

BY THE COMPTROLLER GENERAL

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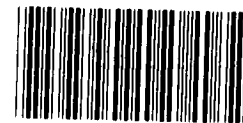
# Report To The Congress

## OF THE UNITED STATES

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### Federal Capital Budgeting: A Collection Of Haphazard Practices

Funds for developing and maintaining physical capital--roads, bridges, airports, computers--are often cut to reduce expenditures. The Federal Government needs to pay special attention to planning, budgeting, and managing such assets because decisions made in the 1980's about capital assets will determine, in part, the future of the nation's infrastructure and the nature of the economy it can support in the decades ahead.



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Federal decisionmaking today focuses on single projects rather than on the nation's overall infrastructure needs. GAO recommends that the Congress and the executive branch perform a complete policy assessment of those needs.



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COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

To the President of the Senate and the  
Speaker of the House of Representatives

This report points out the need for, and the present lack of, Federal capital investment policy. After looking at capital investment data and the planning and budgeting experiences of 24 public and private organizations, we concluded that a policy-level approach to capital investment must be added to the Federal Government's decisionmaking. We also identified elements that contribute to a successful capital budgeting process.

We conducted this study because of concern about the nation's deteriorating infrastructure, which is partly a result of budget cuts designed to balance budgets. These cuts frequently affect the development and maintenance of physical capital.

In addition to examining relevant documentation and previous studies, we conducted indepth interviews in the public and private sectors with legislators; top managers; program managers; budget officers and comptrollers; evaluators and auditors; and capital plant managers, planners, builders, and operators.

We are sending copies of this report to the Chairmen of the House and Senate Budget Committees, the Senate Committee on Environment and Public Works and the House Committee on Public Works and Transportation; the Assistant to the President on Domestic Affairs and Policy; the Director, Office of Management and Budget; the heads of the organizations that participated in the study; and the heads of all Federal departments and agencies.

A handwritten signature in black ink, reading "Luther B. Stacks".

Comptroller General  
of the United States



D I G E S T

The Federal Government has enormous amounts of capital assets--military installations, dams, public lands, buildings. It also helps fund State and local government projects, particularly roads and streets, waste water treatment plants, and mass transit systems.

Today much of these federally owned and financed items are deteriorating and the Government is faced with the prospect of either repairing or rehabilitating them, or risking a staggering replacement burden in the future. However, expenditures for capital items are often the first to be cut when budget constraints are imposed. The cuts usually go unnoticed by the public because their effects are not felt immediately by changes in the levels of services delivered.

Industry considers capital budgeting a vital part of running an effective organization. Most States and municipalities follow a capital budgeting procedure, but the Federal Government does not. Whether or not it should has been the subject of lively debate for a long time.

GAO supports the Federal practice of developing and presenting a unified budget. However, it concluded that a policy-level approach to capital investment must be added to the Federal Government's decisionmaking process and sound, up-to-date information is needed to support that approach.

Government agencies need to closely monitor the implementation of capital investment programs, audit their results, and check the condition of operating facilities and equipment to ensure a healthy capital plant--or at least that portion for which the Federal Government is directly responsible.

To determine how the Federal Government should plan, budget, and control physical capital and its operations and maintenance, GAO studied the experiences of 24 organizations, encompassing businesses, cities, counties, States, and Federal agencies. In the organizations studied, GAO conducted 191 indepth interviews with legislators, top managers, and other organization officials. (See ch. 2.)

It found that deteriorating public capital assets are partly the result of State and local neglect and partly the result of Federal Government actions. Federally owned assets appear to be in better condition than State and local assets, but they too suffer from obsolescence and deterioration. (See ch. 3.)

GAO found that the capital budgeting experiences of successful organizations are characterized by certain elements. GAO defines a successful organization as one that can, even under adverse conditions, acquire and/or maintain physical capital without jeopardizing its mission or its clientele. By adverse conditions, GAO means declining resources, political instability, or severe conflict among interest groups. (See ch. 4.)

Of the seven Federal agencies GAO examined, four directly acquire and manage federally owned physical capital. The U.S. Postal Service was the agency among the four which had the most desirable planning, budgeting, and control features that could be readily adopted by other Federal agencies.

Many factors have contributed to the problems of capital investment in the Federal Government: managers' views, congressional authorization and budgetary procedures, limited resources available for capital, and too little monitoring or oversight of ongoing and completed capital projects. (See ch. 5.)

Ownership of much of the capital stock financed by the Federal Government resides with States and municipalities, but Federal programs, policies, and planning procedures can accelerate or arrest its deterioration.

Short-term strategies are implemented in capital investment areas, increased costs of Federal capital programs are passed on to States without recognition, and no effective national capital improvement plan exists. Consequently, the Federal Government's ability to stop the decline of the physical capital across the nation is severely limited. (See ch. 6.)

The growth of uncontrollable outlays--principally entitlements and interest--has reduced the funds available for physical capital investments. Physical capital competes at a disadvantage for discretionary funds. Since the full costs of some capital programs appear in the budget, they may seem more costly than programs that show only 1 year's cost but continue for many years.

Federal decisions about physical capital are based on a parochial view rather than a global one, a perspective that ranges from project managers, to the Congress, to the President. (See ch. 7.)

#### RECOMMENDATIONS TO THE CONGRESS

The responsibility for assessing the amount and the condition of the nation's infrastructure and for advising on policy for it should be assigned to policy and oversight units in the Congress and the executive branch. Both branches should specify the information and analytical support they need from Federal managers. Specifically, the Congress should give a Senate and a House committee the policy-level oversight responsibility for Federal capital investment and for assessing infrastructure needs and conditions. A component of the Executive Office of the President should be designated as a focal point for executive policy directions.

#### AGENCY COMMENTS

With the exception of the Office of Management and Budget, all of the private organizations, State and local governments, and Federal agencies that reviewed this report agree with its message, recommendations, and conclusions.

In its comments, OMB indicated that if capital investment becomes a separate policy area, the budget will grow, tradeoffs will be made with other programs, and more money will be spent on public capital investments. It was not GAO's intention to imply that the Federal Government should increase spending. As a result of OMB's comments, GAO clarified its main recommendation to the Congress, but the basic conclusions and recommendations have not changed. This study points out the need for a cross-cutting analysis of and a policy direction for capital investments and the creation of more broadly based and informed policy advisory units. GAO does not believe that this approach would necessarily mean either a larger budget, cutbacks in other budget functions, or more money spent on capital investments. Responses to specific criticisms from OMB are contained in chapter 8.



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#### ABBREVIATIONS

AT&T	American Telephone and Telegraph Company
BEA	Bureau of Economic Analysis, Department of Commerce
CDBG	Community Development Block Grant
CI	Capital Investment
Conrail	Consolidated Rail Corporation
Corps	U.S. Army Corps of Engineers
DOT	Department of Transportation
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FMHA	Farmer's Home Administration
FY	Fiscal Year
GAO	General Accounting Office
GM	General Motors Corporation
GNP	Gross National Product
GSA	General Services Administration
HUD	Department of Housing and Urban Development
NSF	National Science Foundation
OMB	Office of Management and Budget

OSTP	Office of Science and Technology Policy
R&D	Research and Development
UDAG	Urban Development Action Grants
USPS	United States Postal Service
VA	Veterans Administration





## CHAPTER 1

### INTRODUCTION AND SCOPE

Highways, real estate, energy plants, office buildings, sewage systems--these are some of the tangible items that form the physical infrastructure of organizations. They are the basic facilities, equipment, and installations needed for the functioning of businesses, communities, and nations. Since dams, buses, computers, and the like yield future benefits, they are called capital assets. Definitions of capital assets abound. For our purposes, we use this one: capital assets are physical items that generally have a life expectancy over 1 year.

An organization's infrastructure, then, consists of its physical capital. <sup>1/</sup> Once these items are ready to be used, replacement may not be of immediate concern, but operating, maintenance, repair, and improvement costs certainly are. We wanted to find out how organizations plan, budget, and control their capital items and the costs associated with them. Our particular interest is how the Federal Government does this, since much of our national infrastructure is either owned or financed by the Federal Government. Based on information drawn from our study of 24 organizations, we developed a general (or working) definition of capital budgeting: it is the way organizations decide to buy, construct, renovate, maintain, control, and dispose of capital assets. These decisions combine to produce a capital budget, usually a document, or part of a document, containing management's recommendations for acquiring, expanding, or modernizing capital items at a given point in time.

Two conditions impelled us to study capital budgeting. The first is the strong push to balance public sector budgets. Capital items are often the first to be cut when budget constraints are imposed. Such cuts usually go unnoticed by the public because their effects are not felt immediately by changes in the level of services delivered. Our report, however, contends that the future price for today's cuts may be more than we can afford to pay.

The second condition is the deteriorating infrastructure of some of our major cities. The dilapidated sections of

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<sup>1/</sup>To avoid monotonous repetition, we use the terms physical capital, capital item, capital stock, capital infrastructure, and capital investments interchangeably with capital assets.

New York, Cleveland, and Detroit come to mind. While planning for the future is successful in many areas and for many programs, our study suggests that Federal, State, and local governments devote few resources to comprehensive, long-range planning for capital projects.

Interacting with both these conditions is the current price increase of physical capital. Accountants, economists, and engineers tell us that physical capital construction costs, which, in broad terms, consist of labor, machinery, and natural resources, have outpaced the increases in the general level of prices.

THE FEDERAL GOVERNMENT HAS ALWAYS  
HAD SOME RESPONSIBILITY FOR OUR  
NATIONAL INFRASTRUCTURE

The Constitution confers broad powers on the Congress to develop our nation's infrastructure. The Federal Government can, among many things, build military installations, erect dams, construct highways, and produce and sell electrical power. 1/ In addition to the powers set forth in the Constitution, many Federal agencies, boards, and commissions have been delegated the authority to own capital assets outright. Other agencies provide funds to State and local governments to purchase capital items.

As the nation's needs have changed, so has the Government's emphasis on developing any particular type of capital asset. 2/ Before the 1870s, we focused on building roads, canals, and railroads to connect our western territories to our eastern markets. Between the 1870s and 1930s, cities concentrated on urban development, with sewers, streets, and water mains taking precedence. High unemployment during the Great Depression justified the Government's large public works projects (enormous multi-purpose dams, parks, and many of our public buildings). From 1935 to 1943, the Work Projects Administration constructed or improved nearly 500 water treatment plants, installed or repaired more than 19,000 miles of water mains, and made many other water system improvements. During World War II, the Federal Government

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1/See appendix II for a list of the clauses in the Constitution that grant the Congress the power to develop capital infrastructure.

2/For an extensive review of the history of public works from 1790 to 1970, see "A Study of Public Works Investment in the United States," U.S. Department of Commerce, April 1980.

undertook industrial construction on a large scale. Since World War II, we have again focused on streets, sewage systems, and water resources. The decade of the 1960s saw a large rise in the development of our national infrastructure and a substantial increase in the number of publicly mandated private investments (for example, devices to control pollution from factories and motor vehicles).

During the 1970s the trend seems to have been a steady decline. As shown in table 1, the percentage of the gross national product (GNP) spent on infrastructure items by Federal, State, and local governments has decreased (based on constant 1972 dollars) from a peak of 4.1 in 1965 to a low of 2.2 in 1977.

Table 2 presents an interesting picture of capital investment activity. Notice that the value of total Federal, State, and local capital stock almost doubled between 1957 and 1977. During that same 20-year period, State and local capital stock grew per capita (in constant 1972 dollars) from \$1,473 to \$2,593, while Federal capital stock per capita declined from \$583 to \$524.

The figures in table 3 show that from one year to the next (except for a decrease from 1958 to 1959), Federal capital investment increased until 1966. Since then it has generally decreased, with intermittent increases. State and local amounts, however, increased regularly from 1957 to 1968, but declined thereafter between 1969 to 1972 and between 1975 to 1977. Analysis discloses that per capita capital investment for States and localities was slightly lower in 1977 than in 1957 (approximately \$116 versus \$119).

However, when gross capital investment is compared to net capital investment, a different picture appears (see table 3). In more than half the years between 1957 and 1977, the value of depreciation of federally owned capital stock exceeded the value of gross capital investment. (The estimates of net investments are based on the straight line depreciation formula, which assumes equal dollar depreciation each year over the estimated life of an asset. 1/) This could represent

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1/Young, A.H. and J.C. Musgrave, "Estimation of Capital Stock in the United States," a report presented at the National Bureau of Economic Research, Conference on Research in Income and Wealth, October 1976.

Table 1

Relationship Between Capital Investment (CI) and  
Gross National Product (GNP), by Level of Government  
(percent of current and constant 1972 dollars)

Year	Current Dollars				2/	Constant Dollars				2/
	Federal CI÷GNP	State CI÷GNP	Local CI÷GNP	Total CI÷GNP		Federal CI÷GNP	State CI÷GNP	Local CI÷GNP	Total CI÷GNP	
1957	0.49	2.91	1/	3.40		0.49	2.95	1/	3.44	
1958	0.56	3.09	1/	3.65		0.57	3.24	1/	3.81	
1959	0.45	1.31	1.56	3.32		0.47	1.42	1.65	3.54	
1960	0.45	1.14	1.63	3.22		0.48	1.28	1.75	3.51	
1961	0.54	1.27	1.62	3.43		0.58	1.43	1.75	3.76	
1962	0.59	1.25	1.58	3.42		0.62	1.41	1.71	3.74	
1963	0.66	1.35	1.60	3.61		0.69	1.51	1.74	3.94	
1964	0.72	1.34	1.65	3.71		0.75	1.50	1.80	4.05	
1965	0.72	1.32	1.72	3.76		0.75	1.47	1.86	4.08	
1966	0.70	1.38	1.69	3.77		0.72	1.51	1.84	4.07	
1967	0.54	1.39	1.78	3.71		0.57	1.52	1.93	4.02	
1968	0.42	1.33	1.86	3.61		0.44	1.45	2.02	3.91	
1969	0.35	1.32	1.71	3.38		0.37	1.40	1.82	3.59	
1970	0.34	1.36	1.57	3.27		0.34	1.40	1.64	3.38	
1971	0.34	1.33	1.52	3.19		0.34	1.34	1.54	3.22	
1972	0.32	1.25	1.39	2.96		0.32	1.25	1.39	2.96	
1973	0.30	1.16	1.39	2.85		0.31	1.14	1.37	2.82	
1974	0.30	1.17	1.64	3.11		0.31	1.06	1.55	2.92	
1975	0.35	1.07	1.62	3.04		0.32	0.97	1.50	2.79	
1976	0.33	0.86	1.39	2.58		0.30	0.82	1.31	2.43	
1977	0.34	0.73	1.26	2.33		0.33	0.70	1.18	2.21	

1/Local CI included in State CI.

2/Total CI÷GNP is the sum of Federal CI÷GNP plus State CI÷GNP plus local CI÷GNP.

Source: U.S. Department of Commerce, "A Study of Public Works Investment in the United States," April 1980. (Defense capital investments not included in the Commerce study.)

Table 2

Total Capital Stock, All Types, Including Residential and Nonresidential,  
Equipment, Structures and Inventories, but Excluding Military

Year	<u>Stocks, Net 1/</u>			<u>Flows (CI)</u>								
	Millions of Constant (1972) Dollars			Constant (1972) Dollars Per Capita 2/			Millions of Constant (1972) Dollars			Constant (1972) Dollars Per Capita 2/		
	Federal	State and Local	Total	Federal	State and Local	Total	Federal <sup>3/</sup>	State <sup>3/</sup> and Local	Total	Federal	State and Local	Total
1957	98,495	249,024	347,519	582.52	1,472.77	2,055.30	3,327	20,075	23,402	19.68	118.73	138.41
1958	101,179	261,905	363,084	587.74	1,521.38	2,109.12	3,873	22,030	25,903	22.50	127.97	150.47
1959	102,124	274,774	376,898	576.57	1,551.31	2,127.88	3,397	22,081	25,478	19.18	124.66	143.84
1960	102,961	287,440	390,401	574.16	1,602.91	2,177.07	3,573	22,298	25,871	19.92	124.34	144.26
1961	101,912	301,361	403,273	556.73	1,646.30	2,203.03	4,359	24,018	28,377	23.81	131.21	155.02
1962	104,538	315,581	420,119	562.36	1,697.67	2,260.03	4,965	24,880	29,845	26.71	133.84	160.55
1963	107,013	331,543	438,556	567.23	1,757.37	2,324.60	5,764	27,010	32,774	30.55	143.17	173.72
1964	109,211	348,869	458,080	570.68	1,823.01	2,393.69	6,529	28,869	35,398	34.12	150.85	184.97
1965	111,897	367,388	479,285	577.36	1,895.63	2,472.99	6,960	30,807	37,767	35.91	158.96	194.87
1966	111,832	387,418	499,250	570.76	1,977.28	2,548.04	7,111	32,876	39,987	36.29	167.79	204.08
1967	112,903	409,445	522,348	570.61	2,069.33	2,639.94	5,746	34,788	40,534	29.04	175.82	204.86
1968	115,699	432,721	548,420	578.95	2,165.29	2,744.24	4,660	36,466	41,126	23.32	182.47	205.79
1969	116,471	453,271	569,742	576.81	2,264.37	2,841.18	3,982	34,770	38,752	19.72	172.19	191.91
1970	113,895	471,209	585,104	560.41	2,318.55	2,878.96	3,660	32,690	36,350	18.01	160.85	178.86
1971	114,114	487,730	601,844	553.36	2,365.11	2,918.47	3,751	31,874	35,625	18.19	154.56	172.75
1972	112,596	502,771	615,367	540.72	2,414.46	2,955.18	3,751	30,865	34,616	18.01	148.22	166.23
1973	109,964	517,348	627,312	523.99	2,465.24	2,989.23	3,816	31,016	34,832	18.18	147.80	165.98
1974	110,006	532,433	642,439	520.39	2,518.72	3,039.11	3,767	31,725	35,492	17.82	150.08	167.90
1975	109,438	545,135	654,573	513.67	2,558.71	3,072.38	3,860	29,774	33,634	18.12	139.75	157.87
1976	110,233	554,124	664,357	513.50	2,581.31	3,094.81	3,863	27,049	30,912	18.00	126.00	144.00
1977	113,395	561,025	674,420	524.18	2,593.38	3,117.56	4,332	25,057	29,389	20.02	115.83	135.85

1/Special tabulation by J. C. Musgrave, BEA.

2/Population data from U.S. Bureau of Census, Current Population Reports, Series P-25.

3/Survey of Current Business, National Income and Product Accounts, 1929-1974, Table 3.9 used for 1957-1972. Survey of Current Business, July 1977, Table 3.9 used for 1973 and Survey of Current Business, July 1978, Table 3.9 used for 1974-1977. The following exceptions should be noted: constant dollars for 1975-1977 were obtained from unpublished update provided by John Welles, BEA, Government Division.

Source: U.S. Department of Commerce, "A Study of Public Works Investment in the United States," April, 1980. (Defense capital investments are not included in this study.)

Table 3

Total residential and Nonresidential Governmental Capital Investment, Gross and Net, and Depreciation (millions of constant 1972 dollars)

Year	<u>Federal</u>				<u>State and Local</u>				<u>Total Government</u>			
	<u>Gross 1/</u> <u>Invest-</u> <u>ment</u>	<u>Depreci-</u> <u>ation</u>	<u>Depreci-</u> <u>ation As</u> <u>Percent of Net</u> <u>Gross</u> <u>Investment</u>	<u>Invest-</u> <u>ment</u>	<u>Gross 1/</u> <u>Invest-</u> <u>ment</u>	<u>Depreci-</u> <u>ation</u>	<u>Depreci-</u> <u>ation As</u> <u>Percent of Net</u> <u>Gross</u> <u>Investment</u>	<u>Invest-</u> <u>ment</u>	<u>Gross 1/</u> <u>Invest-</u> <u>ment</u>	<u>Depreci-</u> <u>ation</u>	<u>Depreci-</u> <u>ation As</u> <u>Percent of Net</u> <u>Gross</u> <u>Investment</u>	<u>Invest-</u> <u>ment</u>
1957	3,571	5,395	151.1	-1,824	20,374	8,325	40.86	12,049	23,945	13,720	57.30	10,225
1958	4,364	5,039	115.5	-675	21,663	9,752	40.40	12,911	26,027	13,791	52.99	12,236
1959	3,783	4,679	123.7	-896	22,081	9,128	41.34	12,953	25,864	13,807	53.38	12,057
1960	3,787	4,335	114.5	-548	22,300	9,523	42.70	12,777	26,097	13,858	53.12	12,229
1961	4,424	4,058	91.7	366	23,988	9,929	41.39	14,059	28,412	13,987	49.23	14,425
1962	4,981	3,865	77.6	1,116	24,660	10,342	41.94	14,318	29,641	14,207	47.93	15,434
1963	5,784	3,963	68.5	1,821	26,799	10,790	40.23	16,019	32,583	14,743	45.25	17,840
1964	6,602	3,756	56.9	2,846	28,652	11,259	39.30	17,393	35,254	15,015	42.59	20,239
1965	6,872	3,829	55.7	3,043	30,281	11,775	38.89	18,506	37,153	15,604	42.00	21,549
1966	7,040	3,949	56.1	3,091	32,422	12,327	38.02	20,095	39,462	16,276	41.24	23,186
1967	5,911	4,056	68.6	1,855	35,041	12,933	36.91	22,108	40,952	16,989	41.49	23,963
1968	4,401	4,132	93.9	269	36,944	13,608	36.83	23,336	41,345	17,740	42.91	23,605
1969	3,684	4,170	113.2	-486	34,749	14,277	41.09	20,472	38,433	18,447	48.00	19,986
1970	3,716	4,189	112.7	-473	32,741	14,902	45.51	17,939	36,457	19,091	52.37	17,376
1971	3,931	4,195	106.5	-254	31,882	15,510	48.65	16,372	35,813	19,695	54.99	15,538
1972	4,010	4,164	103.8	-154	31,125	16,111	51.76	15,014	35,135	20,275	57.71	14,860
1973	4,128	4,138	100.2	-10	31,135	16,712	53.68	14,423	35,263	20,850	59.13	14,413
1974	3,845	4,094	106.5	-249	32,147	17,335	53.92	14,312	35,992	21,429	59.54	14,563
1975	3,482	4,026	115.6	-544	30,680	17,997	58.66	12,683	34,162	22,023	64.47	12,139
1976	3,765	3,954	105.0	-189	27,510	18,571	67.51	8,939	31,275	22,525	72.02	8,750
1977	4,122	3,893	94.4	229	25,826	19,076	73.86	6,750	30,037	22,969	76.47	7,068

1/Estimates differ from those in Table 2 due to the use of different data.

2/The substantial Federal investment in grants-in-aid to State and local governments (about 40 percent of the 1977 State and local capital investment) is classified as State and local investment.

Source: J. C. Musgrave, BEA, special tabulation in U.S. Department of Commerce, "A Study of Public Works Investment in the United States," April 1980. (Defense capital investments not included in this study.)

disinvestment in Federal capital stock in certain years. 1/ State and local net capital investment is positive between the years 1957 to 1977, but declines sharply from the 1968 high of \$23.3 billion to \$6.8 billion in 1977 (in 1972 dollars).

Another indicator of possible disinvestment in Federal capital stock is the decline in per capita Federal net capital stock (excluding military). Table 4 shows that the total per capita Federal net capital stock has decreased from \$586 in 1957 to \$524 in 1977 (in 1972 dollars).

Table 5 shows the functional distribution of capital investment for selected years. Note the decline in spending for highways and the increased spending for public utilities, natural resources, and other.

The plight of cities with respect to capital purchases and maintenance is particularly acute. According to a recent study by the Joint Economic Committee of Congress, 2/ if cities continue to defer expenditures for streets, sewers, water mains, and other physical capital, these facilities are likely to collapse. To compound this situation, Federal aid to cities has tapered off and is dropping fast in real terms. Coupled with these problems is strong citizen resistance to new or increased taxes. As States and cities become hard-pressed to maintain a healthy capital infrastructure, the Federal Government's practices in this area need to be examined.

#### THE FEDERAL GOVERNMENT TAKES NO SPECIAL LOOK AT CAPITAL INVESTMENTS

Industry considers capital budgeting a vital part of running an effective organization. In the private sector, it is common to separate expenditures for current (i.e., today's) items from expenditures for capital items. The former are considered expenses that are paid for from current revenues. The latter (capital items) are thought of as investments, the costs of which are expected to be recovered in the future. Private firms normally prepare separate budgets for current and capital expenditures. Businesses also use cash flow analyses to identify available cash to support current operations and capital budgets.

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1/Disinvestment, like depreciation, is an accounting concept, and also includes net sales of Federal capital stock to the private sector.

2/Joint Economic Committee, "Trends in the Fiscal Conditions of Cities," 96th Congress, 2nd Sess., 1980.

Table 4

Per Capita Federal Government Net Capital Stock, Excluding Military  
(constant 1972 dollars)

<u>Year</u>	<u>Non-Residential Buildings and Structures</u>							<u>Equipment</u>	<u>Residential</u>	<u>Total</u>
	<u>Industrial</u>	<u>Education</u>	<u>Hospital</u>	<u>Other Buildings</u>	<u>Highways/ Streets</u>	<u>Conservation/ Development</u>	<u>Other Structures</u>			
1957	93.01	1.93	10.17	24.35	13.45	167.94	2.78	95.23	17.25	585.52
1962	75.94	2.33	11.10	30.91	17.67	194.78	5.32	47.73	29.48	562.36
1967	62.03	2.58	12.08	44.08	20.53	197.32	5.75	67.78	28.81	570.61
1972	51.02	2.51	12.88	41.46	21.78	201.61	6.11	49.08	29.63	540.72
1977	45.24	2.54	14.69	39.24	25.16	210.89	6.74	23.79	30.49	524.18

Source: U.S. Department of Commerce, "A Study of Public Works Investment in the United States," April 1980.  
(Defense capital investments are not included in this study.)



Table 5

Distribution of Total Capital Investment by Function in Selected Years  
(Includes Federal, state and local, in billions of constant 1972 dollars  
and percent) 1/

Function	1959		1962		1967		1972		1977	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Highways	10.1	39.0	11.2	37.3	13.2	32.4	11.5	33.0	6.8	23.5
Public Utilities <u>2/</u>	3.4	13.1	3.8	12.7	4.7	11.5	4.7	13.5	5.6	19.3
Education	4.8	18.5	5.4	18.8	9.8	24.0	7.2	20.6	5.4	18.6
Natural Resources	2.2	8.5	2.8	9.3	3.5	8.6	2.8	8.0	3.2	11.0
Transportation	0.6	2.3	0.7	2.3	1.6	3.9	1.7	4.9	1.3	4.5
Health Facilities	0.8	3.1	0.8	2.7	1.2	2.9	1.4	4.0	1.4	4.8
Housing	1.5	5.8	1.9	6.3	1.2	2.9	1.5	4.3	0.6	2.1
Other <u>3/</u>	2.5	9.7	3.4	11.3	5.6	13.7	4.1	11.7	4.7	16.2
Total	25.9	100.0	30.0	100.0	40.8	100.0	34.9	100.0	29.0	100.0

1/Estimates of total PWI differ from those in table 2 due to the use of different data sources.

2/Includes water and sewer systems; does not include Federal public utilities which are included in the natural resources and other categories.

3/Includes public buildings, correctional facilities, and Federal government purchases of all types of equipment. A breakdown of Federal equipment by function was not feasible, although data on the functional distribution of state and local government equipment purchases were available and have been included under their respective functional headings.

Source: U.S. Department of Commerce, "A Study of Public Works Investments in the United States," April 1980. (Defense capital investments are not included in this study.)

Most States and municipalities also follow a dual budget procedure. Some do so because their constitutions or charters require it. Others do it arbitrarily, to call attention in their budgets to long-term projects that require significant resources for planning, funding, and implementation. Most State constitutions require the State government, and local governments as well, to present a balanced budget. The current budget must be balanced, but the capital budget is usually totally or partially financed by borrowing. The Federal Government, however, has never had a separate capital budget. It prepares a comprehensive (or unified) budget that does not separate capital items from current items. However, in many respects the budget resembles the cash flow analyses of businesses, where the deficit indicates the added debt required to cover cash requirements for the year.

Whether or not the Federal Government should have a separate capital budget has been the subject of lively debate for a long time. In 1949, the First Hoover Commission on Government Organization stated in its report on Budgeting and Accounting that:

"There is a present constant confusion in Federal budgeting and accounting because current expenditures and capital outlays are essentially different in character, and should therefore be shown separately under each major function of activity in the budget.

We recommend that the budget estimate of all operating departments and agencies of the Government should be divided into two primary categories--current operating expenditures and capital outlays."

In 1967 the President's Commission on Budget Concepts addressed the issue of a dual budget. It said that the Federal Budget serves two purposes: (1) it presents the President's proposals for legislation and appropriations; and (2) it allocates resources and serves as a tool for stabilization and growth. The Commission concluded that a separate capital budget did not serve these purposes simultaneously, and it recommended that the "purchase of physical assets should not be set up as a separate capital budget \* \* \*."

Experts surveyed by the 1967 Commission believed that a capital budget would promote "bricks and mortar" programs at the expense of other Government programs. They also cited the difficulties of defining a capital budget and of determining precisely what items should be considered capital assets. The experts were not, however, averse to special tabulations of capital investments, and the Commission recommended that such data be included in the unified budget.

No single Federal organization  
is responsible for capital investments

At the Federal level, nearly all major issues of policy can be identified with a specific organizational entity that is responsible for guiding the direction of a particular national policy and for assessing priorities with respect to it. In many cases, a policy area is assigned to a cabinet-level department. Such is the case with health and education, which are directed by the Department of Health and Human Services and the Department of Education. In other cases, a smaller organizational entity is in charge of a policy area and may exercise its responsibilities by coordinating the efforts of many departments, agencies, and offices. The Office of Science and Technology Policy (OSTP) is an example. In the case of Federal capital investments, however, there is no organizational unit responsible for policy guidance.

To illustrate the neglect of capital investment policy in Federal decisionmaking, we compared it to Federal research and development (R&D), a policy area under the direction of the Office of Science and Technology Policy. Because discovering basic knowledge and applying it to meet national needs is seen as one of the responsibilities of Government, Congress passed the National Science and Technology Policy, Organization, and Priorities Act in 1976. The Act established OSTP within the Executive Office of the President and made it responsible for coordinating Government-wide R&D programs and for helping the President, Office of Management and Budget (OMB), and Federal agencies to prepare R&D budgets. In carrying out its mission, OSTP participates in the budgetary process to make sure that long-term planning for science policy is incorporated into the budgets of the 31 Federal agencies that engage in R&D activities.

Although R&D, like capital investment, is not a separately budgeted activity, agencies do propose their own R&D budgets based on OSTP's suggestions and program reviews. Within the context of its normal budgetary process, each agency analyzes its R&D needs program-by-program or project-by-project. As the R&D portion of an agency's budget winds its way through the budgetary process, OSTP and OMB collaborate to make sure that national science policy goals are the backbone of the proposed R&D figures. OSTP places a high priority on its budget review function.

In addition to OSTP's efforts, the National Science Foundation (NSF) publishes an annual appraisal of how U.S. science and technology relate to national interests. NSF also supports the joint work of OSTP and OMB by providing them with special analytical studies.

As a result of OSTP's guidance, science policy and its related R&D activities have a direction and focus within Federal decisionmaking that capital investment lacks. The Federal agencies we surveyed do not, as a matter of agency policy or practice, coordinate their capital investment activities or plans with one another. No Federal organization is responsible for evaluating or assessing capital investment as a discrete policy issue or for taking a cross-cutting look at capital investment to see how it affects national priorities.

Special Analysis D does not  
meet the needs of our analysis

Capital expenditures are recognized as having a different effect on the economy than other types of expenditures. To take this effect into account at the national level, Special Analysis D, which is a list of Federal investment (i.e., capital) outlays, has been prepared since 1951. <sup>1/</sup> However, it is compiled after agency officials make their budget decisions. Consequently, it is not designed to be a resource from which one can infer or analyze Federal capital investment policies and practices. As might be expected, when we tried to use the Analysis for those purposes, we found it contained little of the information we needed.

Our analytical needs notwithstanding, the Analysis does a good job of what it is intended to do, which is to divide program outlays into two categories: those devoted to current (or operating) expenses and those devoted to "investment-type" (which includes capital) expenses. (As we explained earlier, current outlays provide benefits in the year they are made, and capital outlays benefit the future through the acquisition of physical capital.) Total Federal investment-type outlays for fiscal 1982 are estimated at \$161.5 billion. As shown in table 6, \$83.5 billion of this estimate is for capital assets (according to our definition). About 87 percent of the \$22 billion that goes to States and localities is for highways and mass transit, pollution control and abatement, and community development block grants.

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<sup>1/</sup>Special Analysis D is one section in the Special Analyses, Budget of the United States Government, which is a supplement to the President's annual budget to the Congress.

Table 6

Estimated Federal Capital Outlays  
Fiscal Year 1982  
(\$ in billions)

National Defense

Acquisition of major equipment	\$41.830
Construction and rehabilitation of physical assets	3.509
Other physical assets	<u>0.238</u>
	<u>\$45.577</u>

Civilian Agencies

Construction and rehabilitation of physical assets:	
Grants to State and local governments	\$22.019 <u>a/</u>
Direct Federal outlays	9.535 <u>a/</u>
	<u>\$31.553 b/</u>
Other physical assets	1.593
Commodity inventories	3.759
Acquisition of major equipment	<u>1.013</u>
	<u>\$37.918</u>
TOTAL	\$83.495

a/\$3.509 billion in national defense outlays for construction and rehabilitation of physical assets consist of \$3.492 billion in direct Federal outlays and \$0.017 billion in grants to State and local governments. These defense components were subtracted from the grants and direct outlay totals to arrive at appropriate figures for civilian agencies.

b/Does not add up due to rounding.

For our purposes, the Analysis is seriously limited in the following five ways.

- 1) Special Analysis D does not accurately portray the magnitude of capital investment activity because capital outlays from one category are netted against the receipts from the same category. The Department of Agriculture is a case in point. In FY 1980 loans to Agriculture borrowers were an estimated net loan figure of -\$130 million, which indicates only that loan repayments are expected to exceed loan disbursements, but does not reveal how many dollars are expected to be loaned or how many repaid. Stating the loan figures in gross terms, however, would give a much clearer picture of the amount that Government is contributing to capital investment.
- 2) Special Analysis D does not include the financial activities of off-budget agencies. <sup>1/</sup> Omitting this data understates the capital investment activity that takes place outside the formal budget process. For example, since FY 1974, the United States Postal Service has been an off-budget entity, and it has averaged \$560 million in annual outlays for capital items from 1974 to 1979.
- 3) Special Analysis D does not represent total capital stock because it displays capital outlays for only 3 fiscal years. Three years is too short a time span to accurately account for additions to capital assets or their depreciation and disposal. Consider, for example, construction projects. There is a considerable time lag between when a facility is built and when payment is made. The Analysis shows payments (outlays) made rather than the dollar value of a constructed facility. Thus, construction outlays reported in one year may actually reflect the construction activity that took place in the previous year.

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<sup>1/</sup>Off-budget Federal agencies are entities, federally owned in whole or in part, whose transactions have been excluded from the Federal budget totals under provisions of law, e.g., the Federal Financing Bank. The fiscal activities of these entities are not included in either budget authority or outlay totals, but are presented in a separate part of the budget appendix and as memorandum items in various tables in the budget.

(A better measure may be obligations, which would show the Government's commitments, but of course obligations would be somewhat before the fact, as outlays are after the fact.)

Moreover, the incremental reporting in Special Analysis D contains no estimates of total Federal investment in capital assets. Since the Analysis was not meant to assess policy, it does not show estimates of total assets, information it should contain to be useful for policymaking.

- 4) Since there is no consistent definition of physical capital, Federal agencies define physical capital as they choose. Thus, an asset in one agency may be thought of as capital, and the same asset in another agency may be treated as a current item. Note the following differences in the way agencies define capital assets.

Headquarter officials at the General Services Administration (GSA) told us that capital investment consisted of all new construction, alterations, and major repairs except for one-to-one replacements of equipment. On the other hand, the Corps of Engineers defines capital as basically the construction of a water resource project. They said it involves new construction and has no dollar limits. Veteran's Administration (VA) officials said their capital consists of construction and renovation projects over \$100,000 except for one-to-one replacements of equipment, which are treated as current expenditures. The Postal Service defines capital building projects as those over \$2,000 that (1) are new buildings, (2) add space to an existing building, (3) add new features to an existing building, or (4) extend the useful life of a building. These varying definitions of physical capital make it difficult to precisely interpret much of the data in Special Analysis D.

- 5) Special Analysis D places some program outlays in the class (i.e., either capital or current) where the majority of the expenditures are expected to occur. Classifying outlays in this manner can seriously distort what is being spent on capital items. Some programs, such as general revenue sharing and community development block grants (with combined outlays of over \$10 billion), can be used by the recipient for either capital or operating purposes. However, if 51 percent or more of a program's funds are used for operating expenses, Special Analysis D classifies

the entire outlay as a current item, even though a big portion of it (say 49 percent) is used for capital investment. 1/

Special Analysis D is not a useful resource for our purposes. Since it is prepared after budget decisions are made, it cannot be used to support decisions about capital investment policy. Except for this special analysis, the Federal Government does not practice capital budgeting in a comprehensive way.

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1/OMB Circular A-11 states that in those grant-in-aid programs where the recipient has the discretion to use the funds for either current or investment-type purposes, all the outlays are to be recorded in the category where the majority of the funds are expected to be used.



## CHAPTER 2

### STUDY DESIGN AND APPROACH

#### METHODOLOGY

To determine how the Federal Government should plan, budget, and control physical capital and its operation and maintenance, we looked at the experiences of 24 organizations: 4 businesses, 4 cities, 4 counties, 4 States, 1 regional authority, and 7 Federal agencies. 1/ Various methods can be used to study capital budgeting and the ways infrastructures are assessed. For our research, we chose a blend of survey and field study techniques. We also reviewed the current literature and gathered information from the Office of Management and Budget, other Federal agencies, and budget specialists.

#### Our framework for studying capital budgeting

The literature on capital budgeting covers several points of view. Business journals generally discuss the analytical techniques used to determine the most cost-effective choices. Public sector literature centers on three areas: (1) the procedures used to prepare a capital budget document, (2) whether a separate capital budget (using the traditional accounting definition) is practical, and more recently (3) the condition of cities' infrastructures.

Nowhere, however, in our literature review could we find a comprehensive, precise discussion of the critical elements of a capital budgeting process. Thus, we devised an analytical framework of our own, and based on it, we developed and designed this study's data collection needs. Our framework, below, consists of four parts, all of which we judge necessary for a successful approach to capital budgeting.

- 1) Assess the condition of the infrastructure and identify its short- and long-term physical needs.
- 2) Develop alternatives to satisfy the organization's short- and long-term needs.

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1/Actual locations visited are listed in appendix III.

- 3) Select alternatives and set priorities among the various short- and long-term needs and establish short-term funding allocations.
- 4) Monitor and control work schedules and financing.

Our criteria for determining  
successful or unsuccessful  
organizations

To analyze our survey and field data, we arranged the 24 organizations we studied along a spectrum, ranging from very successful to very unsuccessful (failure). We defined a successful organization as one that can, even under adverse conditions, acquire and/or maintain physical capital without jeopardizing its mission or its clientele. By adverse conditions, we mean declining resources, political instability, or severe conflict among interest groups.

By using the spectrum arrangement, we were able to identify consistent elements that characterized the capital budgeting practices of the 24 organizations. We classified the elements as critical, important, helpful, harmful, damaging, and destructive. Each of the successful organizations contained some helpful, important, and critical elements. The very successful organizations contained more critical elements than the successful or partially successful groups. The organizations on the unsuccessful end of the spectrum, however, had only one element in common--harmful (see figure 1). The identity of these elements, which we discuss in chapter 4, forms the basis of our conclusions. We have also used them to assess the effects of various funding mechanisms on an organization's ability to form and maintain its capital infrastructure.

SURVEY AND FIELDWORK METHODS

Our criteria for selecting  
the Federal agencies

The seven Federal agencies we studied were selected because of their programs, funding mechanisms, relationship with State and local physical capital, and size of capital plant. They are--

- the Department of Housing and Urban Development (HUD)
- the Department of Transportation (DOT)
- the General Services Administration (GSA)

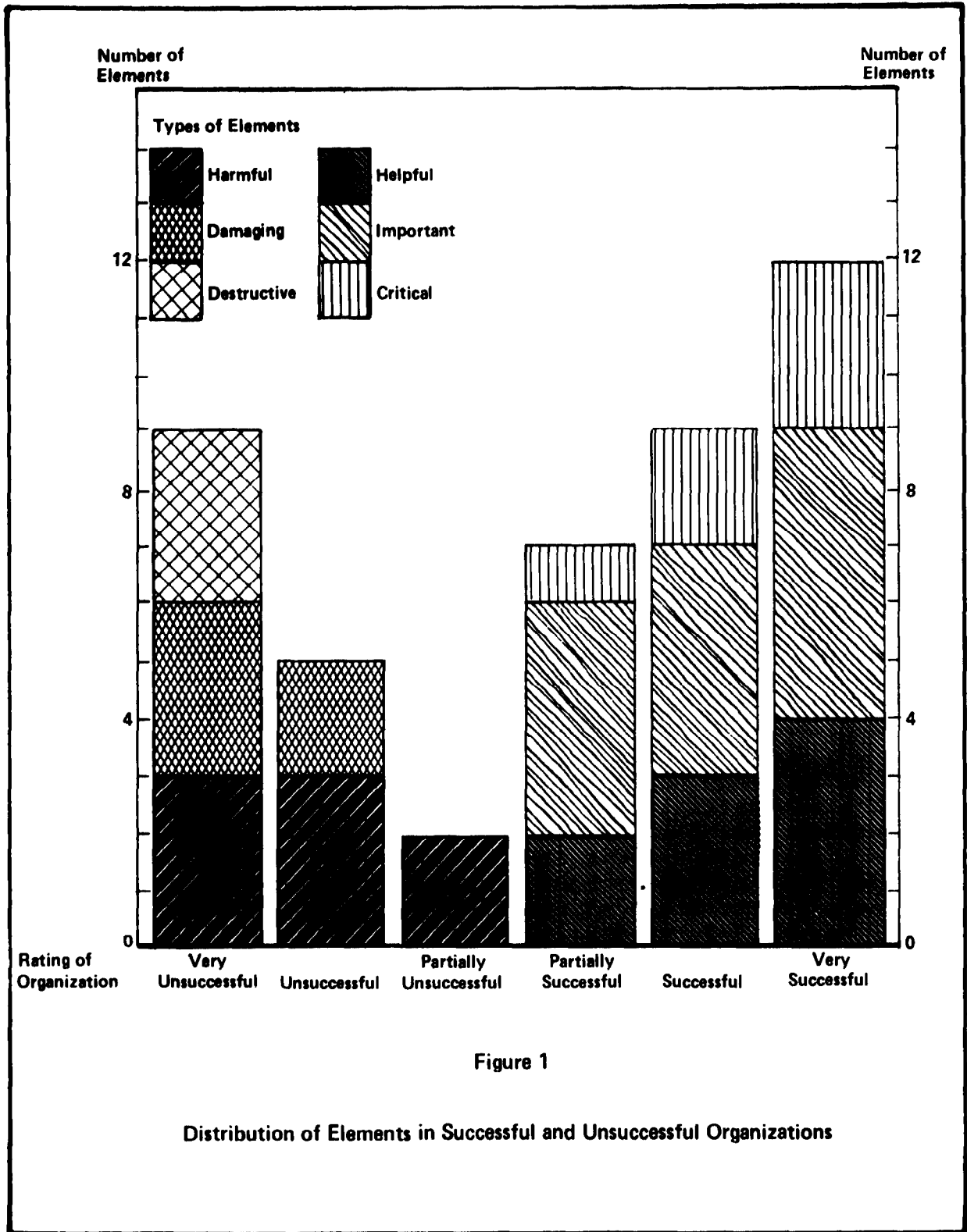


Figure 1

Distribution of Elements in Successful and Unsuccessful Organizations

- the Environmental Protection Agency (EPA)
- the Veterans Administration (VA)
- the United States Postal Service (USPS)
- the U.S. Army Corps of Engineers (Corps)

These agencies fall into two broad categories--those that invest directly in physical assets--the Postal Service, GSA, VA, and the Corps--and the ones that invest indirectly by providing funds to State and local governments to buy and operate physical capital. HUD, DOT, and EPA are in the latter group; they conduct the three largest Federal grant programs that finance State and local physical capital.

We chose DOT because it administers the very large Highway Trust Fund, which gets its support from fuel taxes. The Fund provides grants to the States for the Federal-Aid Highway System. USPS was selected because it is an off-budget Federal agency and can borrow money on its own initiative. Most of its funds come from mail delivery and related services. GSA was picked because it oversees an extensive rental program, has a minuscule current construction program, and a large backlog of repairs and alterations. GSA's real property operations are financed mainly by the rent it collects from Federal agencies that occupy GSA-controlled space. We selected VA because it owns and manages the largest hospital system in the United States and its capital assets are among the oldest.

The Corps was chosen because it builds public works projects that take a very long time to plan, design, and construct. Its civil works program is capital intensive and its construction cycle is much longer than normally experienced by other Government agencies. The average time from conception to start of construction of flood control projects, for example, is 26 years. Construction of civil works projects takes about 5 additional years. EPA was selected for its specific-purpose, capital-intensive grants, which are financing vast physical capital construction projects in many States and localities. EPA grants for water pollution facilities require some State and local government financing. When completed, these plants are operated and maintained by local governments. We selected HUD primarily because it distributes community development block grants, broad-purpose grants that are apportioned by formula. These grants impose no strict requirements as to whether or not the funds must be used to acquire physical capital. The primary source of capital improvement funds for VA, Corps, HUD, and EPA are general fund appropriations made specifically for those investments.

### Our criteria for selecting the States

The four States we visited were California, Michigan, Ohio, and Pennsylvania. They represent a cross-section of current and past cash positions, types of assets, size of capital plant, current and past infrastructure conditions, and geographical locations.

California was chosen primarily because it often enjoys a cash surplus and because it is experienced in building, maintaining, and operating a very large capital project. The California State Water Project (the basic project was completed in 1973) includes 18 reservoirs, 15 pumping plants, 5 power plants, and 580 miles of aqueducts. Pennsylvania has recently had serious financial problems, and many of its roads and bridges are in very sad shape.

Michigan has had experience handling quick swings in cash positions. It is characterized as a one-industry State and therefore its cash position is closely tied to the health of the automobile industry. Ohio has a record of operating with relatively limited resources. Its voters and legislators generally emphasize limited government and taxes.

### Our criteria for selecting the cities

The four cities selected were Baltimore, Maryland; Cleveland, Ohio; Detroit, Michigan; and San Jose, California. They represent a mix of geographical locations, population composition and trends, and size of capital plant. They are also a mix of growing, sustaining, and declining public and private resources. In addition, suggestions by various officials prompted us to select the special authority, the Port Authority of New York and New Jersey. The Port Authority has a long history of experience in building and maintaining a transportation infrastructure and believes that its experience can help solve the broader infrastructure problems of the region.

Baltimore is known as a turn-around city. Once a declining urban area, it is now vigorously repairing and rebuilding its infrastructure and its image. Baltimore carries all the responsibilities of a city and a county. It is old and its population is declining, but its financial condition is strong. Baltimore voters are noted for their support of bond issues for capital investment.

Cleveland (on December 15, 1978) was the first major American city to default since the Great Depression. It has

defaulted three times since then and faces \$700 million in needed improvements to its basic capital plant.

Detroit, like the State of Michigan, is susceptible to the fortunes of the automobile industry and consequently it is suffering large revenue losses (State and local). It has received media coverage for actively trying to rebuild its image and infrastructure.

San Jose--located in the "silicon valley" south of San Francisco--is one of the nation's major growth areas. The overall debt for the city is below average. Revenues and funding operations are considered generally sound. San Jose has recently weathered the storm of California's proposition 13.

The Port Authority of New York and New Jersey (created by State compact in 1921) plans, develops, and operates bus, air, marine, and other terminals and facilities of transportation and commerce. It is financially self-sustaining and obtains funds based on its own credit. It has a sound financial position and builds, maintains, and operates an extensive capital plant. Over the years, the Authority has expanded its responsibility for infrastructure in the New York/New Jersey area.

#### Our criteria for selecting the counties

We based our selection of the four counties on geographical location, various organizational and service delivery structures, and current and past cash positions. They were Howard County, Maryland; Arlington County, Virginia; Maricopa County, Arizona; and Oakland County, Michigan.

Howard County, which contains the privately developed and administered model city of Columbia, must balance the competition between its urban and rural sections. The county has grown steadily and has not suffered severe cash problems. Arlington County is an urban county that has no cities within its boundaries, and thus it has the combined responsibilities of a city and a county. With constant revenues, it is handling a rapidly declining school population and a large requirement for funding subway construction and operation.

Oakland County has a completely decentralized government and an increasing revenue base. It is in a sound cash position and can easily provide the cash needed to build and maintain its infrastructure.

Maricopa County is located in the rapidly growing area of Phoenix, Arizona. It has an expanding revenue base and a sound cash position. Maricopa can easily provide the cash needed to build and maintain its physical capital.

#### Our criteria for selecting the private firms

The corporations chosen were American Telephone and Telegraph Company (AT&T), the General Motors Corporation (GM), the Boeing Company, and the Republic Steel Corporation. These companies represent a cross-section of capital-intensive industries--automotive, steel, aerospace, and communications. They were also chosen because they represent a mix of companies which have, over the years, experienced a variety of cash positions.

AT&T is the largest corporation in the world ranked by assets. In 1979, it spent \$15.7 billion for construction, up \$2.0 billion from 1978. AT&T is an acknowledged leader in the communications field and provides 83 percent of the nation's telephone service. It builds, operates, and maintains an extensive capital plant. It also manufactures communications products and conducts a large research operation. Its cash position is very sound.

Boeing, the 29th largest U.S. industrial corporation ranked by sales, is an international leader in the aerospace industry. It has experienced, as has the entire industry, periods of severe decline and heavy growth. It builds primarily airplanes, helicopters, and aerospace products.

GM, the second largest U.S. industrial company ranked by sales, builds automobile products and is in an enviable cash position. It has large cash reserves. The leader in the U.S. automobile field, it is currently (like the rest of the industry) experiencing strong competition from foreign manufacturers for fuel-efficient cars. In 1979, GM spent \$5.4 billion for new plant facilities, renovation of existing plants, and special tools.

Republic Steel is the 85th largest U.S. industrial company ranked by sales. It is fighting the well-known, industry-wide problems of obsolete plant and equipment and a declining ability to rebuild and retool.

#### Interviews and documents

During the course of our study, we conducted 191 interviews with:

- legislators (8)
- top managers (36)
- program managers (20)
- budget officers and comptrollers (43)
- evaluators and auditors (9)
- capital plant managers, planners, builders, and operators (75).

We also examined:

- policies, procedures, instructions, budgets, and forms;
- documents on capital and its maintenance as they relate to the organizations contacted;
- documents concerning the availability of different types of funds; and
- enabling legislation and other laws.

#### STUDY LIMITATIONS

In this report we do not explore the details of programs, nor did we collect data on the extent of capital investments made by the Federal Government over the years. Extensive information on capital investments is available in the 1980 report issued by the Department of Commerce, "A Study of Public Works Investment in the United States." The Urban Institute has also issued several reports on the condition of major cities' infrastructures.

Further, we do not discuss the pros and cons of a separate capital budget versus the unified Federal budget. Nor do we discuss in any detail State and local budgeting practices. These issues will be analyzed in subsequent GAO reports.

We are conducting a series of studies on capital budgeting and infrastructure assessment practices. This report is the second one in the series; the first, "Foresighted Planning and Budgeting Needed for Public Buildings Program," was published in September 1980. <sup>1/</sup> Our ongoing studies are

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<sup>1/</sup>U.S. General Accounting Office, (PAD-80-95, September 9, 1980).



addressing these questions: (1) Should the Federal Government have a separate capital budget? (2) What information is needed to make Federal capital investment policy? What are the cost implications of gathering such information? (3) What are the elements that affect State and local capital investment decisions?

#### COMMENTS ON THIS REPORT

We received oral and written comments on a draft of this report from seven Federal agencies, two industrial companies, one special authority, two county governments, and five professional management associations. 1/ With the exception of the Office of Management and Budget, all the reviewing organizations agree with our message, conclusions, and recommendations.

As a result of the comments, in this final report we have mentioned changes to capital investment systems that agencies plan to undertake in the future, but we are in no position to evaluate these changes. We also added a discussion, in chapter 5, of the Federal Government's historical approach to budgeting operations and maintenance and construction. In our view, the approach gives the impression of a greater degree of separation of these items in the budget formulation process than actually takes place when the budget is implemented.

Many reviewers had specific, technical comments about their organization or items of special interest to them. Within the body of the report, we have corrected factual errors and have presented the organizations' positions. As the reader may notice, in some cases comments pertained to ongoing GAO projects. We do not address these comments in this report because they will be taken into account as we continue our current work. We also clarified our main recommendation to the Congress (see ch. 8) to more precisely convey what we mean, which is that top-down policy advice is needed for Federal capital investments, not centralized management and control. OMB's specific comments about the report, and our responses, are discussed in the final section of chapter 8, immediately following our recommendations.

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1/The written comments from OMB and other organizations are reproduced in their entirety in appendix I.

## CHAPTER 3

### PHYSICAL CAPITAL IN THE PUBLIC SECTOR: THE CURRENT SITUATION

#### FEDERALLY FINANCED PHYSICAL CAPITAL NEEDS SPECIAL ATTENTION

The Federal Government owns enormous amounts of capital assets--military installations, dams, public lands, buildings. It also helps State and local governments to purchase similar facilities, particularly roads and streets, waste water treatment plants, and mass transit systems. Today much of these federally owned and financed capital items are deteriorating, and we are faced with the unpleasant prospect of either repairing or rehabilitating them, or of risking a staggering replacement burden in the future.

Our survey shows that deteriorating public capital assets are partly the result of State and local neglect and partly the result of Federal Government actions.

Exactly how much physical capital the Federal Government owns is not clear. Estimates vary depending on the valuation basis used and the types of assets included in the estimates. Nevertheless, all studies of federally owned physical capital show that the amount is substantial. Some conclusions reached by studies we considered include:

- The Department of Commerce estimates the value of federally owned fixed capital in 1979 to be \$418 billion (in 1972 constant dollars). <sup>1/</sup> This consists of a military portion of \$238 billion and a non-military portion of \$180 billion.

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<sup>1/</sup>U.S. Department of Commerce, "Survey of Current Business," March 1980. The constant-dollar gross of Government-owned fixed capital is the value of the stock in 1972 constant dollars before deductions for depreciation. This study uses the perpetual inventory method that derives gross capital stock for a given year by cumulating past investment and deducting the cumulative value of the investment that has been discarded.

--A 1977 study published by the Treasury Department describes an experiment to develop a consolidated financial statement based on historical costs. 1/ This study lists Federal property and equipment at \$324 billion, \$189 billion of which is military capital.

--An inventory prepared by GSA of real property owned by the United States worldwide shows that the Federal Government owns \$106.9 billion worth of real property. 2/ This figure, however, is based on actual or estimated costs without considering depreciation, obsolescence, or economic changes in value.

Although the Federal Government owns billions of dollars worth of capital items, State and local governments own much more. The Department of Commerce study cited above estimates that in 1979 capital assets owned by States and municipalities totaled about \$896 billion (in 1972 constant dollars).

Federal agencies who own capital assets set differing priorities for routine maintenance, major repairs, rehabilitation, and new construction

Although the four agencies we studied who own and maintain their own assets use different criteria for setting priorities, in one area they concur: each gives a high priority to maintenance critical to operations. Both the Corps and the Postal Service said they would cut operations before reducing critical maintenance. Rather than

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1/U.S. Department of Treasury, "Consolidated Financial Statements of the United States Government, FY 1977," prototype. This report is part of a continuing experiment to expand the use of accrual accounting concepts in governmental accounting. Capital assets are accounted for on a historical cost basis; with some having no recorded value. Although the figures shown do not include deductions for depreciation, an integral part of having such a statement would be having a detailed listing of capital assets.

2/General Services Administration, "Real Property Owned by the United States as of September 30, 1978." This inventory lists federally owned land, buildings, structures, and facilities (real property) at cost. Since most of the land was acquired at minimal cost, it is shown at only a fraction of its market value. Civilian and military equipment is not included in these totals.

forego maintenance during an overall budget constraint, the Corps would stretch out some construction projects and reduce operating expenses by closing less essential recreational facilities. VA said that it, too, attaches a high priority to maintaining physical capital that is critical to operations, but its primary concern is its health care programs; these are not sacrificed to provide for capital investment needs.

A Postal Service official said that the maintenance budget is never purposely cut and that in recent years maintenance personnel have increased, while the total number of Postal Service employees has declined. Postal Service officials pointed out that increased mechanization requires more qualified maintenance personnel.

At many Federal agencies, priorities and consolidated budgets are developed at headquarters, but day-to-day operations and maintenance are performed at the local level. At the VA, for example, the operating and recurring maintenance budgets are combined and the individual hospital directors have considerable authority to make decisions about day-to-day spending. A hospital director may decide to defer some non-critical maintenance, like painting rooms, if there are other, more pressing operational needs. Nonrecurring maintenance, such as replacement of building service equipment (elevators, boilers, etc.), replacement of building components (roofs, windows, etc.), and minor improvements (room renovations, partitions, etc.), is a separate category within the medical care operating budget. VA does not use it for any other operational requirements. Improvement and rehabilitation projects are funded from new construction projects in a separate appropriations account.

The Corps of Engineers combines its operations and maintenance budget and can transfer funds from one project to another to meet operational expenses. Rehabilitation projects are funded from new construction projects in a separate appropriations account. At GSA, daily operations and lease and purchase contract payments are given first priority. GSA officials cited budgetary constraints as the reason why alterations, repairs, and new construction receive lower priority.

The emphasis these agencies put on operations and critical maintenance allows them to function on a daily basis, but it can result in the gradual decline of their facilities. The Postal Service differs from the other Federal agencies in this respect because it assigns a high priority to improving its capital equipment and facilities. First, since it became an independent agency in 1971, the Postal Service has had the authority to borrow money. Second, it has launched

an ambitious program to improve equipment and facilities. Many antiquated facilities have already been replaced with modern ones, and the Postal Service is currently mechanizing to improve worker productivity. USPS' ability to borrow money is vital to its modernization program.

Federally owned assets appear to be in better condition than State and local assets, but they also suffer from obsolescence and deterioration

Facilities at one of the four Federal agencies in our study are becoming obsolete, two agencies appear to be holding their own, and one has substantially improved its facilities. Although these agencies routinely inspect their assets, none prepares reports that directly compare the overall condition of their facilities over time. We made this judgment after interviewing agency officials and collecting available information.

The Veterans Administration's facilities are becoming functionally obsolete. Many of its hospitals are structurally sound but do not have enough room or the correct space configuration to accommodate modern medical equipment, outpatient facilities, or air conditioning and ductwork. Currently about one-third of the VA's 172 hospitals have no air conditioning in the patient's quarters. Although the agency is taking a hard look at its medical facilities, it is not replacing or renovating them fast enough to up-grade them to the new, higher standards of hospital occupancy.

Facility age, changes in the life safety and electrical codes, requirements of the Joint Commission on Hospital Accreditation, changes in medical technology, and insufficient construction funds are the reasons the VA gives for the obsolescence of its medical facilities over the last 10 years. A 1978 GAO report 1/ states that many of the facilities under the VA's Department of Medicine and Surgery are technically obsolete. 2/ Half the hospitals currently in use were constructed before 1950--the oldest in 1888. A few of them

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1/U.S. General Accounting Office, "Review of the Process that the Veterans Administration Has Developed To Determine Priorities for Its Major Construction Program," (HRD-78-76, March 15, 1978).

2/The Department of Medicine and Surgery is responsible for 172 hospitals, 228 outpatient facilities, 90 nursing homes, and 16 domiciliaries.

were actually intended to be temporary facilities. During 1975-79, VA's outlays (in 1972 constant dollars) for capital investments averaged about \$142 million a year. This is a considerable increase over outlays made in the three prior 5-year periods (1960-74), which ranged from an annual average of \$91 million to \$103 million in 1972 constant dollars. Despite this recent increase in capital outlays, we do not believe the VA has yet reversed the gradual functional obsolescence of its facilities.

The Department of Medicine and Surgery has developed a system that identifies medical facilities most in need of renovation or replacement. These facilities are reviewed annually and the ones selected are included in a 5-year construction plan. VA's 5-year plan incorporates all proposed major construction projects over \$2 million. This represents 247 projects with an estimated construction cost of \$4,130 million. (The VA also has a minor projects program for construction and alterations under \$2 million.)

GSA officials said their buildings are in better condition now than 10 years ago because they have more money for repairs and because GSA no longer oversees Post Office buildings. However, GSA's backlog of alterations and major repairs has grown tremendously--up 233 percent since 1962. Between 1962 and 1979, the inventory for alterations and major repairs has grown from about \$370 million to \$1,234 million. (In constant 1972 dollars this would be a growth from \$524 million to \$746 million, an increase of 42 percent.)

GSA attributes much of its backlog increase to inflation, which has exceeded 10 percent in the construction industry during the past several years. Officials also attribute the increase to incoming workload for new programs--such as energy and the handicapped--and to the aging process of their buildings, the majority of which are over 30 years old. Despite the backlog, GSA officials said the agency is holding its own in balancing repairs and alterations against continual deterioration and obsolescence.

In recent years the Congress has greatly increased the appropriations for GSA's alterations and major repairs program. During fiscal years 1968 through 1977, about \$61 million to \$100 million a year was appropriated for this program. Because of the substantial backlog of work requirements, the Congress increased the new obligation authority for fiscal years 1978 and 1979 to about \$200 million annually. In FY 1980, however, GSA received only \$151.3 million.

Currently GSA has little in the way of a new construction program. Most space needs are being met by rehabilitating

existing buildings or by leasing. GSA's FY 1980 appropriation for new construction was only \$29.3 million, but an additional \$100.6 million was provided by the 1980 supplemental appropriation. GSA currently has a backlog of \$737.2 million in new construction projects pending before the Public Works Committees of both houses of Congress.

Corps of Engineers officials said that the overall condition of the Corps' capital infrastructure has improved over the last 5 to 10 years, but acknowledged that some older structures have deteriorated. The Corps had an estimated \$220 million in unfunded maintenance requirements for FY 1981, including river and harbor dredging, maintenance of recreation facilities, locks, dams, and other structural and operational needs.

The Corps' operations and maintenance budget is considered one category for appropriations purposes, but the Corps has the authority to transfer funds from one project to another to meet emergency needs. Since 1970, its operations and maintenance budget has grown faster than its construction budget, because of new projects coming on-line, new legal requirements, and the aging of its projects. The operation and maintenance appropriations have grown 218 percent, from \$262 million in 1970 to \$833 million in 1979; whereas, the construction budget has increased by 89 percent, from \$712 million in 1970 to \$1,344 million in 1979. In terms of 1972 dollars, this is an increase of 75 percent in operations and maintenance, and an increase of 4 percent in construction dollars. Without studying the Corps' maintenance over time and changes in the condition of its capital stock, we cannot determine if the level of maintenance or the condition of the capital assets have changed.

U.S. Postal Service officials said their facilities have improved in the last 10 years. When the old Post Office Department became the Postal Service in 1971, thousands of post offices needed modernizing. During the next 3 years, the Service instituted a program to improve working conditions that has been dramatically successful. It involved more than 22,000 projects at a cost of \$260 million. When the program started, only 20 percent of the employees worked in environmentally acceptable quarters compared to 92 percent when the program was completed. Since its establishment as an independent agency, the Postal Service has been able to borrow money and its capital investments have nearly tripled, from an average of \$236 million during the 4 years before the Service was formed, to an average of \$683 million in the 4 years after it was formed.

The Postal Service puts heavy emphasis on maintenance. In recent years it has increased maintenance personnel and decreased operations personnel. Capital improvements and increased mechanization have made maintenance even more important now than in the past.

THE FEDERAL GOVERNMENT WILL PROBABLY  
HAVE TO CONTINUE TO SPEND MONEY TO  
PROTECT FEDERALLY FINANCED STATE AND  
LOCAL CAPITAL ASSETS

Inflation and resistance to local tax increases are damaging local budgets. Although few studies have documented the costs of deferred maintenance, the government and industry officials we interviewed believe that deferred maintenance results in breakdowns, deterioration, and eventually in a larger capital budget to rehabilitate or replace the neglected asset. Three of the Federal agencies we visited--EPA, DOT, and HUD--invest indirectly in physical capital. These agencies grant most of their funds to States and localities to help them acquire and operate their own capital assets. However, once Federal monies are committed to a capital improvement project, the financial commitment remains long after the asset is purchased. Highways, mass transit, and water pollution control facilities--the physical capital funded by DOT and EPA--are cases in point. As these assets grow old, the Federal Government is faced with a dilemma: it can allow them to deteriorate and become unusable, or it can commit more funds to their repair and replacement.

The bulk of HUD's investment in State and local physical capital is not limited to a specific type of project, as is the case with EPA and DOT. As we discuss in chapter 6, one of the major HUD programs (community development block grants) gives local officials wide latitude in deciding how to use the grant funds. The funds do not necessarily have to be used for capital investment, and often they are not.

A good example of a specific on-going Federal commitment is the interstate highway system. As originally conceived, revenues from DOT's Federal Highway Trust Fund were to be used solely to build a national highway system. But as State maintenance has dwindled in the face of budget cuts, the Trust Fund has been allowed to use its monies to rehabilitate roads and repair bridges. <sup>1/</sup> As a consequence, the Federal Government has assumed more and more responsibility for rehabilitating federally financed highways in order to protect its investment

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<sup>1/</sup>Rehabilitation is considered a capital expenditure.



in the system. To date the Federal investment in the interstate system is an estimated \$70 billion.

The Federal Highway Administration (FHWA) provides about \$8 billion a year in aid to highways. Ninety percent of the construction of 42,500 miles of interstate and defense highways is financed by the FHWA, and 75 percent of the construction and improvement of another 784,000 miles of roads and streets is financed by the Federal Government. Despite this large commitment, our highways are wearing out faster than we can repair them due to such factors as increasing inflation, declining capital improvement spending, weather conditions, and daily wear-and-tear caused by cars and trucks. The FHWA reports that the overall condition of our nation's highways dropped from good to fair between 1970 and 1975, and more deterioration occurred during the severe winter of 1976-77.

To compensate for shrinking financial resources, some States are cutting their highway maintenance budgets and staffs. Deferred maintenance can be costly. A recent GAO report shows that bridge surfaces that were expected to last for 40 years now require major repairs after 5 to 10 years. <sup>1/</sup> Preventing this deterioration, which is caused by salt used to melt snow, would save DOT billions of dollars in repair costs. According to the FHWA, if 29,000 interstate bridge decks continue to be neglected, an additional \$4.4 billion will be needed later to repair them. By protecting the bridges not yet contaminated by salt, a 3-to-1 savings over the life of the bridge deck could be realized.

The national mass transit program is an example of a Federal commitment that grew from an agreement to help finance the purchase of physical capital to an agreement to support operating expenses. The Congress first passed a major bill in 1964 authorizing Federal aid to urban mass transportation. In the decade before this bill was passed, nearly 200 private transit companies had gone out of business and Federal aid seemed necessary to buy the failing private transit companies and operate them as public entities.

By the late 1960s, many transit systems were publicly operated and the pressing need was for funds to maintain and expand services rather than to purchase private systems. As a result of the growing operating deficits by the transit

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<sup>1/</sup>U.S. General Accounting Office, "Solving Corrosion Problems of Bridge Surfaces Could Save Billions," (PSAD-79-10, January 19, 1979).

systems, the Congress amended the National Mass Transportation Assistance Act in 1974 to allow Federal aid for operating expenses. Under current mass transit legislation, Federal funds are now used to help local governments purchase transit equipment and to pay for operating expenses.

Besides supporting State and local capital assets, the Federal Government also subsidizes private organizations to maintain vital public services. The Consolidated Rail Corporation (Conrail) began operation in April 1976, with a Federal commitment of \$2.1 billion. Conrail acquired a deteriorated physical plant from its bankrupt predecessor railroads--the result of the railroad industry's reluctance to make needed investments due to the short supply of funds and the low prospects for return on investment.

In 1978, the Congress authorized an additional \$1.2 billion; however, more Federal funds may be necessary to continue the rehabilitation and rail improvement programs started by Conrail in 1976. A 1980 GAO report states that Federal funds are running out and Conrail plans to significantly reduce its capital programs in 1980 and 1981 to stay within the current \$3.3 billion Federal funding limit. <sup>1/</sup> The report concludes that capital investments at this reduced level will probably result in deterioration and a return to declining service, thus ending the benefits gained from the already significant Federal investment. DOT disagreed with the report, stating that "...a two-year reduction in the current levels of rehabilitation and maintenance...will not adversely impact the long-term future of Conrail, provided that the necessary funds are available at the end of that period to catch up with any necessary maintenance."

Municipal wastewater treatment facilities are yet another example of federally financed projects that suffer from insufficient operations and maintenance funds. EPA finances 75 percent of the construction costs of these facilities, which are owned, operated, and maintained by local governments. The Clean Water Act of 1977 provides that facilities using innovative and alternative technology can receive up to 85 percent Federal funds; if such a facility fails, 100 percent grants are available to fund modification or replacement costs.

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<sup>1/</sup>U.S. General Accounting Office, "Conrail's Reduced Capital Program Could Jeopardize the Northwest Rail Freight System," (CED-80-56, March 10, 1980).

From FY 1970 to FY 1979, EPA gave local governments \$24.6 billion to build about 13,000 wastewater treatment plants, yet a 1978 EPA study shows that many of them are not adequately cleaning waste water. 1/ Twenty-nine percent of the facilities sampled in the study were in serious violation of their discharge permits. Among the reasons cited for their non-compliance were operations and maintenance deficiencies caused by untrained operators, insufficient staff, and poorly maintained equipment. 2/ In March 1980, EPA officials estimated that 77 percent of the completed water pollution plants failed to meet their discharge permit conditions. EPA now faces the problem of giving more money to new (or recently renovated) municipal wastewater facilities so that they can meet the permit conditions. The alternative is to accept dirtier water.

The public has a multibillion dollar investment in State and local capital assets. In all likelihood the Federal Government will continue to protect this huge investment by continuing to subsidize local services.

POOR STATE AND LOCAL MAINTENANCE OF  
CAPITAL ASSETS COULD RESULT IN INCREASED  
FUTURE COSTS

State and local governments often use the purchase and maintenance of physical capital as a mechanism to balance their operating budgets. When funds are plentiful, capital items are acquired and maintained. When funds are scarce, purchases of capital assets are deferred and maintenance is reduced. Cutbacks are made in many areas, but since government services are not immediately affected by reduced maintenance, maintenance is a prime target for budget cuts. The issue is not whether maintenance should be cut along with other items, but how much it should be cut.

Deferral often causes existing facilities to deteriorate rapidly. As the auto mechanic in the commercial invites, "You can pay me now...or you can pay me later." And many cities and States are doing just that--deciding to pay later for the maintenance and repair of their capital assets. During our survey, we found that some of the organizations we examined,

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1/Energy and Environmental Analysis Inc., Evaluation of Municipal Wastewater Treatment Plant Operations, Feb. 13, 1978.

2/The EPA study considered influents and inadequate facilities to be more important problems than operations and maintenance.

particularly the older, large cities, do not maintain or replace their physical capital, even though they know deferral will mean huge repair and replacement costs in the future.

Our examinations, Urban Institute reports, and a study by the Joint Economic Committee of the Congress paint a dreary picture of the conditions of the physical capital in some of our cities and States. Cleveland, New York City, and Pennsylvania are vivid examples of governments that have neglected their capital infrastructures.

In Cleveland, about 50 of the 163 bridges for which the city has full maintenance responsibility are in intolerable or unsatisfactory condition. About 33 of these bridges have a sufficiency rating of less than 50 percent, which qualifies them for Federal bridge replacement funds. Thirty percent are classified as beyond repair. The city estimates that it would cost at least \$150 million to bring all deficient bridges up to standard. (This would involve rehabilitating and reconstructing the bridges to a "like new condition.") 1/

Cleveland's sewer network is also showing its age. Two-thirds of the sewer's main mileage is over 60 years old; the oldest section was built in the 1880s. Sections of the collection system have collapsed, causing numerous street cave-ins. An analysis of one sewer district, representing over half of Cleveland's sewer mileage, found that structural conditions were "poor to fair." Over 90 percent of the combined sanitary and storm sewers and 60 percent of the sanitary sewers approach or exceed service lives of 50 years.

The city's most difficult sewer problem is inadequate capacity to handle storm water runoff, which causes floods and overflows of raw sewage into receiving waters. Within the Cleveland portion of the Easterly Service District alone, 450 flooding incidents and 125 street cave-ins have been recorded. Cleveland estimates it will cost \$340 million to alleviate its flooding problems.

New York City is another example of a city with a deteriorating capital plant. Probably the most dramatic incidence of this is the collapse of the city's West Side elevated highway, built in the early 1930s and now being torn down. This

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1/Nancy Humphrey, George E. Peterson, and Peter Wilson, America's Urban Capital Stock, Vol. 2: The Future of Cleveland's Capital Plant (Washington, D.C.: The Urban Institute, 1979).

needed, but ruined, highway is a vivid reminder of the dangers of neglect and deferred maintenance.

But the collapse of the West Side highway is only a single, though obvious, example of New York City's crumbling infrastructure. The city's bridges and highways badly need repair, primarily because they are not regularly maintained. Of the 1,322 bridges and tunnels inspected by the city, one out of every ten is in poor condition (defined as needing major reconstruction or replacement). Another 13 percent are in fair condition (needing modernization or rehabilitation). The repair and replacement of the highway bridges and other structures are a substantial future burden facing the city.

Besides the hard pressed older cities, some States cannot maintain their capital infrastructure. A Pennsylvania Department of Transportation official said that the State's highways are in horrible condition. The Governor has declared that Pennsylvania's highway system is in a state of crises, and he has recommended a major \$76 million one-time maintenance catch-up effort. In addition, according to a Pennsylvania Department of Transportation official, the State has a severe bridge problem. Fifty-two bridges have been closed, and more are being closed weekly. One estimate is that the State has 632 bridges needing repairs, at an estimated cost of \$570 million.

A study prepared for the Joint Economic Committee of the Congress assessed the fiscal condition of over 300 cities with populations greater than 10,000 based on 1978 and 1979 data as well as 1980 projections. <sup>1</sup>/ This study states that because in past years capital expenditures have frequently been deferred to adjust for revenue shortfalls, the deterioration of the capital plants in many cities has reached a critical stage. Capital expenditures, therefore, may be deferred only at the risk of physical collapse.

A recent Urban Institute report shows that because of New York City's extreme financial troubles, annual capital appropriations fell by nearly 70 percent between 1974 and 1978 and maintenance and repair cycles were stretched--sometimes to

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<sup>1</sup>/Joint Economic Committee, U.S. Congress, Trends in the Fiscal Conditions of Cities: 1978-80 (Washington, D.C.: The Government Printing Office, April 20, 1979).

extraordinary lengths. <sup>1/</sup> Although these spending reductions were part of a general budgetary cutback, capital outlays fell lower and faster than did spending on current operations. The pressure on the capital budget was particularly acute because New York's temporary default on debt payments made it impossible to borrow funds for capital investment.

Cleveland, New York City, and Pennsylvania are extreme but useful examples of the pitfalls of deferred maintenance and neglect of capital facilities. Eventually many of their facilities will have to be rehabilitated or replaced, or they will cease to function.

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<sup>1/</sup>David A. Grossman, America's Urban Capital Stock, Vol. 1: The Future of New York City (Washington, D.C.: The Urban Institute, 1980).

## CHAPTER 4

### PLANNING AND CONTROLLING PHYSICAL CAPITAL: IT CAN BE WELL THOUGHT OUT OR INCOMPLETE AND DISCONNECTED

Many of the organizations we studied do not successfully use capital budgeting, but others can and do. We believe many lessons can be learned from both the successful and unsuccessful experiences (our study population was distributed almost evenly in both categories). While many variables affect an organization's capital budgeting abilities, our survey results revealed that certain elements characterize the successful groups and that the absence of these elements (and the presence of a few others) characterize the unsuccessful groups. The survey also revealed certain elements that do not affect how well capital budgeting is performed.

Because of the relative nature of measuring success and failure, we categorized the experiences of all the organizations we studied and ranked their relative success in planning, budgeting, and controlling physical capital. As discussed in chapter 2, the criteria we chose to judge success was derived from our analysis of survey and field data. To repeat our definition: a successful organization is one that can, even under adverse conditions, acquire and/or maintain physical capital without jeopardizing its mission or its clientele. By adverse conditions, we mean declining resources, political instability, or severe conflict among interest groups.

The organizations' range of success is as follows: very successful, successful, partially successful, partially unsuccessful, unsuccessful, and very unsuccessful. Those that we judged very successful incorporate into their capital budgeting systems all the elements that we identified as critical, important, and helpful to success. Those organizations that we deemed very unsuccessful either totally lack these elements, or, if not, possess them to such a small degree that the elements have no positive effect on the organization's ability to carry out capital budgeting.

Included in the very successful group are private companies and various Federal, State, and local government agencies. In the very unsuccessful category are public sector organizations at all three levels of government. Most of the organizations we visited fall within the moderately successful to unsuccessful range. Table 7 is a list of the elements contributing to success and failure. Since there are no absolute measures for these elements, our assessment of the

Table 7

Elements Contributing to Success and Failure

Elements Found in Successful Organizations

Critical

Extensively links planning to budgeting.

Concerned about long-term effects.

Incorporates up-to-date information on physical capital into decisionmaking process.

Important

Recognizes the effect of deferred maintenance and minimizes it to the extent possible.

Protects capital investment funds from being used for operations.

Considers related operations and maintenance costs when making capital budgeting decisions.

Considers alternative methods of meeting the objectives of capital investment projects.

Monitors capital investments and the condition of physical capital.

Does not have internal conflicts that disrupt capital budgeting activities.

Sees individual projects as modernization, revitalization, and investment.

Uses funding mechanisms to protect priorities.

Uses incentives to meet work and financial targets.

Helpful

Figures out ways to allocate something for everyone (keeps things even, moves on all fronts).

Uses categories for decisionmaking that are important to the organization, e.g. productivity items.

Routinely assesses physical capital and adherence to a maintenance schedule.

Elements Found in Unsuccessful Organizations

Destructive

Does not link planning to budgeting, when planning takes place.

Pays little attention to long-term effects.

Does not consistently feed information on the condition of physical capital into the decisionmaking process.

Damaging

Has limited, if any, controls; misses many financial and work targets.

Defers structural maintenance; focuses on cosmetic repairs.

Cuts budgets with "closed" eyes.

Harmful

Lets funding mechanisms drive priorities.

Sees individual projects as pork barrel.

Lets special interest groups get out of control.



organizations along these dimensions must be interpreted with this thought in mind.

THE CRITICAL ELEMENTS:

THE ORGANIZATIONS THAT POSSESS  
THEM ARE VERY SUCCESSFUL;  
CONVERSELY, THE ORGANIZATIONS  
THAT LACK THEM ARE VERY  
UNSUCCESSFUL

Only those organizations clustering at the extreme ends of our distribution spectrum either fully possess or totally lack the critical elements. Very successful, and to a slightly lesser degree, successful organizations:

- Extensively link planning to budgeting;
- Are aware of and concerned about the long-term effects of capital budgeting decisions; and
- Incorporate up-to-date information on physical capital into their decisionmaking processes.

Successful capital budgeting is  
based on extensive planning

We noticed that the successful organizations premeditatedly interrelate their long-term plans with their short-term plans to form the basis for their capital budgets. Ultimately, both plans serve as the rationale for the organizations' daily operations.

Managers formulate a basic, overall idea of the future direction of the organization. From that idea they develop a long-range plan suited to the organization's individual needs and purposes. These plans are updated regularly to reflect changes in priorities, the environment, and organizational goals, and to maintain comparability with shorter range plans and budgets.

The duration of the long-term plans varies. Several successful organizations use 5-year plans, a few use 10-year plans, and some use a 6-year plan which they update annually. Under this latter scheme, the last 5 years constitute the long-range plan, and the first year is the next fiscal year (commonly called the budget year) to be implemented.

Most of the successful organizations and all the ones ranked as very successful track the progress of their capital budgeting activities by firmly linking their long- and

short-range plans. The short-range plans often consist of detailed descriptions of funded programs that set in motion the organization's daily business operations, which, in turn, implement the long-range goals for the current fiscal year. The majority of the successful cases use a 1-year format for their short-term plans. One very successful organization makes a strong attempt to link its short-term plan with its 20-year objectives.

In planning for physical capital, it is important for the organization to consider whether future resources will grow, remain stable, or decline. This helps the organization decide the best way to handle its capital investments. For example, an organization with declining resources would normally choose to maintain and preserve capital rather than add to its existing capital stock. A growing organization would tend to accumulate additional physical capital and a stable organization would concentrate on balancing the two. Our survey results show that the very unsuccessful organizations fail to balance growth and preservation. They do not take good care of their facilities, and their capital assets are badly deteriorated.

Another key aspect about sound planning is whether the organization makes conscious decisions about the disposition of its existing capital stock. Sometimes these decisions might be to rehabilitate what is currently on board; at other times, the organization might decide to demolish and build anew. Regardless of what action is taken, the important thing is to ask the question: "What is the best use of our current and future resources?"

#### Successful capital budgeting considers long-term effects

A view of the future is a common characteristic of the organizations that fall in the successful range. Shared by these groups is the realization that the maintenance of physical capital is vital to the long-term health of the organization. Because they are aware of and are concerned about forecasting future needs, they do not allow their budget cycles (usually one year) to constrain their decisionmaking. For example, one successful organization looked at life cycle costs over 30 years to decide the merits of a project, even though its budget cycle was much shorter.

Successful organizations establish controls to assure that long-term benefits are not ignored in favor of short-term ones. Commonly, the successful organizations

- monitor the condition of their capital assets,
- use funding mechanisms to protect capital outlays and priorities, and
- recognize, and therefore minimize, the consequences of deferred maintenance.

Close attention is paid to these elements because each one affects the organization's ability to understand its options and control the nature of its future capital infrastructure.

### Monitoring

Successful organizations closely monitor the growth of their capital assets. They know that adding to their capital plant can significantly affect long-term costs, particularly when more staff are needed to operate and maintain the new capital items. They also distribute resources and projects evenly throughout all parts of the organization. In this way, they make sure that no segment is ahead of or behind the other.

Besides monitoring growth, successful organizations also carefully watch cost overruns and the transfer of funds from one budget category to another. Several organizations require management to review cost overruns above a predetermined amount. Transferring funds is monitored in much the same manner. Not all organizations allow funds to be transferred, but those that do require prior approval for any transfers over a set dollar amount. In addition, they do not permit transfers from capital to operating expenditures or to unauthorized programs, and ultimately they return all funds to the projects for which the funds were originally allocated.

One successful organization monitors inflation in a highly visible way. It calculates estimates for inflation for all projects. The estimates are adjusted by the central budget staff and then placed in the budget as a separate line item below each project line. This procedure makes it easier for the organization to monitor and adjust for actual inflation.

### Protecting

During their planning and budgeting processes, successful organizations set priorities for certain long-range capital improvements. Once priorities are set, they go one important step further: they designate funding mechanisms to protect the funds allocated for the capital projects. One organization, for example, uses a construction and

conveyance tax to fund capital projects for urban and rural redevelopment. The tax sets aside a certain percentage of funds from every private construction project and title transfer to be used for capital improvements. Seventy-five percent of the taxes are returned to the geographical area from which they were collected, and the remaining 25 percent can be used for areawide improvements.

Two other organizations use a similar transfer tax, while a fourth uses bond funds to finance its capital improvements. Using bonds has a built-in advantage. By law such funds can be spent only for the purposes authorized.

#### Deferring maintenance

Recognizing the long-term effects of deferring structural maintenance is the third important method of control shared by the successful organizations. Although none of the officials we interviewed could estimate precisely the effect of deferred maintenance, all make the same assumption: deferred maintenance greatly accelerates long-term repair and replacement costs.

Just as most people believe that putting off simple car repairs leads to bigger problems (and hence bigger repair costs), officials in the very successful organizations see deferred maintenance as potentially crippling. They emphasize preservation and renovation. Individual projects are seen as ways to modernize or invest, not as "pork barrel." 1/

Maintenance is the last item to suffer budget cuts in these organizations. The condition of the physical capital is assessed and a maintenance schedule is adhered to. As a result, their capital assets are structurally sound and healthy.

#### Successful capital budgeting relies on up-to-date information for decisionmaking

Information is an intricate component of making a decision. This relationship holds true for the simplest decisions to the most complex ones. The successful organizations we surveyed respect this relationship. They understand that decisions rest on information that allows the decisionmaker

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1/We define pork barrel as projects selected based on political clout and not necessarily on efficiency, equality, or equity.

to "test" the merits of alternative approaches before a decision is made.

People and organizations use much the same decision-making process. To use a simplified example, a decision to buy a vacation home (an addition to your personal "capital plant") incorporates considerable information and analysis of alternatives and trade-offs. Before deciding to buy or not to buy, you consider the merits of the decision by taking into account:

- 1) the full cost of the house (including interest charges);
- 2) the related direct operation and maintenance costs (utilities, routine repairs, etc.);
- 3) the increased indirect costs associated with the purchase (such as insurance);
- 4) the alternative investment opportunities; and
- 5) the effect of an additional capital purchase on your capacity to operate and maintain it.

This looks very cut and dried, but obviously it is not because choices and costs change often. Nevertheless, our example does illustrate the need for basic, up-to-date information, and it applies to organizations as well as individuals. Successful organizations merely increase the sophistication of this process to handle more complicated variables, like funding requirements, financial alternatives, and assessments of existing capital needs. They also exert much effort to obtaining complete, up-to-date information.

Very successful organizations use several information categories, such as productivity, safety, energy savings, improved service, and fire hazard to make sure they are funding a "balanced" group of items. One organization uses a highly developed system of graphs and charts to evaluate trade-offs and to project agency funding needs and program priorities. Most successful organizations display the related operations and maintenance costs in their budgets when making trade-offs. Without showing the effect of new capital assets on operations and maintenance, items may be funded without taking into account the supporting operations and maintenance requirements. The final result may be a new plant that cannot be adequately staffed or cared for.

Unsuccessful organizations either  
do not plan or do not link planning  
to budgeting

Most organizations we classified as unsuccessful either do not make long- and short-range plans, or do not interrelate their planning with budgeting. Where long-range plans exist, short-range plans do not parallel them. What we usually found was a half-hearted attempt at planning that no one took seriously. Often, one person was responsible for planning, but that person had no involvement in the capital budgeting process. We believe the failure to interrelate planning and capital budgeting is the most important signal of future trouble, especially when resources begin to decline.

All of the very unsuccessful organizations we studied are currently faced with accelerating maintenance and repairs. Without adequate long-term planning, this problem cannot be recognized or minimized in advance. At one unsuccessful organization, the situation is so severe that its long-range capital improvement plan is totally ignored by management. The agency official told us that any planned project actually performed was merely coincidental. The agency has since thrown out its long-range plan and is working on a new one that takes into account its capital infrastructure.

In the unsuccessful organizations, financial analysis of alternatives and trade-offs is neither required nor routinely practiced. At one of the very unsuccessful organizations, an official said they do not have the resources to perform such analyses.

Unsuccessful organizations pay  
little attention to long-term  
effects

As a group, unsuccessful organizations concentrate heavily on the short-term, and to varying degrees (depending on where they fall on the spectrum) pay only lip service to forecasting future needs. Unsuccessful organizations exercise few, if any, controls over their physical capital because they:

- do not monitor the condition of their capital assets;
- allow funding mechanisms to drive priorities, rather than protect capital projects;
- defer structural maintenance, focusing instead on cosmetic repairs; and
- cut budgets with "closed" eyes.

### Monitoring

Unsuccessful organizations do not monitor the growth of their capital plants. Several of the ones we surveyed were not only unaware of the condition of their existing capital infrastructure, they had also failed to make the connection between adding capital assets and the corresponding costs of operations and maintenance. Failure to grasp this connection is important because the relationship between the two is not linear. Accumulated physical capital can magnify the long-term effects of operations and maintenance, particularly when more staff are needed. Also, without careful advance planning, requirements for repairs can peak, causing a heavy financial burden when many assets are acquired in a relatively short space of time. Lack of awareness that properly maintained physical capital is vital to an organization's health was most prevalent among the very unsuccessful cases. They tended to add capital items inexorably with no thought as to how they would pay for operations and maintenance in the future. They are now finding it difficult to make repairs and renovations, and their bridges, roads, and other capital assets show signs of serious deterioration.

Several unsuccessful organizations repeatedly miss their financial and construction targets. No progress reports or reports on capital expenditures are required or prepared. No group is responsible for monitoring cost overruns and funds are often transferred from one budget category to another after final authorization. One official blames many of these incidents on the fact that no internal or external controls exist to monitor any aspect of the organization's capital budgeting process.

### Protecting

In contrast to the successful organizations, who set priorities and funding requirements for capital projects during the planning process, the unsuccessful groups tend to allow funding mechanisms to drive priorities. Because these organizations do not designate specific funding mechanisms to protect priorities, capital projects are forced to compete continuously with other funding alternatives. As we explain further in chapter 7, capital projects compete disadvantageously with other discretionary funds. As a result, whatever funding is available usually determines what capital projects are performed. More often than not, priorities are compromised by the availability of funding.

The ability of one organization to meet its physical capital needs was weakened by the improper use of bond funds.

Bonds were supposed to be a protective funding mechanism for capital projects, but were actually used for operation expenses.

#### Deferring maintenance

We also found that unsuccessful organizations focus mainly on cosmetic repairs and defer the more costly structural maintenance. As stated in congressional testimony,

"Capital investment and maintenance are favorite candidates for cutbacks during periods of spending restraints, since the implications of deferred capital spending are not visible until some years in the future." 1/

At one very unsuccessful organization, deferred structural maintenance is accelerating deterioration. An agency official estimated that his organization is meeting only one percent of its bridge maintenance needs and none of their needs for additional capital. The agency is operating on an emergency basis, deferring maintenance and closing bridges as they become unsafe.

#### Cutting budgets

The problem of deferring maintenance is part of the larger, more fundamental problem of cutting budgets without serious thought as to future consequences. As we stated before, maintenance and capital assets are prime targets for budget cuts because their effects are not felt for a long time. These items are also thought of as "pork barrel" instead of investment, revitalization, or modernization. Unsuccessful organizations rarely protect their capital investments with designated funding mechanisms. When they do use designated funding mechanisms, they let the mechanisms drive priorities. When funds become scarce, budget cutbacks follow. Maintenance and capital assets receive the majority of the cuts.

Another Urban Institute study points out that one organization over a period of time skimmed on maintenance and the

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1/Prepared statement by George E. Peterson, Director, Public Finance Program, the Urban Institute to the Subcommittee on Economic Development of the House Committee on Public Works and Transportation, 95th Cong., 2nd sess. June 27, 1978.



routine renewal of its capital items. <sup>1/</sup> The organization now faces exorbitant costs due to deferred maintenance, and it is having serious trouble arranging financing. This same organization has had such extensive cuts in maintenance that parts of its capital infrastructure pose a serious safety hazard. Only after regional authorities assumed responsibility for part of the infrastructure did the capital assets begin to improve. The parts not taken over by the regional authorities continue to decay.

In another unsuccessful organization, acquiring new capital assets historically receives a higher priority than maintenance. Until last year, maintenance was performed on a "spoils system" basis--the area politically affiliated with the current administration received the maintenance funds.

These two cases show how reactionary budget cutting can cause problems in building and maintaining a healthy capital plant. Unsuccessful organizations address the problem of budget cuts with a view of the short term. They use either a quick-fix solution that does not consider the future or they simply ignore the future.

Unsuccessful organizations  
do not have adequate  
information for decisionmaking

Unsuccessful organizations neither understand the long-term implications of a decision, nor do they have the appropriate information with which to assess the merits of a decision. They practice capital budgeting in ways that limit their ability to gather up-to-date information. Many of them do not consistently feed information on their physical capital into their budgeting or maintenance schedules. Thus, decisionmaking cannot completely determine needs or evaluate alternatives because information on the condition of physical capital is not routinely generated. When assessments are not conducted regularly, as is the case with most unsuccessful organizations, the capital budgeting process suffers.

Several of the unsuccessful organizations we surveyed react to problems only when there is a need to "do something." Some of them depend heavily on complaints from users to assess the condition of their infrastructures. This erratic method of assessment carries two implications: the flow of information into decisionmaking is choppy and disconnected, and the

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<sup>1/</sup>Nancy Humphrey, George E. Peterson, and Peter Wilson, America's Urban Capital Stock, Vol. 2: The Future of Cleveland's Capital Plant (Washington, D.C.: The Urban Institute, 1979).

information is limited. This is the situation at an unsuccessful organization where one official was prompted to say, "There is a total lack of management information."

SOME ORGANIZATIONAL CHARACTERISTICS  
DO NOT AFFECT CAPITAL BUDGETING

Literature on management suggests that the placement of decisionmaking (i.e., at what level decisions are made) and the location of the budgeting unit (i.e., where capital budgeting is conducted) can affect the way an organization operates. Our survey revealed that these two characteristics do not affect the success or failure of capital budgeting.

The issue of where decisions are made is often called centralization/decentralization.

"The essence of decentralization is the freedom to make decisions. Decentralization is a matter of degree. Total decentralization means minimum constraints and maximum freedom for managers to make decisions, even at the lowest levels. At the other extreme of the continuum total centralization means maximum constraints and minimum freedom." 1/

The virtues and vices of centralization and decentralization have been argued by scholars and managers alike. Our analysis shows that the success or failure of capital budgeting does not hinge on where decisionmaking is placed. However, top management participation does help. (See table 8 for the organizations we studied.)

Decisionmaking in some organizations is focused in a single manager, others use some form of group decisionmaking. Single manager and group decisionmaking are located both at the top of organizations we studied and at all management levels. Table 9 illustrates the success and failure of the organization as related to group and single-manager decisionmaking.

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1/Charles T. Horngren, Cost Accounting: A Managerial Emphasis, (3rd edition, Prentice Hall Inc., Englewood Cliffs, New Jersey, 1972), p. 692.

Table 8

Placement of Management Decisionmaking

	<u>Overall percentage</u>	<u>Percentage successful</u>	<u>Percentage unsuccessful</u>
Decisions made by all manage- ment levels	38.1%	37.5%	62.5%
Decisions made by all manage- ment levels but tightly controlled by top management	14.3%	66.7%	33.3%
Decisions made by top manage- ment	42.8%	77.8%	22.2%
Decisions made by top manage- ment but moni- tored by all management levels	4.7%	100.0%	0%

A second characteristic thought to have a significant effect on capital budgeting is where the capital budgeting unit is placed within the organization. Our survey results reveal that the placement of this responsibility alone does not dictate success or failure. Of the organizations we examined, 76.2 percent had decentralized capital budgeting units.

Table 9

Group- and Single-Manager Decisionmaking

	<u>Decisions Made by Top Management</u>		<u>Decisions Made at Levels Below Top Management</u>	
	<u>Group Decision- making</u>	<u>Single Manager Decisionmakers</u>	<u>Group Decision- making</u>	<u>Single-Manager Decisionmakers</u>
Total or- ganizations	9	3	3	6
Percent of survey total	42.8%	14.3%	14.3%	28.6%
Number successful	7	2	2	2
Percent successful	77.8%	66.7%	66.7%	33.3%
Number un- successful	2	1	1	4
Percent un- successful	22.2%	33.3%	33.3%	66.7%

## CHAPTER 5

### MANY FACTORS INFLUENCE FEDERAL AGENCY CAPITAL INVESTMENT PROGRAMS

The U.S. Postal Service, the General Services Administration, the Veterans Administration, and the Corps of Engineers (civil works) invest directly in capital assets, which means they acquire and manage federally owned physical capital. As we discussed in chapter 4, organizations (whether they are Federal, State, or local governments or private industry) possess certain elements that determine the success of their capital investment process. The elements that can enhance or hamper successful capital budgeting in the four agencies discussed in this chapter are shown in table 10.

Of the four Federal agencies discussed in this chapter, we believe that the Postal Service is the closest to what we have defined as a successful organization; however, we are not advocating that its flexibility (off-budget status and freedom from congressional authorization of capital projects) be extended to the other Federal agencies. The Postal Service is unique among the agencies we examined in that it operates like a business, selling well-defined services to the public. We cite it as an organization with a capital budgeting process that has many desirable planning, budgeting, and control features that could be readily adapted by other Federal agencies.

Although the Postal Service has many good capital budgeting features, it operates under a cloud of criticism because of capital investment decisions made before the effective date of the Postal Reorganization Act of 1970 and before its current capital investment system was established. <sup>1/</sup> Today, the Postal Service's capital investment process seems sound, but we are planning to review some of USPS' more recent investments and will report our findings to the Congress.

Postal Service management recognizes that capital assets are important to productivity. USPS is an independent, off-budget agency and is not required to seek congressional authorization for individual projects. This independence makes

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<sup>1/</sup>U.S. General Accounting Office, "Grim Outlook for the United States Postal Service's National Bulk Mail System," (GGD-78-59, May 16, 1978).

Table 10

<u>Element</u>	<u>Does Element Enhance Capital Investment Program?</u>			
	<u>USPS</u>	<u>GSA</u>	<u>VA</u>	<u>CORPS</u>
Agency management attitude enhances long-term capital investment	yes	no	yes	yes
Agency prepares long-term capital investment plan	yes	no	yes	yes <u>1/</u>
Congressional authorization process encourages planning for capital acquisition	yes <u>2/</u>	no	yes	no
Agency has sufficient funds to execute capital program	yes	no	yes <u>3/</u>	yes <u>3/</u>
Agency controls and monitors capital project execution	yes	yes	yes	yes
Agency uses economic analyses to justify projects	yes	yes <u>4/</u>	yes <u>5/</u>	yes
Agency performs post-completion study to determine if project accomplished its objectives	yes	no	yes	no

1/Corps annually prepares a 5-year investment program that identifies projects likely to be started during the next 5 years, given probable funding constraints. The Corps has the capability of formulating a range of alternative 5-year investment programs responsive to alternative funding levels.

2/The Congress has granted the Postal Service broad authority over capital investments. The authorizing committees do not participate in the selection of projects.

3/Subject to appropriated amounts.

4/Analysis focuses on identifying the least costly way of meeting a need.

5/Analysis focuses on demographics and identifying the least-costly way of meeting a need.

it relatively free of the Congress as a source of funds for its operating and capital investment programs. USPS does not have to compete with other Federal programs for capital investment funds. The Postal Service prepares 5-year capital investment plans and performs extensive economic and cost analyses before it funds capital investment projects. Once capital programs are underway, USPS tightly monitors and controls them for cost and time of completion. After a project is completed, a postaudit analysis is done to find out if proposed results were achieved and to identify any trends that need management attention or action.

In contrast to the Postal Service, GSA is subject to strong congressional control. It must first obtain authorization committee approval for each project over \$500,000 before it can request funds from congressional appropriations committees. While this requirement does not specifically restrict GSA planning, it does not encourage it either. GSA's funds are generated from user charges that finance lease payments, purchase contract payments, operations, repairs and alterations, program management, and new construction. Because of legal obligations (lease and purchase contract payments) and other priorities, new construction is the last budget item to receive funds, and the remaining funds are not sufficient to execute a successful capital investment program. Because funds are insufficient, and to keep the budget down, the executive branch has preferred to meet capital building needs by continuing GSA's leasing program. These factors do not encourage capital planning. The result is that GSA management does not have a long-term capital investment program at the moment. However, the agency is now developing a management planning system that sets forth long-range policies for public buildings acquisition, leasing, and major repair. The system is scheduled to be fully operational in early 1981. GSA says it is trying very hard to plan effectively for the future.

#### MANAGERS HAVE DIFFERENT VIEWS OF CAPITAL INVESTMENTS

In successful organizations, managers recognize and understand the long-term effects of capital investment. We found that managers in the four Federal agencies had different views of capital investment. Postal Service officials place a very high priority on acquiring and maintaining physical capital. Corps officials told us that they consider capital investment and operations and maintenance decisions separately. VA places highest priority on operations, which are to provide medical services to veterans, and a lower priority on nonrecurring maintenance. GSA, on the other hand, for years has been preoccupied with meeting its capital investment needs by leasing and rehabilitating existing space

rather than constructing new Federal buildings.

### U.S. Postal Service

Postal Service management wants to keep costs low and increase productivity. Officials believe they can accomplish this only by mechanizing and improving their physical capital. Through its 11-member Board of Governors, USPS can make independent decisions about capital investment, and since the Congress has granted it borrowing authority (up to \$1.5 billion annually to finance capital acquisition), USPS management has sufficient funds to invest in needed capital assets.

Since 1972, the Postal Service has committed over \$4 billion to capital investment, an average of about \$532 million per year over the last 8 years. This is considerably higher than the average of about \$200 million per year for the 6 years (1966 to 1971) before the Postal Service became an independent agency. (In constant 1972 dollars, these averages would be respectively about \$438 million and \$233 million.)

### Corps of Engineers

Since the 1960s the Corps has planned and budgeted capital investments and operations and maintenance separately. The Congress appropriates these items separately, too; thus, funds cannot be transferred from one account to the other. Traditional budget practice has been to prepare separate justifications for capital investments and operations and maintenance, and to handle priorities separately as well. Corps officials said that the Congress generally specifies funding increases or decreases by category, and only if there were an unspecified, across-the-board appropriation increase or decrease, would there be any choosing of priorities between capital and operations and maintenance.

### Veterans Administration

Like the Corps of Engineers, VA's capital and operations and maintenance are planned, budgeted, and funded separately. Priorities within each account are handled separately and funds cannot be transferred from one account to the other.

To protect its priorities, VA sets a high priority on operations essential to its mission, which is to provide medical care to veterans, and a lower priority on nonrecurring maintenance. VA officials said they understand the long-term effects of capital investments and strive to balance construction projects by selecting those compatible with their mission.



## General Services Administration

For years GSA has met its capital investment building needs primarily by leasing rather than by constructing new Federal buildings. From 1968 to 1979 federally owned space decreased about 23 million square feet (from 160.4 million to 137.4 million), while leased space increased by 45.1 million square feet (from 48.2 million to 93.3 million). GSA continues to rely on leasing despite the concerns of the House and Senate Committees on Appropriations and Public Works about the increasing amount and cost of leased space. The Committees have advocated direct Federal construction as the most economical way to provide space for Federal agencies. GSA said it would prefer to meet more space needs by new construction, but budgetary constraints have limited its ability to do so.

We have reported that from the standpoint of the budget for the Federal Buildings Fund, the best way to finance space is to build new buildings. <sup>1/</sup> This means large initial cash outlays for construction, but over the long term less of the Fund's resources would be used and a larger budget surplus would result. A study of eight buildings showed that under the purchase-contract method it would take 27 years to recover their costs. Had these buildings been new construction, their costs would have been recovered in 14 years. Leasing buildings provides a positive cash flow from the start, but over the entire building life direct Federal construction provides a larger positive cash flow than either leasing or purchase contracting.

For years GSA's management has not been committed to an aggressive capital investment program for several reasons: its current authorization process does not encourage long-range capital planning, it does not have enough funds to implement an effective capital program, and recently it has received adverse publicity about fraud and mismanagement. In addition, during the last 5 years the top management of GSA's Public Buildings Service has changed six times and the agency has been criticized by the Congress and the media about kickbacks to GSA employees from contractors.

GSA recognizes the shortcomings of its capital investment plan. It is currently developing a management planning system that delineates long-range policies for physical capital.

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<sup>1/</sup>U.S. General Accounting Office, "Costs and Budgetary Impact of the General Services Administration's Purchase Contract Program," (LCD-80-7, October 17, 1979).

According to GSA, the system proposes to closely link planning and budgeting and to provide information on facility planning, prospectus review, resources availability, and assessment of accomplishments against planned targets.

LONG-RANGE PLANNING IS NECESSARY FOR  
EFFECTIVE CAPITAL INVESTMENT PLANNING

A successful capital investment program depends heavily on long-range planning. 1/ Every organization that we identified as successful prepares long-range plans, usually for a 5-year period. These organizations understand the many advantages of gauging future trends and developments. They know that long-range planning:

- encourages early review of priorities and capital investment objectives;
- serves as a vehicle for coordinating projects and fostering short-term planning;
- helps determine future funding requirements; and
- informs other agencies and the executive and legislative branches of its capital investment needs in relation to its mission.

U.S. Postal Service

The Postal Service prepares a 5-year capital investment plan which, when approved by its Board of Governors, becomes the financial plan for the budget year. The plan is developed "bottom-up" by the field offices and undergoes various reviews by headquarters. Priorities are then set in the plan for the projects to be undertaken.

Each regional office is sent an approved financial plan based on the approved capital investment plan. The regions then implement their plan within the established dollar

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1/Part of OMB Circular A-109, issued in 1976, directs Federal agencies that acquire major systems to (1) relate capital investment needs to agency mission and goals, and communicate this relationship to the Congress early in the planning cycle and (2) identify and explore alternative concepts through early contractual competition and continue competition as long as economically feasible.

limits. Before funds are committed, the requesting regional office must prepare a cost analysis for each procurement over \$2,000 and a full economic analysis for each project over \$30,000.

#### Veterans Administration

The VA prepares a 5-year medical facility construction plan, which is also developed from the "bottom-up." The plan lists all construction projects that exceed \$2 million by year, categories of construction, and location. Public Law 96-22, Section 5007, requires the VA to submit its plan to the congressional authorizing committees for approval.

VA's 1980-84 plan contains 16 different categories of construction such as boiler plants, general projects, medical facility improvements, replacement and modernization, and safety and fire. The plan also includes a list of 10 hospitals most in need of construction, replacement, or major modernization.

#### Corps of Engineers

Each year the Corps prepares a 5-year investment program that lists the projects available for initiation during that 5-year period, given the probable funding constraints. The selection of individual projects is based on national and regional needs within the region's allocated share of the total probable funding level. The 5-year investment program does not set individual project priorities but does list, by region, the status of a project's availability for initiation.

Annual recommendations for new starts are made from categories in the 5-year plan that have a high priority. Right now, the Corps is emphasizing projects that satisfy the need for hydroelectric power, urban flood control, municipal and industrial water supply, and commercial navigation.

#### General Services Administration

Right now GSA does not prepare any long-range capital investment plans. Officials said they used to prepare them, but since there have been so few funds for new construction in recent years they feel it is a waste of time to prepare long-range plans for construction projects. However, GSA is currently working on a 5-year plan for housing its Federal customers. This plan is expected to be ready for use for the 1983 budget cycle.

The lack of capital plans by GSA has recently come to the attention of the Senate Environment and Public Works

Committee. Committee members introduced S. 2080, which passed the Senate on June 20, 1980. Among other things, the bill requires GSA to prepare and submit to the Congress each year a program for construction, renovation, and acquisition, along with a 5-year plan for accommodating the public building needs of Federal agencies.

The Committee has also expressed concern about the piecemeal authorization of individual projects throughout the year. Right now the committee approves or disapproves individual projects without the benefit of knowing the relative priority of projects, or how a particular project fits in the building program. In testimony before the Committee in January 1980, GAO said that S.2080 is an improvement over the current authorization and planning procedure. We also discussed the need for long-range plans in our report "Foresighted Planning and Budgeting Needed for Public Buildings Program," (PAD-80-95, September 9, 1980). GSA acknowledges that it now has no cohesive, prioritized plan for all construction projects. However, such a plan is in the development stage and would be required by S. 2080.

THE CONGRESSIONAL AUTHORIZATION  
PROCESS CAN ADVERSELY AFFECT  
FEDERAL GOVERNMENT PLANNING

Today the Congress must authorize many projects individually before they can be funded. We think that planning and executing capital investment programs can be more effective if the authorization process focused more on an agency's mission and related capital investment needs. Authorizing legislation is the basic substantive legislation that sets up or continues the legal operation of a Federal agency or program. Such legislation sanctions a particular type of obligation or expenditure. It is a prerequisite for the subsequent appropriation of funds to carry out a program. The four agencies we studied have diverse requirements for congressional authorization of individual projects, ranging from no control, as in the case of the Postal Service, to almost absolute control, as in the cases of the Corps of Engineers and the General Services Administration.

Each agency has general legislative authority to acquire, operate, and maintain certain types of physical capital. For GSA, VA, and the Corps, the Congress determines (by authorizing individual projects) the location, scope, and timing of capital investments. These requirements are designed to maintain congressional authorization control (in addition to the appropriation control) of individual projects. In practice, however, such requirements, though not necessarily by design or desire, can sometimes lessen congressional control, or

at least divert attention from the agency's mission. Without benefit of adequate long-range plans, these requirements force committees and the agencies to make decisions about projects without knowledge of overall needs or priorities in relation to authorized missions.

Only the Postal Service is not required to have individual projects authorized by the Congress. Since it became an independent agency in 1971, the Postal Service prepares 5-year capital plans. It has also averaged 2 to 3 times more capital investment than it did as a cabinet department under more direct congressional control. In contrast, GSA, which has the strongest congressional authorization requirements, has no long-range capital plans. It has averaged significantly less than USPS in capital investment because of lack of funds in recent years. VA has authorization requirements similar to GSA's, but unlike GSA, its authorizing legislation requires that 5-year plans be developed and forwarded to the authorizing committees.

Table 11

Requirements for Congressional Authorization  
of Individual Capital Investment Projects

U.S. Postal Service	no approval required
General Services Administration	all projects over \$500,000
Veterans Administration	all projects over \$2 million
Corps of Engineers	all projects over \$2 million <u>a/</u>

a/ Some projects have lower authorization levels.

U.S. Postal Service

When the Post Office Department was changed to an independent agency by the Postal Reorganization Act of 1970, it was given general authority to construct, operate, lease, and maintain buildings, facilities, equipment, and other improvements without further authorization from the Congress. Since it has become an independent agency, investment in capital assets has increased dramatically.

Veterans Administration

Only recently has the Veterans Administration been required to seek authorization of individual medical facilities before requesting appropriations for their acquisition. From 1931 to 1979, the authority to establish VA hospitals and health care facilities rested solely with the President,

subject to the appropriation of funds by the Congress. The location and need for facilities was determined by the Administrator of Veterans Affairs, subject to presidential approval. The only restraint put on the VA by the Congress was the funds made available in the annual appropriation acts.

This procedure was changed in 1979 by the Veterans' Health Care Amendments of 1979 (P.L. 96-22, June 13, 1979). Title III of this Act provides that no appropriation to construct, alter, or acquire a medical facility costing over \$2 million can be made unless it is first approved by a resolution of the Committees on Veterans' Affairs of the House and the Senate. These provisions also apply to leased facilities with an annual rental of more than \$500,000. The VA must now submit a prospectus to both committees showing a detailed description of the project, its location, its general costs, and the cost of the equipment to operate it.

The Act also requires that VA submit to the committees a 5-year plan for constructing, replacing, or altering facilities; a list of 10 hospitals most in need of construction, replacement, or major modernization; and general plans (costs, location) for each project in the 5-year plan.

#### General Services Administration

Section 7 of the Public Buildings Act of 1959, as amended, says that no appropriation in excess of \$500,000 shall be made to construct, alter, purchase, or acquire any building to be used as a public building until it has been approved by the Committees on Public Works of the Senate and House of Representatives. This section also applies to leases with an average annual rental exceeding \$500,000.

The GSA Administrator submits case-by-case prospectuses to the Committees since there is no legal requirement to submit an annual or multi-year plan. The prospectus authorization by each of the Committees is a separate action and is not subject to the committee conference process. Thus, GSA's proposed projects are submitted to the Public Works Committees without regard to available appropriations and without explanation of relative priorities. Senator Moynihan, in a statement in the December 5, 1979, Congressional Record on S. 2080, said that:

"Other than a pro forma declaration asserting the importance of each to the efficient functioning of the Government, we have no idea of the relative priorities among the proposals, nor do I believe that the GSA itself has any notion of the priorities. We can--and do--authorize projects without knowing

whether there will later be an appropriation sufficient to undertake them. Some authorized projects languish unfunded for years, and some are never carried out at all."

Senator Stafford, then ranking minority member of the Environment and Public Works Committee stated that ". . . the prospectus process may no longer be adequate or appropriate . . ." He added: "the current prospectus process leads to piecemeal approvals without program review or oversight of the policies, and procedures inherent in project proposals."

GSA officials told us that even though they cannot get funds from the appropriations committees until the authorizing committees approve their prospectuses, 40 or 50 prospectuses are pending approval. We have reported that the authorizing committees may take several months to well over a year to approve some alteration and major repair prospectuses. <sup>1/</sup> For example, GSA asked for \$180 million for FY 1980 alterations and major repairs, but the appropriations committees reduced the request to slightly less than \$146 million because several proposed projects had not yet been authorized. According to GSA officials, delays in prospectus approvals have hampered their plans for funding projects. GSA said it is trying to limit its budget requests to only those projects previously approved, but the agency points out that often it is forced to add projects for which prospectuses have not been approved because of critical repair work and the space needs of other Federal agencies.

### Corps of Engineers

The Corps of Engineers has the most complex and lengthy authorization process of the four agencies studied. The conception, authorization, and construction of a Corps flood control project travels through several phases of congressional authorization. In 1978, we reported that of 77 flood control projects studied, an average of 26 years had elapsed since initial authorization and start of construction.<sup>2/</sup> Planning and design consumed 12 years of this 26-year period; reviews and the appropriations process took most of the remaining time.

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<sup>1/</sup>U.S. General Accounting Office, "Repairs and Alterations of Public Buildings by General Services Administration--Better Congressional Oversight and Control Is Possible," (LCD-78-335, March 21, 1979).

<sup>2/</sup>U.S. General Accounting Office, "Corps of Engineers Flood Control Projects Could Be Completed Faster Through Legislative and Managerial Changes," (CED-78-179, September 22, 1978).

Authorization of Corps projects is at the sole discretion of the Congress. There are three basic phases--study, design, and construction--and Congress must authorize the study and construction phases. Public Works Committees authorize the conduct of studies, usually after local interests make their desires known through their elected representatives. Congress must then appropriate funds for the study. After the study is completed, the Secretary of the Army (after review by the Administration) makes a recommendation to the Public Works Committees. If the project is viable and funds are available for planning, preliminary planning is done. Before detailed plans can be completed and construction permitted, the Congress must pass substantive legislation authorizing the construction. However, some projects under \$2 million can be initiated by the Secretary of the Army without Congress' authorization, if they meet statutory dollar limits.

#### FUNDING METHODS INFLUENCE CAPITAL INVESTMENT

The source and type of funds, and an agency's ability to control its funds can hinder or facilitate the acquisition of capital assets. Funding methods affect priorities and the extent to which agencies are able to execute a viable capital investment program.

GSA and generally VA construction projects are fully funded. Postal Service projects are funded incrementally from operating receipts and/or borrowing, and Corps projects are incrementally funded by congressional appropriation. Full funding means that all of the estimated costs of a project are appropriated in the first year. Incremental funding is the appropriation of funds yearly for the estimated costs of the project for that year. As a matter of budget policy, we favor the full funding concept. However, not considering lease commitments for all future years clearly understates leasing costs and diverts decisions away from construction and acquisition to constantly escalating leases which are justified on the next year's cost only.

VA and Corps projects are funded from general fund appropriations. Their funds are placed in accounts to be used exclusively for specific capital construction projects and/or acquisition projects. GSA and the Postal Service, on the other hand, are funded through revolving funds set up by the



Congress--the Federal Buildings Fund and the Postal Service Fund. These two Funds are similar in that receipts from them finance expenditures, which in turn generate receipts. There are, however, important differences in the way the revenues are collected and the Funds are controlled.

Activities of the Postal Service are financed by congressional appropriations and by receipts from (1) mail and services revenue, (2) reimbursements from Federal and non-Federal sources, (3) interest on investments, and (4) proceeds from borrowing. These receipts are deposited into the Postal Service Fund and are used to pay for operating expenses, retirement of obligations, investments in capital assets, and investment in obligations and securities as determined by USPS. The Postal Service has a distinct advantage over GSA because it does not have to compete with other Federal programs for capital investment funds and it can borrow up to \$10 billion. A net increase of up to \$2 billion in any 1 year can be used for either capital investment (no more than \$1.5 billion) or operating expenses (no more than \$500 million). The borrowing authority of the Postal Service greatly increases its flexibility to finance operations and capital investment.

The Federal Buildings Fund, authorized in 1972 and begun in 1975, obtains receipts from rates charged to Federal agencies occupying GSA-controlled space. According to law these rates are to approximate commercial charges for comparable space and services. Collections are deposited into the Federal Buildings Fund and used, subject to annual appropriation act limitations, to finance GSA's real property operations, which consist of six program categories: (1) new construction, (2) alterations and major repair, (3) purchase contract payments, (4) lease payments, (5) real property operations (utilities, cleaning, etc.), and (6) program direction and centralized services. GSA is also reimbursed from Federal agencies for space and improvements that are in excess of those covered by the standard level user charge.

New construction is a low priority in GSA's real property operations. GSA officials told us that new construction gets what funds remain after other program needs are met. Since the Federal Buildings Fund began operating in FY 1975, it has not generated enough money for new construction. Only \$386 million was available in FY 1975 through 1980, an average of \$64 million a year. In addition, because of language in the appropriations acts from 1975 through 1979, about \$2.4 million in excess Fund receipts related to the new construction program were deposited in the Treasury as miscellaneous

receipts. 1/ Beginning with the 1979 appropriation act, the language was changed to provide that the excess receipts remain in the Fund.

GSA's current annual average of \$64 million for construction projects contrasts sharply with the \$115 million annual average during the years (1959-71) before the Fund was established. Even then, GSA considered the \$115 million inadequate. In 1971 GSA had a backlog of 63 projects, with estimated construction costs of \$750 million, that had been authorized but not funded. GSA pointed out during hearings on the 1972 purchase contract legislation that with annual appropriations averaging only \$115 million, it would take at least 10 years to eliminate the backlog of construction already approved but unfunded by the Congress.

To reduce that backlog, the Public Buildings Amendments of 1972 (P.L. 92-313) was passed to give GSA a 3-year stop-gap authority to enter into purchase-contract agreements to construct the unfunded projects. Since then, GSA has arranged for the construction and financing of 23 projects for which it makes semiannual payments to contractors for interest, real estate taxes, and amortization of principal. At the end of the contract period, title to the buildings vests with the Government.

GSA also used a dual method for constructing and financing 45 building projects. Construction contracting under the dual method was made the same as under direct Federal construction, but the projects were financed by the sale of participation certificates and by borrowing from the Federal Financing Bank.

Today GSA is again faced with a backlog of projects of about \$737 million. The Senate Environment and Public Works Committee recognized that direct construction funds from the Federal Buildings Fund will not put a dent in this backlog over the next several years. The Committee reported out a bill (S. 2080) that passed the Senate on June 20, 1980, authorizing GSA to borrow construction funds from the Treasury and to repay the Treasury from user charges.

In October 1979 2/, we recommended to the Congress that

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1/A total of \$13 million for the entire Fund were deposited in the Treasury.

2/U.S. General Accounting Office, "Cost and Budgetary Impact of the General Services Administration's Purchase Contract Program," (LCD-80-7, October 17, 1979).

any new financing authority for GSA be limited to direct loans from the Treasury or the Federal Financing Bank. In January 1980 testimony before the Senate Environment and Public Works Committee, we concluded that Federal construction is the best alternative for acquiring space and that borrowing money for direct Federal construction is the most practical current alternative due to the limited funds generated from the Federal Buildings Fund.

#### ECONOMIC ANALYSES CAN JUSTIFY CAPITAL INVESTMENT DECISIONS

Economic analysis is a useful tool for determining the most cost-effective projects. All the agencies we studied use economic analysis, and, although the analyses differ, their differences may be attributed to the varying nature of the agencies' missions and projects (hospitals, office buildings, post offices, dams).

The U.S. Postal Service performs the most complex and complete analyses of potential projects and various alternatives. Its analyses more closely approximate those done by many private companies than the analyses conducted by VA, GSA, and the Corps. Among the analyses USPS uses are return on investment, internal rate of return, and discounted cost benefits calculated on cash flow. The Postal Service also performs a sensitivity analysis to identify what factors significantly affect project results and to show how increasing, decreasing, or eliminating the sensitive factors affect the project. Economic studies usually begin with the date of decision and cover a 10-year operating span, or the useful life of the investment, whichever is shorter.

GSA analyzes alternatives for its projects by calculating present-value life cycle costs as required by OMB Circular A-104. Using this method GSA determines the 30-year costs for each alternative and then discounts them to show future costs in current dollars. These figures are included in each prospectus submitted to the Public Works Committees for approval.

GSA's present-value analyses generally support budget decision already made. Because of budgetary restraints and the limited availability of construction funds, the only practical method for GSA to meet growing space needs has

been through leasing. In a June 1980 report, 1/ we stated that GSA analyses were inaccurate and based on erroneous assumptions; consequently, the analyses were not a reliable base on which to evaluate the cost of leased space versus the cost of constructing federally owned buildings.

VA uses demographics to determine hospital needs. Also, VA officials say they use economic analyses to decide whether to extensively rehabilitate a facility or build a replacement. If rehabilitation costs over a number of years exceed replacement costs, the VA would opt for replacement.

The Corps of Engineers uses benefit/cost ratios to determine if projects are justifiable economically. To be justified, a project's benefit/cost ratio must be equal to or greater than 1:1. 2/ Once a project is justified and authorized for construction and construction is begun, the Corps generally completes the project regardless of cost. The Corps' position is that the Congress authorizes the scope of a project, not the cost of a project.

AGENCIES NEED TO MONITOR AND  
CONDUCT FOLLOW-UP STUDIES ON CAPITAL  
ACQUISITION

Monitoring during acquisition and following up afterwards help to ensure that a project is implemented within the costs and time frame originally estimated, and that once completed, the project is accomplishing its objectives. Each of the four agencies reports monthly on the status of obligations incurred against its planned total, but only the Postal Service and the VA conduct follow-up studies to find out if a completed project accomplished its objectives.

The Postal Service's postaudit analysis of a completed facility is as follows. After a shakedown period that allows

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1/U.S. General Accounting Office, "General Services Administration's Lease Versus Construction Present-value Cost Analyses Submitted to the Congress Were Inaccurate," (LCD-80-61, June 20, 1980).

2/Final rules for water resource planning (18 CFR 711) were published in the Federal Register, September 29, 1980. Subsection 711.92 states: "A recommended plan (when considered on the basis of the with-plan versus the without-plan comparison) must have combined beneficial NED [national economic development] and EQ [environmental quality] effects that outweigh combined adverse NED and EQ effects."

for the project to correct start-up problems and begin normal operation, a study is conducted to compare actual operating costs with the estimated costs when the project was proposed. USPS uses its postaudits to determine the continuing applicability of previous conclusions, to highlight any continuing undesirable trends that warrant management action, to project cost changes through the life of the project, and to compare the results of the project's original economic evaluation.

Postal Service officials think that the postaudit is a very important feature that is lacking in the Government's other capital investment programs. They told us that post-audits are necessary to determine if the finished facility is doing what it was supposed to do when it was originally justified.

VA performs a post-occupancy evaluation on major projects 1 year after they are put into operation. In this way, the agency can determine if the project meets its objectives, if it works as originally planned, if it performs well, and if the design and standards are adequate. Knowledge gained from these post-occupancy evaluations, plus state-of-the-art changes, are fed back into the VA's standards.

## CHAPTER 6

### FEDERAL PROGRAMS AND POLICIES AFFECT THE CONDITION AND DEVELOPMENT OF STATE AND LOCAL PHYSICAL CAPITAL

The Federal Government should pay closer attention to the problems in State and local capital plants because:

- The Government has a vested interest in the condition of State and local physical capital.
- Some Federal capital programs are being used as "stop-gap" measures by States and localities instead of as long-term ways to address the problem of their deteriorating capital stock.
- Federal capital programs increase the operating costs of cities, counties, and States.
- Federal programs can affect State and local capital budgeting and planning.
- Federal programs that affect State and local capital investment are not efficiently coordinated.

Public sector assets in the United States are deteriorating. Much of this capital stock is financed by the Federal Government, but ownership resides with States and municipalities. The Federal Government should take a closer look at the condition of this State and local capital stock, not simply because it finances much of it, but because Federal programs, policies, and planning procedures can accelerate or arrest the deterioration. However, as long as short-term, instead of long-range, strategies are implemented in capital investment areas, as long as the increased costs of Federal capital programs that are passed onto States are not recognized, and as long as no effective national capital improvement plan exists, the ability of the Federal Government to stop the decline of the physical capital across the nation is severely limited.

Federal programs and funding mechanisms can and often do significantly influence the capital investment decisions made by State and local officials. In this chapter we discuss how the direction of general Federal policies and the specific programs of DOT, EPA, and HUD affect the condition of State and local physical capital.

THE CURRENT SCALE OF STATE AND LOCAL  
CAPITAL INVESTMENT WOULD NOT EXIST  
WITHOUT THE FINANCIAL SUPPORT OF  
THE FEDERAL GOVERNMENT

Although the relative importance of Federal capital investment aid varies, virtually none of the States, cities, or counties we visited fails to use Federal aid for some capital projects. While economically distressed, stable, and growing communities are likely to use the aid in different ways, all use Federal dollars as support, if not the support, for the development of their respective infrastructures. Specifically:

- The Federal Government funds a very high percentage of the costs of certain capital-intensive projects in State and local areas.
- Other Federal programs indirectly fund a substantial portion of capital needs in many State and local areas.
- Both economically hard-pressed communities and relatively affluent ones depend on Federal capital investment funds for at least some of their capital expenditures.

As explained in chapter 2, we can classify Federal capital programs as either direct or indirect. Chapter 5 discusses the direct programs. However, it is the indirect programs--generally in the form of grants--that support much of the nation's State and local capital stock.

Indirect grant programs are composed of three types: specific purpose (categorical), broad-based, and general purpose. Capital-intensive examples of the categorical type are Federal-aid highways, urban mass transit, and EPA construction grants. By law, funds for specific-purpose grants may only be used for specified projects, and thus State and local officials enjoy little or no discretion as to how these funds are spent. Broad-based and general-purpose grants, however, differ in use from the categorical grants. Broad-based grants, such as community development block grants, provide money for any project or combination of projects within broad guidelines set forth in the grant program. These grants allow recipients wide discretion in deciding how the funds are to be used. State and local governments are responsible for determining project need, selection, and design, and for carrying out construction. General-purpose grants, such as general revenue sharing, allow State and local officials almost complete discretion in their use of the funds. Under all three types of Federal aid, the States or localities acquire ownership of the completed project and are responsible for future operations and maintenance.

The Federal highway programs listed in table 12 are funded out of DOT's Highway Trust Fund. In all there are 38 Federal-aid highway programs (not all are funded from the Trust Fund), and the Federal share varies from 75 to 100 percent. Federal subsidies for mass transit projects were authorized by the 1974 National Mass Transportation Assistance Act as amended by the 1978 Federal Public Transportation Act. EPA construction grants were authorized by the 1972 Federal Water Pollution Control Act as amended by the Clean Water Act of 1977.

Table 12

Federal Share of Selected Major  
Specific-Purpose Capital Investment Programs  
for State and Local Areas

<u>Program</u>	<u>Percentage of Federal Share</u>
Federal-aid Highways (DOT)	
Completion of Interstate roads	90%
Primary roads	75
Secondary roads	75
Urban roads	75
Bridge Replacement and Rehabilitation	80
Mass Transit (capital) (DOT)	80-85
Waste water treatment construction grants (EPA)	75

In addition to these categorical grants, broad-based programs also fund a high proportion of capital projects for State and local areas. In one city we classified as economically stable and successful in terms of management, approximately 62 percent of its capital budget is funded with Federal aid. Eighty percent of this city's housing and community development is financed by Federal aid, with community development block grants as the primary source. In a city we judged unsuccessful, officials said that, in terms of capital projects, Federal dollars are the only revenues keeping the city afloat right now. In growing communities, Federal aid is used for airport improvements, parks, and recreation facilities.



The trend throughout the country is increased Federal capital aid for the nation's largest urban areas, as table 13 shows. Even though small- and medium-size cities received less Federal capital aid in 1980, more than one dollar out of every five allocated to capital investment comes from the Federal Government. For very large cities, the Federal Government funds almost half of their capital investment. Clearly, Federal support of State and local capital investment is far reaching. There are, however, some problems in the way this aid affects State and local governments. The rest of this chapter discusses those problems.

Table 13

Percentage of Federal Capital Aid  
by Size of City Population

<u>City Population</u>	<u>1978</u>	<u>1979</u>	<u>Anticipated 1980</u>
Small Cities (10,000-50,000)	29.6%	30.6%	23.3%
Medium Cities (50,000-100,000)	34.3	34.9	22.9
Large Cities (100,000-250,000)	27.4	34.0	31.2
Largest Cities (250,000)	34.5	29.9	44.8

Source: Joint Economic Committee, Trends in the Fiscal Condition of Cities: 1978-1979.

SHORT-TERM FEDERAL PROGRAMS  
ARE IMPLEMENTED IN POLICY AREAS  
THAT NEED LONG-TERM ATTENTION

Improving the capital stock of State and localities demands long-term policy commitments from all levels of government. However, many of the indirect Federal programs, which can be used to build up the capital stock of cities and States, go to small, short-term projects, if they are used for capital at all. One such area is community development.

Community development

The largest Federal program of this type is the community development block grant (CDBG). This program is a consolidation of seven categorical grant programs developed in the 1940s through the 1960s. It is authorized by the Congress every 3 years and approximately \$4 billion is allocated annually to eligible localities. Community

development block grants are apportioned on a formula basis--all cities of more than 50,000 and central cities in standard metropolitan statistical areas are entitled to receive a share of the appropriated funds. In all, 560 cities plus 80 urban counties are eligible. (There is also a small cities' discretionary program for those not eligible to receive the formula-based allotments.)

The block grant program is a decentralized approach to arresting the problem of physical decay in cities. Its primary objective is to develop "viable urban communities." Within certain parameters, local officials can spend their allocated funds in a wide variety of ways. The funds do not have to be spent on physical capital. Estimates vary on the exact amount that goes for capital investment, from just under 50 percent to about 75 percent. 1/ The rest goes for operations and maintenance expenses.

But just as important as the amount of capital spending is exactly what it is used for. Local governments use much of the community development block grant money for small-scale, short-term needs, such as park improvements, street lights, and sidewalk repairs. 2/ In the past, such projects have often comprised the major portion of municipal capital investment programs. The 1978 HUD study says that CDBG funds are generally not used as part of a comprehensive program for dealing with major problems of physical distress, and that since the program was implemented in 1974, there has been a move away from long-term major renewal projects in local areas. (A later HUD study indicates a shift towards more long-term projects in recent years. 3/)

Ironically, the areas that have the most severely deteriorating infrastructures are the ones most likely to use the block grants for non-capital or small-scale projects. One

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1/U.S. Department of Housing and Urban Development, "Decentralizing Community Development," June 2, 1978, p. 206.

2/HUD regulations on the community development block grant program (24 CFR 570.302) state that monies must be used to "give maximum feasible priority to activities which will benefit low- and moderate-income families or aid in the prevention or elimination of slums or blight." HUD officials say that projects that qualify are most often for small-scale improvements.

3/U.S. Department of Housing and Urban Development, "Fifth Annual Report," 1980.

large declining city we examined uses only 16 percent of its CDBG allocation for capital needs. According to the 1978 HUD study and the officials in the cities we visited, when many groups and interests in declining localities compete for the same funds, the result is that no one group receives enough money to solve long-term capital investment problems. In another declining city we visited, the city council, in trying to appease all interests, split \$5.9 million in CDBG funds among 145 community groups. Jurisdictions with less relative physical decay and disadvantaged citizens are not so pressured to spread funds across a broad range of interests. Thus these communities are more apt to use CDBG funds for major capital programs rather than for services or small beautification projects.

According to HUD, decentralized decisionmaking in the block grant program plays a major role in the shift away from long-term renewal strategies in deteriorating areas. As the involvement of Federal agencies in community development activities has declined, the influence of local officials, such as chief executives, legislators, and planners has increased. Local officials today tend to have shorter time horizons than Federal agency officials because they are much more affected by political pressures and prevailing community values. As a result, the competition among interest groups is the rule, not the exception, for communities most in need. 1/

Other Federal programs also do not address long-term strategies for State and local capital development. Like CDBGs, general revenue sharing need not be used for capital. Although it is difficult to trace exactly where State and local governments spend their revenue sharing funds, most studies show that capital investment is not a major area of concentration. In our study population, only growing communities use revenue sharing for capital projects, and of course, if the funds are used for capital investment at all, they are subject to the same political pressures as the CDBGs.

The urban development action grant (UDAG) is a Federal program that concentrates on capital investment. Unlike the grants based on eligibility criteria and priorities set forth in the program's authorizing legislation, one purpose of UDAG is to use public funds to stimulate private investment. In fact, UDAG funds cannot be granted until there is a firm commitment of private funds and other public funds necessary

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1/HUD, op. cit., 1978.

for project development. UDAG is oriented toward projects that provide jobs and increase the tax bases of distressed cities and counties. Social services cannot be funded under this program. While the program is geared to long-term economic development of urban areas, HUD's criteria for cities' eligibility has come into question. Recently we questioned HUD's method of determining "severely distressed," saying that HUD's criteria did not take into account the severity of the distress. 1/ An earlier report criticized the adequacy of the private commitment to funded projects and questioned whether or not some grants benefit the private entrepreneur more than the community. 2/ Regardless of these questions, however, the UDAG program should not be viewed as directly targeted toward new capital assets or the preservation of deteriorating ones in urban areas. 3/ Its purpose is mainly to expand tax bases, which is a very important way of curbing disinvestment and may help solve the problems we have raised in this report. But it is an indirect approach that can easily ignore deteriorating physical capital.

#### Local public works aid

In 1976 and 1977, the Federal Government provided \$6 billion in local public works aid to cities as countercyclical capital assistance. 4/ This aid was used to finance a high percentage of many deteriorating cities' capital budgets in 1978, although precise estimates of these percentages vary. It is our view, however, that programs such as this one, while important to deteriorating cities, constitute a "quick fix" attack on the problem of disinvestment or failure to repair and replace worn out capital stock in States and localities. Public works aid is not part of an overall, long-term solution.

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1/U.S. General Accounting Office, "Criteria for Participation in the Urban Development Action Grant Program Should Be Refined," (CED-80-80, March 20, 1980).

2/U.S. General Accounting Office, "Improvements Needed in Selecting and Processing Urban Development Action Grants," (CED-79-64, March 30, 1979).

3/HUD officials point out that the program can be used for these purposes, however.

4/A 1980 report by Pat Choate of the Academy for Contemporary Problems ("As Time Goes By, The Costs and Consequences of Delay"), disclosed that delays in disbursing funds have impaired the usefulness of local public works aid.

## FEDERAL CAPITAL PROGRAMS INCREASE STATE AND LOCAL COSTS

Federal aid is not free. Often State and local governments must spend money they would not ordinarily spend if they did not receive Federal aid. The additional costs borne by State and local governments because of Federal capital projects fall into three categories: (1) matching funds, (2) operation and maintenance expenditures, and (3) extra expenditures due to Federal regulations. The third category includes capital projects that State and local governments must implement because of Federal mandates and the administrative costs associated with federally financed State and local projects.

Although the Federal Government pays a high percentage of the costs for capital assets, like mass transit, highways, and pollution control equipment, the State and local shares can still be difficult to raise, especially in the areas that most need to improve their capital stock. In one city we visited that had major bridge problems, officials said they lose opportunities to gain Federal dollars because their city cannot generate the 20 percent matching fund requirements. A State, which uses Federal aid for the bulk of its transportation funds, said it simply does not have enough matching funds available to maintain its transportation infrastructure.

Of course, with transportation programs, State and local governments are not legally obligated to implement the projects at all. If the matching funds are not available, the problems the programs try to address are simply deferred or ignored. But some Federal programs, such as the EPA construction grants for wastewater treatment plants, are used to meet Federal mandates with which localities must comply. Thus, the matching funds for these programs must be generated. This can cause a shift in priorities and result in the deferral or abandonment of other needed capital programs.

Operation and maintenance costs associated with indirect Federal capital programs are, for the most part, the responsibility of the State and/or local governments. On EPA projects, all operating, maintenance, and repair costs arising from the construction of a new pollution control facility are paid by the State and local governments. 1/ These costs

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1/A Water Resources Council study reports that the composite costs of EPA construction grants are 39 percent Federal and 61 percent local.

are usually passed on to local residents in the form of hook-up fees and user charges. In cities and towns with small populations, charges to the residents can be very high. Many small communities have difficulty paying the rates necessary to operate the facilities. 1/

Operating and maintaining Federal highways is a major cost for State and local governments. While major rehabilitation and renovation can be federally financed, routine maintenance (such as sealing and painting bridges constructed with Federal aid) are State or local concerns. States spend about 17 percent of their highway funds on maintaining their roads (Federal and non-Federal), and according to a researcher in this area, about one-fourth of all State and local capital outlays go to road construction. 2/ Since no Federal money goes to maintaining Federal-aid highways, States fund these costs through fuel taxes, license fees, etc. With costs rising and revenues from the fuel taxes declining due to energy conservation, even less money is available to State and local governments for the increasing costs of operating and maintaining highways. As chapter 3 points out, road maintenance is becoming more and more difficult to fund.

State and local governments must also assume additional operation and maintenance costs for urban mass transit. Unlike the Federal-aid highways, however, up to 50 percent of any urban area's transit operating deficit can be funded by the Federal Government. But these Federal operating subsidies cannot be used by State and local governments in lieu of their own transit subsidies. Federal funds are to be used to supplement the State and local funds, not as a substitute for them. The Department of Transportation has interpreted this prohibition to mean that if States and localities reduce their transit subsidies, Federal operating assistance halts completely.

Regulatory costs entail both additional capital projects that State and local governments must implement due to Federal mandates and the various administrative costs involved in implementing Federal capital programs. Examples of basic capital investments State and local governments must undertake by Federal mandate are accessibility requirements for the

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1/See U.S. General Accounting Office, "EPA Should Help Small Communities Cope with Federal Pollution Control Requirements," (CED-80-92, May 30, 1980).

2/George E. Peterson, The Fiscal Outlook For Cities, ed. Roy Bahl (Syracuse: Syracuse University Press, 1978) p. 67.

handicapped, occupational safety and health standards, and various energy conservation requirements. Administrative costs generally include: (1) reporting requirements, (2) requirements that must be met before funds are obligated, and (3) reimbursement procedures.

Although not specifically asked, some officials expressed concern about the increased costs they incur when participating in federally financed projects. For example, one city official we interviewed said the recordkeeping necessary for federally funded projects, as well as delays by Federal agencies in closing out projects, increases project costs by at least 50 percent. A county official said Federal specifications drive up costs by about 10 percent. An official in another county stated that unnecessary delays caused by Federal requirements, along with high inflation, have led him to believe that it may have been better to forego the Federal funds and somehow to have undertaken construction themselves.

The costs to State and local areas discussed here are not necessarily costs that the Federal Government should assume. The point we emphasize is that, while capital expenditures by the Federal Government create many benefits for the State and local governments, they also create certain costs for State and local governments that they may not otherwise incur.

THE FEDERAL GOVERNMENT IS NOT  
WORKING IN PARTNERSHIP WITH  
STATES AND LOCALITIES

The Federal Government is not helping the State and local capital budgeting process to the extent that it could. In fact, Federal policy often complicates the problem of deteriorating physical capital. For instance:

- Federal budget and program cycles and procedures can complicate State and local capital investment planning.
- Federal capital-intensive programs are not always targeted to where problems are most severe.

Most of the State and local governments we visited plan their capital budgets on at least a 5-year basis, and one even has long-range plans through the year 2000; yet many Federal program dollars are provided only on an annual basis. Thus, it is difficult for States and localities to count on Federal aid as part of a capital plan. In addition, the State and Federal fiscal years are often different.

Officials in two of the four cities felt that local and Federal planning are not well coordinated. One official said

that Federal budget cycles and trying to determine the amount and duration of grants hamper long-term planning efforts. Another city official said his city has a difficult time planning for and maximizing the use of Federal funds. Each Federal program has a different funding process, the programs change all the time, many are authorized but not appropriated or appropriated for less than the authorized amount, and there are layers of approval between city, State, and Federal agencies. All these problems complicate the long-term capital planning for the city.

DOT mass transit grants and the community development block grants are examples of specific programs with annual appropriations that can hinder State and local long-term planning. In addition, emergency public works programs are normally for 1 or 2 years, when they exist. Although most of these programs are authorized for more than 1 year, the funds do not have to be appropriated at the authorized amount. As a result, it can still be hard for State and local officials to use these funds as part of a long-range capital improvement plan. Most large Federal-aid highway programs are part of the Highway Trust Fund. While obligations under this program are exempted from the appropriations process, the actual cash reimbursements to the State for the Federal share are appropriated yearly.

In addition to the problems caused by the financing procedures, certain direct capital programs do not necessarily go to the areas of greatest need. For EPA construction grants, the Clean Water Act distributes grant funds by an allotment formula that precludes EPA from awarding grants based on a nationwide priority system. Such a system, however, would be able to better consider the vast differences in the quality of pollution control facilities from State to State.

Urban mass transit grants apportion operating subsidies by formula, using mainly population and population density as criteria. GAO has criticized the formula for having no indicator of relative use of existing mass transit. <sup>1/</sup> The result is that the places most in need of Federal assistance to maintain and operate transit systems do not necessarily receive their fair share.

Within the funds available, as set by the Congress, Federal-aid highway programs are apportioned by formula as

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<sup>1/</sup>U.S. General Accounting Office, "Analysis of the Allocation for Federal Mass Transit Subsidies," (PAD-79-47, October 9, 1979).



entitlements. The formula varies with each program--i.e., primary, secondary, urban, and interstate roads--but most programs include population and miles traveled. Few take into account local road conditions. Thus, a State with badly deteriorating highways is not likely to receive any more Federal aid than a State with Federal roads in relatively good condition. Although Federal-aid highways are deteriorating (see ch. 3), no Federal aid can be used for maintenance (it can, however, be used for major rehabilitation in the interstate system) and no formal maintenance guidelines exist. 1/

In one State we visited, we were told that there are no incentives for the State to maintain its Federal-aid roads. Any maintenance performed comes from individual department pride, not by tying Federal funds to maintenance. There is also the possibility that the States could intentionally allow the roads to deteriorate to the point where they can qualify for Federal aid for major rehabilitation. However, State governments would still have to answer to their taxpayers since the States would have to match the rehabilitation monies.

A 1980 report prepared for the Department of Commerce supports our observations. After studying five physical capital areas--water systems, sewer systems, streets, bridges, and mass transit, the report concluded that:

"Federal programs encourage investment in new capital expenditures and early replacement of capital equipment.

The literature reviewed, concerning the biasing effects of Federal grants on maintenance and capital outlays, indicate that, indeed, Federal programs often encourage early capital replacement, possibly earlier than is really necessary and/or desirable. Capital projects are premature if expenditures of maintenance funds for the original facility would be a better or more efficient use of total resources. But, when Federal incentives

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1/In 1977 a GAO report called for the Federal Highway Administration (FHWA) to set standards and guidelines for the States to attain good highway and bridge maintenance. The report also recommended using an engineer's maintenance inspection manual to provide inspectors with general guidance. The FHWA has not acted on these recommendations. See U.S. General Accounting Office, "Improving and Maintaining Federal-Aid Roads--Department of Transportation Action Needed," (CED-77-31, February 2, 1977, p. 13).

are introduced to accelerate the capital replacement program without a corresponding availability of Federal funds for maintenance, it is more cost-effective for the local government to pursue the capital grants. This outcome has the effect of encouraging local governments to forego maintenance of the facilities that can be replaced easily (with Federal funds)." 1/

FEDERAL PRIORITIES CAN, IN EFFECT,  
DEFINE CHOICES FOR STATE AND  
LOCAL GOVERNMENTS

Federal priorities can entice and force State and local governments to use their funds to implement national programs. This can reduce the funds that States and municipalities could use to meet other needs for which Federal funds might not be available.

At two of the 12 State and local governments we examined, officials were concerned about Federal influence on local capital budgeting. We were told by one State official that Federal aid is often the difference between a project "going or not going," because the legislature is more likely to approve a capital program if it includes Federal funds. A city official said that a 1966 Federal policy induced his city to build certain streets as part of a planned land-use strategy. The Federal Government was to help finance the building of connecting expressways as part of the plan, but by the 1970s DOT had decided against it. Thus, the official claims, the city is left with congested streets, fewer residences, and slower growth.

The Highway Trust Fund was criticized by one official as generally influencing State programs too much. State officials believe they must get and spend all the Federal highway dollars for which they are eligible. Thus, they tend to plan highway programs around the 38 Federal-aid categories from which they can receive funds. As a result, what often happens is that a State, which may need to replace bridges, may instead build another section of interstate road because it has already spent all its money in the bridge replacement category and funds may still be available to build a new section of interstate. An official in one of the States we visited specifically criticized this fragmentation of

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1/U.S. Department of Commerce, "A Study of Public Works Investment in the United States," Executive Summary, April 1980, p. 28.

the highway program. He said it takes away much of his State's flexibility with regard to where Federal highway dollars are used.

EPA, FAA, and Federal legislation for the handicapped were also criticized by State and local officials. All can affect local budgeting decisions concerning which projects are built and which are deferred. In fact, several State and local governments we visited set their priorities according to the percentage of Federal monies available. When Federal priorities shift, State and local governments are affected.

On the other hand, the lack of Federal priorities can define or skew choices for State and local officials. As the experience with CDBGs has shown, when local officials have only broad Federal objectives to meet, the funds can become much more politicized within localities. One city official believes competitive grants, such as UDAG, are worthwhile because they cause the city to plan more than it normally would. This official also said that she supports Federal discretion in the use of funds. Another city official thinks the current nature of Federal grants precludes long-range planning and cited a need to return to categorical grants if any long-range planning is to be done.

The point to be made from illustrating these conflicting views is that Federal priorities influencing local capital budgeting decisions are not necessarily a "bad thing." The goal of the Federal Government is to have a positive affect on the condition and development of State and local physical capital. Grants can be a way of achieving this goal.

NO OVERALL INFRASTRUCTURE IMPROVE-  
MENT PLAN FOR STATE AND LOCAL AREAS  
EXISTS IN THE FEDERAL GOVERNMENT

No broad Federal plan deals with the problem of the deteriorating capital stock in State and local areas. Little capital investment planning takes place between the three levels of government, and even less takes place among the Federal agencies that are partly responsible for State and local capital investment. We believe the problems discussed in this chapter--stop-gap programs, added costs, an ineffective partnership among the levels of government, and Federal priorities defining State and local choices--are partly the result of this lack of Federal planning. Specifically:

--Planning between levels of government either is not present or it is ineffective.

--Existing programs that affect State and local capital

stock are fragmented and are not effectively coordinated.

--No system for setting capital priorities exists.

The community development block grants program is one of the broad areas through which capital deterioration can be addressed, yet little long-range community development planning is done. Since the program is decentralized, no long-term plans are made at the Federal level. HUD conducts no assessments to identify community needs, and CDBG applications are approved 99 percent of the time. According to a HUD official, community development block grants emphasize quick results.

It would be unfair to say that planning is non-existent in all capital areas. Since 1975, EPA has engaged in long-range planning exercises with the States (under Section 2, Public Law 92-500), and the Federal Highway Administration reviews State plans for Federal highway construction. When DOT officials commented on this report, they said that the policies of the Urban Mass Transportation Administration require State and local governments to analyze alternatives before asking for help to fund mass transportation investments. These analyses are reviewed by the Administration to ensure that the most cost-effective improvements have been identified. But as we mentioned earlier, Federal budget and program cycles and procedures are often at odds with those of States and localities.

The dearth of coordination among Federal agencies is also a cause for concern, for if Federal policy is not coordinated, no degree of cooperation on individual programs between the Federal, State, and local levels can significantly improve the nation's capital infrastructure. As the system is now, Federal programs that address capital needs are fragmented, and even programs within the same agency lack coordinated direction. Since 1975, the Federal Highway and Mass Transportation Administrations have issued joint planning regulations requiring urban areas to develop short-range plans for improving urban transportation systems. We have, however, criticized these plans, saying there is separate administration by UMTA and FHWA and inconsistent enforcement. <sup>1/</sup> In commenting on this report, officials from DOT pointed out that, in October 1980, the Federal Highway and Urban Mass

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<sup>1/</sup>U.S. General Accounting Office, "Stronger Federal Direction Needed to Promote Better Use of Present Urban Transportation Systems," (CED-79-126, October 4, 1979).

Transportation Administrations revised their joint planning regulations. These regulations are intended to make the process of capital project development more consistent between the two agencies.

In different agencies, capital programs obviously address different problems, but one agency official said that there is no Federal program designed to assess, preserve, and maintain the existing capital infrastructure. Instead, one agency attacks one area and another looks at a different problem. A HUD official told us that any coordination that does take place at the Federal level (for example between HUD and EPA) is merely cursory, except when two or more agencies agree that a particular project is important to each of them.

Because capital programs are fragmented, political considerations and "turf" are very important. No capital priority system exists. No single agency coordinates the programs that influence State and local capital assets. No entity makes decisions about which programs should be emphasized, which ones are working to meet similar objectives, and which are at cross purposes. As a result of this planning void, the potential is great for the Federal Government to adversely affect State and local physical capital. If we were looking at the Federal Government as a whole, in terms of how it deals with State and local capital investment, it would clearly be on the unsuccessful end of our spectrum discussed in chapter 4.

## CHAPTER 7

### FEDERAL DECISIONMAKING LIMITS PHYSICAL CAPITAL INVESTMENT

"A little noticed, but highly important issue with regard to the Federal budget of the United States is the question of what portion of the budget should be devoted to capital investment projects. The rapid proliferation and expansion of the many social programs funded by the Federal Government have, of course, brought significant benefits to the American people. But we must never lose perspective of the fact that the revenues to support these and future social programs must be generated by a productive economy. An economy can maintain and increase its productivity only if there is a satisfactory rate of capital investment in both the private sector and the public sector.

Just as a private company must make capital investments to assure future production, the American Government must make capital investments to assure a foundation for the future growth and prosperity of the Nation." 1/

Throughout this report we have discussed several factors that affect an organization's internal ability to practice capital budgeting. Before we come to the end of our analysis, however, it is useful to take a broad look at how Federal decisionmaking influences Federal capital investment activities. We contend that current national capital investment is limited because:

- 1) The growth of uncontrollable outlays--mainly entitlements and interest--has reduced the funds available for physical capital investments; and
- 2) Federal decisions about physical capital are based on a parochial view rather than a global one, a perspective that ranges from project managers, to the Congress, to the President.

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1/House of Representatives, 95th Congress, 2nd Session, Report No. 95-1247, "Public Works for Water and Power Development and Energy Research Appropriations Bill," 1979.

THE GROWTH OF BUDGET UNCONTROLLABILITY  
HAS REDUCED THE FUNDS AVAILABLE FOR  
PHYSICAL CAPITAL INVESTMENT

If we look at the Federal budget in terms of controllable and uncontrollable outlays, we can see how past and present legislative decisions have limited physical capital investment. Controllable outlays are those over which the President and the Congress can exercise some discretion (or control) by increasing or decreasing spending in the year in question, generally the current or budget year. Outlays for current operations and most outlays for physical capital fall into the controllable portion of the budget.

"Relatively" uncontrollable outlays, which have grown rapidly in recent years, are outlays that cannot be increased or decreased without changing existing substantive law. Social programs, such as payments to individuals for social security and veterans benefits, unemployment assistance, medical care, fixed costs, and payments coming due under obligations incurred during prior years constitute the largest share of uncontrollable outlays. In the past 14 years most Federal outlays have been uncontrollable outlays (see table 14).

Many practices have promoted the growth of uncontrollable outlays in the Federal budget. Consider, for example, the way entitlement programs are funded. By law, benefits from entitlement programs must be paid to any person who meets the legal eligibility requirements. The spending levels of such programs are set each year without congressional action because the funds are available through either a "permanent appropriation" or an automatic "current appropriation." In both cases, the Congress has little or no alternative--short of amending the entitlement legislation--but to appropriate the funds. The Congressional Budget Office estimates that entitlements now account for 47 percent of all Federal outlays. 1/

The Congress also uses several other budgetary devices that have abetted budget uncontrollability:

--permanent borrowing authority, which permits a Federal agency to incur obligations and to make payments for specific purposes out of borrowed monies;

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1/ Printout of current year 1980 entitlements, dated 3/20/80, from the Budget Analysis Division, Congressional Budget Office.

- contract authority, under which binding contracts or obligations may be entered into in advance of an appropriation;
- advance appropriations, wherein funding is provided by the Congress for use in a fiscal year beyond the fiscal year for which the appropriation act is passed;
- establishment of off-budget Federal agencies, whose amounts are excluded by law from the budget totals;
- loan guarantees, a form of contingent liability that commits the United States to repay in whole or in part the principal and/or interest in case of default; and
- entitlement program benefit increases resulting from adjustments to consumer price and other indexes.

Table 14

Growth of Uncontrollable Outlays

<u>Outlays</u>	<u>Percentage of total outlays</u>			<u>Percentage increase 1967-1982 a/</u>
	<u>1967</u>	<u>1981</u>	<u>1982</u>	
Uncontrollable				
Payments to individuals	26.4	48.5	47.9	21.5
Prior-year contracts and obligations	23.4	16.5	16.1	(7.3) <u>c/</u>
Other <u>b/</u>	9.5	11.6	12.5	3.0
Subtotal	59.3	76.6	76.5	17.2
Controllable	41.8	24.4	24.4	(17.4)
Undistributed employee share, employee retirement	(1.1)	(1.0)	(0.9)	0.2
Subtotal	40.7	23.4	23.5	(17.2)
Total Budget Outlays	100.0	100.0	100.0	-

a/Amounts for fiscal years 1981 and 1982 are estimates.

b/Primarily composed of interest on Federal debt.

c/Parentheses denote negative numbers.



Physical capital competes at a disadvantage for discretionary funds

As uncontrollable outlays have grown, and continue to grow, each year there are fewer funds available that are relatively free of prior commitment. The fiscal 1980 budget projected an increase of about \$38 billion in outlays from 1979, but OMB classified \$33.9 billion (89 percent) of the increase as relatively uncontrollable. Note in table 15 how discretionary outlays continue to decline, both in dollars and as a percentage of total annual outlay increment.

Table 15

Outlay Increments  
(\$ in billions)

<u>Fiscal years</u>	<u>Total outlay increments</u>	<u>Increment uncontrollable</u>	<u>Increment controllable</u>	<u>Percent controllable</u>
1975-76	\$40.2	\$30.2	\$10.0	25%
1976-77	36.3	26.6	9.7	27
1977-78	48.1	39.5	8.6	18
1978-79 <sub>a/</sub>	42.6	35.3	6.3	15
1979-80 <sub>a/</sub>	38.2	33.9	4.3	11

a/Amounts for fiscal years 1978-79 and 1979-80 are estimates.

When economic conditions cause budget cutbacks, competition for this shrinking discretionary fund increases, and physical capital investment tends to lose in favor of outlays for current operations. This is the case at the Corps of Engineers, GSA, VA, and in most of the State and local governments we studied. The Corps' 1981 budget calls for a construction share of 52 percent, or a drop of 23 percent since 1967. The Corps attributes this increase to environmental legislation, increased maintenance on older projects, and other factors. GSA's physical capital outlays for new construction, the lowest priority item funded by the Federal Buildings Fund, is next to nothing--\$29 million for four projects in FY 1980 (an additional \$100.6 million was provided in the fiscal year 1980 supplemental appropriation) against a backlog of \$737 million in new construction projects pending before the Public Works Committees. At the VA, the operations and recurring maintenance budget receives discretionary funds first, but nonrecurring maintenance has a somewhat lower priority when

discretionary funds are limited. Construction is a separate appropriation from operational funding and is established at the level compatible with the decisions of OMB.

Fully funded capital projects also compete at a disadvantage for discretionary funds with projects that are incrementally funded. Consider how legislators would view a program requiring that the program's entire costs of \$50 million be funded in the first year versus one whose costs of \$50 million are funded year-by-year over a 10-year span. If the pool of discretionary monies is, say, \$60 million for a given fiscal year, the incrementally funded program stands a better chance of being approved than the fully funded one. Many capital programs are fully funded, especially at the Federal level.

#### Dedicated physical capital funds lack flexibility

Dedicated funding (also called earmarking) is another budgetary mechanism that fosters uncontrollable outlays, but it is also used to fund some physical capital programs. Dedicated funding is the practice of designating in authorizing legislation specific revenues for specific public services or projects. For example, gasoline taxes are earmarked to pay for building and maintaining roads. When there is a direct link between the source of the revenue and the expenditure (as in the case of our example), dedicated funding is a fair way of indirectly charging the user. However, dedicated projects escape the scrutiny of the annual legislative budget process. The result is that this funding mechanism limits the flexibility of decisionmakers to change priorities.

Over the years, the Congress has enacted legislation allowing the Federal Government to help State and local governments finance the construction of major physical capital projects like highways, airports, and waste water treatment plants. When construction is completed, the States or localities own the asset and are responsible for its annual operation and maintenance. Funding for these projects is typically dedicated; usually it cannot be rechannelled to pay for operations and maintenance or to build other needed physical capital.

Dedicated funding emphasizes new construction of particular projects, and because it does, it has two distinct advantages. It promotes better long-term planning and ensures the systematic completion of major capital projects that otherwise could not have been built without federally dedicated funds. A Department of Transportation official told us that the most important advantage of the Highway Trust Fund is that it

permits the States to plan highway construction, rehabilitation, and renovation. Because they know that Trust Fund monies will be forthcoming, the States feel confident about signing long-term construction contracts.

On the other hand, the emphasis dedicated physical capital funding places on new construction has contributed to the inadequate maintenance and subsequent deterioration of capital assets. The Highway Trust Fund cannot be used for routine maintenance and repairs of highways and bridges. Until recently, the Fund's monies could be used only for new construction, although now a large portion pays for rehabilitation and renovation. Yet, the trend toward rehabilitation (a one-time effort to restore physical capital to good operating or original condition) is the result of the inability of States and local governments to finance routine maintenance of highways and bridges. As these assets deteriorate past the point where they can be rejuvenated by normal upkeep, only the choice of rehabilitation or abandonment remains. How bad is this situation? In one State we visited, 7,870 of the 45,000 miles of State maintained highways and 2,298 bridges out of 56,100 were in need of immediate rehabilitation.

The Corps of Engineers also builds physical capital projects that local governments must maintain. In December 1978, the Corps reported that a large midwestern city had not maintained a Corps financed bridge and that as a result the bridge was inoperable. The city's lack of maintenance funds appears to have been the reason for not keeping the bridge in good working condition.

Dedicated funding also constrains the Federal Government's ability to respond to changing priorities. For example, the Government cannot, without amending substantive law, redirect the capital funds in the Airport Trust Fund. The Fund currently has a \$3.2 billion surplus because (1) the growth in user fees charged by airports has exceeded the need for Trust Fund monies to pay for new airports and related capital facilities, and (2) although the user fees were intended to cover FAA maintenance and capital outlays, before 1976 the Congress did not allow these funds to be used for maintenance.

#### TODAY'S DECISIONS MAY HARM THE FUTURE OF PHYSICAL CAPITAL INVESTMENT

In industry and at all levels of government, physical capital investment faces an uncertain future. The increasing desire to curb public spending has contributed to this uncertainty. Added to this desire are growing inflation and stagnating sources of revenue, all of which bodes ill for the future of our deteriorating national infrastructure.

## Efforts to constrain the Federal budget could be detrimental

The Congress and the President are trying to constrain the Federal budget as a means of fighting inflation. Their attempts may adversely affect the nation's ability to fund physical capital projects. For example, in an attempt to balance the fiscal 1981 budget, President Carter initially proposed a reduction of \$15 billion. In March 1980, the National Conference of State Legislatures ranked the President's proposed cuts according to three priorities--high, medium, and low. Four of the six high-priority programs were capital-intensive--highway construction, rural water and sewer grants, mass transit, and utility coal conversion. A fifth item, revenue sharing, supports capital projects to a lesser extent. In April 1980, the National Governor's Association reviewed the President's and the House and Senate Budget Committees' proposed cuts. The Association's analysis showed that \$6 billion of the proposed \$15 billion reduction would directly affect State and local budgets. About half (\$2.7 billion of the \$6 billion) is directly or indirectly related to physical capital investment.

As we have discussed in previous chapters, our nation's cities depend heavily on Federal aid to finance local physical capital projects. The proposed reductions to the fiscal 1981 budget could have caused cities to (1) redirect their funds from physical capital to cover operational shortages and (2) defer needed construction, renovation, rehabilitation and maintenance of physical capital assets. The projects that would likely suffer include environmental protection, local public works, economic development, and mass transit. These are the cities' highest physical capital priorities.

The proposed reductions would have not only deferred investment in physical capital, they would have also decreased Federal grants to State and local governments. The National Governor's Association estimated that Federal grants would have fallen as a percentage of total Federal outlays--from 10.9 percent in 1979 to 8.1 percent in 1983.

## Federal decisionmakers should reorient their view of physical capital investments

Presently no broad Federal plan exists that sets out a national strategy for keeping the nation's infrastructure intact and healthy. No single Federal agency is responsible for assessing new infrastructure needs or for preserving and maintaining existing capital assets, and there is little recognition at the Federal level that capital investment is a vital component of a vigorous economy. In short, the Fed-

eral Government does not take a cross-cutting look at capital programs to see how they fit into the realization of national priorities.

Some long-range planning does occur within individual agencies, like EPA, DOT, and the Corps' Appalachia study; however, these efforts rarely transcend a program orientation. More often than not, planning for physical capital investment is very project specific. Since the Executive Office of the President and the Congress tend to set priorities for physical capital investment program-by-program, no one is sure what projects and programs should be emphasized, which ones have similar objectives, or which ones are at cross-purposes. This "program" orientation makes infrastructure planning vulnerable to political variables, and it could continue to limit governments' and industry's ability to invest in capital programs. We think the likelihood of ineffective capital investment is high. In terms of linking physical capital planning to budgeting, the Federal Government falls on the unsuccessful end of the spectrum we discussed in chapter 4.

## CHAPTER 8

### SUMMARY, CONCLUSIONS, RECOMMENDATIONS TO THE CONGRESS, AND OMB COMMENTS

#### REPORT SUMMARY

Our nation's physical capital needs are changing and expanding, but the country has been less and less willing to invest in new capital items or to pay for maintaining and repairing existing ones. The signs of our infrastructure's uncertain future are abundant: roads made impassable by potholes, bridges that cannot be traversed, water polluted because of poorly designed or poorly maintained wastewater treatment plants. The Federal Government has always had some responsibilities for our national infrastructure, particularly roads, bridges, post offices, and navigable rivers and harbors. In recent decades these responsibilities have grown with new legislation. Today Federal agencies help State and local governments buy or construct other capital items, like mass transit equipment. Many of these federally financed capital projects are partnerships with State and local governments, who assume ownership and operating responsibility when the projects are completed.

Despite the Federal Government's active and long-time participation in physical capital development, it has not taken a comprehensive look at capital investments. Past commissions on government operations have recommended that capital expenditures receive special attention, but the Government does not yet do this--either by collecting information useful for analysis (although Special Analysis D of the President's budget does a good job of showing which budget outlays are investment outlays and which ones are current) or by assigning policy responsibility for capital investments to a specific Federal organization.

Many factors have contributed to the problems of capital investment the Federal Government now faces: management attitudes, congressional authorization and budgetary procedures, limited resources available for capital, and too little monitoring of ongoing and completed capital projects. Of the Federal agencies we studied, we can characterize only the Postal Service as having all the elements we consider necessary for a successful program of capital investment and infrastructure assessment. (But the Congress has given up considerable oversight control by setting the Postal Service outside of the regular management and budget process.)

Federal programs and policies also affect the condition and development of State and local physical capital. Little capital planning takes place between the three levels of government and among those Federal agencies who are partly responsible for State and local capital investment. We believe "stop-gap" programs and Federal priorities that sometimes dictate State and local choices and impose additional costs on cities, States, and counties are problems that are largely a result of this lack of infrastructure planning.

In addition to established programs and policies, Federal decisionmaking is also limiting physical capital investment. The Government is trying to constrain the budget as a way of fighting inflation, increase defense spending, and meet its commitments under entitlement programs. As a result, the Government has limited funds available for capital items. These capital outlays are competing for discretionary funds, which make up only 24 percent of the 1980 budget. Since the full cost of some capital programs appears in the budget, they may seem more costly than programs which only show one year's cost but which will continue for many years. Therefore, the Federal budget should also show the longer-term cost implications of other programs so that fully funded capital projects are not automatically at a disadvantage.

As we have pointed out, there are advantages and disadvantages imbedded in the decision to fund physical capital investments with dedicated revenues. This funding mechanism makes long-term planning and construction easier because it guarantees a steady flow of financial support, but it also inhibits the ability of decisionmakers to redirect priorities to reflect changing national needs.

#### CONCLUSIONS

Planning, budgeting, and controlling physical capital is a complex process. Yet, this process can be carried out successfully, as some of the organizations we studied demonstrate. We conclude that a policy-level approach to capital investment must be added to the Federal Government's decisionmaking, and that sound, up-to-date information is needed to support that approach. Closely monitoring the implementation of capital investment programs, auditing their results, and checking the condition of operating facilities and equipment can help ensure a healthy capital plant--or at least that portion of our national infrastructure for which the Federal Government is directly responsible.

## RECOMMENDATIONS TO THE CONGRESS

The Federal Government does not treat capital investment as a special area of policy, and it has never conducted a cross-cutting analysis to find out how physical capital relates to and affects other national interests. Because physical capital has not yet been designated as a specific component of national policy, our recommendations are by necessity broad ones. To understand and plan for physical capital investment, the Congress must decide who will be responsible and accountable for the policy and who will devise and operate the reporting systems and analytical tools needed to support and implement that policy.

→ We recommend that the responsibility for assessing the amount and condition of, and advising on the policy for, the nation's infrastructure be assigned to policy and oversight units in the Congress and the executive branch. We recommend that both branches specify the information and analytical support they need from Federal managers. Specifically, the Congress should give a Senate and a House committee the policy-level oversight responsibility for Federal capital investment and for assessing infrastructure needs and conditions. Also, a component of the Executive Office of the President should be designated as a focal point for executive policy directions. Planning and creating policy are integral parts of sound management. They do not call for additional staff or decisionmaking systems beyond what should be in place today.

### Suggested activities for the congressional committees

—The committees should set realistic goals and information requirements for policies, programs, and projects so the public is aware of the condition of our infrastructure and what is going to be done. The committees should grant the administrators of Federal agencies the authority and resources to render congressional goals and expectations plausible. Requisite authority and resources should be set out in legislation and in committee and Federal agency reports to minimize the gap between expectations and what is feasible. When resources are limited, this would involve explicitly reducing goals to match resource levels.

—The congressional committees should require executive reports to focus on broad policy decisions (timed to congressional cycles) before the Congress authorizes and funds individual projects. Reports should inform the Congress of: (1) long-term needs, (2) status of projects already approved, (3) long-term plans for meeting needs, and (4) budget year plans addressing



long-term needs. (Details of these reporting requirements are being addressed in a separate study not yet completed.)

--The congressional committees should consider capital investment programs in a way that will not penalize the programs because they are fully funded in the first year they are begun. So that valid program comparisons can be made, the Congress and executive agencies should regularly use longer-term costs (for at least 5 future years) for the other programs in the the budget.

✓ --The congressional committees should consider the financial ability of State and local governments to operate and maintain capital facilities built mainly with Federal funds. If the financial ability of the State or local government is questionable, the committees should consider (1) requiring the States or localities to prove financial ability, (2) financing part of the operations and maintenance costs, as in the case of mass transit grants, or (3) not implementing the projects. The views of State and local governments and Federal agencies on these alternatives should be explained in agency budget justifications and in agency comments on proposed legislation.

Suggested activities for the  
Executive Office of the President

✓ We suggest that the Congress require, under existing authority or by new legislation, the President's Domestic Policy staff, or a newly established group within the Executive Office of the President, to:

--devise and propose to the Congress a strategy and establish an overall policy for the nation's infrastructure needs and physical capital development. Such a strategy should take into account: (1) maintenance of facilities not outdated to minimize future costs; (2) planned obsolescence, abandonment, demolition, or salvage of specific facilities; and (3) construction or renovation to meet technological and program needs.

--work with lead Federal agencies and OMB to ensure that consistent management practices and policies are adopted by all Federal agencies and priorities are set for the nation's capital investment projects.

--provide leadership and guidance to Federal agencies to tailor their report information to meet the specific

needs of the President and the Congress for decisions on capital investment policy, legislation, and budget analysis. Leadership and guidance should take the form of:

- 1) requiring the Federal agencies to develop, use, and submit (timed to the budget cycle) capital investment information focusing on: (a) identification of long-term needs, (b) long-term plans for meeting needs, and (c) budget-year plan addressing long-term needs, and (d) status of projects previously approved.
- 2) summarizing information on Federal capital investment activities and submitting it to the Congress with the President's budget. (Details of these reporting requirements are being addressed in a separate study not yet completed.)

--work with lead Federal agencies to review and streamline the guidance on analyses used to justify capital projects. The streamlined guidance should ensure that all agencies, before requesting project approval, conduct analyses of life cycle costs for all capital projects and analyses of alternatives for meeting capital needs.

--take an active part in reviewing Federal agencies' budgets as they pertain to capital investment and work with OMB to ensure that stated capital investment policies and strategies are fully considered.

--work with Federal agencies and State and local organizations to make sure that federally financed physical capital is adequately maintained.

--in January of each even-numbered year, submit to the Congress a four-year outlook report summarizing the plans for at least 4 future years of Federal capital investment programs and their expected contributions to the nation's infrastructure.

--work through State and local organizations to develop periodic assessments of the condition of federally financed physical capital that is owned by State and local governments.

Suggested activities for  
the Office of Management  
and Budget

We recommend that the Congress require the Office of Management and Budget, under existing authority or by new legislation, to:

- direct Federal agencies that acquire or finance physical capital to explain in their annual budget to the Congress the relationships of their proposals to the long-range capital needs and investment plan, and to the priorities contained in the four-year outlook. (Details of these reporting requirements are being addressed in a separate study not yet completed.)
- build linkages between oversight and audit, evaluation, and planning functions by requiring:
  - 1) Federal agencies to analyze completed capital projects to verify that the project is accomplishing its intended purposes, and
  - 2) Federal agencies to conduct periodic post-audits of capital assets to assess (a) the condition of the infrastructure of interest to the agency, (b) the projected requirements for the infrastructures within the agency's area of responsibility, (c) the effectiveness of maintenance standards, and (d) the plans for infrastructure development within the agency's area of responsibility.

COMMENTS FROM THE OFFICE OF  
MANAGEMENT AND BUDGET

As we stated in chapter 2, with the exception of OMB, all of the 19 organizations that reviewed the draft of this report agree with our message, conclusions, and recommendations. The remainder of this chapter is devoted to a discussion of OMB's comments. We begin with a summary of OMB's disagreements with our conclusions and recommendations. We follow with our responses to OMB's general and specific comments.

Summary of OMB's disagreements

Generally, OMB disagrees with the changes we believe are necessary. OMB appears to have assumed that we recommend, or that others will use this report to support, (1) a separate capital budget; (2) unrestricted debt financing for capital investments; (3) strong, direct, central controls on Federal

capital investment money; and (4) a substantial increase in capital investment spending. OMB is concerned that if capital investment becomes a separate policy area, the budget will grow, tradeoffs will be made with other programs, and more money will be spent on public capital investments.

We do not recommend a separate capital budget. We support the continued use of the unified budget; however, we point out the need for a cross-cutting analysis of and a policy direction for capital investments. Moreover, we do not recommend unrestricted debt financing for capital investments. We support full funding of capital investments and the return of off-budget entities to on-budget status to restore the unified budget. As we have stated, we clarified our principal recommendation to more precisely denote that what we recommend is the creation of more broadly based and informed policy advisory units--not strong, direct, central management control units. We also recognize that how this advisory role is carried out will be a function of the personnel appointed to the job and the way they view their roles--as advocates or as informed advisers.

Finally, we believe that capital investments need broad policy guidance. We do not believe that this approach would necessarily mean either a larger budget, cutbacks in other budget functions, or more money spent on capital investments. GAO does not take a position on how to fix the current problems associated with capital investments and maintenance practices, but we do believe that these problems will not go away as long as current policies and practices prevail. As we discussed in the report, when resources are plentiful, sufficient funds are available for capital outlays and maintenance; when resources are scarce, either capital investments or recurring maintenance are most often the first items cut in government budgets. Clearly, we are in a time of decreasing resources. By continuing our present practices, our nation's infrastructure could continue to deteriorate until such time as resources will begin to increase, and then the infrastructure would naturally improve.

General comments from  
OMB and our responses

OMB divided its comments into the general and the specific. Its first general reaction was to agree

"that capital formulation and maintenance is a critical issue with regard to both economic growth and level of public reviews. However, there is a serious danger that the remedies outlined may be as undesirable as the problems the report attacks."

OMB then discusses what it thinks are the factors contributing to this danger.

"(1) In several ways, the report appears to argue for a substantial increase in capital investment per se. Without regard to programmatic justification, this would be undesirable national policy and bad budget policy, as would be a policy of increasing spending for any other object class by itself."

We believe that top-down policy advice should be added to and melded with the programmatic justification, much as in the case of policy for research and development. This does not necessarily mean a policy of increased spending for capital investments. It may mean a different distribution of resources, or possibly it may mean decreased or increased capital investment spending. It may be that if the top-down approach were joined with the bottom-up approach, the result could be a more efficient use and distribution of resources. Greater efficiency could produce better results from the same or less resources. We hope that more informed decisions will lead to better decisions.

"(2) The Federal budget--through both tax and spending policies--has a major impact on total (public and private) capital formation in the United States. Both the executive branch and the Congress perceive a clear need to promote private capital formation. Any program that increases total Federal spending and thereby reduces resources available to achieve private investment must be approached cautiously."

Again, we do not recommend an increase in Federal spending. The need to know the condition and amount of private capital investments, and their relationship to public tax and spending policies, is an important aspect of Federal capital planning and budgeting.

"(3) The report argues for a major expansion of capital spending and development of budgetary devices to protect both capital and maintenance spending from other competing claims on budget resources. This approach could be accomplished only by having higher taxes, more borrowing, and/or lower spending for other purposes. Decisions with regard to these issues cannot be made in the abstract, as your report appears to propose be done, by giving priority to one possible use of funds. They are made by the executive branch and the Congress after considering a range of

alternatives. For example, the report states, and regrets, that the Veterans Administration places higher priority on delivering medical services than on construction of new medical facilities. If this is so, it reflects considered judgment--and is not, as you assume it to be, necessarily incorrect.

"Moreover, the portrayal of agency reviews, such as for the VA budget, as a process in which all current operating needs are satisfied and then additional resources (if any) go to capital projects does not accurately reflect the way budget reviews are conducted. Indeed, there are separate accounts in the VA budget for hospital construction, and the requests for these accounts are considered in considerable depth by both the Executive and the Congress. While you may believe that the funds appropriated for VA hospital construction by the Congress are inadequate, it is inaccurate to assert that VA or other capital needs are met only from residual funds. Capital investment needs are considered explicitly in the budget process, frequently in the very terms that you recommend, but they are considered in the context of the needs of the programs that they would serve and in the light of overall constraints."

We repeat: we are not advocating increased Federal spending and the consequent increased taxes or borrowing. We do recognize, however, that with or without assigning oversight and advisory responsibilities for capital investments to a presidential policy adviser and to Senate and House authorizing committees, there is the possibility that tradeoffs will occur. Tradeoffs could redirect monies from program operating expenses to capital investments. We do not propose nor recommend that these decisions be made in the abstract--by giving priority to one possible use of funds. We believe, as OMB does, that these decisions should be made by the executive branch and the Congress after considering a range of alternatives. We also believe that the broader effects of the tradeoffs need to be viewed and considered from the top down as well as program-by-program and project-by-project. We are not saying that tradeoffs that give a higher priority to operations are necessarily wrong. We simply recommend that decisionmakers be cognizant of the tradeoffs, and the tradeoffs not be hidden in the process. We have added to the report to more completely and accurately describe the way budget reviews, such as those conducted for the VA budget, take place.

"(4) As our first and third points suggest, when addressing public capital needs, there is no substitute for a program-by-program or project-by-project analysis. It would be possible to spend vast sums of money on capital investment that contributes little to the public welfare if the objective were merely to increase capital investments in the public sector. While there may well be a need for increased capital investments in the public sector, that need has to be evaluated in the light of the resources that can be devoted to a given programmatic area and to the competing demands for resources within that area."

We do not recommend that program-by-program or project-by-project review be abolished. Nor are we questioning its value in the process. Our recommendation is to integrate a complementary top-down process with the valuable bottom-up process. We agree that it would be possible to spend vast sums of money on capital investments that contribute little to the public welfare if the objective were merely to increase capital investments in the public sector. We are not recommending increasing capital investments in the public sector as an end in itself. We do, however, believe that the condition of the entire infrastructure needs to be assessed along with related Federal programs and projects. From that assessment, the composition of the Federal effort and alternative approaches can be evaluated. Our recommendation adds another vital dimension to the analysis.

"(5) At several places, the report discusses the dangers of large-scale earmarking of funds for particular purposes, and then concludes that an appropriate remedy in the capital area is to earmark funds for capital investment. Such earmarking would add to the controllability problem that the report deplores, and inhibit the ability of the President and the Congress to budget rationally. We continue to believe that funding mechanisms for capital investments should not supplant judgments made after considering all the competing demands for resources."

Our aim was to present a balanced picture of the advantages and disadvantages of earmarking. The practice is neither totally good nor totally bad. As we pointed out, sometimes earmarking is desirable, but sometimes it can become a liability. We agree that it can add to the problem of total budget uncontrollability, which we do deplore. We also believe that this funding mechanism should not supplant

judgments made after all competing demands for resources are considered. However, there are times when the States and municipalities need to know if future funds will be available so that they can make long-term commitments. Long-term planning for large scale projects in the absence of continuity of commitment can be very difficult and tenuous.

"(6) Acceptance of the recommendations of the report might tend to affect the budget undesirably in another way: giving priority to investment in 'bricks and mortar' over investment in research and human investment. Clearly, there are many cases where government expenditure for research or training may make a greater contribution to productivity than physical capital. Such expenditures frequently complement and induce productive private investments. Yet, under the approach outlined, public investment would receive a greater priority. We are not persuaded that this priority is necessarily better."

Nowhere do we recommend that public physical investment be given priority over inducements for productive private investments. We also do not recommend the investment in "bricks and mortar" over investment in "research and human investment." Again, GAO believes a top-down policy analysis of capital investments needs to be inserted into the budget process, much as research and development has been made part of the process. Handling research and development in this way does not give it a priority for Federal funds, and we do not believe that such a priority would be set when capital investment is treated as a policy area. In our view, a capital investment policy analysis would result in the U.S. Government doing a better job of targeting and coordinating resources, which, in turn, may result in doing more with less. Having a policy adviser for the area would insert a more articulate and informed spokesman into the process. Whether or not he or she also performs as an advocate depends upon the President's choice and the guidance given to that person by the President. It is true that we question the balance of resources being targeted to capital investments versus operations. We believe this balance needs to be reviewed, and we are recommending that a policy mechanism, which has not been available in the past, be created to do this.

"One of the conclusions of the report is that Federal controls over grants-in-aid to State and local governments must be increased to assure that more of these resources are devoted to capital investments. As you are undoubtedly aware, the



trend over the past decade has been to seek ways to reduce Federal control over the use of grants and there is little likelihood that the strength of that trend will diminish soon. The whole purpose of community development block grants, for example, is to give localities broader flexibility in deciding priorities. The report recommendations would require a clear reversal of this effort: it would call for Federal project management to guarantee that investments are protected."

Again, OMB misunderstood our recommendations, and we have reworded them to clarify our meaning. It is not our recommendation to create more central controls over grants-in-aid to State and local governments. In our discussion of the use of community development block grants for short-term capital investments, we portrayed only part of a total picture of the state of Federal capital investments. We are making no specific recommendations about specific capital investment programs, but we do suggest that they be evaluated as a whole, not as separate, individual programs.

"The report calls for a single approach to financing capital facilities in contrast with the variety of approaches now in use. Currently, for example, if the President and the Congress wish to provide maximum flexibility for an investment program, it can be done by authorizing a semi-autonomous body to spend stipulated sums of money without annual appropriations. This is done, for example, in the case of the Postal Service and the Tennessee Valley Authority. Clearly, it is possible to provide such autonomy without excluding the spending from the budget: The TVA is included in the budget as is the subsidy payment to the Postal Service. However, there are fundamental drawbacks to such autonomy; the President and the Congress lose effective control over significant parts of the budget. Hence, this type of approach is used only when the perceived need for autonomy is believed to outweigh the normal desirability for annual budget control."

As pointed out above, we are not calling for a single approach to financing capital facilities. OMB inaccurately assumed this to be true. We are not recommending a separate capital budget, nor debt financing as the only financing mechanism for capital investments. We agree that it is desirable to maintain a unified budget and to use a variety of financing mechanisms. We are in favor of bringing back on budget all off-budget items, so that the Federal budget

will be, in the strict sense of the word, a unified budget.

"An alternative approach is to authorize fully funded capital projects. This is common, for example, for major procurement and construction in the Defense budget and in other areas. In contrast, there are cases--the Corps of Engineers is a good example--where the Congress provides incremental funding for construction projects. Here, the Congress prefers to make moderate progress on a large number of projects through annual appropriations rather than to fully fund a few each year. Economic analysis can contribute to evaluating which projects could be completed most expeditiously at least cost, but as long as the congressional preference for many simultaneous projects persists, such analysis would be fruitless."

We do not favor removing any items from the unified budget. We support fully funded capital projects, as is reflected in our recommendations on page 97. We do lament, however, the disadvantageous situation created for capital investment projects and programs by this practice. We recommend that these programs be considered in a way that will not penalize them. We believe this can be accomplished by regularly comparing them to the costs of noncapital programs for at least 5 years in the future. We do not support the incremental funding of capital investment projects. We also do not believe that the absence of full funding justifies not doing comparative economic analysis of projects. We contend that more informed decisionmaking eventually leads to better decisions.

"The report seems to be unbalanced in other major respects. For example, the definition of a 'successful' organization appears inadequate, and there is an inadequate recognition of the dimensions of the fiscal straits of some localities. In chapter 2, page 2, a successful organization is defined as 'one that can acquire and maintain physical capital that satisfies its mission and clientele even when conditions are adverse.' Clearly, however, the interests of the taxpayer may differ from those of the organization and clientele, especially when conditions are adverse. Subsequently, the report suggests means for forcing localities to develop and maintain certain physical capital standards regardless of the localities' perception of fiscal priorities. Our understanding of the problem is that, because of their weak financial condition,

some communities require either vastly increased resources (which will not come easily) or a significant reduction in the public services they can provide. It is not clear that efforts by the Federal Government to force the locality to maintain a perceived 'adequate' capital base in the face of an overall lack of fiscal resources is appropriate policy. Nor does the Federal Government have a ready source of funds that can be used to provide the degree of relief that is proposed. We cannot agree that spending on capital projects should automatically be exempted from the fiscal constraints that Federal, State, and local governments face, and we cannot agree that perceived 'mission and clientele' needs should override the prerogatives of elected officials or the electorate in guiding fiscal policy."

We have reworded our report to clarify our definition of "successful" capital budgeting. We meant that the capital investments "critical" to an organization's mission and clientele need to be present in order for an organization to be judged successful. Taxpayers are a clientele of local governments, and as such their interests are part of the definition of an organization's mission and what is critical to it. In regard to "forcing localities to develop and maintain certain physical capital standards regardless of the localities' perception of fiscal priorities," what we do say, on page 97, is that

"The congressional committees should consider the financial ability of State and local governments to operate and maintain facilities built mainly with Federal funds. If the financial ability of the State or local government is questionable, the committees should consider (1) requiring the States or localities to prove financial ability, (2) financing part of the operations and maintenance costs, as in the case of mass transit grants, or (3) not implementing the projects. The views of State and local governments and Federal agencies on these alternatives should be explained in agency budget justifications and in agency comments on proposed legislation."

We do not propose a degree of relief nor do we recommend that spending on capital projects should be automatically exempted from financial constraints that Federal, State, and local governments face.

OMB general comments also disagree  
"with the solutions that are proposed in the final

chapter of the report. Having argued forcefully that the capital formation portions of the budget should be insulated from the political process (because of the dangers of 'pork barrel' and of perceived short-sighted judgments), the report then proposed creation of new congressional oversight committees. Of course we will not presume to tell the Congress how to organize itself, but the report does not make a convincing case that these new committees would either benefit the congressional budget process or achieve the stipulated objectives. We strongly doubt the utility of separating oversight responsibility for program operations from responsibility for program capital formation.

"Similarly, the proposal for a new office in the Executive Office of the President that would have an 'advocacy' role in favor of capital outlays appears to us to be misguided. In our opinion, the objective of balancing alternative claims on limited budget resources is better served through the traditional budget process. Obviously there always is room for improvement in our budget analyses, including those applicable to capital investment. However, such improvements need to be made in a way that preserves the integrity of a budget process that is designed to achieve reasonable distribution of available resources among competing claims on those resources. Setting capital investments aside for special favor would not do that.

"What we are suggesting, in essence, is that inadequacies in public capital formation or maintenance would be better served by improving program-by-program analysis than by a broad, supermanager approach. It might be, for example, that the balance between grants-in-aid for capital construction and for facility maintenance and operation should be shifted in certain cases. But the appropriate context for such decisions would be in the review of budgets for grant programs or in a broad review of intergovernmental fiscal relations--i.e., in reviews that considered a range of priorities, not simply the desirability of capital formation."

OMB has again assumed a preference on our part that is not so. We do not believe that the creation of "new" committees for capital investment is needed. Broad oversight could be the responsibility of existing committees, such as the

as the Senate Environment and Public Works Committee and the House Committee on Public Works and Transportation. Both committees already have authorizing and oversight responsibility for many capital investment programs and projects. Giving these two committees broader oversight responsibility for capital investments would be similar to the broader oversight responsibility for research and development within the jurisdiction of the House Committee on Science and Technology and the Senate Committee on Commerce, Science, and Transportation. Both Committees have broader oversight responsibility than program and project authorization responsibilities. Similarly, we believe that the responsibility for advising the President on capital investments could logically be placed with the Domestic Policy Staff. As is the case with the House and Senate Committees, the Domestic Policy Staff is already responsible for policy advice on programs and projects involving many capital investments.

We believe that we are as concerned as OMB is about the integrity of the budget process. That is one of the considerations which led us to recommend a change that has already proved workable in the science policy area. This change would not set capital investments aside for special favor, just as it did not set research and development aside for special favor.

Our recommendation will not create a super-manager approach. As we said before, whether it creates an advocate or an informed adviser depends on many factors, such as who would fill the positions and how they perceived their duties.

Like OMB, we also see the need for improved program-by-program analysis. We do not believe that a top-down policy approach would hinder these improvements.

#### Specific comments from OMB and our responses

##### Chapter 1

"Human skills and organizational strengths are as much a part of productive 'infrastructure' as are physical capital facilities.

"The discussion of the lamentable problems of certain State/local governments in the physical capital areas could be matched by discussions of similar problems in the operating areas (i.e., frequently the problem is a significant shortfall in total resources, not just an imbalance in the use of resources).

"The chapter articulates reasons why State and local governments frequently use capital budgets separate from operating budgets and why private businesses must identify capital costs (i.e., in order to identify what constitutes profits). It fails to discuss how the Federal budget differs (i.e., because it is not-for-profit and does not operate under constitutional requirements for borrowing only for capital purposes, the Federal Government does not have a similar need for a capital budget). We note that our current practice conforms with the recommendations of the Report of the President's Commission on Budget Concepts. Furthermore, we worry that separate operating and capital budgets would provide temptations for budget gimmickry that are not possible now."

We do not support nor recommend separating the Federal "unified" budget into a capital investment budget and an operating budget. A thorough discussion of the advantages and disadvantages of separating the budget and a discussion of human resources as capital investments will be addressed in a later GAO report.

OMB continues its comments on chapter 1.

"The discussion about Special Analysis D is misleading. While the analysis has data weaknesses, the discussion greatly overstates the degree of central review (outside of the agency budget review) of various other special analyses. In general, all special analyses are prepared the way Special Analysis D is.

"In addition, the report criticizes Special Analysis D for not doing what it was never intended to do and what, in fact, it cannot do. For example, Special Analysis D is criticized at bottom of page 19 for not showing estimates of total assets. Of course, it doesn't. It is a measure of cash flow (outlays), not stocks. The discussion also contains no reference to the attention given to capital needs in agency and program budget reviews. These needs are considered explicitly and at length, even when construction and maintenance are not the major activities in the account.

"We disagree with the comment on pages 17-18 that the budget presentation of lending on a net basis is misleading; we have a longstanding disagreement with the GAO on this issue. The budget provides information on loans on both a gross and net basis;

we believe that approach is superior to the GAO proposals to associate loan repayments with tax receipts. Comment #5 on pages 20 and 21 regarding not splitting outlays is inaccurate. The comment regarding the classification of outlays for the purpose of Special Analysis D refers to an exception to the norm, and the programs used for illustrative purposes (general revenue sharing and community development block grants) are available, within broad limits, for use for either investment or operating purposes at the discretion of the recipient. It is not reasonable to expect any budget presentation to identify what recipients who have discretion over the use of funds will do with funds that have not yet been appropriated."

In our discussion of Special Analysis D, we state that it is not designed to be a resource from which one can infer or analyze Federal capital investment policies and practices. We simply pointed out the limitations of the Analysis when an attempt is made to use it for this purpose. We conclude by recommending that information cutting across all capital investments be reported to designated policy units in the Congress and the executive branch.

We do not mention the program level review because it is not relevant to Special Analysis D as a policy analysis tool. As OMB noted, GAO and OMB have a long standing disagreement on how to report loan repayments. We believe that there are enough accounts where capital and operating outlays are not separated to cause problems if Special Analysis D were used for policy analysis. The programs used for illustrative purposes (general revenue sharing and community development block grants) account for large dollar amounts, which make the exception very important. OMB's comments relative to the other special analyses indicates that perhaps their limitations should be studied further. We have deleted any reference to these analyses in our report.

## Chapter 2

"Any approach to Federal capital investment programs that leaves out the Defense Department is not a balanced approach."

The scope of our report includes the U.S. Army Corps of Engineers, which is an integral part of the Department of Defense. Whether all defense assets (including weapons), or only some capital assets (e.g., those which could be utilized by civilians) should be classified as Federal capital stock, is certainly a question that policy units looking at

capital investments should address. We did not address defense capital investments, but the House Armed Services Committee chose to do so. In its recent report, "Ailing Defense Industrial Base: Unready for Crisis," the Committee found, among other things, that:

- "the general condition of the defense industrial base has deteriorated and is in danger of further deterioration in the coming years;
- "the Department of Defense has neither an on-going program nor an adequate plan to address the defense industrial base preparedness issue; Department of Defense inaction in enhancing industrial base preparedness, coupled with instability within the five year defense program, weapon system procurement stretchouts, inadequate budgeting and inflation, has contributed to the deterioration of the U.S. defense industrial base, and as a consequence, jeopardizes the national security;" 1/

Moreover, the Committee's first nonlegislative recommendation is as follows:

"That the Committee on Armed Services take the following actions:

- recommend to the President that he establish within the Executive Office of the President a point of authority to initiate action, and to direct and coordinate the efforts of the several responsible departments and agencies, necessary to solve the many problems relating to productivity, quality, manpower and critical materials that afflict the defense industrial base." 2/

OMB continues with its comments on chapter 2.

"The report's definition of a successful organization is one that can acquire and maintain physical capital that satisfies its mission and clientele when conditions are adverse. (The report defines adverse conditions in this context as declining resources, political instability, or severe con-

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1/Committee Print Report 29, December 31, 1980, p. 1.

2/Ibid., p.2.



flict among interest groups.) This definition of a successful organization is inappropriate when applied to governmental institutions in a democracy. Governmental institutions in a democracy cannot have the autonomy and the freedom from the constraints imposed by the political process that the definition implies."

We have clarified our definition, as we point out on page 25. We agree that governmental institutions in a democracy should not be autonomous or free of the constraints imposed by the political process. We neither imply nor believe that they should be, nor do we believe that private companies are necessarily free from the constraints imposed by the political process. We simply see that some organizations, by planning and building credibility with the public, are better able to deal with the adverse conditions that we describe.

### Chapter 3

"The case studies in this chapter provide interesting descriptive information, but the judgments expressed about them are heavily biased in favor of capital investment. The issues that are raised can be reviewed satisfactorily only in an agency/program context, not in the capital/current budget context. If another team of GAO analysts were to perform a similar survey of operating programs, they could make an equally graphic case of shortfalls (i.e., there are problem areas where the total demand on resources is unbalanced relative to the available fiscal resources). It is the nature of the world that we live in that there are insufficient resources to satisfy all claims on those resources.

"Two sentences illustrate this point forcefully. On page 13 there is the sentence: 'Capital investments at this reduced level [for Conrail] will probably result in deterioration and a return to declining service, thus ending the benefits gained from the already significant Federal investment.' The final sentences on page 14 state: 'EPA now faces the problem of giving more money to new (or recently renovated) municipal water work facilities so that they can meet the permit standards. The alternative is to accept dirtier water.' The report appears to say that these capital invest-

capital investment is only one of those factors."

We do not make judgments in this chapter; we report the conditions of the infrastructure and the problems associated with those conditions.

#### Chapters 4 and 5

"These chapters are helpful in identifying some of the elements leading to effective or ineffective capital management. They also recognize that there are some understandable reasons why entities are not always able to choose the course or action that GAO would prefer (i.e., it is not clear that capital needs are so paramount that they should always override all other considerations). On page 5-21 there is a typing error that could mislead--it should refer to \$664 million, not billion. We note that the Postal Service is a unique agency--not a model for all Federal capital spending. It provides business-like services to the public; has no grants-in-aid or income transfer programs; has a single, easily identified set of services; and is able to make major savings in operating costs through large-scale capital investments. Few other major Federal operations have similar circumstances. As already noted, even this independence is not costless to the President and the Congress in terms of their control over the operation."

As we have discussed earlier, GAO has not expressed a preference for funding capital as opposed to other budget areas. We also discuss clearly all the relationships of the Postal Service to the Federal Government that OMB cites and the advantages and disadvantages associated with this arrangement.

#### Chapter 6

"This chapter addresses dilemmas, not certainties. For example, on page 9 it states that 'Decentralized decisionmaking in the block grant program plays a major role in the shift away from long-term renewal strategies in deteriorating areas. As the involvement of Federal agencies in community development activities has declined, the influence of local officials, such as chief executives, legislators, and planners, has increased. Local officials today tend to have shorter time horizons than Federal agency officials because they are much more

affected by political pressures and prevailing community values. As a result, the competition among interest groups is the rule, not the exception, for communities most in need.'

"We would suggest that this statement expressed a value judgment about which there are clear differences of opinion and that the statement may not be appropriate for the report."

As our footnote shows, this discussion was derived from a HUD report. We have further emphasized the derivation of this statement.

"Similarly, the criticism of local public works on page 11 is unfair. Of course, countercyclical public works spending cannot cure permanent deterioration of area investment; it was not intended for this purpose. Such programs must be evaluated on the basis of their own end purposes, not as panaceas to every problem. (A more appropriate question about them is: Do they succeed in fighting economic downturns in an effective manner and in keeping a high rate of public capital investment in times of temporary budget tightness due to economic downturns?) The same point goes for the criticism on page 17 '. . . emergency public works programs are normally for 1 or 2 years . . .' that deplores the fact that such investments do not fit into long-range planning. They are not intended to fit into long-term planning."

We recognize that these programs are by nature short term. However, we believe that maximum use of these funds can be achieved if these programs are implemented with full recognition of how they would affect a longer-range policy and program.

"The chapter [6] goes into great detail discussing perceived defects in grant program administration. Many of these defects are well known and subject to intensive remedial efforts by the Federal Government. However, as several GAO reports have argued, there are analogous defects in many direct Federal operations. The report reflects a lack of perspective in implying that application of stronger direct controls from Washington will cure most or all such defects, while it is clear from experience such controls frequently impose their own defects.

"It is argued on page 24 that 'no single agency coordinates the programs that influence State and local assets' and that this constitutes a 'void.' We do not agree that there should be Federal supervision of all State and local capital programs. However, OMB does coordinate a total review of the budget, and capital needs are part of that review. One of the factors that we take into consideration in our review is the state of capital investment in the governmental sectors, as well as elsewhere in the economy."

We have (as stated above) reworded our recommendations to more precisely state our intentions, which is to assign top-level units the responsibility for providing policy advice on capital investments. We are not recommending central management and control. OMB certainly does coordinate a total review of the budget, but OMB officials told us during our review that they do not take a cross-cutting look at capital investments. Agency officials say that coordination of capital investment needs among Federal agencies occurs only when two or more agencies are involved in the same, or similar, project.

#### Chapter 7

"We cannot concur with the efforts to separate physical capital spending from other budget decisions. We believe that capital investments should be considered as trade-offs against non-capital costs, primarily on the basis of their relative contributions to program outputs. We do not agree with the conclusion (on page 2) that 'Federal decisions about physical capital are based on a parochial view rather than a global one.'"

We do not advocate separating physical capital spending from other budget decisions. What we do advocate is a rational and logical approach to determining what the national policy should be for physical capital investments. In our opinion, such an approach should combine a top-down, global view with a bottom-up, program-by-program and project-by-project view. When this occurs, both the Congress and the executive branch will be better able to consider alternatives and make decisions as to what part of the Federal budget should be devoted to physical capital investments.

"The argument on page 3 that 'budgetary practices' promote uncontrollability through creation of open-ended programs is misleading. The budget must

reflect the requirements of the substantive legislation that establishes the entitlement; the legislation is what makes the entitlement relatively uncontrollable, not budgetary practices."

We have eliminated this reference to budgetary practices.

#### Chapter 8

"As already noted, we disagree with the basic recommendations proposed to remedy the problems."

As clarified, our recommendations stand.

# National Association of Counties

Offices • 1735 New York Avenue N.W., Washington, D.C. 20006 • Telephone 202/783-5113

November 17, 1980

Mr. Kenneth W. Hunter  
Senior Associate Director  
Program Analysis Division  
United States General Accounting Office  
Washington, D.C. 20548

Dear Mr. Hunter:

I spoke with Ted Boyden on the telephone last week to comment on the GAO draft report entitled "Federal Capital Budgeting: A Haphazard Collection of Practices." He suggested that I put my comments in writing.

When I reviewed the report, I dealt only with those sections that discussed the capital budgeting practices of state and local governments and I will address my remarks to those sections alone.

Generally speaking, the report is well-written and very readable -- no small virtue, given the turgid writing that usually characterizes government reports. It also provides a solid basis for your subsequent report on state and local capital budgeting.

In Chapter Two, under Survey and Fieldwork Methods, there is a section on criteria for selection of counties. I do not think that the three criteria provided are sufficiently explained. For example, geographical location does not really appear to be a criterion in the choice of Howard and Arlington Counties, both of which are located in the Washington, D.C. suburban area. Most would assume, I think, that choosing counties on the basis of geographical location implies choosing them because their geographical locations are widespread and represent different parts of the country. It appears that something else is meant by your criterion of geographical location and you should clarify what it is. Likewise, the criterion of "organizational structure" perhaps should be explained in terms of the county's governmental structure, e.g., elected county executive, county board - county administrator form. You appear instead to mean "service delivery structure," rather than the conventional "organizational structure." If so, your terminology should be changed. I also think that you might have included in your sample of counties a severely distressed county, such as Wayne County, Michigan, to make comparisons more meaningful, not only among counties, but between cities and counties. This is especially true because you included several distressed cities in your sample.

Mr. Kenneth W. Hunter

-2-

November 17, 1980

In Chapter Three, your discussion in the three sections dealing with the interrelationship between federal grants and state and local capital construction and maintenance indicates an understanding of the mutual responsibilities of the various governmental levels for protecting capital assets in the future. Particularly, the drafters of the report seem to comprehend the potentially dire financial consequences of deferral of capital maintenance in the current inflationary economic situation. This is a problem that should be addressed in some detail in your subsequent report on state and local capital budgeting.

The section of your report that deals most extensively with state and local capital construction and maintenance is Chapter Six. Several of the points you make are good ones: First, your emphasis on the need for the development of long-term strategies indicates an awareness of one of the major problems that has characterized state and local provision for capital construction, maintenance, and replacement -- the short-run planning horizon. Short-term planning is evident, as you pointed out, in the use of block grants for capital improvements. In a sense, the flexibility built into these grants discourages their use in a comprehensive capital improvement program. Likewise, countercyclical capital assistance through local public works programs is viewed as an emergency measure by local governments, designed to deal with their most pressing capital needs rather than to be included in a long-term plan.

Second, the report makes the point that federal capital programs generate additional costs to state and local governments and distort spending priorities. In your subsequent study, I suggest that you research these points in some detail, particularly from the perspective of state and local government compliance with federal mandates. NACo has worked with Dr. Catherine Lovell of the University of California at Riverside to define, identify and classify federal and state mandates. As part of that study, a model was developed to assist local governments in computing the cost of compliance with mandates. NACo would be very interested in the GAO looking more closely at the mandate issue in this particular area of capital construction and maintenance.

Third, Chapter Six rightly emphasizes the need for a consistent and workable federal policy toward state and local governments concerning capital improvements. The current lack of such a policy is due in part to the lack of cohesion among federal granting agencies in their dealings with state and local governments. The subsequent study by the GAO of state and local capital programs might outline a model for coordinating federal activities in this area. To develop the model, input from state and local government officials could be sought.

The remarks above summarize my observations concerning your report. Let me reiterate that I think it is a good foundation from which to launch a more detailed examination of state and local capital programs because it has identified the issues and problems that currently inform the federal - state and local relationship in this area.

Best wishes,



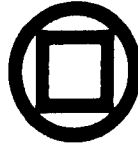
Martharose F. Laffey  
Tax and Finance Specialist

MFL/vlo

1140  
Connecticut  
Avenue  
Northwest  
Washington DC  
20036

Area Code 202  
828-3600

**International  
City  
Management  
Association**



December 9, 1980

Mr. Kenneth Hunter  
Senior Associate Director  
General Accounting Office  
Program Analysis Division  
Washington, D.C. 20548

Dear Mr. Hunter:

Thank you for sending a copy of the draft report on capital budgeting for our review.

Taking steps in Congress and the Executive Branch to focus attention on federal capital budgeting needs, and to formulate explicit capital budgeting procedures, is an excellent idea. No one could dispute that the condition of the nation's capital infrastructure has a long-term, direct impact on the economy and productive capacity.

In assessing capital infrastructure needs, I would urge that federal capital budgeting be analyzed in tandem with those of states and municipalities, as part of an integrated approach to capital budget planning.

Very truly yours,

  
Donald J. Borut  
Director  
Management Development Center





EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D.C. 20503

NOV 14 1980

Mr. Morton A. Myers  
Director, Program Analysis Division  
U.S. General Accounting Office  
Washington, D. C. 20548

Dear Mr. Myers:

This responds to your request for comments on the draft report: "Federal Capital Budgeting: A Haphazard Collection of Practices." The draft report addresses perceived inadequacies in budgeting practices for construction and maintenance of physical assets both by the Federal Government and by a significant number of grant-in-aid recipients. It proposes sweeping remedies for these perceived inadequacies.

The descriptive portions of the report are interesting; clearly, they are the product of considerable effort. We would hope that they might encourage better planning for and management of capital investments by Federal agencies within the constraints imposed upon them by limited resources and by the political process. As is explained in more detail later in this letter, we disagree with some of the descriptive material in the report, and we disagree with some of the analysis and conclusions. We also take exception to the subtitle of the report. It reflects, more than anything else, a lack of understanding of the seriousness with which budgeting for capital investments is taken within the Federal Government and the severity of the resource limitations imposed by fiscal constraints.

Our response is divided into two parts. The first provides general comments, while the second (an enclosure) comments on specific parts of the report. The latter comments illustrate and support the former points.

General Comments

We have several reactions to the basic thrust of the report. First, we agree that capital formation and maintenance is a critical issue with regard to both economic growth and the level of public services. However, there is a serious danger that the remedies outlined may be as undesirable as the problems the report attacks. This danger arises from a number of factors:

- (1) In several ways, the report appears to argue for a substantial increase in capital investment per se. Without regard to programmatic justification, this would be

undesirable national policy and bad budget policy, as would be a policy of increasing spending for any other object class by itself.

- (2) The Federal budget -- through both tax and spending policies -- has a major impact on total (public and private) capital formation in the United States. Both the executive branch and the Congress perceive a clear need to promote private capital formation. Any program that increases total Federal spending and thereby reduces resources available to achieve private investment must be approached cautiously.
- (3) The report argues for a major expansion of capital spending and development of budgetary devices to protect both capital and maintenance spending from other competing claims on budget resources. This approach could be accomplished only by having higher taxes, more borrowing, and/or lower spending for other purposes.

Decisions with regard to these issues cannot be made in the abstract, as your report appears to propose be done, by giving priority to one possible use of funds. They are made by the executive branch and the Congress after considering a range of alternatives. For example, the report states, and regrets, that the Veterans Administration places higher priority on delivering medical services than on construction of new medical facilities. If this is so, it reflects considered judgment -- and is not, as you assume it to be, necessarily incorrect.

Moreover, the portrayal of agency reviews, such as for the VA budget, as a process in which all current operating needs are satisfied and then additional resources (if any) go to capital projects does not accurately reflect the way budget reviews are conducted. Indeed, there are separate accounts in the VA budget for hospital construction, and the requests for these accounts are considered in considerable depth by both the Executive and the Congress. While you may believe that the funds appropriated for VA hospital construction by the Congress are inadequate, it is inaccurate to assert that VA or other capital needs are met only from residual funds. Capital investment needs are considered explicitly in the budget process, frequently in the very terms that you recommend, but they are considered in the context of the needs of the programs that they would serve and in the light of overall constraints.

- (4) As our first and third points suggest, when addressing public capital needs, there is no substitute for a program-by-program or project-by-project analysis. It would be possible to spend vast sums of money on capital investment that contributes little to the public welfare if the

objective were merely to increase capital investment in the public sector. While there may well be a need for increased capital investment in the public sector, that need has to be evaluated in the light of the resources that can be devoted to a given programmatic area and to the competing demands for resources within that area.

- (5) At several places, the report discusses the dangers of large-scale earmarking of funds for particular purposes, and then concludes that an appropriate remedy in the capital area is to earmark funds for capital investment. Such earmarking would add to the controllability problem that the report deplores, and inhibit the ability of the President and the Congress to budget rationally. We continue to believe that funding mechanisms for capital investments should not supplant judgments made after considering all the competing demands for resources.
- (6) Acceptance of the recommendations of the report might tend to affect the budget undesirably in another way: giving priority to investment in "bricks and mortar" over investment in research and human investment. Clearly, there are many cases where government expenditures for research or training may make a greater contribution to productivity than physical capital. Such expenditures frequently complement and induce productive private investments. Yet, under the approach outlined, public physical investment would receive a greater priority. We are not persuaded that this priority is necessarily better.

One of the conclusions of the report is that Federal controls over grants-in-aid to State and local governments must be increased to assure that more of these resources are devoted to capital investments. As you are undoubtedly aware, the trend over the past decade has been to seek ways to reduce Federal control over the use of grants and there is little likelihood that the strength of that trend will diminish soon. The whole purpose of community development block grants, for example, is to give localities broader flexibility in deciding priorities. The report recommendations would require a clear reversal of this effort: it would call for Federal project management to guarantee that investments are protected.

The report calls for a single approach to financing capital facilities in contrast with the variety of approaches now in use. Currently, for example, if the President and the Congress wish to provide maximum flexibility for an investment program, it can be done by authorizing a semi-autonomous body to spend stipulated sums of money without annual appropriations. This is done, for example, in the case of the Postal Service and the Tennessee Valley Authority. Clearly, it is possible to provide such autonomy without excluding the spending from the budget: the TVA

is included in the budget as is the subsidy payment to the Postal Service. However, there are fundamental drawbacks to such autonomy; the President and the Congress lose effective control over significant parts of the budget. Hence, this type of approach is used only when the perceived need for autonomy is believed to outweigh the normal desirability for annual budget control.

An alternative approach is to authorize fully funded capital projects. This is common, for example, for major procurement and construction in the Defense budget and in other areas. In contrast, there are cases -- the Corps of Engineers is a good example -- where the Congress provides incremental funding for construction projects. Here, the Congress prefers to make moderate progress on a large number of projects through annual appropriations rather than to fully fund a few each year. Economic analysis can contribute to evaluating which projects could be completed most expeditiously at least cost, but as long as the congressional preference for many simultaneous projects persists, such analysis would be fruitless.

The report seems to be unbalanced in other major respects. For example, the definition of a "successful" organization appears inadequate, and there is an inadequate recognition of the dimensions of the fiscal straits of some localities. In chapter 2, page 2, a successful organization is defined as "one that can acquire and maintain physical capital that satisfies its mission and clientele even when conditions are adverse." Clearly, however, the interests of the taxpayer may differ from those of the organization and clientele, especially when conditions are adverse. Subsequently, the report suggests means for forcing localities to develop and maintain certain physical capital standards regardless of the localities' perception of fiscal priorities.

Our understanding of the problem is that, because of their weak financial condition, some communities require either vastly increased resources (which will not come easily) or a significant reduction in the public services they can provide. It is not clear that efforts by the Federal Government to force the locality to maintain a perceived "adequate" capital base in the face of an overall lack of fiscal resources is appropriate policy. Nor does the Federal Government have a ready source of funds that can be used to provide the degree of relief that is proposed. We cannot agree that spending on capital projects should automatically be exempted from the fiscal constraints that Federal, State, and local governments face, and we cannot agree that perceived "mission and clientele" needs should override the prerogatives of elected officials or the electorate in guiding fiscal policy.

We also do not agree with the solutions that are proposed in the final chapter of the report. Having argued forcefully that the capital formation portions of the budget should be insulated from the political process (because of the dangers of "pork barrel" and of perceived short-sighted judgments), the report then proposes creation of new congressional oversight committees. Of course, we will not presume to tell the Congress how to organize itself, but the report does not make a convincing case that these new committees would either benefit the congressional budget process or achieve the stipulated objectives. We strongly doubt the utility of separating oversight responsibility for program operations from responsibility for program capital formation.

Similarly, the proposal for a new office in the Executive Office of the President that would have an "advocacy" role in favor of capital outlays appears to us to be misguided. In our opinion, the objective of balancing alternative claims on limited budget resources is better served through the traditional budget process. Obviously there always is room for improvement in our budget analyses, including those applicable to capital investment. However, such improvements need to be made in a way that preserves the integrity of a budget process that is designed to achieve reasonable distribution of available resources among competing claims on those resources. Setting capital investments aside for special favor would not do that.

What we are suggesting, in essence, is that inadequacies in public capital formation or maintenance would be better served by improving program-by-program analysis than by a broad, supermanager approach. It might be, for example, that the balance between grants-in-aid for capital construction and for facility maintenance and operation should be shifted in certain cases. But the appropriate context for such decisions would be in the review of budgets for grant programs or in a broad review of intergovernmental fiscal relations -- i.e., in reviews that considered a range of priorities, not simply the desirability of capital formation.

I trust these comments will be useful to you in preparing your final report. If you would like to discuss them, let us know.

Sincerely,



Dale R. McOmber  
Assistant Director  
for Budget Review

Enclosure

EnclosureSpecific Comments

Chapter 1: Human skills and organizational strengths are as much a part of productive "infrastructure" as are physical capital facilities.

The discussion of the lamentable problems of certain State/local governments in the physical capital area could be matched by discussions of similar problems in the operating areas (i.e., frequently the problem is a significant shortfall in total resources, not just an imbalance in the use of resources).

The chapter articulates reasons why State and local governments frequently use capital budgets separate from operating budgets and why private businesses must identify capital costs (i.e., in order to identify what constitutes profits). It fails to discuss how the Federal budget differs (i.e., because it is not-for-profit and does not operate under constitutional requirements for borrowing only for capital purposes, the Federal Government does not have a similar need for a capital budget). We note that our current practice conforms with the recommendations of the Report of the President's Commission on Budget Concepts. Furthermore, we worry that separate operating and capital budgets would provide temptations for budget gimmickry that are not possible now.

The discussion about Special Analysis D is misleading. While the analysis has data weaknesses, the discussion greatly overstates the degree of central review (outside of the agency budget review) of various other special analyses. In general, all special analyses are prepared the way Special Analysis D is.

In addition, the report criticizes Special Analysis D for not doing what it was never intended to do and what, in fact, it cannot do. For example, Special Analysis D is criticized at bottom of page 19 for not showing estimates of total assets. Of course, it doesn't. It is a measure of cash flow (outlays), not stocks. The discussion also contains no reference to the attention given to capital needs in agency and program budget reviews. These needs are considered explicitly and at length, even when construction and maintenance are not the major activities in the account.

We disagree with the comment on pages 17-18 that the budget presentation of lending on a net basis is misleading; we have a longstanding disagreement with the GAO on this issue. The budget provides information on loans on both a gross and net basis; we believe that approach is superior to the GAO proposals to associate loan repayments with tax receipts.

Comment #5 on pages 20 and 21 regarding not splitting outlays is inaccurate. The comment regarding the classification of outlays for the purpose of Special Analysis D refers to an exception to the norm, and the programs used for illustrative purposes (general revenue sharing and community development block grants) are available, within broad limits, for use for either investment or operating purposes at the discretion of the recipient. It is not reasonable to expect any budget presentation to identify what recipients who have discretion over the use of funds will do with funds that have not yet been appropriated.

Chapter 2: Any approach to Federal capital investment programs that leaves out the Defense Department is not a balanced approach.

The report's definition of a successful organization is one that "can acquire and maintain physical capital that satisfies its mission and clientele when conditions are adverse." (The report defines "adverse conditions" in this context as "declining resources, political instability, or severe conflict among interest groups.") This definition of a successful organization is inappropriate when applied to governmental institutions in a democracy. Governmental institutions in a democracy cannot have the autonomy and the freedom from the constraints imposed by the political process that the definition implies.

Chapter 3: The case studies in this chapter provide interesting descriptive information, but the judgments expressed about them are heavily biased in favor of capital investment. The issues that are raised can be reviewed satisfactorily only in an agency/program context, not in the capital/current budget context. If another team of GAO analysts were to perform a similar survey of operating programs, they could make an equally graphic case of shortfalls (i.e., there are problem areas where the total demand on resources is unbalanced relative to the available fiscal resources). It is the nature of the world that we live in that there are insufficient resources to satisfy all claims on those resources.

Two sentences illustrate this point forcefully. On page 13 there is the sentence: "Capital investments at this reduced level [for Conrail] will probably result in deterioration and a return to declining service, thus ending the benefits gained from the already significant Federal investment." The final sentences on page 14 state: "EPA now faces the problem of giving more money to new (or recently renovated) municipal waterwork facilities so that they can meet the permit standards. The alternative is to accept dirtier water." The report appears to say that these capital investments must be made. Our point is that such decisions are properly made in the budget process in a political

context and are made after considering a number of factors; the desirability of increased capital investment is only one of those factors.

Chapters 4 and 5: These chapters are helpful in identifying some of the elements leading to effective or ineffective capital management. They also recognize that there are some understandable reasons why entities are not always able to choose the course of action that GAO would prefer (i.e., it is not clear that capital needs are so paramount that they should always override all other considerations).

On page 5-21 there is a typing error that could mislead -- it should refer to \$664 million, not billion.

We note that the Postal Service is a unique agency -- not a model for all Federal capital spending. It provides business-like services to the public; has no grants-in-aid or income transfer programs; has a single, easily identified set of services; and is able to make major savings in operating costs through large-scale capital investments. Few other major Federal operations have similar circumstances. As already noted, even this independence is not costless to the President and the Congress in terms of their control over the operations.

Chapter 6: This chapter addresses dilemmas, not certainties. For example, on page 9 it states that "Decentralized decisionmaking in the block grant program plays a major role in the shift away from long term renewal strategies in deteriorating areas. As the involvement of Federal agencies in community development activities has declined, the influence of local officials, such as chief executives, legislators, and planners has increased. Local officials today tend to have shorter time horizons than Federal agency officials because they are much more affected by political pressures and prevailing community values. As a result, the competition among interest groups is the rule, not the exception, for communities most in need."

We would suggest that this statement expresses a value judgment about which there are clear differences of opinion and that the statement may not be appropriate for the report.

Similarly, the criticism of local public works on page 11 is unfair. Of course, countercyclical public works spending cannot cure permanent deterioration of area investment; it was not intended for this purpose. Such programs must be evaluated on the basis of their own end purposes, not as panaceas to every problem. (A more appropriate question about them is: Do they succeed in fighting economic downturns in an effective manner and in keeping a high rate of public capital investment in times of



temporary budget tightness due to economic downturns?) The same point goes for the criticism on page 17 "...emergency public works programs are normally for 1 or 2 years..." that deplores the fact that such investments do not fit into long-range planning. They are not intended to fit into long-term planning.

The chapter goes into great detail discussing perceived defects in grant program administration. Many of these defects are well known and subject to intensive remedial efforts by the Federal Government. However, as several GAO reports have argued, there are analogous defects in many direct Federal operations. The report reflects a lack of perspective in implying that application of stronger direct controls from Washington will cure most or all such defects, while it is clear from experience such controls frequently impose their own defects.

It is argued on page 24 that "no single agency coordinates the programs that influence State and local capital assets" and that this constitutes a "void". We do not agree that there should be Federal supervision of all State and local capital programs. However, OMB does coordinate a total review of the budget, and capital needs are part of that review. One of the factors that we take into consideration in our review is the state of capital investment in the governmental sectors, as well as elsewhere in the economy.

Chapter 7: We cannot concur with the efforts to separate physical capital spending from other budget decisions. We believe that capital investments should be considered as trade-offs against noncapital costs, primarily on the basis of their relative contributions to program outputs. We do not agree with the conclusion (on page 2) that "Federal decisions about physical capital are based on a parochial view rather than a global one."

The argument on page 3 that "budgetary practices" promote uncontrollability through creation of open-ended programs is misleading. The budget must reflect the requirements of the substantive legislation that establishes the entitlement; the legislation is what makes the entitlement relatively uncontrollable, not budgetary practices.

Chapter 8: As already noted, we disagree with the basic recommendations proposed to remedy the problems.

**UNITED STATES WATER RESOURCES COUNCIL**

SUITE 800 • 2120 L STREET, NW WASHINGTON, DC 20037

NOV 25 1980

Mr. Henry Eschwege  
Director  
Community and Economic  
Development Division  
General Accounting Office  
Washington, DC 20548

Dear Mr. Eschwege:

Thank you for the opportunity to review your draft report on capital budgeting entitled "Federal Capital Budgeting: A Haphazard Collection of Practices."

The Council staff does not have any specific comments to offer on the draft report. After the report is final, we may wish to examine with our Member agencies coordinated procedures to implement specific recommendations as they relate to water resources planning.

Sincerely,

A handwritten signature in black ink that reads "Gerald D. Seimwill".

Gerald D. Seimwill  
Acting Director



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

14 JAN 1981

OFFICE OF  
PLANNING AND MANAGEMENT

MEMORANDUM

**SUBJECT:** Comments on GAO Proposed Federal Capital Budgeting Report

**FROM:** C. William Carter, Deputy Assistant Administrator for Resources Management (PM-224)

**TO:** Donna Heivilin, Principal Budget Policy Analyst  
Program Analysis Division, General Accounting Office

Your proposed report on federal capital budgeting practices has presented a convincing case that, taken as a whole, federal capital budgeting is inadequate and requires revised policy, planning, budgeting, and postaudit procedures. EPA is addressed in the study in terms of its water treatment construction grants program, which contributes to the National capital infrastructure even though the Federal government does not own or maintain the completed treatment plants.

The EPA Construction Grant program differs, however, to a great extent from other Federal government capital budgeting entities. Construction Grant funds are allocated by State on a Congressionally mandated formula rather than by application from the states (individual grants to municipalities, however, are based on needs and priority determinations at the state level). Grant funds are set up as a separate appropriation under a separate authorization. Unlike other agencies which you discussed, we cannot reduce the construction grants program to fund operating programs. We are, therefore, not subject to the same capital budgeting pressures as other agencies.

EPA administers the grant monies within a regulatory structure which controls to a large extent where and how the funds can be expended. Within this framework we are well on our way toward implementation of most of your study recommendations. We have begun, for example, a construction grants long-range 1990 Plan which would address the long-term national requirements in the area of waste water treatment and outline EPA's projected response to those requirements. We already have short term plans for utilization of construction grant funds and integrate these plans into our budget process. In conjunction with state

-2-

and local governments, alternatives are examined before construction and results are monitored after completion.

Our main concern is not with your recommendations, but with the procedures and additional resources which will be required to implement the recommendations. The system which must be set up for government-wide implementation of these recommendations would greatly affect EPA in terms of effort needed to tailor our system to a larger federal effort. More specifics are needed before we can assess the real impact of your recommended capital budgeting changes. In terms of policy decisions, the study looks to an overall capital budgeting policy role to be assumed by Congress and the President. As federal policy changes, so would EPA's planning and budgeting response to the construction grants program. One policy change suggested is the use of federal funds for maintenance as well as construction of capital projects. This represents a fundamental shift from the statute, and would result in a major reorientation of the intent of construction grants program policy, the resource requirements, and the objectives for which the program was authorized. The study should address the need for additional resources required by agencies to meet shifts of this nature in both policy and implementation procedure.

cc: Jim Teare  
Carl Reeverts  
Dave Hawkins  
Steve Gage  
Inez Reid  
Chris Beck  
Marc Pugh  
Harvey Pippen  
Brenda Green  
Roy Gamse  
Cindy Kelly



General  
Services  
Administration

Washington, DC 20405

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Honorable Elmer B. Staats  
Comptroller General of the United States  
U.S. General Accounting Office  
Washington, DC 20548

Dear Mr. Staats:

Thank you for the opportunity to comment on the General Accounting Office draft report "Federal Capital Budgeting: A Haphazard Collection of Practices" (PAD-81-19), dated October 27, 1980.

I am in basic agreement with the report's overall concept that a policy-level approach to capital investment should be added to the Federal Government's decisionmaking process and up-to-date information is needed to support this approach. The General Services Administration (GSA) began development of a management planning system to specifically link the planning process to the budget and provide detailed information on facility planning, prospectus review, resource availability, and program assessment. We anticipate having this system fully operational by early 1981, and believe that it conforms to the concept proposed in your report.

I believe the enclosed statement fully explains our position. If there are any questions, I am available to discuss the matter with you or your representatives.

Sincerely,

Enclosure

## General Services Administration (GSA)

Comments on the GAO Draft Report "Federal Capital Budgeting: A Haphazard Collection of Practices"General comments

GSA is in general agreement with the concept that a policy-level approach to capital investment should be added to the Federal Government's decisionmaking and up-to-date information is needed to support this approach. Several references in the report refer to the present shortcomings of GSA's long-range capital investment plans and the present efforts of GSA to develop and implement a long-range plan. GSA is currently developing a Management Planning System (MPS) which sets forth long-range policies on public building acquisitions, construction, leasing, and major repair. The automated system, which will be completed in early 1981, proposes to closely link the planning process with budgeting; and, provide detailed information on facility planning, prospectus review, resource availability, and the assessment of program accomplishments against planned targets. In addition, since June 1979, administration policy requires a capitalized income approach be used for all new construction and lease prospectus cost estimates which is in conformance with sound capital budgeting principles.

We also feel that the report should be more clear as to whether the General Accounting Office (GAO) is focusing strictly on new construction only or includes claims, acquisitions from the U.S. Postal Service, etc.

Specific CommentsPage 3-4:

New Construction, Paragraph 2, lines 8-10 state, "At GSA daily operations and lease and purchase contract payments are given first priority, followed by alterations and repairs and last by new construction."

While new construction has not been utilized as much as GSA would prefer in order to meet the space needs of Federal agencies, GSA would still like to implement a major Federal construction program. In that regard, we have identified projects that could be developed through new construction for the period from FY 1982 through 1987. However, budgetary constraints imposed on GSA have limited its authority to implement such a program.

Repair and Alterations (R&A). In the R&A program, capital projects are currently identified and programmed over a 5-year period. Projects over \$500,000 require Congressional authorization before they can proceed. Therefore, reviewers in the

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Executive Branch as well as the Legislative Branch are being constantly updated on the basis for resource allocation decisions in the R&A program.

Page 3-7:

New Construction. GSA's new construction appropriation in FY 1980 was \$29.3 million plus an additional \$100.6 million approved in the FY 1980 supplemental appropriation, for a total of \$129.9 million. In addition, GSA currently has a backlog of \$737.2 million of new construction projects pending before the Public Works Committees of Congress.

Repairs and Alterations. With the exception of two fiscal years, 1978 and 1979, the amount of money available to GSA for repairs has in constant dollars increased very slightly over the past 10 years. Over the past two fiscal years, the amount of R&A funds has been declining. For FY 1980, GSA received only \$151.3 million, and we expect a nominal increase for FY 1981 once final action is taken by the Congress on our request.

In only FY 1978 has the amount of R&A funds received offset the new work inventory. As a result, our inventory has continued to grow. Much of the increase in the R&A inventory is attributable to inflation, which has consistently been over 10 percent in the construction industry the past several years. Incoming workload has also increased as a result of new programs such as energy, handicapped, and omnibus court work; the acquisition of postal buildings; and, the aging process of our buildings--the majority of which are over 30 years old. A significant increase in appropriation levels will be required in the future to reduce our workload inventory.

Page 5-4:

New Construction, Paragraph 1, lines 1-18 state, "In contrast to the Postal Service, GSA is subject to strong congressional control....These factors do not encourage capital planning. The result is that GSA management does not have a long-term capital investment program." In addition, page 5-10, paragraph 2, lines 1-7 state, "Right now GSA does not prepare any long-range capital investment plans. Officials say they used to prepare them, but since there have been so few funds for new construction in recent years they feel it is a waste of time to plan construction projects. However, GSA is currently working on a 5-year plan for housing its Federal customers. This plan is expected to be ready for use for the 1983 budget cycle." As part of our MPS which was initiated in FY 1980, multiyear projections and analyses of Federal Buildings Fund income are made in order for GSA to plan its 5-year capital investment program.

Repairs and Alterations. GSA is making every effort to accomplish effective long-range planning within the current

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prospectus process. The multiyear planning system referred to above is being established to review and validate projects anticipated in the next five years before they are placed in GSA's annual budget.

Page 5-10:

GAO states that GSA officials "feel that it is a waste of time to plan construction projects." This probably overstates the case since GSA must, through the prospectus procedure, plan construction projects. At this time there is no cohesive, prioritized plan for all construction projects but this is in the development stage and would be required under S. 2080. In addition, the comments which were made regarding page 5-4 also apply to this section.

Page 5-16:

Repairs and Alterations. As the report points out, delays in prospectus approvals have hampered GSA's efforts to fund projects as needed. We are now attempting to include projects in our R&A program which have an approved prospectus. Of the 31 projects listed in the FY 1981 R&A budget, prospectuses had not been fully approved for only seven locations when the budget was transmitted to the Congress. Subsequently, the Congress has approved prospectuses for all but one of these projects. GSA is forced in many instances to include projects in their budgets for which a prospectus has not been approved due to critical repair work and agency requirements.

Page 5-20:

GAO figures for the amount of new construction funds are incorrect as well as the amounts returned to the Treasury. The availability for new construction in FY 1975 through 1980 should be \$386 million instead of \$288 million, with an average to \$64 million a year instead of \$43 million. The excess Fund receipts deposited in Treasury from FY 1975 through FY 1979 pursuant to the Fund's appropriation language for these fiscal years relating to the new construction program was \$2.4 million. The \$13 million referred to in the report as excess receipts pertain to the entire fund. The second reference to the average of \$48 million should be changed to \$64 million.



CONSTITUTIONAL PROVISIONS RELATED TO THE  
INFRASTRUCTURE OF THE UNITED STATES

Responsibility for the public sector infrastructure, as in other duties, is divided between the Federal Government and the States. As described in this report, the relationship between the Federal Government and the States and their subdivisions varies among the programs. Below are brief statements of constitutional provisions under which Federal legislation for infrastructure creation and use and maintenance is enacted.

1. The Commerce Clause (Article I, Section 8, Clause 3) gives the Congress the power to construct interstate highways, develop air traffic routes and airports and other activities (bridges, canals, railroads, dams, levees, wharfs, etc.) as needed to promote interstate commerce.
2. Through the power conferred by Article I, Section 8, Clause 7, the Congress can construct and authorize construction of highways, airports, etc. needed to carry mail and secure its safe and speedy movement.
3. Article I, Section 8, Clauses 12 and 13, empower the Congress to raise, support, and supply armies and a navy (which includes purchasing or erecting warships and equipment). This clause was used as justification to create the Naval Academy.
4. The necessary and proper clause (Article I, Section 8, Clause 18) empowers the Congress to pass laws necessary and proper for the execution of any specified Constitutional power, such as the power to regulate interstate commerce.
5. Article IV, Section 3, Clause 2-- the property clause-- states that "The Congress shall have the power to dispose of and make all needed rules and regulations respecting the territory or other property belonging to the U.S." This clause has been used to uphold the constitutionality of the Government's production and sale of electricity by the Tennessee Valley Authority.

LOCATIONS VISITEDFEDERAL GOVERNMENT

Department of Housing and Urban Development:  
Washington, D.C.

Department of Transportation:  
Washington, D.C.

Environmental Protection Agency:  
Washington, D.C.

General Services Administration:  
Washington, D.C.  
Auburn, Washington

Office of Management and Budget:  
Washington, D.C.

U.S. Army Corps of Engineers:  
Washington, D.C.

U.S. Postal Service:  
Washington, D.C.

Veterans Administration:  
Washington, D.C.

STATE GOVERNMENTS

California:  
Sacramento

Michigan:  
Lansing

Ohio:  
Columbus

Pennsylvania:  
Harrisburg

COUNTY GOVERNMENTS

Arlington County, Virginia

Howard County:  
Ellicott City, Md.

Maricopa County:  
Phoenix, Arizona

Oakland County:  
Pontiac, Michigan  
Bloomfield Hills, Michigan

CITY GOVERNMENTS

San Jose, California

Baltimore, Maryland

Detroit, Michigan

Cleveland, Ohio

INDUSTRY

American Telephone and Telegraph Company:  
Basking Ridge, New Jersey  
New York, New York

The Boeing Company:  
Seattle, Washington

The General Motors Corporation:  
Detroit, Michigan

The Republic Steel Corporation:  
Cleveland, Ohio

REGIONAL AUTHORITY

Port Authority of New York and New Jersey:  
Jersey City, New Jersey  
New York, New York

(920691)





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