### Statement of Edward M. Gramlich Acting Director Congressional Budget Office

before the Subcommittee on Investigations and Oversight. Committee on Public Works and Transportation U.S. House of Representatives

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## NOTICE

This statement 5s not available for public release until it is **delivered** at 10:00 am (EDT), Thursday, September 17, 1987.

Mr. Chairman, I am pleased to appear before this Subcommittee to discuss the effects of recent federal fiscal policy on state and local infrastructure finance. My testimony today concerns:

- o The effect of recent federal budget deficits on state and local infrastructure investment;
- o How deficit reduction efforts have changed the **size** and efficiency offederal infrastructure programs; and
- o How the Tax Reform Act of 1986 affected infrastructure finance.

#### THE FEDERAL BUDGET DEFICIT

No discussion of investment financing in this decade can begin without citing the effects of large and sustained federal budget deficits. In 1980, the federal budget deficit equaled 2.8 percent of gross national product (GNP). The deficit rose to 5.4 percent of GNP by 1985, and in the absence of new Congressional action, the deficit will still equal 3.9 percent of GNP in 1988.

Deficits of this magnitude can reduce the resources devoted to infrastructure investments. The effects traditionally ascribed to federal deficits occur in a world of relatively isolated national economies. In such a world, deficits compete with other, private projects in a national capital market. Moreover, by raising interest rates, they "crowd out" private investment. But if national economies are linked through a global capital market, the effect of the deficit will be different. The foreign investors who help finance deficits need currency to purchase government securities. Large deficits thus increase the value of the currency and penalize exports and encourage imports, without affecting either interest rates or aggregate domestic investment.

While foreign capital inflows can postpone much of the conventional "crowding out" problem associated with financing the U.S. deficit, they cannot eliminate it. First, the U.S. deficit is large enough relative to the global capital pool that it is capable of raising world interest rates, making all investment more expensive. Second, massive foreign borrowing by the United States has left our economy vulnerable to sudden short-term withdrawals of foreign capital. If foreign lenders perceive more lucrative investment possibilities abroad, they will begin to withdraw their funds from

the United States, requiring more of the deficit to be financed by domestic savings, raising interest rates and the possibility of conventional crowding out. In fact, some observers believe that this shift is already under way. The changing origin of capital inflows into the United States this year--from private lenders to foreign central banks--suggests that private investors abroad are already less willing to hold dollar-denominated securities.

Thus, federal deficits are likely to prove unkind to infrastructure investments through a variety of mechanisms. Among the most productive things that the Congress could do to support national infrastructure investment would be to reduce the volume of federal debt with which these investmentscompete.

# INFRASTRUCTURE GRANTS AND FEDERAL DEFICIT REDUCTION EFFORTS

Reducing the federal deficit would make it easier for states and localities to finance infrastructure investments. These governments might take cold comfort, however, from deficit reduction measures that took the form of cuts in federal infrastructure spending. States and localities have, in fact, borne much of the burden of deficit reduction efforts during the last six years. Yet reductions in federal aid to states and localities have been

concentrated in broad-based grant programs, such as the recently ended general revenue-sharing program and various economic development grant programs. Federal spending for infrastructure has fared somewhat better, particularly since 1982.

The table shows that between 1980 and 1987, total federal infrastructure spending fell from 0.9 percent of GNP to 0.7 percent of GNP. Relative to other federal nondefense discretionary spending, however, infrastructure outlays have been nearly constant. Adjusted for inflation, infrastructure outlays fell 10 percent between 1980 and. 1982, and have risen slowly, but steadily, since then. Spending for the different federal infrastructure programs, however, has varied widely--transportation spending rose 18 percent between 1982 and 1987. while water resources outlays fell more than 20 percent during this period.

The two largest federal infrastructure programs--highways and aviation, which together account for 60 percent of all federal infrastructure spending--have fared the best during the 1980-1987 period. Spending for both programs did fall between 1980 and 1982. Since then, however, inflation-adjusted outlays have risen 40 percent for highways and over 30 percent for aviation.

TABLE: FEDERAL INFRASTRUCTURE OUTLAYS

	In Billions of 1982 Dollars			Percent Change	
Program	1980	1982	1987 (est.)	1980-1987	1982-1987
Transportation Highways Aviation Mass transit Railroads <b>a</b> /	19.59	16.84	19.88	1.4	18.0
	10.10	8.19	11.51	13.9	40.5
	4.37	3.54	4.74	8.4	33.9
	3.40	3.85	2.99	-12.3	-22.5
	1.72	1.26	0.65	-62.3	-48.6
Water Resources Wastewater treatment Water resources Municipal water supply	10.04	8.40	6.55	-34.8	-22.0
	5.06	4.10	2.59	-48.8	-36.9
	4.23	3.70	3.50	-17.2	-5.3
	0.75	0.60	0.46	-39.3	-23.3
<b>Total</b> Outlays As a percent of gross national product	29.64	25.24	26.43	-10.8	4.7
	0.93	0.80	0.72	-14.3	-9.8
Nominal Outlays as a Percent of Nondefense Discretionary Spending	17.6	16.5	18.3	-6.1	10.7

SOURCE: Congressional Budget Office.

a. Railroad spending excludes spending for Conrail.

Outlays for federal infrastructure programs not funded primarily through dedicated revenues have taken a very different course. Federal support for water resources, mass transit, and railraods has declined steadily in real terms, from \$15.2 billion in 1980 to \$10.2 billion in 1987. CBO's baseline projection shows that real outlays for these programs will continue to decline between now and 1992.

Focusing only on the level of federal infrastructure outlays, however, overlooks how wisely the government spends. In the last six years, the Congress has taken a number of steps to improve the efficiency of federal infrastructure programs. Congressional attention has focused on two problems that have characterized many infrastructure programs: federal matching rates that are set too high and infrastructure user fees that fail to reflect benefits received.

Federal matching grants are designed in part to increase state and local infrastructure investment by correcting inefficiencies in private markets. Many kinds of infrastructure--the interstate highways, the national system of airports and air traffic control, inland waterways, and others--confer benefits on residents outside the jurisdiction providing the facility. A community that must pay all the costs of a facility, but receives only a fraction of the associated benefits, will choose to provide less than is

economically beneficial for the nation as a whole. The federal government can encourage states and localities to make the appropriate infrastructure investments by paying the portion of state and local expenditures that corresponds to the benefits that spill over into neighboring jurisdictions.

Available evidence suggests that federal matching rates in many programs have been set higher than the share corresponding to benefit spillovers. These high matching rates would have led to excessive infrastructure investment had federal grants been "open-ended"--that is, had the federal government matched all desired state and local spending, as it has with some social welfare programs. In fact, infrastructure grants have been "closed"; federal matching funds have been available only on a specified amount of state and local spending. States have had to pay the full cost of any investments above this amount.

The combination of closed grant programs and excessively high matching rates can lead to a variety of problems. First, by paying not only for benefits accruing to people outside the community, but also for a portion of the benefits received by local residents, high matching rates prompt local governments to build projects that are uneconomical from a national perspective. At the same time, however, not all economically beneficial infrastructure projects will be undertaken, since states and localities will

not build enough of those projects that fall above the federal spending ceiling and so are ineligible for federal matching funds.

Just as excessive matching rates characterize many federal grant programs, so insufficient user fees are common to many federally provided infrastructure services. In only two of the seven major federal programs--highways and airports--are fees now high enough to defray most federal spending. And even in these programs, some users--notably, operators of heavy trucks and private planes--pay less than their share of costs, while other users--light truck operators and airline passengers--make up the difference by paying fees that recover more than their share of federal outlays. Below-cost pricing leads users to request more infrastructure services than they are willing to pay for, while infrastructure providers get an exaggerated perception of investment needs from these misleading signals about infrastructure demand.

During the last five years, the Congress has adjusted matching rates and user fees in a variety of programs:

o In 1981, user fees were for the first time imposed on the use of inland waterways.

- o In 1984, the Congress changed the incidence of taxes earmarked for the Highway Trust Fund to reflect better the distribution of costs imposed by different users.
- o In 1985, the matching rate on EPA wastewater treatment grants fell from 75 percent to 55 percent. Our analysis indicates that the lower matching rate will result in more efficient state and. local wastewater investments.
- o Finally, the Omnibus Water Resources Act of 1987 required local beneficiaries to pay a larger share of the cost of heretofore federally financed water resources projects.

All of these actions were part of the important, ongoing effort to make federal infrastructure programs more efficient, and thus able to deliver more infrastructure services from a given amount of federal spending.

#### THE TAX REFORM ACT OF 1986

The Tax Reform Act of 1986 (TRA) dramatically changed the federal income tax code. TRA included a host of provisions that, taken individually,

would have changed state and local borrowing costs significantly. But many of these provisions will have offsetting consequences, so that, taken together, their effect will be less substantial. When fully implemented, TRA is likely to change tax-exempt interest rates only slightly.

The feature of TRA most appealing to individuals--the reduction in tax rates--is also, ironically, the feature of TRA most detrimental to state and local finance, since reduced income tax rates lead to increased interest rates on tax-exempt debt. Tax-exempt bonds are attractive to investors only as long as their yield equals the after-tax yield on comparable taxable instruments. When tax rates fall, the yield on tax-exempt bonds must rise until the after-tax return is again similar for both kinds of debt. Thus, yields on municipal bonds rose relative to yields on taxable debt as soon as the Congress began to consider tax proposals that would have sharply reduced income tax rates, even in anticipation of actual legislation.

The rise in tax-exempt interest rates will be tempered, however, by a variety of other TRA provisions. Some provisions will put downward pressure on tax-exempt rates by increasing the demand for municipal bonds. For example, higher tax rates on capital gains will encourage investors to switch some of their holdings from stocks to bonds; lower corporate tax

rates should make corporate debt both more scarce and more expensive, and so lead investors to hold fewer corporate bonds and more municipal bonds; and the restriction or elimination of other tax preferences will cause more of those investors seeking tax shelters to purchase tax-exempt instruments. At the same time, tighter volume limits on private-purpose bonds will lower tax-exempt rates by limiting the supply of municipal bonds.

Finally, and perhaps most importantly, other TRA provisions will lower all interest rates, both taxable and tax-exempt. TRA has made it more profitable to save (by lowering tax rates on interest earnings) and more costly to borrow (by eliminating the deductibility of some interest payments). Relative to a world without TRA, interest rates should fall as the pool of investment capital grows and the demand for borrowing declines.

The provisions of TRA that will affect municipal borrowing costs are varied, and their interactions complex. On balance, it is likely that any changes in tax-exempt interest rates brought about by TRA will be small, and it is certain that these changes will pale next to those brought about by the more fundamental forces of federal monetary and fiscal policies.