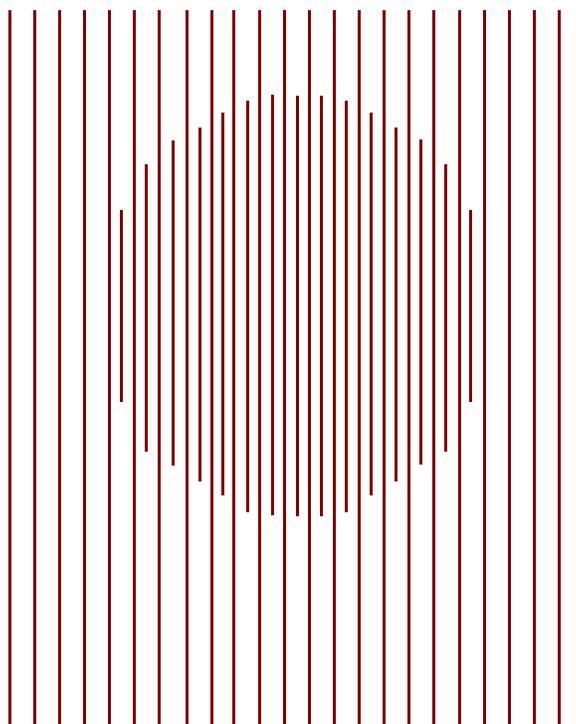


# CBO PAPERS

**PUBLIC INFRASTRUCTURE  
SPENDING AND AN ANALYSIS OF  
THE PRESIDENT'S PROPOSALS  
FOR INFRASTRUCTURE SPENDING  
FROM 1996 TO 2000**

**June 1995**



**CONGRESSIONAL BUDGET OFFICE**



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**June 1995**



**CONGRESSIONAL BUDGET OFFICE  
SECOND AND D STREETS, S.W.  
WASHINGTON, D.C. 20515**

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## NOTES

All years referred to in this paper are fiscal years.

Discussions of the President's proposals and the President's budget refer to the *Budget of the United States Government, Fiscal Year 1996*, submitted by President Clinton to the Congress in February 1995.

All figures in the section "Inflation-Adjusted Trends in Public Spending and Proposed Federal Spending for Infrastructure" are in 1990 dollars.

All figures in the section "The President's 1996 Budget: Infrastructure Proposals for the 1996-2000 Period" are in nominal dollars.

The baseline projections of the Congressional Budget Office show the likely path of spending if current laws remain unchanged. The baseline does not project budget outcomes but instead provides a benchmark against which different policies can be compared. Previously, CBO's baseline referred to the projection of current-year levels of budget authority, outlays, revenues, and the surplus or deficit--adjusting for inflation in discretionary appropriations--into the budget year and the out-years. Currently, CBO also provides baseline projections without adjusting for inflation. Although both baseline projections are provided in the tables, all baseline comparisons in the text refer to the inflation-adjusted baseline.

All CBO baseline references are to the March 1995 baseline.

Data on state and local outlays and total public outlays are available through 1991; data on federal outlays are provided through 1995.

Numbers in the text and tables of this paper may not add to totals because of rounding.

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## **PREFACE**

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At the request of the House Committee on Transportation and Infrastructure, this Congressional Budget Office (CBO) paper continues the detailed analysis of infrastructure outlays in CBO's August 1993 paper *Updating Trends in Public Infrastructure Spending and Analyzing the President's Proposals for Infrastructure Spending from 1994 to 1998*. In addition, it analyzes current and future spending proposals through 2000 based on the budget submitted by President Clinton to the Congress in February 1995.

Aaron Zeisler of CBO's Natural Resources and Commerce Division wrote the paper under the supervision of Elliot Schwartz and Jan Paul Acton. The author wishes to thank many people, both inside and outside CBO, for their helpful contributions. Within CBO, John Patterson helped to prepare and analyze data related to the President's 1996 budget. David Sanders, Jeff Holland, and Robert Arnold were also of great assistance in preparing data. Elizabeth Pinkston offered many useful comments and suggestions. Outside CBO, Gerard Keffer of the Bureau of the Census facilitated the compiling of state and local spending data.

Paul L. Houts edited the manuscript, and Christian Spoor provided editorial assistance. Donna Wood and Kathryn Quattrone prepared the paper for publication.

June E. O'Neill  
Director

June 1995



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**SUMMARY**

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Public infrastructure outlays have risen in real (inflation-adjusted) terms throughout most of the 1956-1991 period. Since the end of the 1980s, however, state and local governments have contributed approximately 75 percent of those outlays, and current patterns of spending uphold that trend.

In 1994, total federal spending for infrastructure was \$45.3 billion in nominal terms (not adjusting for inflation). The mix between capital and noncapital outlays remained about the same--70 percent capital investment and 30 percent noncapital investment. Federal spending is estimated to rise again in 1995 to \$47.2 billion, a nominal increase of 4.3 percent, but a real increase of only 1.9 percent. If the contributions of state and local governments remain at their historical levels, total public spending for infrastructure for 1995 will increase.

As for the 1996-2000 period, the President's proposals would lead to a decrease in total infrastructure spending for most programs. Based on the President's budget, outlays for federal infrastructure programs in 1996 would fall by 2.2 percent in nominal terms--from \$47.2 billion in 1995 to \$46.2 billion. Although spending for all types of infrastructure would total \$225.5 billion (in nominal terms) from 1996 through 2000, spending for each category would decline by 2000. In addition, by 2000 outlays for all infrastructure programs would be at approximately 92 percent of their 1995 spending levels. Relative to the Congressional Budget Office (CBO) baseline, those increases would represent a 11.6 percent decline, or a difference of \$29.6 billion between the President's budget and CBO's inflation-adjusted baseline over the five years. When compared with the baseline, most of the decreases in spending during the 1996-2000 period would occur in surface transportation as well as water supply and wastewater treatment.

The Administration's proposed Unified Transportation Infrastructure Investment Program would encompass a large portion of federal spending and would give states and localities more control over investment decisions. However, outlays for highways, transit, rail, and aviation would fall by approximately \$0.5 billion in 1996, a 1.4 percent cut from 1995 levels. Compared with the CBO baseline, outlays for those programs would decline by \$21 billion over the 1996-2000 period. The President's budget has not specified those cuts by transportation mode. It would be left to the states to decide their own priorities for infrastructure in light of those budget reductions.



## INTRODUCTION

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The public facilities, resources, and services known as infrastructure are vital to the nation's production and distribution of private economic output, in addition to its citizens' overall quality of life. Infrastructure includes, for example, highways, mass transit, railways, airports, and water supply and wastewater treatment facilities. The cost of constructing, maintaining, and operating such infrastructure is great: during the 1980s, approximately 2.7 percent of the nation's gross domestic product (GDP) was spent annually for those purposes. By 1991, total public spending for infrastructure was \$158 billion.

This Congressional Budget Office (CBO) paper highlights trends in spending for infrastructure by all levels of government over the past 36 years. It also analyzes the President's proposals for federal infrastructure spending for 1996 through 2000 and compares them with the CBO's baseline projections. The data presented in this paper are based on data supplied by the Office of Management and Budget, the Bureau of the Census, and the CBO's Budget Analysis Division. The paper uses the same eight categories of infrastructure discussed in CBO's 1992 and 1993 papers on spending for infrastructure: highways, mass transit, rail, aviation, water transportation, water resources, water supply, and wastewater treatment facilities.<sup>1</sup> Like those papers, this analysis also divides spending into capital outlays (primarily the purchase, construction, or rehabilitation of physical assets) and noncapital outlays (primarily the operation and maintenance of physical assets).

Through 1994, CBO has updated the historical analysis of federal spending for infrastructure (total, direct, and indirect) that was presented in its 1993 paper. In addition, it has analyzed federal infrastructure budgets for 1995 and for 1996 through 2000.<sup>2</sup> Through 1991, CBO has calculated state and local government spending (both total spending and total spending net of federal grants and loans) as well as total public spending (total federal spending plus state and local spending net of federal grants and loans). Thus, this set of infrastructure data is continuous from 1956 through 1991 for total public spending (federal, state, and local) and continuous from 1956 through 2000 for federal spending. The appendix presents definitions, methods, and sources used to create the set of data.

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1. See Congressional Budget Office, *Trends in Public Infrastructure Outlays and the President's Proposals for Infrastructure Spending*, CBO Paper (May 1992), and *Updating Trends in Public Infrastructure Spending and Analyzing the President's Proposals for Infrastructure Spending from 1994 to 1998*, CBO Paper (August 1993).
  2. Estimates of federal spending are available for 1995 and for 1996 through 2000 in the *Budget of the United States Government, Fiscal Year 1996*. Data on state and local government spending are from the Bureau of the Census's *Government Finances* series and are available only through 1991. Thus, total spending by federal, state, and local governments (referred to as public spending) cannot be calculated for 1992 through 2000.

For more recent state and local government spending data, see Bureau of the Census, *Government Finances: 1991-1992, Preliminary Report* (August 1994).

## **INFLATION-ADJUSTED TRENDS IN PUBLIC SPENDING AND PROPOSED FEDERAL SPENDING FOR INFRASTRUCTURE**

Total public spending for infrastructure has risen in inflation-adjusted (known as "real") terms over the 1956-1991 period (see Table 1).<sup>3</sup> From 1981 to 1991, total expenditures increased steadily in real terms (falling only in 1982) at an average rate of 2.6 percent a year. Total outlays rose by 3.6 percent between 1990 and 1991--from \$147.6 billion to \$152.9 billion.

Although total public spending for infrastructure has increased, many of the underlying components of that spending have fluctuated. CBO estimates that they will continue to do so in the future. Those components reveal several changes.

- o *The relative contributions of federal, state, and local governments have varied widely.* Over the 1956-1976 period, federal spending for infrastructure was approximately 40 percent of state and local government spending and roughly 30 percent of total public spending. After peaking in 1977 at 39.4 percent, the federal share has continued to decline as a percentage of the total. Although both federal outlays and state and local outlays increased in 1991, federal spending relative to state and local government spending was still proportionally less than it had been in more than three decades: it was 32 percent of the size of the state and local government contribution and 24 percent of total public spending for infrastructure.
- o Capital outlays have fluctuated more than noncapital outlays.<sup>4</sup> From 1956 through 1991, noncapital outlays increased steadily (see Table 2). Since 1973, they have grown almost every year. In contrast, capital outlays rose and fell over the 1956-1991 period. Nevertheless, since 1982, capital investment has increased every year at an average annual rate of 4.9 percent.
- o *Priorities for infrastructure programs have changed more at the federal level than at the state and local levels.* Federal infrastructure spending has always been dominated by spending for highways. During the 1970s, however, federal spending for infrastructure was relatively more focused on wastewater treatment, transit, and water supply. Beginning in the 1980s and

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3. All spending referred to in the text, tables, and figures of this section is in 1990 dollars.

4. For a complete discussion, see Congressional Budget Office, *Trends in Public Infrastructure Outlays*.

TABLE 1. PUBLIC SPENDING FOR INFRASTRUCTURE, 1956-1991  
(In millions of 1990 dollars)

Year	Total	Federal	Percentage of Total	State and Local <sup>a</sup>	Percentage of Total
1956	66,892	11,638	17.4	55,254	82.6
1957	71,836	12,787	17.8	59,050	82.2
1958	73,967	15,052	20.3	58,915	79.7
1959	78,022	21,605	27.7	56,418	72.3
1960	76,534	23,359	30.5	53,175	69.5
1961	81,329	23,472	28.9	57,857	71.1
1962	82,446	23,799	28.9	58,647	71.1
1963	85,192	24,756	29.1	60,435	70.9
1964	86,861	27,094	31.2	59,766	68.8
1965	90,444	29,229	32.3	61,215	67.7
1966	93,027	28,907	31.1	64,120	68.9
1967	95,769	28,619	29.9	67,151	70.1
1968	97,161	29,206	30.1	67,955	69.9
1969	99,230	28,737	29.0	70,493	71.0
1970	99,959	28,694	28.7	71,264	71.3
1971	105,999	32,044	30.2	73,955	69.8
1972	106,939	31,530	29.5	75,409	70.5
1973	104,430	32,974	31.6	71,456	68.4
1974	102,737	33,046	32.2	69,692	67.8
1975	106,136	33,855	31.9	72,281	68.1
1976	107,309	39,420	36.7	67,888	63.3
1977	107,550	42,345	39.4	65,205	60.6
1978	107,989	40,450	37.5	67,539	62.5
1979	113,798	41,528	36.5	72,270	63.5
1980	117,154	43,898	37.5	73,257	62.5
1981	118,112	42,648	36.1	75,464	63.9
1982	113,728	36,901	32.4	76,827	67.6
1983	115,716	35,229	30.4	80,487	69.6
1984	119,441	37,381	31.3	82,059	68.7
1985	124,821	38,438	30.8	86,383	69.2
1986	131,979	39,967	30.3	92,012	69.7
1987	137,046	36,037	26.3	101,010	73.7
1988	140,611	36,525	26.0	104,086	74.0
1989	142,676	35,541	24.9	107,135	75.1
1990	147,594	36,727	24.9	110,867	75.1
1991	152,919	37,297	24.4	115,621	75.6

SOURCE: Congressional Budget Office.

a. State and local outlays are net of federal grants and loans.

TABLE 2. PUBLIC CAPITAL AND NONCAPITAL SPENDING FOR  
INFRASTRUCTURE, 1956-1991 (In millions of 1990 dollars)

Year	Total	Capital	Percentage of Total	Noncapital	Percentage of Total
1956	66,892	32,318	48.3	34,574	51.7
1957	71,836	34,462	48.0	37,374	52.0
1958	73,967	37,778	51.1	36,188	48.9
1959	78,022	40,941	52.5	37,081	47.5
1960	76,534	39,105	51.1	37,429	48.9
1961	81,329	41,611	51.2	39,719	48.8
1962	82,446	42,766	51.9	39,680	48.1
1963	85,192	44,043	51.7	41,149	48.3
1964	86,861	46,135	53.1	40,726	46.9
1965	90,444	47,997	53.1	42,447	46.9
1966	93,027	49,439	53.1	43,588	46.9
1967	95,769	50,055	52.3	45,714	47.7
1968	97,161	50,389	51.9	46,772	48.1
1969	99,230	51,725	52.1	47,505	47.9
1970	99,959	50,662	50.7	49,297	49.3
1971	105,999	54,361	51.3	51,638	48.7
1972	106,939	56,495	52.8	50,444	47.2
1973	104,430	54,103	51.8	50,327	48.2
1974	102,737	51,455	50.1	51,282	49.9
1975	106,136	50,707	47.8	55,429	52.2
1976	107,309	51,214	47.7	56,094	52.3
1977	107,550	48,229	44.8	59,320	55.2
1978	107,989	46,372	42.9	61,617	57.1
1979	113,798	49,838	43.8	63,960	56.2
1980	117,154	51,260	43.8	65,894	56.2
1981	118,112	48,228	40.8	69,884	59.2
1982	113,728	45,605	40.1	68,124	59.9
1983	115,716	46,448	40.1	69,268	59.9
1984	119,441	48,459	40.6	70,981	59.4
1985	124,821	52,470	42.0	72,351	58.0
1986	131,979	57,461	43.5	74,518	56.5
1987	137,046	60,730	44.3	76,316	55.7
1988	140,611	63,024	44.8	77,587	55.2
1989	142,676	63,355	44.4	79,321	55.6
1990	147,594	66,292	44.9	81,302	55.1
1991	152,919	69,895	45.7	83,024	54.3

SOURCE: Congressional Budget Office.

continuing in the 1990s, the federal focus shifted back to highways and aviation.<sup>5</sup> The President's 1996 budget proposes to cut much of the spending for surface and air transportation. Most spending for highways, transit, rail, and aviation would come from a single unified account, giving state and local governments more decisionmaking control over investments. Compared with federal spending, state and local spending has changed little since the 1970s in most categories of infrastructure. However, some increases were seen in mass transit, aviation, and water resources.

- o *Although total real spending for infrastructure at the federal level has increased every year from 1989 to 1994 and is estimated to increase again in 1995, it would fall during the 1996-2000 period, based on the President's budget requests (see Table 3). Federal spending is estimated to be \$42.2 billion for 1995, a 1.9 percent increase over 1994 spending. Federal outlays under the President's budget for 1996 would fall to \$40.7 billion and would continue to decline at an average rate of 3.2 percent a year over the five-year budget period, reaching a low of \$35.9 billion by 2000.*

### Federal Infrastructure Outlays

Total federal spending for infrastructure in 1956 (in constant 1990 dollars) was \$11.6 billion. Of those expenditures, roughly 35 percent went to highways, 10 percent to aviation, and 55 percent to water transportation and resources (see Table A-8 in the appendix).

By 1978, total federal spending had risen to \$40.5 billion. In addition, by that time the distribution of spending had changed: highways received 27 percent of the federal share; mass transit, 10 percent; rail, 8 percent; aviation, 15 percent; water transportation and resources, 23 percent; and water supply and wastewater treatment, 17 percent. After 1980, federal spending fell; by 1992, it stood at \$39.9 billion, \$4.0 billion below the \$43.9 billion peak of 1980. Once again, the distribution of spending among categories of infrastructure had changed, with increases only for highways and aviation.

In the 10-year period from 1984 to 1994, highway and aviation spending grew at average annual rates of 3.5 percent and 5.2 percent, respectively. Nevertheless, all other categories of spending for infrastructure have declined since 1984 in real terms.

Currently, most federal spending is directed toward highways--in 1994, spending for highways totaled \$18 billion, or 44 percent of the federal share (see Figure 1).

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5. Ibid.

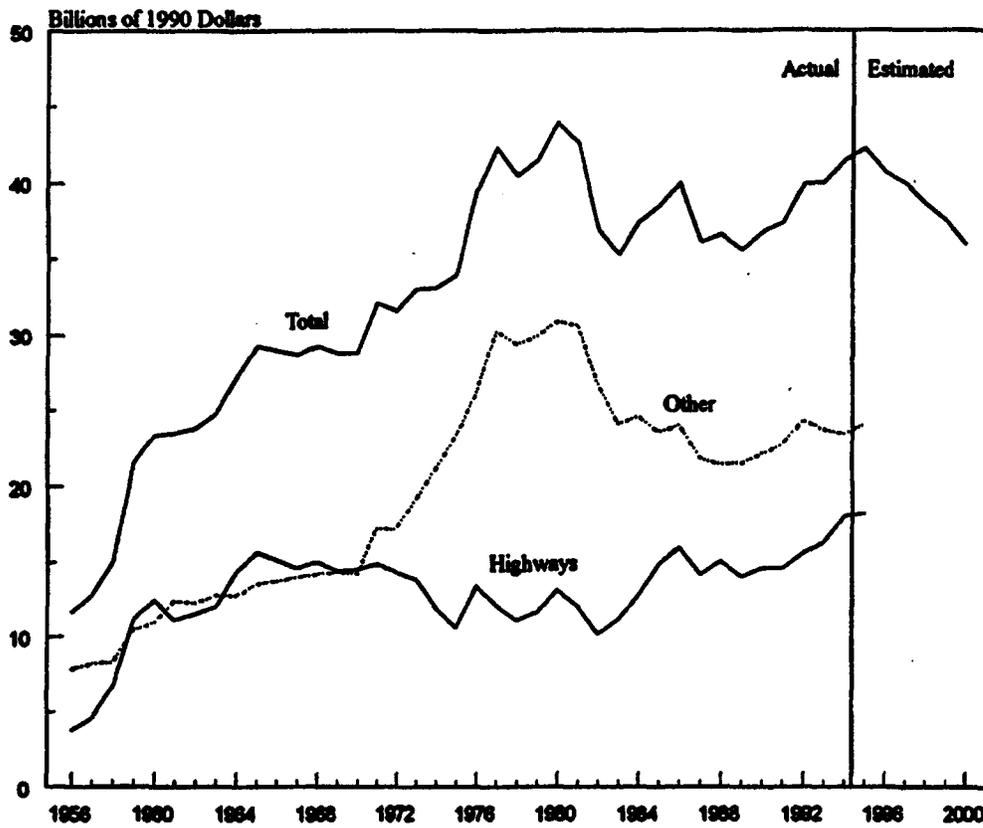
TABLE 3. FEDERAL CAPITAL AND NONCAPITAL SPENDING  
FOR INFRASTRUCTURE, 1956-1996 (In millions of 1990 dollars)

Year	Total	Capital	Percentage of Total	Noncapital	Percentage of Total
1956	11,638	6,090	52.3	5,548	47.7
1957	12,787	7,280	56.9	5,506	43.1
1958	15,052	10,633	70.6	4,419	29.4
1959	21,605	15,249	70.6	6,356	29.4
1960	23,359	16,608	71.1	6,751	28.9
1961	23,472	16,133	68.7	7,339	31.3
1962	23,799	16,856	70.8	6,943	29.2
1963	24,756	17,365	70.1	7,391	29.9
1964	27,094	19,746	72.9	7,349	27.1
1965	29,229	20,983	71.8	8,246	28.2
1966	28,907	20,869	72.2	8,038	27.8
1967	28,619	20,276	70.8	8,343	29.2
1968	29,206	20,433	70.0	8,773	30.0
1969	28,737	19,738	68.7	8,999	31.3
1970	28,694	19,145	66.7	9,549	33.3
1971	32,044	21,105	65.9	10,939	34.1
1972	31,530	21,276	67.5	10,254	32.5
1973	32,974	22,195	67.3	10,779	32.7
1974	33,046	22,659	68.6	10,387	31.4
1975	33,855	22,053	65.1	11,802	34.9
1976	39,420	26,542	67.3	12,878	32.7
1977	42,345	29,167	68.9	13,178	31.1
1978	40,450	26,577	65.7	13,873	34.3
1979	41,528	27,775	66.9	13,753	33.1
1980	43,898	29,320	66.8	14,578	33.2
1981	42,648	25,947	60.8	16,701	39.2
1982	36,901	23,554	63.8	13,347	36.2
1983	35,229	23,266	66.0	11,964	34.0
1984	37,381	24,968	66.8	12,413	33.2
1985	38,438	26,659	69.4	11,778	30.6
1986	39,967	29,031	72.6	10,936	27.4
1987	36,037	25,076	69.6	10,961	30.4
1988	36,525	25,340	69.4	11,185	30.6
1989	35,541	24,238	68.2	11,303	31.8
1990	36,727	25,732	70.1	10,995	29.9
1991	37,297	26,368	70.7	10,929	29.3
1992	39,859	27,714	69.5	12,145	30.5
1993	39,998	28,402	71.0	11,596	29.0
1994	41,444	28,898	69.7	12,546	30.3
1995 <sup>a</sup>	42,247	29,718	70.3	12,529	29.7
1996 <sup>a</sup>	40,658	28,873	71.0	11,785	29.0

SOURCE: Congressional Budget Office.

a. Values for 1995 and 1996 are estimates.

FIGURE 1. FEDERAL SPENDING FOR HIGHWAYS AND OTHER TYPES OF INFRASTRUCTURE, 1956-2000



SOURCE: Congressional Budget Office.

NOTE: Spending levels for 1956 through 1994 are based on actual expenditures. Total spending for 1995 and for 1996 through 2000 are based on the President's 1996 budget. Spending for highways and other modes of surface transportation cannot be estimated beyond 1995 because the President's 1996 Unified Transportation Infrastructure Investment Program does not split spending among these modes.

Aviation had the highest rate of capital investment growth, 12.9 percent a year. In 1995, total federal spending for infrastructure is estimated to be \$42.2 billion in real terms, a 1.9 percent increase over 1994 levels. The President's proposals for infrastructure in his 1996 budget--for 1996 through 2000--would decrease federal outlays for infrastructure by 3.2 percent a year in real terms, on average, for all categories.

The President also proposes a reorganization--the Unified Transportation Infrastructure Investment Program (UTIIP)--that could affect the distribution of types of infrastructure investment over the 1996-2000 period. Starting in 1996, the UTIIP would combine about 70 percent of the programs previously falling under the categories of highways, mass transit, rail, and aviation into a single, unified account.<sup>6</sup> Programs such as Interstate and National Highway Systems can still readily be identified as highway spending, regardless of whether that account appears separately or as a part of the UTIIP. For 1996, however, \$13.0 billion of the \$24.4 billion in budget authority for the UTIIP appears in three accounts that do not specify spending priorities: unified state block grants, state infrastructure banks, and discretionary grants.

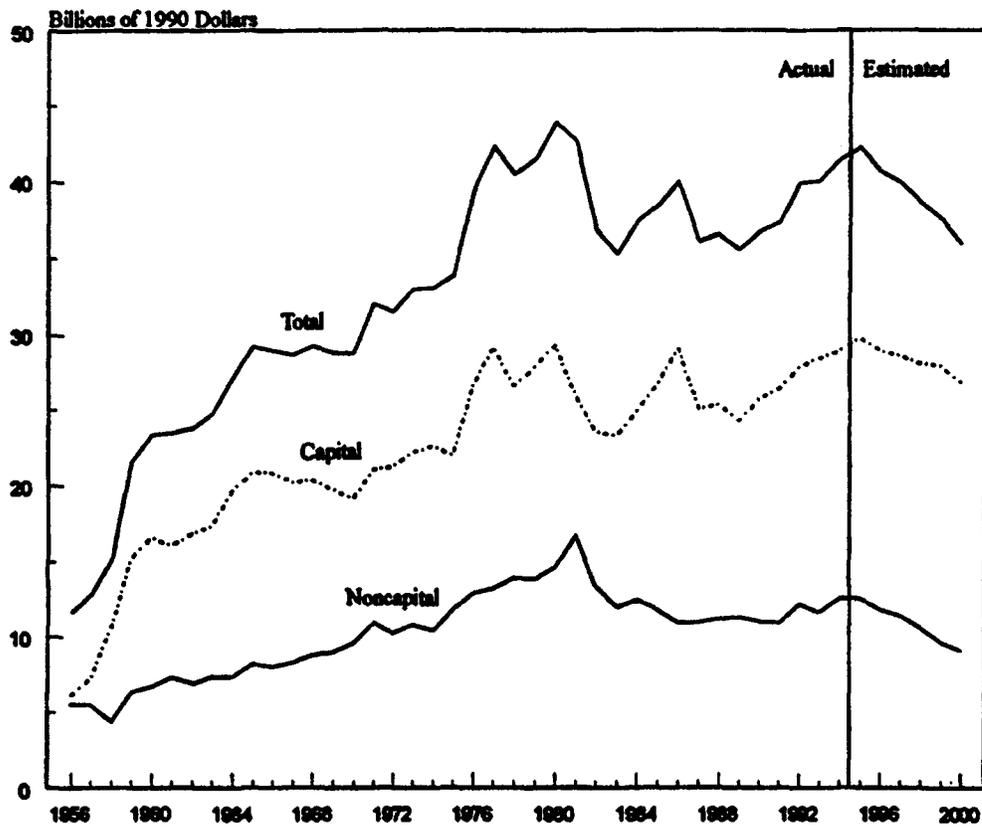
Direct Versus Indirect Outlays. Federal outlays for infrastructure may be indirect (grants-in-aid or loans to state and local governments) or direct (all other federal spending).<sup>7</sup> For highways, transit, airport development (the capital portion), water supply, and wastewater treatment, more than 95 percent of total federal outlays take the form of grants or loans from the federal government (see Table A-10). Furthermore, subsidies for capital expenditures constitute the vast majority of such support: more than 95 percent of federal grants and loans for highways, airport development, water supply, and wastewater treatment and more than 85 percent of federal grants and loans for transit. The remaining categories of infrastructure--rail, airways (the noncapital portion), and water transportation and resources--receive federal funds in the form of direct outlays (see Table A-9). Of those outlays, approximately 70 percent are noncapital expenditures--primarily for rail, aviation, and water transportation and resources.

Capital Outlays. Since the early 1960s, capital outlays have accounted for most of the variation in total federal infrastructure spending (in contrast to noncapital outlays, which have fluctuated little) and most of the spending itself. Indeed, between 65 percent and 70 percent of total federal spending has been for capital expenditures (see Figure 2 and Table A-8).

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6. Please see page 21 of this paper for further discussion of the UTIIP.

7. The definitions of direct and indirect spending, capital and noncapital follow the guidelines set forth in Office of Management and Budget, "Preparation and Submission of Budget Estimates," Circular A-11 (July 1994), pp 71-74.

**FIGURE 2. FEDERAL CAPITAL AND NONCAPITAL SPENDING FOR INFRASTRUCTURE, 1956-2000**

SOURCE: Congressional Budget Office.

NOTE: Spending levels for 1956 through 1994 are based on actual expenditures. Spending levels for 1995 and for 1996 through 2000 are estimates based on the President's 1996 budget.

During the 1970s, capital spending for most infrastructure programs rose in real terms, especially in the areas of mass transit and wastewater treatment, which received eightfold and tenfold increases, respectively, in their capital budgets during the 1970-1979 period. Only in one category--highways--did capital outlays fall over that period.

In the 1980s, many of the investment levels reached during the 1970s were reduced. In constant dollars, capital outlays fell significantly from 1980 through 1989 for rail, water transportation and resources, and water supply and wastewater treatment. For those categories of infrastructure, total capital outlays declined in real terms from \$13.2 billion in 1980 to \$5.7 billion in 1989.

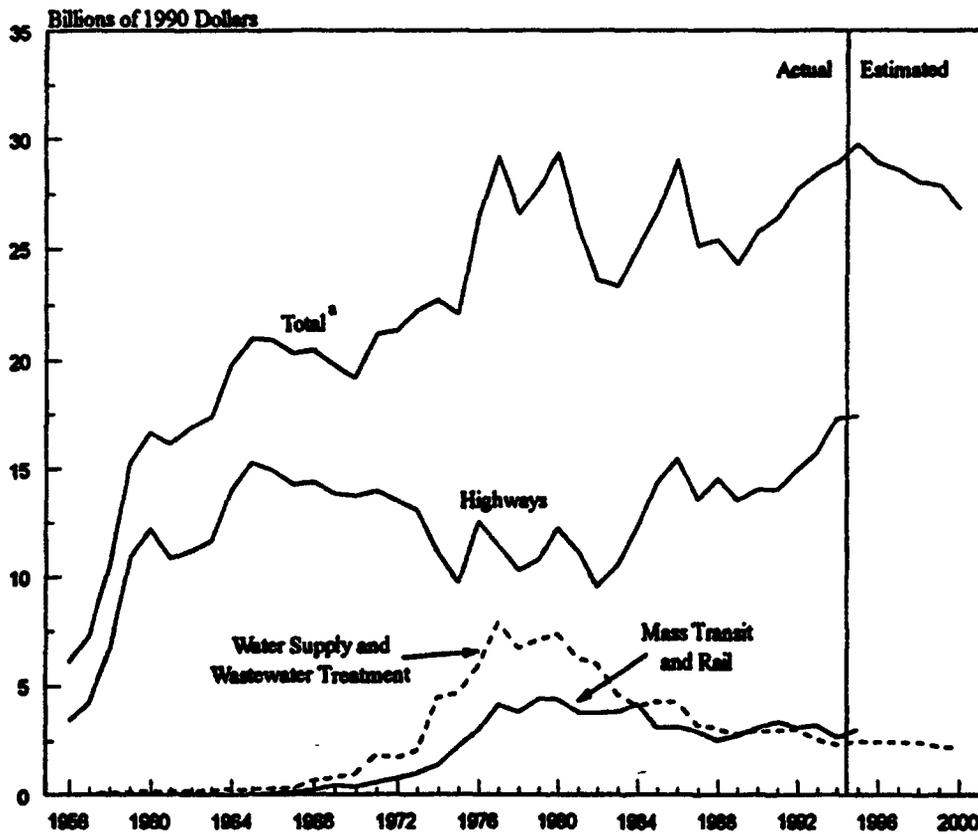
In the late 1980s and early 1990s, capital investment in highways, rail, aviation, and water transportation began to increase. Between 1984 and 1994, federal capital outlays for highways grew from 49 percent to 60 percent of all capital spending. Capital spending for highways grew more than spending in any other category in 1994, increasing by \$1.6 billion to a level of \$17.3 billion. Trends in capital spending generally track highway investment because it represents such a large part of the total (see Figure 3).

Federal capital outlays grew in real terms by 1.7 percent in 1994, rising from \$28.4 billion in 1993 to \$28.9 billion. For 1995, capital outlays are estimated to increase slightly, reaching \$29.7 billion. Under the President's budget, capital spending would drop after 1995, declining at an average rate of 2 percent a year over the 1996-2000 period. By 2000, capital spending is projected to drop to a level of \$26.8 billion. Although levels of capital investment would decline throughout the budget period, the proportion of capital spending to noncapital spending would increase. In 1994 capital spending was 70 percent of total federal infrastructure spending, and by 2000 it would be 75 percent of the total under the President's budget.

**Noncapital Outlays.** Noncapital outlays from 1956 through 1994 have followed a simple pattern that can be separated into two distinct periods--1956 to 1981 and 1981 to 1991 (see Figure 4). Noncapital outlays rose from \$5.5 billion in 1956 to \$16.7 billion in 1981, then declined, falling to \$10.9 billion by 1991 (see Table A-8). The large spike in noncapital spending in 1981 was the result of increased operating expenses for Amtrak.

From 1992 to 1994, noncapital spending climbed in real terms at a rate of 2 percent a year, reaching \$12.5 billion in 1994. In 1995, noncapital spending is estimated to remain unchanged from 1994 levels. Based on the President's budget proposals for 1996 through 2000, however, noncapital outlays would decrease both in absolute terms and as a proportion of total federal spending--at an average annual

FIGURE 3. FEDERAL CAPITAL SPENDING FOR SELECTED TYPES OF INFRASTRUCTURE, 1956-2000

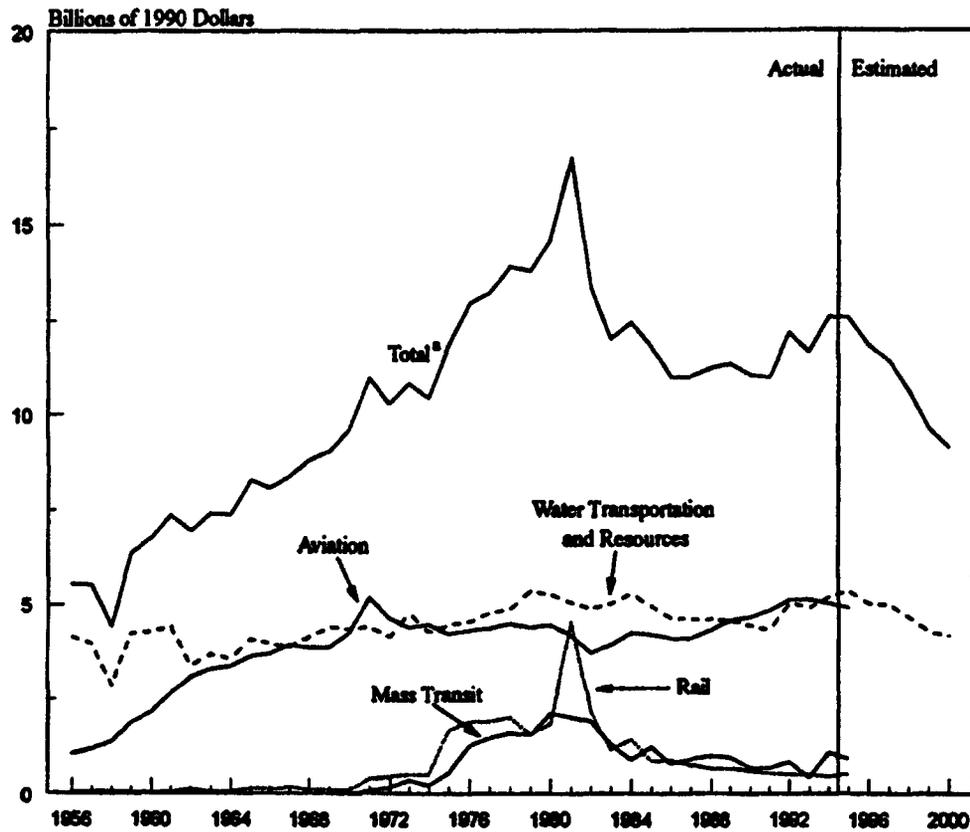


SOURCE: Congressional Budget Office.

NOTE: Spending levels for 1956 through 1994 are based on actual expenditures. Total spending for 1995 and for 1996 through 2000 are based on the President's 1996 budget. Spending for highways and other modes of surface transportation cannot be estimated beyond 1995 because the President's 1996 Unified Transportation Infrastructure Investment Program does not split spending among those modes.

a. Total includes capital outlays for all types of infrastructure.

FIGURE 4. FEDERAL NONCAPITAL SPENDING FOR SELECTED TYPES OF INFRASTRUCTURE, 1956-2000



SOURCE: Congressional Budget Office.

NOTE: Spending levels for 1956 through 1994 are based on actual expenditures. Total spending for 1995 and for 1996 through 2000 are based on the President's 1996 budget. Spending for highways and other modes of surface transportation cannot be estimated beyond 1995 because the President's 1996 Unified Transportation Infrastructure Investment Program does not split spending among those modes.

a. Total includes capital outlays for all types of infrastructure.

rate of 6.2 percent. By 2000, noncapital spending is estimated to be \$9.1 billion, representing the lowest level in real terms since 1969.

### State and Local Infrastructure Outlays

State and local outlays for infrastructure, net of federal grants and loans, rose in real terms by 4.3 percent between 1990 and 1991, reaching \$115.6 billion (see Table A-11). That spending represented 75 percent of all public spending for infrastructure. In 1991, outlays increased for every category of infrastructure except water resources, which fell by 2.7 percent as a result of a decline in capital expenditures.

Spending priorities at the state and local levels often differ from those at the federal level. For example, even though most infrastructure spending at both levels of government in 1991 went toward highways—43.2 percent of state and local spending and 39.1 percent of federal spending—after highway spending the similarities in spending priorities for infrastructure end. At the federal level, the next three largest areas of spending for infrastructure are aviation, water resources, and mass transit (predominately capital investment), whereas at the state and local level, those areas are water supply, wastewater treatment, and mass transit (predominately noncapital expenditures).

Furthermore, the ratio of capital to noncapital state and local expenditures is changing. Although the federal ratio of capital to noncapital spending has remained relatively unchanged since the mid-1980s, the state and local ratio is declining. In 1980, the share was 30 percent capital to 70 percent noncapital; a decade later in 1991, the share was almost 38 percent capital to 62 percent noncapital—an 8 percentage point shift from noncapital to capital expenditures.

The mix of capital and noncapital spending on infrastructure at the state and local level sharply contrasts with that of the federal level (see Table 4). While the federal share of capital to noncapital spending was roughly 71 percent to 29 percent in 1991, the state and local share was 38 percent to 62 percent. State and local capital spending, however, still represents about two-thirds of all public (federal, state, and local) capital investment, whereas its noncapital spending represents about 87 percent of all public noncapital spending.

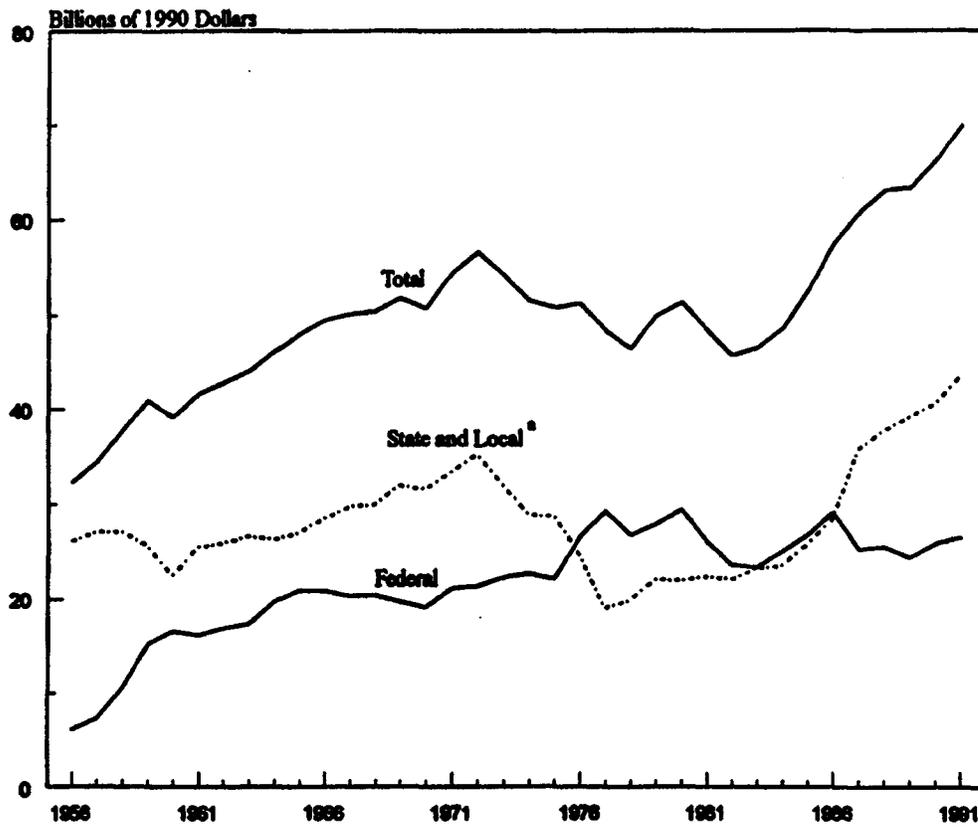
Capital Outlays. By historical comparisons, state and local capital spending varied widely over the 1956-1991 period (see Figure 5 and Tables A-7, A-8, and A-11). Since 1982, however, capital spending has increased every year and in 1991 reached \$43.5 billion. The greatest amount of capital investment went for highways—\$22.3 billion in 1991, which represented 51.4 percent of all capital spending and an 8.5 percent increase over 1990 levels. The next largest amount of commitment in that year went for water supply—\$7.1 billion—representing 16.3 percent of total capital

TABLE 4. STATE AND LOCAL CAPITAL AND NONCAPITAL SPENDING FOR  
INFRASTRUCTURE, NET OF FEDERAL GRANTS AND LOANS, 1956-1991  
(In millions of 1990 dollars)

Year	Total	Capital	Percentage of Total	Noncapital	Percentage of Total
1956	55,254	26,228	47.5	29,026	52.5
1957	59,050	27,182	46.0	31,868	54.0
1958	58,915	27,146	46.1	31,769	53.9
1959	56,418	25,692	45.5	30,725	54.5
1960	53,175	22,497	42.3	30,678	57.7
1961	57,857	25,478	44.0	32,379	56.0
1962	58,647	25,910	44.2	32,737	55.8
1963	60,435	26,678	44.1	33,757	55.9
1964	59,766	26,389	44.2	33,378	55.8
1965	61,215	27,015	44.1	34,201	55.9
1966	64,120	28,570	44.6	35,550	55.4
1967	67,151	29,779	44.3	37,371	55.7
1968	67,955	29,956	44.1	37,999	55.9
1969	70,493	31,987	45.4	38,506	54.6
1970	71,264	31,517	44.2	39,747	55.8
1971	73,955	33,256	45.0	40,699	55.0
1972	75,409	35,219	46.7	40,191	53.3
1973	71,456	31,908	44.7	39,548	55.3
1974	69,692	28,797	41.3	40,895	58.7
1975	72,281	28,654	39.6	43,627	60.4
1976	67,888	24,672	36.3	43,216	63.7
1977	65,205	19,063	29.2	46,143	70.8
1978	67,539	19,795	29.3	47,744	70.7
1979	72,270	22,063	30.5	50,207	69.5
1980	73,257	21,940	30.0	51,316	70.1
1981	75,464	22,281	29.5	53,184	70.5
1982	76,827	22,051	28.7	54,776	71.3
1983	80,487	23,182	28.8	57,305	71.2
1984	82,059	23,492	28.6	58,568	71.4
1985	86,383	25,811	29.9	60,572	70.1
1986	92,012	28,429	30.9	63,583	69.1
1987	101,010	35,655	35.3	65,355	64.7
1988	104,086	37,684	36.2	66,402	63.8
1989	107,135	39,117	36.5	68,018	63.5
1990	110,867	40,560	36.6	70,307	63.4
1991	115,621	43,527	37.6	72,095	62.4

SOURCE: Congressional Budget Office.

FIGURE 5. PUBLIC CAPITAL SPENDING FOR INFRASTRUCTURE, 1956-1991



SOURCE: Congressional Budget Office.

a. The amounts for state and local spending are net of federal grants and loans.

spending. Capital investment also increased in all categories in 1991 except for water resources.

The proportion of capital spending by state and local governments relative to capital spending by the federal government has also fluctuated over time. Before 1975 and after 1987, state and local government contributions represented more than 50 percent of total public capital investment. By 1991, state and local government outlays made up 62.3 percent of total public capital investment.

**Noncapital Outlays.** In contrast, noncapital spending by state and local governments has followed a stable path (see Figure 6 and Tables A-7, A-8, and A-11). In general, state and local noncapital spending has grown over the 1956-1991 period, whereas federal noncapital spending has remained fairly constant. In 1991, noncapital state and local outlays increased to \$72.1 billion from \$70.3 billion in 1990. Moreover, noncapital spending increased among all categories of infrastructure except for water transportation. The greatest amount of noncapital spending at the state and local level was for highways—\$27.6 billion, or 38 percent of total state and local noncapital spending—followed by spending for mass transit at \$13.3 billion, or 8.4 percent of that total. By 1991, noncapital outlays by state and local government constituted 86.8 percent of total public noncapital investment.

#### **THE PRESIDENT'S 1996 BUDGET: INFRASTRUCTURE PROPOSALS FOR THE 1996-2000 PERIOD**

Under the President's 1996 budget proposals, outlays for federal infrastructure programs would decrease from \$47.2 billion in 1995 to \$46.2 billion in 1996 (see Table 5).<sup>8</sup> Spending would continue to decline at an average annual rate of 1.6 percent throughout the 1996-2000 period, reaching \$43.6 billion by 2000. Furthermore, spending would fall in every category of infrastructure over the same period.

Compared with CBO's inflation-adjusted baseline projections for outlays, the President's proposals for all federal infrastructure in 1996 would constitute a 3.3 percent decrease.<sup>9</sup> Over the five-year budget period, spending would total \$225.5

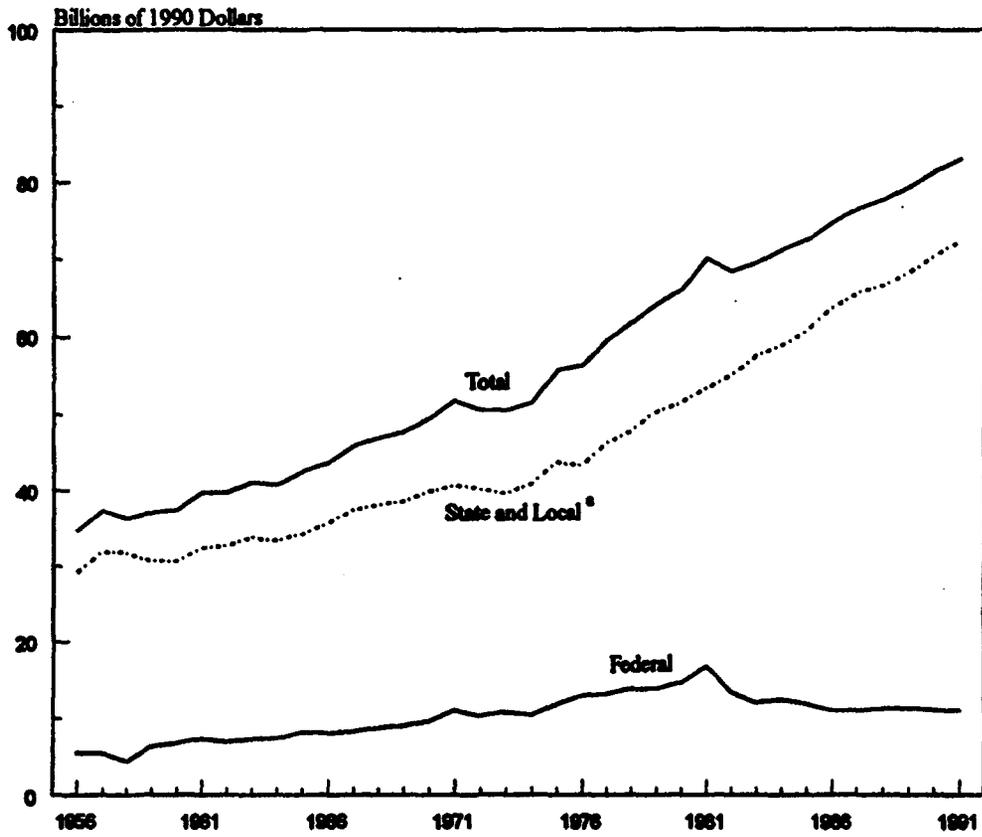
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8. All spending referred to in the text, tables, and figures of this section is in nominal dollars.

9. CBO's baseline projections show the likely path of spending if current laws remain unchanged. The baseline does not project budget outcomes but instead provides a benchmark against which different policies can be compared. Previously, CBO's baseline referred to the projection of current-year levels of budget authority, outlays, revenues, and the surplus or deficit—adjusting for inflation in discretionary appropriations—into the budget year and the out-years. Currently, CBO also provides baseline projections without adjusting for inflation. Although both baseline projections are provided in the tables, all baseline comparisons in the text refer to the inflation-adjusted baseline.

All CBO baseline references are to the March 1995 baseline.

FIGURE 6. PUBLIC NONCAPITAL SPENDING FOR INFRASTRUCTURE, 1956-1991



SOURCE: Congressional Budget Office.

a. The amounts for state and local spending are net of federal grants and loans.