

INTRODUCTION

The budget presentation and concepts used in most of this document are the traditional ones used in presenting a President's budget. In many respects the concepts and presentation are legally required and are effective tools for Federal budgeting.

There is, however, no single "right" way of looking at Federal receipts and outlays and therefore no single "right" structure for the Federal budget.

- The dividing line between the Federal Government and the private sector cannot be delineated unequivocally.
- Some Federal activities may not be quantifiable or at least not quantifiable in a way that is commensurate with budget receipts and expenditures.
- Federal finances may be presented according to alternative conceptual structures for specialized purposes other than budgeting.
- Budget data may be organized in alternative ways to view spending or receipts from complementary perspectives.
- As the Government, the economy, the political process, and the technical capability of budgeting change over time, the appropriate scope and organization of the budget may also change.

The form of the budget is therefore continually being adjusted to the needs of the President and the Congress for establishing priorities and controlling Federal receipts, expenditures, and borrowing; the needs of the Federal agencies for a workable system of effective program management based on legal requirements and policy guidelines; and the needs of the public, including the press and independent researchers, for information with which to judge Federal operations. The change in budgeting for credit in the present budget is a major example of such a development.

The current budget concept, known as the "unified budget," was developed in conformance with the recommendations of the President's Commission on Budget Concepts (1967). While various adaptations have occurred over the years, the Commission's report continues to provide the basic framework for Federal budget concepts and presentations. The unified budget is intended to be comprehensive, including the full scope of Federal programs. It encompasses a diverse array of activities—most unique to government and others similar to business operations—and must accommodate extensive and sometimes inconsistent legal requirements. It is based primarily on the Government's cash receipts and outlays.

The Comptroller General and some Members of Congress, accountants, corporate leaders, and others have criticized the current budget presentation. Some, notably the General Accounting Office, believe the budget's primary focus on obligation controls and cash flows distorts decisionmaking, prejudicing investment and un-

derstating liabilities. Others decry the artificiality, even gimmickry, of certain distinctions between on-budget and off-budget, and the practice of classifying certain Federal entities (such as REFCORP) as non-budgetary Government-sponsored enterprises. On the other hand, some argue that the budget should be more like State budgets that separate activities financed by general funds from those financed by earmarked funds; some argue that the current practice of including business-type income as an offset to outlays should be replaced by including such income in receipts and showing outlays on a gross basis; and others argue that the retirement trust funds and the debt and interest portions of the budget should be separately displayed.

There is no dispute that receipts and spending should be viewed in more than one way. Some standard alternatives have been used longer than the unified budget and were taken for granted or strongly endorsed by the President's Commission on Budget Concepts. And there is a degree of merit in many of the criticisms of the unified budget. Accordingly, this part of the budget document provides a selection of alternative budget presentations—in order to view Federal finances in different ways, to display alternatives to those who have not previously considered them, and to allow those who criticize the conventional approach to examine the effects of alternatives.

The alternative budget presentations are considered in the next six chapters. The first of these chapters describes the Federal sector as measured in the national income and product accounts, which are an integrated set of measures of aggregate economic activity, including the gross national product, prepared for many years by the Department of Commerce. The following two chapters present longstanding alternative ways of dividing up the budget totals that complement the normal presentation. One divides the budget between trust funds and Federal funds; the other focuses on physical capital.

The final three chapters in this part of the budget document show alternative presentations that could replace the unified budget, rather than complement it. These presentations and the unified budget all contain similar information but are arranged differently. The principal difference is in the focus, that which is highlighted for decision makers and the public. The focus, in turn, may affect the incentive to make one budgetary decision rather than another. The alternative presentations are not exact but rather are approximations that illustrate the general concepts and some of the key considerations. These three presentations are:

- The proposal made by the General Accounting Office, which focuses separately on operating and capital uses, on Federal, trust, and enterprise funds, and on aggregate totals.

- A budget cast in the form of the State of California's budget, which, like most State budgets, focuses on individual funds rather than consolidated totals.

- A budget divided threefold among an operating fund, a retirement fund, and a debt and interest fund.

The three presentations are compared with each other and the unified budget at the end of the chapter discussing the last of these presentations, Chapter XXI.

XVI. NATIONAL INCOME AND PRODUCT ACCOUNT PRESENTATION

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The National Income and Product Accounts (NIPAs) are an integrated set of measures of aggregate economic activity that are prepared by the Department of Commerce. One of the many purposes of the NIPAs is to measure the Nation's total current production of goods and services, known as gross national product (GNP), and the incomes generated in its production. Because the NIPAs are widely used in economic analysis, it is important to show the NIPA presentation of Federal transactions.

GNP is the sum of the net products of the household, business, government, and foreign sectors. Federal transactions are included in the NIPAs as part of the government sector. The concepts for the Federal sector have been designed to measure certain important economic effects of Federal transactions in a way that is consistent with the conceptual structure of the entire set of integrated accounts. The NIPA Federal sector is not itself a budget, for it is not a financial plan for proposing, determining, and controlling the fiscal activities of the Government. Rather, it is an accounting translation of the budget to meet specialized and important needs, chiefly the measurement of the impact of Federal receipts, outlays, and the deficit on the national economy. NIPA concepts differ in many ways from budget concepts, and therefore the NIPA presentation of Federal finances is significantly different from that of the budget.

GNP is a measure of final output which excludes intermediate product to avoid double counting. Government purchases of goods and services are included in GNP as part of final output, together with personal consumption expenditures, gross private domestic investment, and net exports of goods and services. Other Federal expenditures—transfer payments, grants to State and local governments, subsidies, and net interest payments—are not part of final output. Rather, they are transfers of income to others, whose consumption, investment, purchases, or transactions with foreigners are part of final output. An entire set of receipt and expenditure transactions of the Federal Government is prepared as one sector of the NIPAs; however, when the accounts for all the sectors are consolidated into a summary account for the Nation as a whole, transfer payments, grants, subsidies, and net interest expenditures are canceled out by receipt of those payments as income in other sectors. This leaves only purchases to be included in final output.

Differences Between the NIPAs and the Budget

Federal transactions in the NIPAs are measured according to NIPA accounting rules in order to be compatible with the purposes of the NIPAs and other transactions recorded in the NIPAs. As a result they differ from the budget in netting, timing, and coverage. These

differences cause total receipts and expenditures in the NIPAs to differ from total receipts and outlays in the budget. Differences in timing and coverage also cause the deficit to differ. Netting differences have the same effect on both receipts and expenditures and thus have no effect on the deficit. Besides these differences, the NIPAs combine transactions into different categories from those used in the budget.

Netting differences arise when the budget records certain transactions as offsets to outlays while they are recorded as receipts in the NIPAs (or vice versa). The budget treats all income that comes to the Government due to its sovereign powers—mainly, but not exclusively, taxes—as Governmental receipts. However, any intragovernmental income from one account to another is offset against outlays rather than being recorded as a receipt. Government contributions for employee retirement is one example. The budget offsets these payments against outlays while the NIPAs treat the Federal Government as any other employer and show contributions for employee social insurance as expenditures by the employing agencies and receipts to the appropriate social insurance funds. The NIPAs also include certain imputations which the budget does not. For example, unemployment benefits for Federal employees are financed by direct appropriations rather than social insurance contributions. The NIPAs impute social insurance contributions by employing agencies to finance these benefits.

The budget also offsets against outlays any income that arises from voluntary business-type transactions with the public. The budget classifies Medicare Part B premiums as business-type transactions, whereas the NIPAs record them as receipts.

Timing differences occur for receipts because the NIPAs generally record personal taxes and social insurance contributions when they are paid and business taxes when they are accrued, while the budget records all receipts when they are received. The principal timing difference between NIPA expenditures and budget outlays occurs because purchases are recorded on a delivery basis in the NIPAs, but when cash is disbursed in the budget. This difference can be large for major defense purchases because progress payments are recorded as outlays in the budget, while the NIPAs do not record expenditures until delivery is made. The NIPAs count work in progress as part of business inventories until delivery is made to the Government.

The budget and the NIPAs also have coverage differences. The NIPAs include off-budget Federal entities and exclude transactions with U.S. territories. The NIPAs also exclude the proceeds from the sales of assets such as land. Bonuses paid on Outer Continental Shelf oil leases are shown as offsetting receipts in the budget and are deducted from budget outlays. In the

NIPAs these transactions are excluded as an exchange of assets.

Financial transactions such as loans, loan repayments, loan asset sales, and loan guarantees are excluded from the NIPAs on the grounds that such transactions involve an exchange of assets with no production involved. Through 1991, in contrast, the budget recorded loans as outlays when disbursed and as offsets to outlays when repaid or sold. With the enactment of the Federal Credit Reform Act of 1990, the budget will make a fundamental change in the way that it records lending transactions. For direct loan obligations and loan guarantee commitments made after 1991, the budget will record the estimated subsidy cost of the direct loan or loan guarantee when the direct loan or guaranteed loan is disbursed. The nonsubsidized cash flows will be recorded in nonbudgetary accounts as a means of financing the budget deficit rather than as budgetary transactions themselves. The new treatment recognizes that part of a Federal direct loan is an exchange of assets with equal value but that part is normally a subsidy to the borrower. The new treatment also recognizes the subsidy normally granted by loan guarantees. (For further discussion, see Chapter VIII.A, "Recognizing and Reducing Federal Underwriting Risks"). In the NIPAs, neither the subsidies nor the loan transactions are included; however, the NIPAs will continue to include all interest transactions with the public, including interest paid to the new financing accounts.

Deposit insurance outlays for resolving failed banks and thrift institutions are similarly excluded from the NIPAs on the grounds that there are no offsetting current income flows from these transactions. For the 1992

budget, this exclusion is the largest difference between the NIPAs and the budget.

Federal Sector Receipts

Tables XVI-1 and XVI-3 show Federal receipts in the four major categories used in the NIPAs, which are similar to the budget categories but with significant differences.

Personal tax and non-tax receipts is the largest category. It is composed primarily of personal income taxes, but also includes estate and gift taxes, fees, fines, and other receipts.

Corporate profits tax accruals differ in classification from the corresponding budget category primarily because the NIPAs include the deposit of earnings of the Federal Reserve System as corporate profits taxes, while the budget treats these collections as miscellaneous receipts. The timing difference between the NIPAs and the budget, as discussed above, is especially large for this category of receipts.

Indirect business tax and nontax accruals are composed of excise taxes, customs duties, royalties, fines, and other receipts.

Contributions for social insurance differ from the corresponding budget category primarily because: (1) the NIPAs include Federal employer contributions for employee retirement in this category as a Government receipt, while the budget offsets the contributions against outlays as undistributed offsetting receipts; (2) the NIPAs include premiums for social insurance programs including Part B of Medicare as Government receipts, which the budget also nets against outlays; and (3) the NIPAs include imputations for Federal employees' unemployment insurance and workers' compensation.

Table XVI-1. FEDERAL TRANSACTIONS IN THE NATIONAL INCOME AND PRODUCT ACCOUNTS, 1981-1992

(In billions of dollars)

Description	Actual										Estimate	
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
RECEIPTS												
Personal tax and nontax receipts	289.6	310.0	292.5	302.5	340.4	357.0	400.8	411.3	457.6	483.0	503.2	543.7
Corporate profits tax accruals	69.4	52.1	55.7	75.3	74.6	81.1	99.1	108.1	113.8	113.6	113.4	120.0
Indirect business tax and nontax accruals	53.4	50.0	50.2	54.9	55.9	50.9	53.5	55.6	57.8	58.8	70.4	74.8
Contributions for social insurance	211.4	231.1	247.3	279.2	305.8	326.1	345.9	382.6	412.6	439.6	461.5	498.6
Total receipts	623.8	643.3	645.7	711.9	776.8	815.2	899.4	957.6	1,041.9	1,094.9	1,148.4	1,237.2
EXPENDITURES												
Purchases of goods and services	231.8	264.4	287.4	297.2	341.5	368.6	375.4	377.8	399.0	416.1	449.9	438.9
Defense	(160.7)	(187.3)	(210.4)	(228.5)	(252.7)	(275.4)	(290.0)	(296.3)	(301.3)	(309.1)	(327.6)	(308.3)
Nondefense	(71.1)	(77.1)	(77.0)	(68.7)	(88.8)	(93.2)	(85.4)	(81.5)	(97.7)	(107.0)	(122.3)	(130.6)
Transfer payments	281.3	312.8	347.5	352.2	374.0	394.6	411.1	433.2	462.0	504.7	536.4	590.9
Domestic ("to persons")	(274.6)	(305.6)	(339.8)	(342.2)	(360.6)	(380.4)	(399.3)	(420.5)	(448.5)	(488.2)	(535.0)	(573.5)
Foreign	(6.7)	(7.2)	(7.7)	(9.9)	(13.4)	(14.3)	(11.8)	(12.8)	(13.5)	(16.5)	(1.4)	(17.4)
Grants-in-aid to State and local governments	90.1	83.4	85.7	90.7	97.8	107.4	103.1	108.3	115.8	128.3	148.1	160.2
Net interest paid	66.7	82.2	90.6	109.7	128.3	134.6	139.3	148.8	167.7	182.1	199.1	209.3
Subsidies less current surplus of Government enterprises	12.5	13.0	20.9	23.3	20.7	22.8	31.1	33.6	27.7	22.0	18.6	19.7
Wage disbursements less accruals	-0.1	*	0.4	-0.1	0.1	.....	-0.1	0.1	.....	.....	.....	.....
Total expenditures	682.4	755.9	832.4	873.0	962.3	1,028.0	1,060.0	1,101.8	1,172.2	1,247.9	1,353.0	1,419.4
Deficit (-)	-58.5	-112.6	-186.7	-161.0	-185.5	-212.8	-160.7	-144.1	-130.3	-158.2	-203.6	-181.8

*\$50 million or less.

Note.—The estimates for 1990-92 are preliminary; revisions will be published in the February 1991 issue of the *Survey of Current Business*.

Table XVI-2. RELATIONSHIP OF THE BUDGET TO THE FEDERAL SECTOR, NIPA

(In billions of dollars)

	1986	1987	1988	1989	1990	1991	1992
Receipts							
Unified budget receipts	769.1	854.1	909.0	990.7	1,031.3	1,091.4	1,165.0
Government contributions for employee retirement (grossing)	33.7	35.4	38.6	41.3	44.5	48.4	52.0
Other netting and grossing	12.6	13.9	16.3	19.9	19.1	20.5	21.6
Timing adjustments	1.3	-2.5	-4.7	-8.4	2.0	-9.8	0.8
Geographic exclusions	-1.5	-1.7	-1.6	-1.8	-2.0	-2.2	-2.3
Other	*	0.1	0.1	0.1	.....	.....	.....
NIPA receipts	815.2	899.4	957.6	1,041.9	1,094.9	1,148.4	1,237.2
Expenditures							
Unified budget outlays	990.3	1,003.8	1,064.1	1,144.1	1,251.7	1,409.6	1,445.9
Government contributions for employee retirement (grossing)	33.7	35.4	38.6	41.3	44.5	48.4	52.0
Other netting and grossing	12.6	13.9	16.3	19.9	19.1	20.5	21.6
Lending transactions	-14.0	1.4	-0.4	1.3	-7.2	-8.5	-10.6
Deposit insurance and other financial transactions	3.2	-3.0	-12.8	-23.4	-57.1	-110.2	-83.8
Defense timing adjustment	4.1	6.8	4.8	-4.9	5.3	-0.9	-0.4
Other timing adjustments	1.0	6.4	-3.1	0.4	2.8	-0.4	0.2
Geographic exclusions	-5.4	-5.4	-5.5	-6.0	-6.2	-6.8	-7.1
Bonuses on outer continental shelf land leases	2.1	1.6	1.3	0.9	0.7	1.1	0.5
Other	0.4	-0.8	-1.5	-1.4	-0.4	-0.7	0.7
NIPA expenditures	1,028.0	1,060.0	1,101.8	1,172.2	1,253.2	1,352.1	1,419.0

Federal Sector Expenditures

Tables XVI-1 and XVI-3 show expenditures in the six major NIPA categories, which are very different from the budget categories.

Purchases of goods and services include the goods and services purchased by the Federal Government, including employee compensation. This category is divided into defense and non-defense components.

Transfer payments is the largest expenditure category. Domestic transfer payments are mainly for income security programs, such as social security and medicare. Foreign transfer payments include grants to foreign governments and payments under social security and other similar programs to individuals living abroad.

Grants-in-aid to State and local governments are designed to help finance a range of programs. Grants are for income security, capital expenditures for infrastructure, and other purposes.

Net interest paid is the interest paid by the Government on its borrowing, less interest received on its lending.

Subsidies less current surplus of Government enterprises consists of two elements: (1) subsidy payments for resident businesses (including farms); and (2) the current surplus (or deficit) of "Government enterprises", such as the Postal Service, which are business-type operations of Government that usually appear in the budget as public enterprise revolving funds. NIPA subsidies do not include the imputed credit subsidies estimated as part of credit reform in the budget. Rather, they are categorized as financial transactions and are excluded from the NIPAs.

Wage disbursements less accruals is an adjustment that is necessary when wages are earned in a different period than they are paid.

Differences in the Estimates.

Since the introduction of the unified budget in January 1968, NIPA receipts have exceeded budget receipts in each year, due principally to the imputed employer contributions for employee retirement. NIPA expenditures have usually been higher than budget outlays for the same reason. However there are two components of budget outlays that are sometimes sufficiently large to overwhelm the grossing adjustments. These are financial transactions and payments to U.S. territories. Budget outlays were greater in 1980, 1989, and 1990. With the enactment of credit reform, effective in 1992, lending activity with the public as recorded in the budget will be treated in a way that is closer to the NIPA treatment. Disbursement and repayment of loans will occur outside the budget as in the NIPAs, and only imputed credit subsidies will remain as budget outlays. However, this narrowing of differences in lending activity is likely to be overwhelmed by large increases in other financial transactions, principally outlays for the resolution of failed financial institutions.

Since 1968, the consolidated on-budget plus off-budget surplus or deficit has exceeded the Federal surplus or deficit as measured in the NIPAs in all but three years. In 1992, the consolidated budget deficit is estimated to be \$280.9 billion, while the NIPA deficit is estimated to be \$181.8 billion.

Table XVI-1 displays Federal transactions using NIPA concepts with actual data for the years 1981-1990 and estimates for 1991 and 1992 consistent with the Administration's budget proposals. Table

XVI-2 displays the reasons for differences between the data using budget concepts and NIPA concepts. Table XVI-3 displays quarterly data using NIPA concepts beginning in October 1989. Annual NIPA data from

1947-1992 are published in Part Seven, tables 14.1 and 14.2. Additional details will be published in the February 1991 issue of the Department of Commerce publication, *Survey of Current Business*.

Table XVI-3. **FEDERAL RECEIPTS AND EXPENDITURES IN THE NIPAs, QUARTERLY, 1990-92**

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

Description	Actual				Estimate							
	Oct.-Dec. 1989	Jan.-Mar. 1990	Apr.-June 1990	July-Sept. 1990	Oct.-Dec. 1990	Jan.-Mar. 1991	Apr.-June 1991	July-Sept. 1991	Oct.-Dec. 1991	Jan.-Mar. 1992	Apr.-June 1992	July-Sept. 1992
RECEIPTS												
Personal tax and nontax receipts	469.6	473.6	492.1	500.0	507.1	495.9	503.9	515.1	525.9	534.7	546.1	557.5
Corporate profits tax accruals	101.3	106.5	109.2	114.2	111.9	118.0	109.7	113.9	118.4	120.0	119.4	122.4
Indirect business tax and nontax accu- als	58.7	60.6	60.5	61.0	64.9	72.7	72.7	72.7	73.3	75.0	75.3	75.6
Contributions for social insurance	426.1	439.9	444.0	450.6	452.2	464.2	468.2	474.5	482.5	497.1	504.7	512.2
Total receipts	1,055.7	1,080.6	1,105.8	1,125.9	1,136.1	1,150.8	1,154.5	1,176.1	1,200.0	1,226.7	1,245.4	1,267.6
EXPENDITURES												
Purchases of goods and services	399.9	410.6	421.9	425.8	438.5	470.9	463.0	431.2	427.0	438.6	442.6	447.6
Defense	(299.2)	(307.2)	(309.6)	(312.6)	(326.5)	(350.5)	(336.2)	(301.4)	(297.1)	(307.5)	(311.8)	(317.2)
Nondefense	(100.7)	(103.4)	(112.3)	(113.2)	(112.0)	(120.4)	(126.8)	(129.8)	(129.9)	(131.1)	(130.8)	(130.4)
Transfer payments	487.9	503.4	510.4	513.2	509.7	532.8	546.1	556.1	573.6	592.7	596.0	599.4
Domestic ("to persons")	(470.5)	(490.3)	(491.4)	(496.1)	(508.7)	(536.8)	(544.5)	(549.1)	(554.7)	(575.8)	(579.1)	(582.5)
Foreign	(17.3)	(13.1)	(18.9)	(17.0)	(1.0)	(-4.0)	(1.6)	(7.0)	(18.9)	(16.9)	(16.9)	(16.9)
Grants-in-aid to State and local govern- ments	121.5	128.5	131.5	129.8	132.5	146.3	154.3	159.0	158.8	159.4	160.5	161.8
Net interest paid	175.2	178.1	184.3	189.8	193.1	197.5	201.5	204.3	206.3	208.3	210.3	212.3
Subsidies less current surplus of Gov- ernment enterprises	21.3	28.3	23.8	13.1	26.1	16.6	15.9	15.5	20.1	19.0	19.9	19.5
Wage disbursements less accruals .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total expenditures	1,205.8	1,248.8	1,271.7	1,271.6	1,299.9	1,364.1	1,380.8	1,366.1	1,385.8	1,418.0	1,429.3	1,440.6
Deficit	-150.1	-168.3	-166.0	-145.7	-163.8	-213.4	-226.2	-190.0	-185.8	-191.2	-183.8	-172.9

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

XVII. TRUST FUNDS AND FEDERAL FUNDS PRESENTATION

XVII. TRUST FUNDS AND FEDERAL FUNDS PRESENTATION

The budget consists of two major groups of funds: Federal funds and trust funds.

The Federal funds group, which comprises the larger part of the budget, includes all transactions not classified by law as being in trust funds. The main component of the Federal funds group is the general fund, which is used for the general purposes of the Government instead of being restricted by law to a specific program. It consists of all receipts not earmarked by law to finance other funds, including virtually all income taxes, and all outlays financed by these receipts and by general Treasury borrowing.

The Federal funds group also includes special funds and revolving funds. Special funds are financed by earmarked receipts. Where the law requires that Federal fund receipts from a specified source be earmarked to finance a particular program, such as the license fees deposited into the land and water conservation fund, the receipts and associated outlays are recorded in special receipt and expenditure accounts. Revolving funds, such as the Postal Service fund, conduct continuing cycles of business-type activity. They charge for the sale of products or services and use the proceeds to finance their spending. The proceeds are credited to the fund that makes the expenditure.

Trust funds are accounts that are financed by taxes and other receipts earmarked by law for specific purposes and that are designated by law as "trust funds." The predominant trust fund activity is social insurance, such as social security, medicare, and unemployment compensation. Other major trust funds are for Federal employee retirement, highway construction, and airport and airway development. These programs are not trust funds in the private sector meaning of assets held in a fiduciary capacity for someone else. The Federal Government owns the assets and, by enacting a law, can change the future receipts and the terms under which a fund's resources are spent. Trust funds are like special funds (or, in a few cases, like revolving funds) except that they are designated a "trust fund" by law.

Table XVII-1 shows the receipts, outlays, and surplus or deficit by fund group and whether the transactions are on-budget or off-budget. The total on-budget receipts and outlays are the sum of the on-budget Federal fund and trust fund receipts and outlays, respectively, minus a deduction for the interfund transactions between the two groups. Interfund transactions are outlays of a fund in one group and receipts of a fund in another group, such as the payment of interest by the general fund to the hospital insurance trust fund on its holdings of Treasury debt. Since the receipts

from interfund transactions are not receipts from the public and the outlays are not outlays to the public, these transactions must be subtracted when Federal fund and trust fund amounts are added so that the budget totals for receipts and outlays will record only transactions with the public.

The off-budget Federal entities, discussed in the previous section, consist of the social security trust funds and the Postal Service fund (which is a Federal fund). Total off-budget receipts and outlays are added together in the same way as on-budget receipts and outlays. The on-budget and off-budget totals may themselves be added together, as shown in table XVII-1, to arrive at the total receipts, outlays, and surplus or deficit of the Federal Government. The latter totals generally represent the net fiscal transactions of the Federal Government with the public.

The on-budget and off-budget amounts are added without any adjustment for interfund transactions. This is because the interfund transactions between on-budget and off-budget are treated in a special way so that the on-budget and off-budget amounts can be added into a consolidated total without any further adjustment. Interfund payments from on-budget to off-budget, such as the interest paid to social security on its holdings of Treasury debt, are not included in off-budget receipts; instead they are subtracted in deriving off-budget outlays. Interfund payments from off-budget to on-budget are treated symmetrically.

This treatment is displayed in the bottom panel of table XVII-2. The first line shows the cash income and outgo of the social security trust funds. The next line shows the interfund receipts from on-budget: interest, a transfer from the general fund equal to the income tax collected on social security benefits, the employer share of the social security contribution for Federal employees, and a small amount from other sources. The final line shows receipts and outlays, both net of these interfund transactions. These are the off-budget trust fund receipts and outlays in table XVII-1. Social Security outlays are considerably less than cash outgo: an estimated \$35.8 billion in 1992. More detail and more years are shown in Part Seven, "Historical Tables," table 13.1, where the estimated difference is shown to grow to \$61.2 billion in 1996.

Table XVII-2, besides its detail on social security, displays the receipts, outlays, and balances of the major trust funds or groups of closely related trust funds. The trust fund balances are primarily invested in Treasury securities.

Table XVII-1. RECEIPTS, OUTLAYS, AND SURPLUS OR DEFICIT BY FUND GROUP

(In billions of dollars)

	1990 actual	1991 estimate	1992 estimate	1993 estimate	1994 estimate	1995 estimate	1996 estimate
Receipts:							
On-budget:							
Federal funds	634.1	667.9	712.4	764.4	838.8	906.6	968.0
Trust funds	255.2	273.1	293.4	313.2	333.5	359.1	380.5
Interfund transactions	-139.6	-147.8	-156.0	-163.6	-172.5	-188.2	-204.9
Total, on-budget receipts	749.7	793.2	849.8	914.0	999.8	1,077.5	1,143.5
Off-budget:							
Federal funds							
Trust funds	281.7	298.3	315.3	338.7	365.5	389.8	417.2
Total, off-budget receipts	281.7	298.3	315.3	338.7	365.5	389.8	417.2
Total, Federal Government receipts	1,031.3	1,091.4	1,165.0	1,252.7	1,365.3	1,467.3	1,560.7
Outlays:							
On-budget:							
Federal funds	973.2	1,104.2	1,119.1	1,104.8	1,058.5	1,087.9	1,139.1
Trust funds	193.1	215.3	231.1	246.6	264.3	284.1	311.9
Interfund transactions	-139.6	-147.8	-156.0	-163.6	-172.5	-188.2	-204.9
Total, on-budget outlays	1,026.6	1,171.7	1,194.2	1,187.8	1,150.2	1,183.8	1,246.1
Off-budget:							
Federal funds	1.6	0.1	-1.1	1.0	0.7	0.5	-0.7
Trust funds	223.4	237.8	252.8	265.4	276.2	286.0	295.4
Total, off-budget outlays	225.1	237.9	251.7	266.4	276.8	286.5	294.7
Total, Federal Government outlays	1,251.7	1,409.6	1,445.9	1,454.2	1,427.1	1,470.3	1,540.8
Surplus or deficit (-):							
On-budget:							
Federal funds	-339.0	-436.3	-406.8	-340.4	-219.7	-181.3	-171.1
Trust funds	62.1	57.8	62.3	66.5	69.2	75.0	68.6
Total, on-budget surplus or deficit (-)	-277.0	-378.5	-344.4	-273.8	-150.4	-106.3	-102.6
Off-budget:							
Federal funds	-1.6	-0.1	1.1	-1.0	-0.7	-0.5	0.7
Trust funds	58.2	60.4	62.4	73.3	89.3	103.9	121.8
Total, off-budget surplus	56.6	60.4	63.6	72.3	88.7	103.4	122.5
Total, Federal Government surplus or deficit (-)	-220.4	-318.1	-280.9	-201.5	-61.8	-2.9	19.9

Table XVII-2. RECEIPTS, OUTLAYS, AND BALANCES OF TRUST FUNDS

(In billions of dollars)

Description	Receipts			Outlays			Balances ¹		
	1990 actual	1991 estimate	1992 estimate	1990 actual	1991 estimate	1992 estimate	1990 actual	1991 estimate	1992 estimate
On-budget:									
Airport and airway trust fund	4.9	6.3	6.9	3.5	5.4	5.8	14.4	15.3	16.4
Federal employees retirement funds	53.0	56.5	59.8	31.5	34.0	35.5	240.7	263.1	287.4
Foreign military sales trust fund	10.3	10.3	10.0	9.3	10.1	10.3	5.7	6.0	5.7
Health insurance trust funds	125.2	134.1	148.4	109.7	116.3	126.7	92.7	92.7	92.8
Highway trust funds	15.4	18.3	19.4	15.3	15.6	16.8	16.3	18.9	21.2
Military retirement fund	34.0	35.6	36.9	21.5	23.0	24.7	77.7	90.2	102.4
Railroad retirement trust funds	10.3	11.3	11.3	9.7	10.1	10.7	8.5	9.0	9.0
Unemployment trust fund	25.9	25.3	26.8	20.3	28.4	28.7	45.1	42.0	40.1
Veterans life insurance trust funds	1.5	1.5	1.4	1.2	1.3	1.3	12.4	12.6	12.7
Other trust funds	5.2	6.4	6.1	1.6	3.5	4.4	25.5	28.8	30.9
Subtotal	285.7	305.5	327.1	223.6	247.7	264.8	539.0	578.6	618.8
Intrafund receipts from on-budget	-0.1	-*	-*	-0.1	-*	-*	.....	.....	.....
Intrafund receipts from off-budget	-3.0	-3.6	-3.3	-3.0	-3.6	-3.3	.....	.....	.....
Interfund from off-budget	-3.9	-5.0	-5.4	-3.9	-5.0	-5.4	.....	.....	.....
Proprietary receipts from the public	-23.5	-23.9	-24.9	-23.5	-23.9	-24.9	.....	.....	.....
Total, on-budget	255.2	273.1	293.4	193.1	215.3	231.1	539.0	578.6	618.8
Off-budget:									
Social security trust funds:									
Cash income and outgo	307.9	329.8	351.1	249.7	269.4	288.6	214.9	272.5	335.0
Interfund receipts from on-budget	-26.3	-31.5	-35.8	-26.3	-31.5	-35.8	.....	.....	.....
Proprietary receipts from the public .....	-*	.....	.....	-*	.....	.....	.....	.....	.....
Total, off-budget (social security)	281.7	298.3	315.3	223.4	237.8	252.8	214.9	272.5	335.0
Total	536.8	571.3	608.7	416.6	453.1	483.9	753.9	851.1	953.8

* \$50 million or less.

¹ Balances available on a cash basis (rather than an authorization basis) at the end of the year. Balances are primarily invested in Federal debt securities.

XVIII. PHYSICAL CAPITAL PRESENTATION

XVIII. PHYSICAL CAPITAL PRESENTATION

FEDERAL PHYSICAL CAPITAL AND OTHER CAPITAL OUTLAYS

The importance and role of Federal and private investment for the future of the Nation are discussed broadly in Chapter IV, "Investing in the Future." In contrast this section classifies Federal outlays into several more technically defined categories of physical and other capital. As noted in the introduction to Part Six, this presentation is an alternative way of dividing up the unified budget totals, as opposed to a replacement of the existing structure. This presentation has been a part of the budget for a number of years.

The major categories for physical and other capital are: major public physical capital, conduct of research and development, conduct of education and training, financial capital outlays, and other capital. The technical presentation in this section provides continuity with previously published analyses, is consistent with physical capital and research and development data extending back to the 1940s that appear in Part Seven, "Historical Tables," presents detailed data by program, and estimates nondefense physical capital net of depreciation.

The section that follows this one, "Supplemental Physical Capital Information," is provided in accordance with the requirements of the Federal Capital Investment Program Information Act of 1984. It uses definitions specified in the Act, which are different from those in this section or elsewhere in the budget.

Capital outlays are outlays that yield long-term benefits. They take several forms and are made for many purposes. They are in the form of grants to State and local governments and direct Federal outlays. They can be for physical capital, which yields a stream of services over a period of years; and for research, development, education, and training, which is less tangible but also provides long-term benefits. They can also be for loans, which yield monetary returns, although the loans usually provide subsidies to the borrowers as well and therefore the face amount of the loans overstates the value of these assets.

Inherent in the classification of these data are two problems, one involving grants to others, and one involving spending that could be shown in more than one category.

- For some grants to State and local governments, the recipient jurisdiction, not the Federal Government, ultimately determines whether the money is used to finance capital or current programs. This analysis classifies all of the outlays in the category where the recipient jurisdictions are expected to spend most of the money. Hence, shared revenues are classified as current spending, although some may be spent by recipient jurisdictions on physical capital. Community development

block grants are classified as physical capital, although some may be spent for current purposes.

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

This section is organized in three parts:

- the composition of Federal capital outlays;
- nondefense physical capital outlays net of depreciation; and
- detailed tables.

Composition of Federal Capital Outlays

The composition of Federal capital outlays consistent with the Administration's 1992 budget is shown in Table XVIII-1. These outlays are estimated to be \$241.1 billion in 1992, \$1.4 billion or 0.6 percent more than the 1991 estimate. This section initially discusses physical capital, such as construction, rehabilitation, and the acquisition of major equipment, and discusses the more marginal categories (in terms of classification) at the end, such as purchases of agricultural commodities and international development activities.

Outlays for major public physical capital (hereafter referred to as physical capital in the text) are estimated to be \$129.6 billion in 1992, \$0.8 billion less than the 1991 estimate of \$130.4 billion. This capital includes primarily outlays for construction, rehabilitation, and major equipment. Direct physical capital outlays by the Federal Government are estimated to be \$102.4 billion in 1992, and grants to State and local governments for physical capital are estimated to be \$27.2 billion.

Direct physical capital outlays by the Federal Government are primarily for national defense, estimated to be \$82.3 billion in 1992. Almost all of this, or an estimated \$75.2 billion, is for the procurement of weapons and other military equipment, and the remainder, \$7.1 billion, is primarily for construction of military bases and family housing for military personnel.

Outlays for direct physical capital for nondefense purposes are estimated to be \$20.1 billion in 1992, \$2.5 billion more than the 1991 estimate. The 1992 outlays

Table XVIII-1. COMPOSITION OF FEDERAL CAPITAL OUTLAYS

(in billions of dollars)

	1990 actual	1991 estimate	1992 estimate
Major public physical capital:			
Direct:			
National defense	87.7	85.8	82.3
Nondefense	15.1	17.6	20.1
Subtotal, major public direct physical capital	102.8	103.5	102.4
Grants to State and local governments	25.8	26.9	27.2
Subtotal, major public physical capital	128.6	130.4	129.6
Other physical capital (nondefense, direct)	3.7	6.5	8.1
Conduct of research and development:			
National defense	41.1	39.1	41.6
Nondefense	22.7	24.6	27.0
Subtotal, conduct of research and development	63.8	63.8	68.6
Conduct of education and training:			
Direct	12.2	14.8	17.2
Grants to State and local governments	14.9	16.7	17.9
Subtotal, conduct of education and training	27.1	31.4	35.1
Loans and other financial capital	2.7	1.9	-5.9
Commodity inventories	-1.3	-0.1	-0.6
Other	7.0	5.9	6.3
Total, Federal capital outlays	231.6	239.7	241.1
MEMORANDUM			
National defense	129.5	125.5	124.3
Nondefense	102.1	114.2	116.8

include \$12.9 billion for construction and rehabilitation. These outlays are largely for water, power, and natural resources projects of the Corps of Engineers, the Department of Interior, the Tennessee Valley Authority and the power administrations in the Department of Energy, and the construction and rehabilitation of veterans hospitals and Postal Service facilities. Outlays for the acquisition of major equipment are estimated to be \$7.2 billion in 1992. The largest items are for the space program, the air traffic control system, and the Postal Service.

Grants to State and local governments for physical capital are estimated to be \$27.2 billion in 1992, \$0.3 billion more than the 1991 estimate. More than half of these outlays, or \$14.8 billion in 1992, are grants to assist with construction of the Interstate Highway System and other major highways. Other major grants for physical capital are for sewage treatment plants, community development, airports, and mass transit. Information on total grants to State and local governments, both for capital and for other purposes, is available in this volume in Chapter VI.C, "Providing Federal Aid to State and Local Governments."

Outlays for other physical capital (nondefense, direct) are estimated to be \$8.1 billion in 1992. This category includes conservation programs for the improvement of land, the purchase and sale of assets, and other activities.

Outlays for the conduct of research and development are estimated to be \$68.6 billion in 1992, \$4.8 billion more than the 1991 estimate. These outlays are devoted to increasing our basic scientific knowledge and promot-

ing related research and development activities. They increase our national security, improve the marginal productivity of capital and labor for both public and private purposes, and enhance the quality of life. More than three-fifths of the outlays for the conduct of research and development, an estimated \$41.6 billion in 1992, are for national defense.

Physical capital for research and development is included in the physical capital category.

Nondefense outlays for the conduct of research and development are estimated to be \$27.0 billion in 1992, \$2.4 billion or 10 percent more than the 1991 estimate. This is almost entirely direct spending by the Federal Government, and is largely for the space programs, the National Science Foundation, health research, and research for nuclear and non-nuclear energy facilities. These programs as well as others are discussed in Chapter IV.C, "Enhancing Research and Development and Expanding the Human Frontier."

Outlays for the conduct of education and training are estimated to be \$35.1 billion in 1992, \$3.7 billion more than the 1991 estimate. These outlays add to the stock of human capital by developing a more skilled and productive labor force. Grants to State and local governments for this category are estimated to be \$17.9 billion in 1992, more than half of the total. They are primarily for the disadvantaged and the handicapped, and for vocational and adult education. Direct education and training outlays by the Federal Government are estimated to be \$17.2 billion in 1992, \$2.4 billion more than the 1991 estimate. Programs in this category are primarily aid for higher education through student fi-

financial assistance, guaranteed student loan subsidies, the veterans GI bill, and health training programs. This category does not include outlays for education and training of Federal civilian and military employees. Physical capital for education and training is included in the physical capital category.

Loans¹ and other financial capital include direct loan disbursements for new loans, repayments of previous loans, the sale of loan assets, and related activities. Because of new credit reform legislation, loan data in this category include activity only for loans obligated in 1991 or earlier. Repayments, sales, and other adjustments are expected to exceed disbursements by \$5.9 billion in 1992. The major loan activities are for the sale of military equipment to foreign countries, promotion of exports and housing, and assistance to farmers and college students. The Federal Credit Reform Act of 1990 has changed the treatment of loans obligated or guarantees committed in 1992 or later. For these direct and guaranteed loans, only the estimated subsidy value of the assistance is included as budget outlays. The subsidies are not classified in this loan category but are classified according to their program purpose, such as for construction, education and training, or non-capital outlays. The unsubsidized cash flows are not included in the budget. More information on the new credit reform concepts is available in Chapter VIII.A., "Recognizing and Reducing Federal Underwriting Risks".

Sales of commodity inventories are estimated to exceed purchases by \$0.6 billion in 1992. These are entirely for direct Federal nondefense purposes. Almost all outlays in this category are for the purchase or sale of agricultural products pursuant to farm price support programs. Net sales of these commodities in 1992 are estimated to be \$0.7 billion. Other outlays in the category are for purchases of oil for the strategic petroleum reserve.

Other capital outlays are for the collection of information, such as by the Bureau of the Census, and for foreign economic assistance grants for general economic development or humanitarian needs. These outlays are estimated to be \$6.3 billion in 1992.

Nondefense Physical Capital Outlays Net of Depreciation

This section presents data on physical capital assets and estimates of the depreciation on these assets, which is the reduction in value due to wear and tear, obsolescence, and other factors. The difference between total (or gross) capital formation and depreciation is net capital formation. These data are presented in constant fiscal year 1982 dollars. Estimates have not been made of net defense capital formation.

For many years, current and constant-dollar data on the value of most forms of both public and private physical capital—e.g., roads, factories, and housing—have been estimated by the Department of Commerce

and published in the *Survey of Current Business*. (See pp. 31–32 of the October 1990 issue and the references therein.) These data include estimates of depreciation of defense capital. However, the Commerce data are not directly linked to the Federal budget and do not include estimates for the years covered by the budget. For budgetary purposes, OMB had to prepare separate estimates.

The estimates were developed first of all from the OMB historical data base for Federal nondefense physical capital outlays and grants to State and local governments for physical capital. These are the same nondefense physical capital outlays presented in the previous section. This data base extends back to 1940 and was supplemented by rough estimates of such spending during 1915–1939.

The resulting series of physical capital outlays in current dollars was adjusted to constant fiscal year 1982 dollars using price deflators for Federal nondefense capital purchases. The resulting constant dollar series is shown as gross capital formation in Table XVIII–2. These constant dollar historical data were then depreciated on a straight-line basis over the following assumed useful lives: 40 years for capital financed by grants (primarily highways); 46 years for water and power projects; 30 years for other nondefense construction and rehabilitation; and 16 years for major equipment. The difference between gross capital formation and depreciation is shown as net capital formation.

These data should be viewed as rough approximations. They have substantial margins of estimating error and provide only a basis for broad generalization. The sources of error include:

- *The extended historical outlay series.*—The historical data series was extended back from 1940 to 1915 using data from selected sources. There are no consistent outlay data on nondefense physical capital for this period, and the estimates are approximations.
- *Price adjustments.*—The replacement cost of the Federal stock of nondefense physical capital has increased through time, but the rate of increase is not known exactly. An estimate of replacement costs in fiscal year 1982 prices was made through the application of the National Income and Product Accounts deflator series for Federal, State, and local purchases of durables and structures indexed to fiscal year 1982 prices. There are no specific price indices for public purchases of durables and structures for 1915 through 1939, and estimates were made on the basis of Census Bureau historical statistics on constant price public capital formation.
- *Depreciation estimates.*—The useful lives of nondefense physical capital are very uncertain. This is compounded by using estimated lives for broad classes of assets, which do not apply uniformly to all the components of each group. The depreciation rate is also very uncertain, and straight-line depreciation may not be the most accurate method.

¹Includes offsets for writeoffs of defaulted loans, which do not directly affect outlays. In such cases, there is an offsetting adjustment in the category that is not for capital outlays.

The data in Table XVIII-2 show that net physical capital outlays, measured in constant dollars, generally increased between 1960 and 1970. It also generally increased during the 1970s, when depreciation was largely based on the relatively low physical capital spending of the 1940s and 1950s, so gross capital outlays primarily added to the capital stock rather than replaced capital. However, with the passage of time, the capital stock became larger, and consequently depreciation grew. More and more gross physical capital outlays were required just to maintain the size of the capital stock. Since the early 1980s, gross physical capital outlays have remained relatively constant. Depreciation continued to rise because of capital outlays in earlier years. As a result, net capital outlays declined in the 1980s.

The composition of nondefense public physical capital outlays—on both a gross and a net basis—has changed substantially. Before the mid-1950s, direct nondefense physical capital outlays exceeded grants for physical

capital outlays, on both a gross and a net basis. However, by the end of the 1950s, after construction of the Interstate Highway System had begun, grants for physical capital substantially exceeded direct physical capital outlays. This relationship has continued on a gross basis, but the trend on a net basis has changed. With increasingly higher depreciation relative to gross physical capital outlays for assets financed by grants, net physical capital outlays for grants are estimated to be less than net direct physical capital outlays in 1992.

Detailed Tables

Tables XVIII-3 and XVIII-4 provide detail on the composition of physical and other capital outlays. They provide two basic displays. Table XVIII-3 shows data on national defense and nondefense capital outlays, and Table XVIII-4 shows data on capital grants for State and local governments and for direct Federal capital outlays.

Table XVIII-2. COMPOSITION OF GROSS AND NET FEDERAL AND FEDERALLY FINANCED NONDEFENSE PUBLIC PHYSICAL CAPITAL OUTLAYS
IN CONSTANT (1982) PRICES

(In billions of dollars)

Year	Total nondefense capital			Direct Federal capital					Capital financed by Federal grants						
	Gross	Depreciation	Net	Gross	Depreciation	Net	Composition of net capital		Gross	Depreciation	Net	Composition of net capital			
							Water and power	Other				Transportation (mainly highways)	Community and regional development	Natural resources and environment	Other
Five-year intervals:															
1960	18.1	7.5	10.6	5.9	4.1	1.8	1.2	0.6	12.2	3.4	8.8	9.0	-0.3	-0.2	0.3
1965	26.0	9.8	16.2	8.7	4.7	4.0	1.9	2.1	17.3	5.1	12.2	10.8	1.2	—*	0.2
1970	25.4	12.1	13.3	6.1	4.9	1.2	0.9	0.2	19.3	7.2	12.1	7.5	3.3	0.3	1.0
1975	26.4	14.9	11.5	8.2	5.7	2.5	2.1	0.5	18.2	9.3	8.9	3.3	2.5	2.9	0.3
1980	33.6	17.8	15.8	9.1	6.6	2.6	1.7	0.9	24.5	11.3	13.2	5.3	4.2	4.2	-0.5
Annual data:															
1985	34.3	21.3	13.0	11.4	7.5	3.9	0.6	3.3	22.9	13.8	9.1	5.8	2.0	1.7	-0.4
1986	34.5	22.1	12.4	11.0	7.8	3.2	0.3	2.9	23.5	14.4	9.1	6.5	1.4	1.7	-0.4
1987	33.4	22.8	10.6	12.3	8.0	4.3	0.7	3.6	21.1	14.8	6.3	4.6	0.8	1.3	-0.4
1988	35.4	23.7	11.7	14.3	8.4	5.9	0.9	5.0	21.1	15.3	5.8	4.7	0.6	0.9	-0.4
1989	33.4	24.6	8.9	13.3	8.8	4.4	0.3	4.1	20.2	15.7	4.4	3.9	0.3	0.6	-0.3
1990	34.8	25.4	9.4	14.0	9.2	4.8	0.8	4.0	20.9	16.2	4.7	4.4	*	0.6	-0.4
1991 estimate	36.2	26.4	9.8	15.6	9.7	5.9	0.3	5.6	20.6	16.7	3.9	3.7	—*	0.5	-0.3
1992 estimate	36.5	27.3	9.2	16.7	10.3	6.4	0.9	5.6	19.8	17.1	2.8	2.9	-0.3	0.3	-0.1

* \$50 million or less.

Table XVIII-3. DETAIL OF FEDERAL CAPITAL OUTLAYS BY DEFENSE AND NONDEFENSE

(In millions of dollars)

	1990 actual	1991 estimate	1992 estimate
CAPITAL OUTLAYS:			
NATIONAL DEFENSE:			
Major public physical capital:			
Construction and rehabilitation:			
Military construction	4,575	4,019	4,020
Family housing	607	490	440
Atomic energy defense activities and other	1,268	1,745	2,669
Subtotal, construction and rehabilitation	6,451	6,255	7,129
Acquisition of major equipment:			
Procurement	80,858	79,098	74,300
Atomic energy defense activities and other	545	682	908
Subtotal, acquisition of major equipment	81,403	79,779	75,208
Subtotal, major public physical capital	87,854	86,034	82,337
Other capital outlays:			
Conduct of research and development			
Defense military	38,247	36,363	38,655
Atomic energy and other	2,831	2,785	2,919
Subtotal, defense research and development	41,078	39,148	41,574
Other outlays	555	356	383
Subtotal, other capital outlays	41,634	39,504	41,957
Subtotal, national defense capital outlays	129,488	125,539	124,293
NONDEFENSE:			
Major public physical capital:			
Construction and rehabilitation:			
Highways	13,972	14,116	14,837
Mass transportation	3,142	3,371	3,051
Rail transportation	36	91	149
Air transportation	1,312	1,567	1,723
Water transportation	99	126	124
Community development block grants	2,818	3,073	3,097
Urban development action grants ..	209	210	200
Other community and regional development	834	895	790
Pollution control and abatement ...	3,163	3,438	3,403
Water resources	2,669	2,925	2,906
Other natural resources and environment	926	1,111	1,203
Energy	2,557	2,081	2,956
Veterans hospitals and other health	879	892	1,088
Postal Service	1,070	1,361	926
Other programs	1,309	1,886	2,974
Subtotal, construction and rehabilitation	34,995	37,145	39,426
Acquisition of major equipment:			
Air transportation	1,344	1,688	1,761
Other transportation	340	420	452
Space flight, control, and data communications	1,793	2,009	1,869
General science and basic research	148	241	199
Postal Service	247	494	784

Table XVIII-3. DETAIL OF FEDERAL CAPITAL OUTLAYS BY DEFENSE AND NONDEFENSE—Continued

(In millions of dollars)

	1990 actual	1991 estimate	1992 estimate
Other	1,293	1,761	2,094
Subtotal, acquisition of major equipment	5,165	6,613	7,160
Other physical assets (grants)	585	587	641
Subtotal, major public physical capital	40,745	44,345	47,227
Other capital outlays:			
Other physical assets (direct)	3,676	6,524	8,057
Conduct of research and development:			
General science, space, and technology:			
NASA	5,624	6,158	6,859
National Science Foundation ...	1,520	1,702	1,936
Other general science	784	897	1,076
Subtotal, general science, space, technology	7,927	8,757	9,872
Energy	2,342	2,435	2,813
Transportation:			
Department of Transportation ...	272	365	407
NASA	701	816	908
Subtotal, transportation	973	1,181	1,315
Health:			
National Institutes of Health	7,092	7,320	7,736
All other health	1,162	1,408	1,528
Subtotal, health	8,253	8,728	9,264
Agriculture	937	987	1,022
Natural resources and environment	1,220	1,376	1,434
All other research and development	1,081	1,157	1,325
Subtotal, conduct of research and development	22,732	24,620	27,044
Conduct of education and training:			
Department of Education:			
Higher education	7,795	9,737	11,797
Elementary, secondary, and vocational education	9,559	11,095	12,275
Other	412	436	398
Subtotal, Department of Education	17,766	21,269	24,470
Veterans readjustment benefits	441	495	574
Training and employment programs	3,890	3,954	4,133
Health training	1,176	1,313	1,337
Other education and training	3,783	4,344	4,518
Subtotal, conduct of education and training	27,056	31,374	35,031
Loans and other financial capital:			
Loans:			
International affairs	-398	-743	-5,512
Agriculture	-4,446	-3,229	-2,258
Mortgage credit	3,034	2,945	91
Deposit insurance	-2,195	-807	-114
Other advancement of commerce	-358	-179	-170
Transportation	-562	39	166
Disaster relief	401	-36	-424
Other community and regional development	264	234	259
Education	3,288	1,336	692

Table XVIII-3. DETAIL OF FEDERAL CAPITAL OUTLAYS BY DEFENSE AND NONDEFENSE—Continued

(In millions of dollars)

	1990 actual	1991 estimate	1992 estimate
Other	2,866	892	-232
Subtotal, loans	1,894	452	-7,503
Other financial capital:			
International development	688	1,307	1,484
Other	130	164	148
Subtotal, other financial capital	818	1,471	1,632
Subtotal, loans and other financial capital	2,713	1,922	-5,871
Commodity inventories:			
Agriculture	-1,622	-184	-666

Table XVIII-3. DETAIL OF FEDERAL CAPITAL OUTLAYS BY DEFENSE AND NONDEFENSE—Continued

(In millions of dollars)

	1990 actual	1991 estimate	1992 estimate
Strategic petroleum reserve	268	33	51
Subtotal, commodity inventories	-1,355	-151	-614
Other outlays:			
Collection of information	2,926	2,093	1,979
International development	3,591	3,468	3,951
Subtotal, other outlays	6,517	5,561	5,930
Subtotal, other capital outlays	61,339	69,852	69,577
Subtotal, nondefense capital outlays	102,084	114,197	116,803
Total, capital outlays	231,572	239,735	241,097

Table XVIII-4. DETAIL OF FEDERAL CAPITAL OUTLAYS BY GRANTS AND DIRECT FEDERAL PROGRAMS

(In millions of dollars)

	1990 actual	1991 estimate	1992 estimate
GRANTS:			
Major public physical capital:			
Construction and rehabilitation:			
Highways	13,961	14,059	14,798
Mass transportation	3,142	3,371	3,051
Rail transportation	16	20	31
Air transportation	1,220	1,434	1,575
Pollution control and abatement	2,533	2,673	2,559
Other natural resources and environment	165	195	143
Community development block grants	2,818	3,073	3,097
Urban development action grants	209	210	200
Other community and regional development	712	753	640
Other construction	446	547	442
Subtotal, construction and rehabilitation	25,220	26,334	26,537
Other physical assets	585	587	641
Subtotal, major public physical capital	25,805	26,922	27,177
Other capital outlays:			
Conduct of research and development ..	345	370	393
Conduct of education and training:			
Training and employment	3,042	3,049	3,149
Elementary and secondary education	9,281	10,742	11,853
Other	2,589	2,859	2,899
Subtotal, conduct of education and training	14,912	16,650	17,901
Collection of information	68	85	56
Subtotal, other capital outlays	15,326	17,105	18,351
Subtotal, grants for capital outlays	41,131	44,026	45,528
DIRECT FEDERAL PROGRAMS:			
Major public physical capital:			
Construction and rehabilitation:			
National defense	6,296	6,048	7,092
Water resource projects	2,547	2,795	2,824
Other natural resources and environment	1,514	1,811	1,986
Energy	2,557	2,081	2,956
Transportation	223	389	429
Veterans hospitals and other health facilities	841	850	1,042
Postal Service	1,070	1,361	926
Other construction	1,178	1,730	2,765
Subtotal, construction and rehabilitation	16,226	17,065	20,018
Acquisition of major equipment:			
National defense	81,403	79,779	75,208
NASA	1,793	2,009	1,869
Postal Service	247	494	784

Table XVIII-4. DETAIL OF FEDERAL CAPITAL OUTLAYS BY GRANTS AND DIRECT FEDERAL PROGRAMS—Continued

(In millions of dollars)

	1990 actual	1991 estimate	1992 estimate
Other	3,125	4,110	4,506
Subtotal, acquisition of major equipment	86,568	86,392	82,368
Subtotal, major public physical capital	102,794	103,457	102,386
Other capital outlays:			
Other physical assets	3,676	6,524	8,057
Conduct of research and development ..	63,465	63,399	68,225
Conduct of education and training:			
Veterans benefits and services	573	643	729
Higher education	7,704	9,636	11,739
Elementary and secondary education	521	748	801
Employment and training	848	905	984
Health training	1,152	1,296	1,320
Other	1,374	1,531	1,617
Subtotal, conduct of education and training	12,172	14,759	17,190
Loans and other financial capital:			
Loans:			
International affairs	-398	-743	-5,512
Energy supply	116	1,429	-57
Agriculture	-4,446	-3,229	-2,258
Mortgage credit	3,034	2,945	91
Deposit insurance	-2,195	-807	-114
Other advancement of commerce	-358	-179	-170
Transportation	-562	39	166
Disaster relief and insurance	401	-36	-424
Higher education	3,288	1,336	692
Veterans benefits and services	2,648	67	-493
Housing assistance	-26	99	-53
Other	344	-516	581
Subtotal, loans	1,846	403	-7,551
Other financial capital	818	1,471	1,632
Subtotal, loans and other financial capital	2,664	1,874	-5,919
Commodity inventories:			
Strategic petroleum reserve	268	33	51
Commodity Credit Corporation	-1,622	-184	-666
Other	89	4	3
Subtotal, commodity inventories	-1,266	-147	-611
Collection of information	2,857	2,008	1,923
International development	4,078	3,834	4,319
Subtotal, other capital outlays	87,647	92,252	93,183
Subtotal, direct Federal capital outlays	190,441	195,709	195,569
Total, capital outlays	231,572	239,735	241,097

SUPPLEMENTAL PHYSICAL CAPITAL INFORMATION

Introduction

The Federal Capital Investment Program Information Act of 1984 (Title II of Public Law 98-501; hereafter referred to as the Act) requires that the budget include projections of Federal physical capital spending and information regarding recent assessments of public civilian physical capital needs. This section is submitted to fulfill that requirement.

Data on historical trends going back to 1940 for Federal public physical capital spending, using the definitions in the previous section, "Federal Physical Capital and Other Capital Outlays," can be found in the Historical Tables in Part Seven of this volume.

This section is organized in two major parts. The first part projects Federal outlays for public physical capital and the second part presents information regarding public civilian physical capital needs.

Projections of Federal Outlays For Public Physical Capital

Summary of projections.—Federal public physical capital spending as defined for this report was \$61.3 billion in 1990 and, for current services estimates,² is projected to increase to \$77.0 billion by 1996. The largest components are for roads and bridges and for federally assisted housing, which together account for about two-fifths of Federal public physical capital spending.

On a Presidential policy basis, the 1992 budget is proposing \$68.7 billion for physical capital spending for 1992, \$0.9 billion less than the current services level of \$69.6 billion.

Definitions.—Federal public physical capital spending is defined in this report as specified in the Act. It covers spending for construction and rehabilitation, acquisition of major equipment, and spending for all other physical assets, such as the purchase and improvement of land and structures. The data for physical capital spending are generally the same as those used for the previous section "Federal Physical Capital and Other Capital Outlays," with two major exceptions required by the Act. They concern housing and military physical capital spending. In the case of the Department of Defense, this report includes only military construction and family housing, and excludes other capital spending, such as for military weapons, aircraft, and ships. Second, this report includes considerable amounts of spending for federally assisted housing that is at least indirectly associated with housing construction. Most of this is considered current spending (i.e., not for capital) in deriving the data for the previous section "Federal Physical Capital and Other Capital Outlays," because it is to pay off loans for public housing rather than to finance the housing construction directly.

²In this chapter, current services estimates are consistent with the caps enacted as part of the Budget Enforcement Act of 1990. For a discussion of current services estimates, see Chapter XV, "Current Services Estimates."

This report excludes financial capital, such as loans, and outlays for human capital, such as the conduct of education, training, and research. The data in this report generally exclude offsetting collections that finance the spending, such as collections from the sale of energy.

Projections.—Table XVIII-5 shows projected current services outlays for Federal physical capital by the major categories specified in the Act. Total Federal outlays for transportation-related physical capital were \$20.2 billion in 1990, and current services outlays are estimated to increase to \$28.7 billion by 2000. Outlays for nondefense housing and buildings were \$13.5 billion in 1990 and are estimated to increase to \$22.8 billion by 2000. Physical capital outlays for other nondefense categories were \$22.9 billion in 1990 and are projected to be \$32.6 billion by 2000. For national defense, this spending was \$4.8 billion in 1990 and is estimated to increase to \$5.9 billion in 2000.

Table XVIII-6 shows current services projections adjusted for inflation on a constant dollar basis to 1996, using fiscal year 1982 as the base year.

Table XVIII-7 compares the current services and Presidential policy projections from 1990 to 1996 in current and constant dollars.

For outlay details for most programs, see the items included in major public physical capital in "Federal Physical Capital and Other Capital Outlays," especially tables XVIII-3 and XVIII-4. For major programs that are formula grants to States, information on the estimated distributions by State for 1990-1992, consistent with Presidential policy estimates, can be found in a separate publication entitled Budget Information for States, prepared by the Office of Management and Budget.

Public Civilian Capital Needs Assessments

The Act requires information regarding the state of major Federal infrastructure programs, including highways and bridges, airports and airway facilities, mass transit, railroads, federally assisted housing, hospitals, water resources projects, and space and communications investments. Funding levels, long term projections, policy issues, needs assessments, and critiques, are required for each category.

Much of the needs assessment material formerly presented in the Supplement to Special Analysis D has been incorporated in the discussions of individual programs in other parts of the budget. Indeed, this budget focuses far more on the need to maintain our capital stock and improve national productivity than has been the case in past years, obviating the need for separate discussion.

Capital needs assessments change little from year to year, in part due to the long term nature of the facilities themselves, and in part due to the consistency of the analytical techniques used to develop the assessments and the comparatively steady but slow changes

Table XVIII-5. CURRENT SERVICES OUTLAY PROJECTIONS FOR FEDERAL PHYSICAL CAPITAL SPENDING

(In billions of dollars)

	1990 actual	Estimate									
		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nondefense:											
Transportation-related categories:											
Roadways and bridges	14.3	14.5	15.3	16.4	16.5	16.7	17.0	17.7	18.4	19.2	19.9
Airports and airway facilities	2.7	3.3	3.4	3.7	3.9	4.0	4.2	4.4	4.5	4.7	4.9
Mass transportation systems	3.1	3.4	3.2	3.1	2.9	2.7	3.0	3.1	3.2	3.3	3.5
Railroads	0.1	0.2	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4
Subtotal, transportation	20.2	21.3	22.1	23.6	23.6	23.8	24.5	25.5	26.5	27.6	28.7
Housing and buildings categories:											
Federally assisted housing	11.5	12.2	12.8	13.7	14.0	14.6	15.0	15.6	16.2	16.8	17.5
Hospitals	1.0	1.2	1.3	1.4	1.5	1.6	1.6	1.7	1.7	1.8	1.9
Public buildings ¹	1.0	1.8	2.4	3.4	3.4	3.3	2.9	3.0	3.1	3.3	3.4
Subtotal, housing and buildings	13.5	15.1	16.5	18.5	18.8	19.5	19.5	20.3	21.1	21.9	22.8
Other nondefense categories:											
Wastewater treatment and related facilities	2.4	2.5	2.4	2.4	2.3	2.3	2.3	2.4	2.5	2.6	2.7
Water resources projects	3.3	3.5	3.6	3.8	3.8	3.9	4.0	4.1	4.3	4.5	4.7
Space and communications facilities	3.7	4.6	4.6	5.1	5.1	5.0	5.0	5.2	5.4	5.6	5.9
Energy programs	2.8	2.4	3.3	4.1	4.4	3.9	3.7	3.9	4.0	4.2	4.3
Community development programs	3.3	3.6	3.4	3.6	3.4	3.4	3.5	3.7	3.8	4.0	4.1
Other nondefense	7.3	8.2	8.6	9.1	9.1	9.1	9.3	9.7	10.1	10.5	10.9
Subtotal, other nondefense	22.9	24.8	25.9	28.1	28.0	27.6	27.9	29.0	30.1	31.4	32.6
Subtotal, nondefense	56.5	61.2	64.6	70.2	70.4	70.9	71.9	74.8	77.8	80.9	84.2
National defense	4.8	4.8	5.0	5.2	5.2	5.1	5.2	5.4	5.5	5.7	5.9
Total	61.3	66.0	69.6	75.4	75.6	76.0	77.0	80.1	83.3	86.6	90.1

¹ Excludes outlays for public buildings that are included in other categories in this table.

Table XVIII-6. CURRENT SERVICES OUTLAY PROJECTIONS FOR FEDERAL PHYSICAL CAPITAL SPENDING (IN CONSTANT (1982) DOLLARS)

(In billions of dollars)

	Actual 1990	Estimate					
		1991	1992	1993	1994	1995	1996
Nondefense:							
Transportation-related categories:							
Roadways and bridges	11.7	11.2	11.2	11.5	11.0	10.7	11.4
Airports and airway facilities	2.3	2.7	2.7	2.8	2.9	2.9	2.9
Mass transportation systems	2.6	2.6	2.3	2.2	1.9	1.7	1.8
Railroads	0.1	0.2	0.3	0.3	0.3	0.3	0.3
Subtotal, transportation	16.6	16.7	16.4	16.8	16.1	15.6	16.4
Housing and buildings categories:							
Federally assisted housing	10.6	10.8	10.9	11.2	11.0	11.1	11.0
Hospitals	1.0	1.0	1.1	1.2	1.2	1.2	1.2
Public buildings ¹	0.9	1.6	2.0	2.8	2.7	2.5	2.1
Subtotal, housing and buildings	12.5	13.4	14.0	15.1	14.8	14.8	14.3
Other nondefense categories:							
Wastewater treatment and related facilities	2.0	1.9	1.7	1.6	1.5	1.5	1.4
Water resources projects	3.1	3.1	3.1	3.1	3.0	3.0	2.9
Space and communications facilities	3.4	4.1	3.9	4.2	4.0	3.9	3.7
Energy programs	2.6	2.1	2.8	3.4	3.5	3.0	2.7
Community development programs	2.7	2.8	2.5	2.5	2.3	2.2	2.2
Other nondefense	6.6	7.1	7.2	7.3	7.0	6.8	6.7
Subtotal, other nondefense	20.4	21.1	21.2	22.1	21.3	20.2	19.7
Subtotal, nondefense	49.5	51.2	51.7	54.0	52.2	50.6	50.4
National defense	4.7	4.5	4.5	4.5	4.3	4.1	4.0
Total	54.1	55.7	56.2	58.5	56.5	54.7	54.4

¹ Excludes outlays for public buildings that are included in other categories in this table.

Table XVIII-7. PROJECTIONS OF FEDERAL OUTLAYS FOR PHYSICAL CAPITAL: CURRENT SERVICES AND PRESIDENTIAL POLICY

(In billions of dollars)

	Actual 1990	Estimate					
		1991	1992	1993	1994	1995	1996
In current dollars:							
Current services:							
Federal physical capital:							
Nondefense	56.5	61.2	64.6	70.2	70.4	70.9	71.9
National defense	4.8	4.8	5.0	5.2	5.2	5.1	5.2
Total	61.3	66.0	69.6	75.4	75.6	76.0	77.0
Presidential policy:							
Federal physical capital:							
Nondefense	56.5	61.2	64.2	68.7	70.8	69.6	71.0
National defense	4.8	4.5	4.5	4.7	4.9	5.1	5.3
Total	61.3	65.8	68.7	73.4	75.7	74.7	76.3
In constant 1982 dollars:							
Current services:							
Federal physical capital:							
Nondefense	49.5	51.2	51.7	54.0	52.2	50.6	50.4
National defense	4.7	4.5	4.5	4.5	4.3	4.1	4.0
Total	54.1	55.7	56.2	58.5	56.5	54.7	54.4
Presidential policy:							
Federal physical capital:							
Nondefense	49.5	51.2	51.4	52.8	52.4	49.5	48.6
National defense	4.7	4.2	4.0	4.1	4.1	4.1	4.1
Total	54.1	55.4	55.4	56.9	56.5	53.6	52.7

in underlying demographics. As a result, the practice has arisen in previous Supplements to refer to earlier discussions, where the relevant information had been carefully presented and changes had been minimal.

In order to present this budget as a focused statement of current Administration policy, the needs assessment material in Supplements of earlier years is incorporated this year largely by reference to earlier editions of the Supplement and by reference to other

needs assessments. The needs analyses, their major components, and their critical evaluations have been fully covered in past Supplements, such as the *1990 Supplement to Special Analysis D*. Supporting tables are presented below, and the reader is referred both to the individual program summaries in Part Two of the budget for policy matters and to previous reports for methodological discussions.

Significant Factors Affecting Infrastructure Needs Assessments

Significant Factors

Amount

Highways

1. Projected annual growth in travel to the year 2005 2-3 percent
2. Annual cost to maintain overall 1985 highway conditions on the Federal-aid systems \$19.6 billion to \$23.5 billion (1989 dollars)
3. Annual cost of eliminating all existing and future bridge deficiencies to the year 2005 for Federal-aid system \$4.1 billion (1989 dollars)

Airports and Airway Facilities

1. Airports in the National Plan of Integrated Airport Systems with scheduled passenger traffic 568
2. Air traffic control towers 400
3. Airport development eligible under airport improvement program for period 1986-1995 \$40.5 billion (\$28.2 billion for capacity) (1989 dollars)

Significant Factors Affecting Infrastructure Needs Assessments—Continued

*Significant Factors**Amount*

Mass Transportation Systems

- | | |
|---|--|
| 1. Yearly cost to restore existing rail facilities over a period of 10 years | \$1.5 billion–\$2.2 billion (1989 dollars) |
| 2. Yearly cost to replace and maintain the urban, rural, and special services bus fleet | \$1,505 million (1989 dollars) |

Wastewater Treatment

- | | |
|--|-------------------------------|
| 1. Total needs of sewage treatment facilities | \$83.5 billion (1989 dollars) |
| 2. Total expenditures since 1972 under the Clean Water Act of 1972 | \$54 billion |
| 3. Percent of population served by centralized treatment facilities that benefits from at least secondary sewage treatment systems | 95% |
| 4. States and territories served by State Revolving Funds | 51 |

Housing

- | | |
|--|-------------|
| 1. Total unsubsidized very low income renter families: | |
| A. In severely substandard units | 0.4 million |
| B. With a rent burden greater than 50% | 3.4 million |

Indian Health (IHS) Care Facilities

- | | |
|--|-----------|
| 1. IHS hospital occupancy rates (1988) | 50% |
| 2. Average length of stay, IHS hospitals (days) (1988) | 4.5 |
| 3. Hospital admissions (1988) | 105,000 |
| 4. Outpatient visits (1988) | 4,990,000 |
| 5. Population (1988) | 1,040,000 |

Department of Veterans Affairs (VA) Hospitals

- | | |
|--|--------|
| 1. Hospitals | 172 |
| 2. Outpatient clinics | 369 |
| 3. Domiciliaries | 35 |
| 4. Outreach centers | 195 |
| 5. VA owned nursing home beds | 14,349 |
| 6. VA owned nursing home beds needed in 2000 | 17,042 |
| 7. VA owned nursing home beds needed in 2005 | 17,664 |

Significant Factors Affecting Infrastructure Needs Assessments—Continued

Significant Factors

Amount

Water Resources

1. Navigation (deepwater ports & inland waterway)
2. Flood control and Storm Damage Protection.
3. Irrigation.
4. Hydropower.
5. Municipal and Industrial Water Supply.
6. Recreation.
7. Fish and Wildlife mitigation and enhancement.
8. Soil conservation.

Needs data are not regularly collected by the Federal Government. Most recent estimates of the need for navigation, flood control and shoreline storm damage protection, and municipal and industrial (M&I) water are found in the *National Council on Public Works Improvement, 1987*. Meeting M&I needs as well as certain other water resource needs estimated in this report (e.g., urban storm water management and dam safety) is primarily a non-Federal responsibility. Program reforms have emphasized non-Federal cost sharing which encourages reexamination of needs.

Investment Needs Assessment References

Highways and Bridges

1. Report of the Secretary of Transportation to the U.S. Congress. *The Status of the Nation's Highways and Bridges: Conditions and Performance and Highway Replacement and Rehabilitation Program 1989*. June, 1989.

Airports and Airways Facilities

1. Federal Aviation Administration. *The National Plan of Integrated Airport Systems Report*. 1987.

Mass Transportation Systems

1. Urban Mass Transportation Administration. *Rail Modernization Study Final Report*. April, 1987.
2. Urban Mass Transportation Administration. *Public Transportation in the United States: Performance and Conditions*. January 1991.

Indian Health Care Facilities

1. Indian Health Service. *Priority System for Health Facility Construction (Document Number 0820B or 2046T)*. September 19, 1981.
2. Office of Audit, Office of Inspector General, U.S. Department of Health and Human Services. *Review of Health Facilities Construction Program. Indian Health Service Proposed Replacement Hospital at Shiprock, New Mexico (CIN A-06-88-00008)*. June, 1989.
3. Office of Audit, Office of Inspector General, U.S. Department of Health and Human Services. *Review of Health Facilities Construction Program. Indian Health Service Proposed Construction Project for the Alaska Native Medical Center at Anchorage Alaska (CIN A-09-89-00096)*. July, 1989.
4. Office of Technology Assessment. *Indian Health Care (OTA-H-290)*. April, 1986.

Wastewater Treatment

1. Environmental Protection Agency, Office of Municipal Pollution Control. *Assessment of Needed Publicly Owned Wastewater Treatment Facilities in the United States (EPA Y30/09-001)*. February, 1989.

Water Resources

1. Frederick, Kenneth G. *The Nation's Water Resources: Past Trends and Current Challenges*. Washington, D.C., Resources for the Future, Discussion Paper ENR 90-02, 1989.
2. National Council on Public Works Improvement. *The Nation's Public Works*, Washington, D.C., May, 1987. see "Defining the Issues—Needs Studies," Chapter II; *Report on Water Resources*, Shilling *et al.*, and *Report on Water Supply*, Miller Associates.

XIX. GENERAL ACCOUNTING OFFICE PREFERRED PRESENTATION

XIX. GENERAL ACCOUNTING OFFICE PREFERRED PRESENTATION

The Comptroller General has in recent years become increasingly concerned that the unified budget's almost exclusive focus on obligation controls and cash transactions prejudices investments and understates liabilities. The General Accounting Office stated in its October 1989 Report (entitled "Managing the Cost of Government: Proposals for Reforming Federal Budgeting Practices") that consolidation into a single unified budget of trust and non-trust receipts and outlays, and of the accounting for operating and capital needs, has permitted financing other parts of the budget through trust fund receipts (especially from Social Security); prevented appropriate budgetary treatment of the special needs of the Government's business-type entities (e.g., the U.S. Postal Service and the Tennessee Valley Authority); biased decisionmaking against capital investment by requiring the recording of the entire cost of an asset in the year of acquisition; and failed to distinguish operating *deficits* from capital *financing requirements*.

To address its concerns with the unified budget, GAO has proposed to divide the budget into three separate fund groups: Federal funds (less enterprise funds), trust funds, and enterprise funds. The fund groups would themselves be aggregated separately in an operating budget and a capital budget. The data in Table XIX-1 show an approximation of the 1992 budget totals on a basis consistent with GAO recommendations.

As compared with the unified budget, which focuses primarily on aggregate totals (although it provides details by fund group and separately identifies trust funds and revolving funds), the GAO proposal focuses separately on operating and capital needs; disaggregated Federal, trust and enterprise funds; and aggregate totals.

Capital and Operating Budgets.—GAO's proposed capital budget separates disbursements for physical capital and credit flows (i.e., credit financing excluding credit subsidies) from the operating budget. The cost of newly acquired assets would be recorded in the capital budget and as assets on the balance sheet, with most forms of capital subjected to depreciation charges recorded as operating budget outlays (with concomitant reduction in the value of capital assets on the balance sheet). Aggregate totals of the capital and operating budgets would be provided (as in the unified budget), but the distinctions between the two uses of funds would be set out in all summary presentations.

The GAO proposal includes only physical and loan capital in its capital budget. The failure to treat R&D and human capital on a par with physical and loan capital has been criticized in Congress and elsewhere, and GAO is studying the issue. In Table XIX-1, expend-

itures for R&D and human capital—education, for example—is retained in the operating budget.

The GAO proposal would also include in the capital budget the value (or cost) of State and local physical facilities financed by Federal grants. These would be recorded on Federal balance sheets as Federal assets financed but not owned by the Federal Government. The GAO proposal, like the unified budget, would record Federal highway and airport and airway trust fund collections as receipts, but the GAO proposal would include them as receipts to finance the capital budget. A problem with the GAO proposal is that its allocation of depreciation cannot be charged to the trust funds which finance these investments through earmarked taxes. Recording both earmarked receipts and depreciation would require double counting with respect to assets acquired after the GAO proposal went into effect.

The GAO proposal would tend to reduce the impediments to Government investment and, as a result, could encourage the Government to make those cost-effective purchases required to meet longer term needs. The portion of the Federal budget attributable to investment in physical capital has declined in recent years as a percentage of GNP—from 4.4 percent in 1960 to 2.2 percent in 1992. While most of this decline is attributable to Defense and NASA, there is a question of whether infrastructure needs have been adequately attended to.

On the other hand, GAO's proposal could also reduce the impediments to "pork barrel" spending in that charges to the operating budget would switch from the point at which they can be controlled—the time of acquisition—to the later time at which they cannot be controlled when depreciation charges would be recorded. Additionally, GAO's attempt to reduce the disincentives to physical capital expenditures would favor physical over human capital.

Treatment of Sovereign and Business-Type Income.—The GAO proposal would abolish the distinction between sovereign and business-type income from the public. Most collections from the public would be recorded as Federal fund, trust fund, or public enterprise fund operating budget receipts and outlays, and outlays would be recorded gross rather than net of offsetting collections. The issue here is the degree to which the budget aggregates should focus on receipts arising from the exercise of Government's sovereign power as opposed to total Government revenues and spending (including business-type activities). GAO would focus on the total of Government activity; current budget concepts treat as receipts only those which the Federal Government collects in its role as a government.

Allocations by Function.—Table XIX-1 shows most of the GAO adjustments by function. Line 14 (Additional Operating Costs Not Currently Allocated by Function), however, includes estimates of two items for which a distribution by function is unavailable. Specifically:

- Line 14(a) records a lump sum estimate of \$20.3 billion as a non-defense “asset consumption charge” (depreciation) and a corresponding reduction of \$20.3 billion in the capital budget net in-

vestment. Defense depreciation of \$53.8 billion, also offset in the capital budget, is included in the amounts on line B(1).

- Line 14(b) records a lump sum \$28.7 billion imputed payment from the general fund to amortize unfunded pension liabilities.

Comparison with Other Alternatives.—The GAO proposal is compared with the alternatives discussed in Chapters XX and XXI, and with the unified budget, at the end of Chapter XXI.

Table XIX-1. GAO FEDERAL BUDGET PRESENTATION (COMPARED TO UNIFIED BUDGET PRESENTATION)

(1992, in billions of dollars)

	UNIFIED BUDGET	GAO COMPREHENSIVE BUDGET				GAO OPERATING BUDGET				GAO CAPITAL BUDGET			
		Total	General	Trust	Enterprise	Total	General	Trust	Enterprise	Total	General	Trust	Enterprise
A. RECEIPTS/REVENUES													
<i>Governmental Receipts:</i>													
(1) Income, Estate, Gift, Customs Duties	664.0	664.0	662.9	1.1	.....	662.9	662.9	.....	.....	1.1	.....	1.1	.....
(2) Social Insurance Taxes and Contributions	429.4	429.4	.....	429.4	.....	429.4	.....	429.4	.....	.....	.....	.....	.....
(3) Excise taxes and miscellaneous receipts	71.7	71.7	45.9	25.8	.....	47.1	45.9	1.3	.....	24.5	.....	24.5	.....
TOTAL RECEIPTS, Federal Budget Basis	1,165.0												
<i>Offsetting Collections Converted to Receipts:</i>													
(4) Proprietary Receipts from the Public		42.8	17.3	24.9	0.6	41.9	17.2	24.0	0.6	1.0	0.1	0.9	.....
(5) Reimbursements to Appropriations ..		190.7	114.4	6.3	69.9	173.1	99.8	6.3	67.1	17.6	14.6	0.1	2.9
TOTAL GAO REVENUES	1,165.0	1,399.5	840.4	487.5	70.6	1,354.4	825.7	460.9	67.7	44.1	14.7	26.6	2.9
B. OUTLAYS, EXPENSES, AND INVESTMENTS													
<i>Outlays by Function:</i>													
(1) Defense/International (050, 150)	313.1	340.9	327.8	10.7	2.4	325.0	312.6	10.7	1.7	15.9	15.1	.....	0.8
(2) Science, Space, Technology (250) .	17.5	17.6	17.6	*	.....	15.0	14.9	*	.....	2.6	2.6	.....	.....
(3) Energy, Natural Resources, Agriculture (270, 300, 350)	38.5	72.3	54.8	3.5	13.9	46.0	35.0	0.8	10.2	26.2	19.8	2.7	3.7
(4) Commerce and Housing Credit (370)	92.8	221.2	169.8	0.4	51.1	210.2	162.8	0.4	47.0	11.0	6.9	.....	4.1
(5) Transportation (400)	32.7	33.7	10.5	22.7	0.5	11.6	7.7	3.4	0.5	22.1	2.8	19.4	.....
(6) Education, Training, Employment, and Social Services (500)	45.5	46.8	45.7	1.1	.....	44.3	43.2	1.1	.....	2.5	2.5	.....	.....
(7) Health and Medicare (550,570)	195.0	213.4	83.0	130.4	.....	213.0	82.6	130.4	.....	0.4	0.4	*	.....
(8) Income Security (600)	184.8	190.9	97.3	92.8	0.8	180.7	87.1	92.8	0.8	10.2	10.2	.....	*
(9) Social Security (650)	288.6	288.6	.....	288.6	.....	288.6	.....	288.6	.....	.....	.....	.....	.....
(10) Veterans Benefits and Services (700)	33.0	36.6	34.1	2.3	0.2	34.1	31.7	2.3	0.2	2.5	2.5	*	.....
(11) Other (450,750,800,870,920)	38.8	44.9	43.6	0.3	1.1	36.9	35.7	0.3	0.9	8.0	7.9	.....	0.1
(12) Net Interest (900)	206.3	209.2	209.2	.....	.....	212.5	212.5	.....	.....	-3.3	-3.3	.....	.....
(13) Undistributed Offsetting Receipts (950)	-40.8	-36.8	-36.8	.....	.....	-36.8	-36.8	.....	.....	.....	.....	.....	.....
TOTAL OUTLAYS	1,445.9												
(14) Additional Operating Costs Not Currently Allocated by Function:													
(a) Asset Consumption .....		.....	.....	.....	.....	20.3	20.3	.....	.....	-20.3	-20.3	.....	.....
(b) Pension liabilities .....		.....	28.7	-28.7	.....	.....	28.7	-28.7	.....	.....	.....	.....	.....
(15) Total Expenses and Investments Before Transfers		1,679.4	1,085.3	524.1	70.0	1,601.4	1,038.1	502.1	61.3	78.0	47.2	22.1	8.7
(16) Interfund Transfers .....		.....	190.1	-190.1	.....	3.3	190.1	-186.8	.....	-3.3	.....	-3.3	.....
TOTAL OUTLAYS/AMOUNT TO BE FINANCED		1,679.4	1,275.4	334.0	70.0	1,604.7	1,228.2	315.2	61.3	74.7	47.2	18.8	8.7
C. SURPLUS/DEFICIT/FINANCING	-280.9	-280.9	-434.9	153.5	0.6	-250.3	-402.4	145.7	6.4	-30.5	-32.5	7.8	-5.8

* \$50 million or less.

XX. STATE-TYPE PRESENTATION

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XX. STATE-TYPE PRESENTATION

California offers a fairly typical example of a State budget presentation. The California budget (Table XX-1) differs significantly from the other alternatives in this Part. It focuses on separate general, special, and capital funds, although it also provides aggregate totals (albeit inflated through double counting) of these funds. The separate State GAAP (Generally Accepted Accounting Principles) presentation includes proprietary and fiduciary funds excluded from the California budget (i.e., public enterprise and working capital revolving funds, self-financing bond funds, employee retirement funds, and certain funds deemed to be held in trust).

When the California approach combines fund groups, it leaves the inter-fund collections in receipts, thereby overstating total collections from, and payments to, the public. Additionally, when capital expenditures are financed by bond funds, they are double counted, because the bond spending and debt amortization are both included in combined total spending. The bottom line is that the California and State GAAP presentations are the least consolidated and most disaggregated of the alternatives discussed in this part of the budget document. In California, the individual funds matter most.

The standard California budget presentation has a two-way distribution of income and a three-way distribution of spending. Receipts go to the general and special funds, whereas outlays/expenses and investments are spent from these funds plus the capital fund. The norm for California's special funds is that they should have cash in hand before they spend (similar to the norm for Federal trust funds). At the same time, both the California general and special funds can spend more in a year than they take in by reducing carry over balances; this is not deemed to create a deficit.

Balanced Budget Requirement.—California's constitutional requirement of balanced budgets, combined with constitutional limitations on taxes and spending, result in procedures different from Federal procedures. These include appropriated allowances for contingencies, with payments charged back to the activity for which the payment is made, and "encumbrances" (similar to obligations in the Federal budget) for which the spending is charged to the year in which the encumbrance occurs.

The California budget document has information tables on total State indebtedness (akin to the Federal display of total Federal debt). In contrast to the Federal Government, however, California's ability to borrow is subject to several restrictions: borrowing can normally occur only for capital projects (whether general or self-liquidating); and debt normally cannot be issued unless approved by both the legislature and the voters.

Capital Projects Fund.—The Capital Projects Fund is displayed only on the spending side, since bond fund spending is financed by borrowing, which is not income. The California capital fund only includes bonds that are to be amortized by the general fund. "Self-liquidating" bonds (such as for toll bridges, the California water plan, and college dormitories) are excluded from the regular budget altogether, but are displayed in the budget documents for information purposes (similar to the way the Federal budget displays GSEs but leaves them out of the totals).

The estimate of the Capital Projects Fund in Table XX-1 (and the associated amortization) was based on several imputations. First, Federal fund (i.e., non-trust) capital outlays (other than those made by the public enterprise funds and other than for grants) are identified as equivalent to the investment that California finances through its Capital Projects Fund. Second, an estimate of amortization of prior debt was made and allocated as expenditures of the general fund. There is currently no solid basis for amortizing total debt, much less for amortizing debt by function. However, Table XX-1 assumes an amortization by function equal to new debt-financed capital investment. It does not provide for a distribution of interest back to the functions charged with the borrowing.

Sovereign Versus Business-Type Operations and Employee Retirement.—The California budget excludes both business operations and employee retirement and related funds from the budget. So, in the reconstruction of the Federal budget in the form of the California budget, most of the public enterprise funds—plus the civil service, military, and foreign service retirement funds—were excluded from the budget totals (although payments to these funds were left in the budget figures). Thus, the general fund coverage in Table XX-1 is less comprehensive than the Federal fund group in the unified budget, and the special fund coverage is less comprehensive than the trust fund coverage in the unified budget.

While the California procedure excludes business operations from the budget, any incidental non-tax income to the State (such as rents, royalties, and interest) is included in budget receipts.

State GAAP Basis.—Table XX-1 also includes a presentation that approaches a State GAAP presentation. While the State is moving toward GAAP, this will take years to accomplish. The GAAP presentation in the California budget is an auxiliary display of spending only. Table XX-1, on the other hand, reconstructs the total budget on a State GAAP equivalent basis. The GAAP display adds "proprietary funds" (i.e., business operations) and "fiduciary funds" (which in-

clude the pension funds and the funds the State collects and spends from Federal grants) to the normal California presentation.

Comparison with Other Alternatives.—The California budget is compared with the alternatives discussed in Chapters XIX and XXI, and with the unified budget, at the end of Chapter XXI.

Table XX-1. CALIFORNIA PRESENTATION OF THE FEDERAL BUDGET (COMPARED TO UNIFIED BUDGET PRESENTATION)

(1992, in billions of dollars)

	UNIFIED BUDGET	NORMAL CALIFORNIA BUDGET PRESENTATION					ADDITIONAL TRANSACTIONS FOR GAAP PRESENTATION		
		General Revenue Funds	Special Revenue Funds	Budget Total	Capital Projects Funds	Total Including Bond Funds	Proprietary Funds	Fiduciary Funds	GRAND TOTAL
A. RECEIPTS									
<i>Governmental Receipts:</i>									
(1) Income, Estate, Gift, Customs Duties	664.0	662.9	1.1	664.0	.....	664.0	.....	.....	664.0
(2) Social Insurance Taxes and Contributions	429.4	.....	424.8	424.8	.....	424.8	.....	4.6	429.4
(3) Other Governmental Receipts	71.7	43.9	27.8	71.7	.....	71.7	.....	.....	71.7
TOTAL RECEIPTS, Federal Budget Basis	1,165.0	706.7	453.7	1,160.4	.....	1,160.4	.....	4.6	1,165.0
<i>Offsetting Collections Converted to Receipts:</i>									
(4) Proprietary Receipts from the Public		11.4	21.1	32.4	.....	32.4	10.4	.....	42.8
(5) Reimbursements to Appropriations		92.1	0.2	92.3	.....	92.3	101.3	.....	193.6
(6) Interfund Transfers		3.6	100.6	104.2	.....	104.2	1.1	92.0	197.3
TOTAL RECEIPTS, California basis	1,165.0	813.7	575.6	1,389.4	.....	1,389.4	112.7	96.6	1,598.7
B. OUTLAYS, EXPENSES, AND INVESTMENTS									
<i>Outlays by Function:</i>									
(1) Defense and International (050, 150)	313.1	423.1	0.1	423.1	83.3	506.5	12.9	.....	519.4
(2) Science, Space, Technology (250)	17.5	20.2	*	20.3	2.6	22.9	.....	.....	22.9
(3) Energy, Natural Resources, Agriculture (270, 300, 350)	38.5	59.9	7.7	67.6	4.2	71.8	13.4	.....	85.2
(4) Commerce & Housing Credit (370)	92.8	138.3	0.3	138.6	2.9	141.5	89.1	.....	230.6
(5) Transportation (400)	32.7	11.3	24.6	35.9	0.8	36.7	0.5	.....	37.3
(6) Education, Training, Employment, and Social Services (500)	45.5	45.7	1.1	46.8	0.1	46.9	0.4	.....	47.3
(7) Health and Medicare (550, 570)	195.0	121.8	126.8	248.7	0.3	249.0	3.6	.....	252.5
(8) Income Security (600)	184.8	111.2	36.1	147.3	10.0	157.3	0.8	60.1	218.2
(9) Social Security (650)	288.6	5.8	288.6	294.5	.....	294.5	.....	.....	294.5
(10) Veterans Benefits and Services (700)	33.0	36.1	0.5	36.6	1.1	37.7	2.3	.....	40.1
(11) Other (450, 750, 800, 920)	38.8	63.2	3.2	66.3	2.5	68.8	0.7	.....	69.6
(12) Net Interest (900)	206.3	286.7	-0.3	286.4	.....	286.4	.....	.....	286.4
(13) Undistributed Offsetting Receipts (950)	-40.8	.....	.....	.....	.....	.....	.....	.....	.....
TOTAL OUTLAYS	1,445.9	1,323.5	488.7	1,812.1	107.9	1,920.1	123.8	60.1	2,104.0
C. SURPLUS/DEFICIT	-280.9	-509.7	87.0	-422.8	-107.9	-530.7	-11.1	36.5	-505.3

* \$50 million or less.

XXI. OPERATING, RETIREMENT, AND DEBT AND INTEREST PRESENTATION

Part Six-37

XXI. OPERATING, RETIREMENT, AND DEBT AND INTEREST PRESENTATION

In 1990, Senator Sanford introduced a bill, the "Balanced Budget and Debt Reduction Act of 1990" (S. 101), which proposed another budget presentation. As shown in Table XXI-1, the unified budget would be subdivided into three budgets—the operating budget, the retirement funds budget, and the debt and interest budget.

The President's budget would present the unified budget totals, as well as totals for the three separate budgets. The social security trust funds and the Postal Service would be included in the unified budget totals and the appropriate component totals. However, the presentation would focus on the deficit or surplus for only the operating budget; this and other requirements are quite different from the unified budget concept.

The operating budget would include the receipts and expenditures not included in the other two budgets. The operating budget would have to be balanced in

the President's budget; legislation that would cause an operating budget deficit would be subject to a point of order in the Congress. (In Table XXI-1, which presents 1992 President's budget numbers, the operating budget is not balanced.) If, in spite of these requirements, the deficit exceeded the maximum deficit amount (defined in the Congressional Budget Act of 1974, as amended by the Budget Enforcement Act of 1990, Public Law 101-508), the next year's operating budget would include an expenditure equal to the previous year's deficit excess. This would result in budgeting for an excess of receipts over current expenditures in the operating budget if the previous year's deficit target is not met.

The retirement funds budget would include the receipts and expenditures of the social security and medicare trust funds, the civilian and military retirement

Table XXI-1. OPERATING, RETIREMENT, AND DEBT AND INTEREST PRESENTATION OF THE FEDERAL BUDGET (COMPARED TO UNIFIED BUDGET PRESENTATION)

(FY 1992, in billions of dollars)

	Unified Budget	ALTERNATIVE PRESENTATION			
		Total Budget	Operating Budget	Debt and Interest Budget	Retirement Funds Budget
A. RECEIPTS					
<i>Governmental Receipts:</i>					
(1) Income, Estate, Gift, Customs Duties	664.0	664.0	664.0	.....	.....
(2) Social Insurance Taxes and Contributions	429.4	429.4	22.8	.....	406.6
(3) Other Governmental Receipts	71.7	71.7	71.0	.....	0.6
TOTAL RECEIPTS, Federal Budget Basis	1,165.0	1,165.0	757.8	.....	407.2
<i>Proceeds from Borrowing Converted to Receipts:</i>					
(4) Increase in the non-Retirement Funds Debt		398.5	.....	398.5	.....
TOTAL RECEIPTS, Alternative Basis	1,165.0	1,563.5	757.8	398.5	407.2
B. OUTLAYS, EXPENSES, AND INVESTMENTS					
<i>Outlays by Function:</i>					
(1) Defense and International (050, 150)	313.1	313.1	324.8	.....	-11.7
(2) Science, Space, Technology (250)	17.5	17.5	17.5	.....	.....
(3) Energy, Natural Resources, Agriculture (270, 300, 350)	38.5	38.5	38.5	.....	.....
(4) Commerce and Housing Credit (370)	92.8	92.8	92.8	.....	.....
(5) Transportation (400)	32.7	32.7	32.7	.....	.....
(6) Education, Training, Employment, and Social Services (500)	45.5	45.5	45.5	.....	.....
(7) Health and Medicare (550, 570)	195.0	195.0	119.8	.....	75.2
(8) Income Security (600)	184.8	184.8	119.8	.....	65.0
(9) Social Security (650)	288.6	288.6	5.8	.....	282.8
(10) Veterans Benefits and Services (700)	33.0	33.0	33.0	.....	.....
(11) Other (450, 750, 800, 920)	38.8	38.8	58.2	.....	-19.3
(12) Net Interest (900)	206.3	206.3	-28.5	304.0	-69.2
(13) Undistributed Offsetting Receipts (950)	-40.8	-40.8	-4.0	.....	-36.8
TOTAL OUTLAYS, Federal Budget Basis	1,445.9	1,445.9	856.0	304.0	286.0
<i>Repayment of Borrowing Converted to Outlays:</i>					
(14) Previous Year Excess Over Maximum Deficit .....		.....	.....	.....	.....
TOTAL OUTLAYS, Alternative Basis	1,445.9	1,445.9	856.0	304.0	286.0
C. SURPLUS/DEFICIT	-280.9	117.6	-98.2	94.5	121.3

trust funds, the railroad retirement trust funds, and such other funds or accounts that OMB, in cooperation with GAO and the Congress, agree upon. The estimates in Table XXI-1 also include the black lung disability trust fund in the retirement funds budget.

The debt and interest budget includes "receipts and expenditures" for reductions or increases in the public debt, and interest on the public debt. During time of declared war or declared recession, Treasury borrowing would be permitted in the debt and interest budget. Borrowed funds would then be transferred to the operating budget as receipts to maintain the operating budget in balance. This definition of "receipts and expenditures" would treat the proceeds of borrowing as receipts and the repayment of borrowing as outlays.

Under current budget concepts, borrowing is treated as a means of financing a deficit, not as a part of the calculation of the deficit; the repayment of borrowing is treated as the use of a surplus. Apart from other, relatively small means of financing the deficit, the treatment of borrowing and repayment of borrowing as receipts and outlays in the alternative proposal would

balance the sum of the operating and debt and interest budgets by definition. If transfers to the operating budget are treated as expenditures of the debt and interest budget, it follows that they are to be treated as receipts of the operating budget. The operating budget would also, therefore, be balanced during time of war or a recession, by definition.

In the Sanford proposal, the budget deficit would be redefined to mean the amount by which the combined outlays of the operating and debt and interest budgets exceed their receipts. The retirement funds budget would be completely excluded. The President's budget and budget legislation would have to stay within the maximum deficit amounts, as well as balancing the operating budget. With the operating and debt and interest budgets in balance by definition, the unified budget would have the same surplus or deficit as the retirement funds budget.

The debt and interest budget would also include a new "trust fund for the reduction of the deficit and the public debt." A special tax could be established for this fund.

SOME DIFFERENCES AMONG THE ALTERNATIVE PRESENTATIONS

A comparison of the GAO, California, and Sanford presentations with each other, and with the unified budget, is presented below.

- The GAO and California budget presentations reflect, primarily, the concerns of financial accounting. The Sanford budget proposal is primarily designed to protect the retirement trust funds and to direct attention to controlling the newly defined operating budget.
- Employee retirement funds are included by GAO as part of its trust fund grouping, and by Sanford as part of his retirement funds budget. The California approach moves these funds into the fiduciary funds category outside the normal budget presentation (but inside the GAAP presentation). The unified budget includes these funds in the consolidated budget totals.
- Enterprise funds are included as part of the operating budget in the Sanford proposal. GAO carries the enterprise funds as one of three separate groupings, together with the general funds and trust funds. The California budget excludes enterprise funds from the normal budget displays but includes them in the GAAP presentation. The unified budget includes these funds in the consolidated budget totals.
- GAO, the Sanford proposal, and the unified budget handle interfund transfers as adjustments on the outlay side; they cancel out in deriving the consolidated totals. The California approach adds them to the receipts of each fund group, and does not net them out in combined totals.
- GAO has a capital budget that includes all capital expenditures for physical and loan assets, no matter how financed. It does not have a bond fund. In the main, the GAO capital budget is financed by depreciation charges and earmarked receipts (mainly highway and airport and airway excise taxes). The California approach has a capital fund but includes only those capital expenditures financed by borrowing to be repaid from the general fund on an amortization basis. The Sanford proposal and the unified budget do not distinguish capital expenditures in the budget aggregates. The President's budget, however, does have an auxiliary tabulation of outlays for both physical and intangible capital (see Chapter XVIII).
- GAO includes grants to State and local governments for physical capital investment in its capital budget. The Sanford proposal and the unified budget do not distinguish these grants in the budget aggregates, but the President's budget does include grants for capital investment in its auxiliary tabulation of Federal capital expenditures (see Chapter XVIII). The California budget does not include grants to localities for capital projects in its capital fund.