that underlie future standards and measurement techniques to improve industrial productivity.
- Expanded support for NOAA research on acid rain pollution and on improved methods of forecasting, detecting, and tracking weather systems and violent storms.

Other agencies within the Department of Commerce also maintain smaller research and development programs: The Bureau of the Census, Economic Development Administration, Maritime Administration, Office of Productivity, Technology and Innovation, the Patent and Trademark Office, and the National Telecommunications and Information Administration. R. & D. funding for these agencies in 1982 will total \$86 million.

## ENVIRONMENTAL PROTECTION AGENCY

EPA conducts research and development in support of the agency's regulatory and enforcement mission to protect human health and the environment. The R. & D. program provides information on health and environmental criteria and the technological basis for developing environmental control standards. The program also provides measurement methods and quality assurance techniques for the accurate and reliable quantification of environmental conditions for assessments, EPA program implementation, and standards enforcement. Total obligations for the conduct of R. & D. will decrease from \$364 million in 1981 to \$345 million in 1982; the reduction largely reflects completion of major regulatory efforts



and a phasing of future research toward review and refinement of regulations. The following are some highlights of the R. & D. program for 1982:

- The energy program, which includes R. & D. related to the impact and regulation of fossil fuel combustion and synthetic fuels, is projected at a level of \$102 million in 1982, a decrease of \$11 million from 1981. This figure includes an increase of \$9 million to support research on acid deposition as part of a major governmentwide effort to assess the sources and effects of acid rain.
- The 1982 request for air quality research reflects a reduction of \$5 million below 1981, to a level of \$69 million, due to a phase-down of the R. & D. effort on diesel particulates and to reductions in research on other particulate and gaseous pollutants as well as on oxidants. The 1982 request for the water quality program is \$57 million, a reduction of \$7 million below 1981. This figure includes a reduction of \$3 million, which is primarily associated with a shift from conventional water quality research to higher priority work on hazardous wastes. This reduction is coupled with reductions in the area of industrial wastewater research reflecting the near completion of the court-mandated schedule for completing waste water effluent guidelines.
- Overall, solid and hazardous waste R. & D. would increase by \$7 million to \$32 million in 1982. The resources shifted from water quality research will accelerate by \$3 million the R. & D. support to EPA's activities related to the identification of the environmental impact of mismanaged hazardous waste sites, and the permitting, and listing or delisting of hazardous wastes.
- The 1982 R. & D. program on safe drinking water increases \$2 million over 1981, to a level of \$31 million. Shifts within the program will permit the establishment of a new groundwater effort totaling \$3 million to yield information on the movement and chemical interactions of contaminants that may reach drinking water supplies.
- The 1982 request for pesticides R. & D. totals \$7 million, a decrease of \$3 million, while the request for Toxic Substances shows a net decrease of \$2 million to a level of \$38 million. The fiscal year 1982 program in Toxic Substances will include the establishment of a quality assurance program directly tailored to the Agency's regulatory and operational activities in this area.

## DEPARTMENT OF LABOR

Over 90% of the Department of Labor's R. & D. funding in 1982 is devoted to research programs in welfare reform, positive adjustment assistance for economically displaced workers, youth employment, and other activities under the Comprehensive Employment Training Act (CETA).

The department expects to obligate a total of \$330 million for the conduct of R. & D. in 1982, more than twice the 1981 level. The 1982 funding includes welfare reform, \$174 million; positive adjustment assistance, \$50 million; youth employment, \$63 million, and other activities, \$43 million. The increase in 1982 for the Department largely reflects funding for continuation of the welfare reform demonstrations funded from other sources in previous years.

Among the department's research objectives for 1982 are:

- Implementation of 10 to 12 demonstration projects to assist workers displaced by rising imports or other economic changes.
- Assessment of the impact of departmental regulations on productivity.
- Continuation of the pilot program in employment opportunities which provides job search assistance and federally assisted work and training opportunities to persons eligible for welfare.
- Continuation of the analysis of the Continuous Longitudinal Manpower Survey (CLMS) to assess in more depth the immediate and long-term benefits accruing to participants in employment and training programs.
- Expansion of the program to explore labor-management relations and the collective bargaining process.

## THE NUCLEAR REGULATORY COMMISSION

The Nuclear Regulatory Commission is authorized to support and perform research in civil uses of nuclear materials and facilities consistent with public health and safety, environmental quality, and national security. A major share of NRC's effort is devoted to the use of nuclear energy to generate electric power. Its research objective is to provide safety and analytical methods adequate to the need for public and private confidence in NRC's licensing procedures and regulatory work.

In 1982, NRC's obligations for the conduct of R. & D. will be increased from \$216 million to \$232 million, an increase of \$16 million. The budget request reflects a redirection of research priorities: several research programs are being completed and new pro-

grams are being started, emphasizing lessons learned from the accident at Three Mile Island.

Work will be curtailed, for example, in loss-of-coolant and transient research, but will be increased in plant operational safety, severe accident research, systems and reliability analysis and waste management.

#### AGENCY FOR INTERNATIONAL DEVELOPMENT

Obligations of the Agency for International Development for the conduct of R. & D. will be \$230 million in 1982, nearly twice the 1981 level of \$120 million.

This large increase reflects the administration's increased recognition of the importance of R. & D. in addressing the development problems faced by the Third World.

Research and development activities in AID consist mainly of applied research to solve specific problems associated with basic human needs development, and of social and economic research aimed at improving U.S. and host country understanding of the major obstacles to such development.

Most of AID's 1982 R. & D. funds will be devoted to three critical problems: (1) food production, with an emphasis on effective developing country efforts to overcome the growing food crisis; (2) population growth, emphasizing methods of controlling increasing population growth rates in the developing countries; and (3) energy supply, emphasizing renewable and non-conventional energy sources critical for development to proceed.

#### VETERANS ADMINISTRATION

The Veterans Administration will obligate \$163 million, an increase of \$16 million, for the conduct of R. & D. in 1982, emphasizing medical, rehabilitative, and health services research. Among new areas to be studied are the health effects of Agent Orange and a pilot program in preventive health care.

VA's effort in medical research is an intramural, biomedical program designed to benefit patients through increased quality and effectiveness of health care delivery. The program includes special research on alcoholism and geriatrics.

In rehabilitative research, the VA works to develop and test prosthetic, orthopedic, and adaptive equipment for improving the care and rehabilitation of disabled eligible veterans, including amputees, paraplegics, and the blind.

The health services research program supports projects at VA health care facilities to improve the delivery and accessibility of health services to veterans.

## DEPARTMENT OF EDUCATION

The primary missions of the Department of Education's programs in R. & D. are to further educational equity and to improve the practice of education. In 1982, the Department expects to obligate a total of \$154 million for the conduct of R. & D., an increase of \$13 million above 1981.

Of the 1982 total, nearly 86% will be obligated by three agencies; the National Institute of Education, \$84 million; the National Institute of Handicapped Research, \$35 million; and the Office of Special Education and Rehabilitative Services, \$13 million.

The National Institute of Education (NIE) will support research in the areas of teaching and learning, educational policy and organization, and improvement and dissemination of practice. The 1982 budget for NIE will:

- Continue the momentum of the grant programs in such areas as reading, writing, cognitive development, desegregation, postsecondary education, organization and management, and minorities and women in research.
- Support the regional R. & D. educational labs and centers.
- Begin selected studies on such topics as improved teaching, testing, evaluating, black colleges, and rural education.
- Expand programs to complement the Office of Educational Research and Improvement initiatives in basic skills learning, science, mathematics, local education improvements (with an urban emphasis), and international/multicultural learning.

Studies initiated by the National Institute of Handicapped Research will concentrate on better equipment, devices, and systems suitable for improving rehabilitation of the handicapped with focus on the severely handicapped. These activities complement continuing R. & D. under the Office of Special Education and Rehabilitation Services.

Funds obligated by the Office of Special Education and Rehabilitative Services will be devoted to innovation and development in education for the handicapped and rehabilitation services. Program objectives include the development and testing of instructional materials and the evaluation of standardized tests for handicapped persons. The program responds to Presidential and congressional mandates to encourage equal educational and rehabilitation opportunities for the handicapped.

The Department also supports R. & D. in such areas as vocational and adult education, language studies, bilingual education demonstrations, and education policy centers. Obligations for these efforts will amount to \$22 million in 1982.

## OTHER AGENCY PROGRAMS

An additional 15 agencies will obligate a total of \$324 million in 1982, an increase of \$51 million above the 1981 total, but amounting to less than 1% of all federally funded programs in R. & D. The programs of these agencies, like those of the 15 agencies providing the majority of R. & D. support, are closely related to the agencies' missions.

Among the agencies in this category that expect to increase their obligations for R. & D. in 1982 are the Departments of Justice and Housing and Urban Development, the Smithsonian Institution, the Federal Emergency Management Agency, the Army Corps of Engineers (civil functions), and the Tennessee Valley Authority.

## SUPPLEMENTARY INFORMATION

The following table provides additional information on the long-term trends in Federal R. & D. funding.

Table K-10. TRENDS IN CONDUCT OF R. &amp; D.

(Obligations in billions of dollars)

Year	Defense <sup>1</sup>	All other	Total
1953.....	2.8	.3	3.1
1954.....	2.5	.3	2.9
1955.....	2.2	.4	2.5
1956.....	2.5	.5	3.0
1957.....	3.3	.6	3.9
1958.....	3.8	.8	4.6
1959.....	5.6	1.1	6.7
1960.....	6.1	1.5	7.6
1961.....	7.0	2.1	9.1
1962.....	7.2	3.1	10.3
1963.....	7.8	4.7	12.5
1964.....	7.8	6.4	14.2
1965.....	7.3	7.3	14.6
1966.....	7.5	7.8	15.3
1967.....	8.6	7.9	16.5
1968.....	8.3	7.6	15.9
1969.....	8.4	7.2	15.6
1970.....	8.0	7.3	15.3
1971.....	8.1	7.4	15.5
1972.....	8.9	7.6	16.5
1973.....	9.0	7.8	16.8
1974.....	9.0	8.4	17.4
1975.....	9.7	9.3	19.0
1976.....	10.4	10.4	20.8
1977.....	11.9	12.1	24.0
1978.....	12.6	13.8	26.4
1979.....	13.6	15.4	29.0
1980.....	15.1	16.6	31.7
1981 (estimate).....	17.6	17.6	35.2
1982 (estimate).....	21.6	20.2	41.7

<sup>1</sup> Includes military-related programs of the Departments of Defense and Energy.