STATEMENT OF ALICE M. RIVLIN

DIRECTOR

CONGRESSIONAL BUDGET OFFICE

Before the
Committee on Public Works and Transportation
Subcommittee on Economic Development
House of Representatives

April 27, 1983

Mr. Chairman, I am pleased to appear before your Committee to discuss federal investment in the nation's public works infrastructure. Yesterday, the Congressional Budget Office released a study of seven major infrastructure systems: highways, public transit, wastewater treatment, water resources, air traffic control, airports, and municipal water supply. 1/

The CBO analysis finds that the **level** of current federal spending is not far below reasonable estimates of needs. The **structure** of federal programs, however, is not well suited to those needs. Many programs do not address highest-priority problems, nor do they lead to the most cost-effective investments. The Congress has already recognized this problem in enacting the Surface Transportation Assistance Act of 1982. That legislation is part of a major reorientation, from the past emphasis on building new facilities to today's greatest needs--repair, replacement, and modernization of the facilities now in place. Giving particular urgency to this transition, budgetary pressures compel consideration of ways to guide the shift toward more productive investments.

Three approaches analyzed by the CBO seem particularly promising: greater application of user fees, greater local responsibility for facilities of local interest, and redirected federal aid toward less capital-intensive

---

1. See Congressional Budget Office, Public Works Infrastructure: Policy Considerations for the 1980s (April 1983).

investments. If steps in this direction were taken, annual federal expenditures might actually fall as much as $4 billion below the current level of $24 billion (in 1982 dollars). More important, the resulting public infrastructure would better support the economic needs of the nation. However, such a transition would raise other issues: state and local expenditures might have to rise, users of infrastructure-based services might have to pay more, and some services might have to be reduced.

My remarks this morning will focus on three topics:

- The nature of current infrastructure problems and the costs of dealing with them;
- Strategies that could lead to more cost-effective investments in public works infrastructure; and
- The relationship between public works investment and jobs.

CURRENT INFRASTRUCTURE PROBLEMS AND COSTS

With the nation's public works infrastructure largely in place, the main problem now is physical deterioration, compounded by the effects of aging and inadequate maintenance. Insufficient capacity to serve growth and technological obsolescence can also cause problems.

The CBO estimates that, to meet a reasonable definition of needs, annual public capital outlays--that is, by all levels of government--would have to increase from $42 billion to roughly $53 billion between 1983 and 1990. Under current programs, the federal share of these higher outlays would average $28 billion a year--somewhat above current federal spending of $24 billion a year (shown in Table 1). For highways, and to a lesser extent, public transit, estimated needs for federal spending are not greatly different from the current level, owing largely to the almost $6 billion provided by 1982 legislation. For other programs, however, the percentage increase would be significant. For example, annual federal spending for water resources would have to increase by roughly two-thirds to meet needs under the current program structure; for wastewater treatment, the increase would be one-third.

These estimates of required federal investment presuppose continuation of the current federal shares of various types of infrastructure spending. If needs were interpreted as requiring a broader federal responsibility than under current policy, calls for even higher federal spending could result. For example, if the full shortfall in meeting wastewater treatment needs were financed at the federal level--instead of roughly half, as under current law--an additional $1.6 billion in annual federal outlays would be required. Similarly, if the projected capital costs in municipal water supply

TABLE 1. FEDERAL SHARE OF ANNUAL CAPITAL INFRASTRUCTURE COSTS UNDER CURRENT AND REVISED POLICIES, 1983-1990 (In billions of 1982 dollars)

Infrastructure System	Current Spending Level	Annual Outlays to Meet Alternative Measures of Need	
		Under Current Program Structure	Under Revised Programs
Highways	12.7	13.1	9.3
Public Transit	3.7	4.1	2.2
Wastewater Treatment	3.2	4.2	3.7
Water Resources	2.3	3.7	3.1
Air Traffic Control	0.8	0.8	0.7
Airports	0.8	0.9	0.3
Municipal Water Supply	0.9	1.4	1.0
Total	24.4	28.2	20.3

SOURCE: Congressional Budget Office.

were paid for entirely with increased federal dollars, annual outlays would increase from about $1 billion a year to about $8 billion.

FEDERAL APPROACHES TO IMPROVED PUBLIC WORKS INVESTMENT

Today, many of the concerns that once motivated federal involvement in public works no longer apply--namely, the need to establish a basic infrastructure, to promote regional development, and to rely on federal initiative and financial strength. To accelerate the development of the West, for example, the federal government subsidized irrigation to foster western agriculture. Today, agriculture in western states has become a mature industry far more capable of supporting itself. Similarly, developing entire river basins was a concern of the 1930s that helped create the Tennessee Valley Authority. Today, the Tennessee River Basin and other major river basins are largely developed, and construction of smaller intrastate water projects is gaining in importance. Similarly, the federal government helped stimulate commercial aviation by making capital grants for airport development, with the result that every major city now has an airport. Most major airports, however, appear capable of raising sufficient capital on their own.

The CBO has analyzed three approaches for the Congress to consider in realigning public works investment with changing priorities:

- **Adjusting user fees** to produce a reasonable measure of needs, correct present misalignments among users, and raise funds for needed investments;
- **Limiting the federal role** to infrastructure investments with clear national importance; and
- **Redirecting existing federal aid** to alter the current bias toward capital-intensive investment decisions.

Adjusting User Fees

Though users of many of the nation's infrastructure facilities now pay some fees, those fees tend to be set well below the levels needed to recover federal or state governments' costs. The resulting subsidies stimulate demand and lead to exaggerated perceptions of need for services. For example, low municipal water rates encourage overconsumption. Increasing local water rates would reduce demand, in turn, reducing capital needs for new sources of supply. Higher local water rates would also increase municipal revenues. Together, reduced demand plus the additional money could satisfy about 95 percent of projected water supply needs. The currently small federal role--expenditures of less than $1 billion per year--would not have to increase significantly.

This is also true of aviation. At present, air traffic congestion, and hence pressure to expand airport capacity, commonly occurs at certain hub airports and during daily periods of peak demand. Only rarely, however, are user fees structured to reflect the high capital cost of congestion--the costs of building new runways, terminals, and other facilities. If peak-hour user fees were raised to cover such costs, some traffic would shift to off-peak hours and to less crowded airports, thereby reducing the need for airport expansion. At the same time, users willing to pay the price of the extra capacity would provide the necessary revenue through their payment of fees. Indeed, federal measures that allowed peak-hour charges and other, more-flexible pricing arrangements could provide airport authorities with the means to substitute local for federal fees, thus reducing annual federal expenditures by up to $500 million.

Limiting the Federal Role

When a rationale no longer exists for federal involvement in local projects, federal funding can distort economic choices and divert funds from more pressing national needs. Highways offer a good example of this problem. Originally, the financial advantage to states through 90 percent federal matching shares for Interstate highway construction assured the Interstate System's completion. Now, that high match encourages states

to build projects primarily of local concern. Lower matching ratios might reduce demand for such construction and release resources for needed repairs. A more drastic option would be the elimination of urban highways and other locally oriented roads from the federal program. This would require $3.4 billion less a year than would current policies, while channeling more federal funds to the repair of nationally important routes.

With nonfederal funding sources now emerging, states appear quite capable of meeting the financial challenges that would come with greater responsibility. New Jersey, for example, has recently proposed a state infrastructure bank to provide a revolving loan fund for construction and improvements to local wastewater treatment projects. Other state and local financing mechanisms include earmarked revenues, local user fees, and state bond guarantees. With access to these financial sources, states and localities may no longer require substantial federal aid to finance large up-front capital investments. Many airports, for example, still drawing 90 percent federal grants for capital improvements, are now rated in the municipal bond market as premium investments, and they might find ways to finance their own capital development.

Even if a changed federal policy were beneficial in the long run, however, moving quickly toward greater state responsibility could impose high transition costs on state economies. Some states could be constrained

by depressed economic conditions and would either require assistance or be forced to forego public works spending until conditions improved. To avoid such shocks even in more prosperous states, the federal government might follow an interim policy of either turning back user fee revenues to states or reducing federal user fees to allow states and localities to phase in their own higher taxes. This could be helpful in aviation and highways. In general, a gradual reduction in federal support for local projects would also allow states and localities time to explore locally available options.

Redirecting Federal Assistance

Federal aid to public works projects could be made more cost effective by reducing the current federal match on capital grants or allowing more federal funds to be used for purposes other than new construction. In public transit, for example, high federal capital grants have encouraged many cities to start new capital-intensive systems, particularly rail. At the same time, local financial constraints have forced other transit authorities to neglect the worsening physical condition of older-generation rail systems. Not enough of the $3.7 billion a year now available for federal capital grants goes toward repair and rehabilitation in the most transit-dependent cities, although the overall sum appears within range of estimated transit needs through 1990.

Further, a smaller federal match--perhaps 60 percent as opposed to the current 75 percent--would encourage cities to pursue low-cost transit options, such as express buses and carpool lanes. Finally, federal spending could be better targeted if more funds were distributed according to transit use rather than population size and density and if federal regulations were reduced. These policy changes offer the potential to reduce federal spending to around $2.2 billion a year.

Changes in federal regulations might also result in meeting infrastructure needs at less federal expense. If the Environmental Protection Agency's national standards for minimum wastewater treatment were made flexible enough to accommodate local conditions, perhaps as much as $8 billion could be saved over a 20-year period, at no expense to local ambient water quality.

INFRASTRUCTURE INVESTMENT AND EMPLOYMENT

Public works investment has both long-run and short-run effects on employment. In the long term, cost-effective infrastructure investments, together with appropriate monetary and fiscal policies, would promote economic growth. Significant and sustainable reductions in unemployment will only come from such growth. But in the short run, public works

investments can only have limited effects on employment. To the extent that they are used to promote employment, however, three considerations would apply.

First, for near-term results, projects must begin quickly. If economic recovery is far advanced by the time projects get under way, the stimulative effect could be wasteful and perhaps inflationary. The speed with which infrastructure projects could be started varies considerably among the types of work involved. In general, repair and maintenance projects require less design and contracting time than new construction, and hence may provide a more rapid source of stimulus.

Second, the pattern of infrastructure spending should mesh with the geographic distribution of unemployment and the skills of jobless people. For example, highway and mass transit needs--particularly those involving repair instead of new construction--appear disproportionately concentrated in the Midwest and Mid-Atlantic regions, where unemployment is severe. New construction and replacement tend to draw on skilled workers and to stimulate employment in support industries such as steel. Repair work requires less-skilled workers, and employs more persons per dollar spent.

Third, public works investment, like other forms of federal spending, would have different employment effects depending on financing mecha-

nisms. Financing projects with simultaneous increases in user charges or taxes would probably produce no net increase in employment, but rather, it would simply transfer employment from one sector to another. For example, the tax on motor fuel reduces the purchasing power of households and, in turn, dampens those households' consumption of other goods and services. On the other hand, financing public works by raising the federal deficit would have a short-term impact on jobs but could put upward pressure on interest rates, especially as the recovery proceeds; this could have negative effects on employment.

In conclusion, Mr. Chairman, sustainable reductions in unemployment depend on long-term economic growth, which, in turn, can be fostered by effective infrastructure investment policies and by fiscal discipline. Although the level of federal infrastructure spending appears close to CBO's estimate of the nation's infrastructure needs, significant opportunities are available for channeling that spending into more cost-effective investments. Greater reliance on user fees, greater state and local responsibilities, and redirected federal aid can be part of the transition already under way to promote more effective public works investment at the current level of spending or an even lower one.