

**Statement of
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**before the
Subcommittee on Policy Research and Insurance
Committee on Banking, Finance and Urban Affairs
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NOTICE

**This statement is not available for
public release until it is delivered at
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Mr. Chairman and Members of the Committee, I am pleased to appear before you this morning to discuss the findings of the Congressional Budget Office's (CBO's) report titled *New Directions for the Nation's Public Works* (September 1988). My testimony today will review three themes of that report:

- o The nation's major infrastructure programs have similar motivations: the need to coordinate local investment in a national infrastructure network; a desire to share the financial burden imposed in different jurisdictions; and a desire to promote social policy goals such as regional economic development.
- o The major infrastructure programs face similar challenges: first, we are witnessing a transition from an era that emphasized adding capacity to an era of managing and maintaining existing public works. Second, some federal programs fail to give infrastructure users and state and local infrastructure managers incentives to make efficient choices about building or using infrastructure.
- o Many policies could address these challenges, including better pricing of infrastructure services and broadening the eligibility criteria for federal infrastructure programs.

THE ORIGINS AND ACHIEVEMENTS OF FEDERAL INFRASTRUCTURE PROGRAMS

The nation's infrastructure programs were created to serve many purposes, but three motivations for federal involvement were paramount. First was the need for coordination. Federal programs in highways, airports, air traffic control, and inland waterways were undertaken because no other jurisdiction could plan a system of such facilities from a national perspective. If left to their own devices, for example, localities might underinvest in roads, since many of the benefits of these investments accrue to people outside their boundaries. A second motivation was to spread nationwide the financial burden of these investments. And a third motivation was to promote social policy goals.

In most infrastructure areas, significant progress has been made toward the initial program goals. The Interstate Highway System as currently planned is about 99 percent complete, and all funds needed for its completion will be obligated by 1993. The United States now has more highway miles per person than any other industrialized country, and its roads are used at only about 15 percent of capacity in rural areas and 40 percent of capacity in urban areas. Water supply projects have contributed greatly to the development of the West, so much so that the Bureau of Reclamation now sees the country's primary need as conservation rather than new water supply. About 90 percent of the wastewater treatment plants needed to meet current regulatory

standards have been built; these plants have contributed to arresting the ongoing deterioration in water quality prevalent only two decades ago.

Although significant progress has been made in most infrastructure areas, the standard of achievement is not uniform. The largest urban rail systems need substantial renovation. The air traffic control system and some airports are operating at capacity, while aviation traffic is growing rapidly.

CHALLENGES FACING FEDERAL INFRASTRUCTURE PROGRAMS

The various infrastructure modes confront, each in its own fashion, a similar set of challenges. The most important of these may be the transition from an era that emphasized adding capacity to an era of management. Just how well federal infrastructure programs perform in this new era will depend, in part, on the incentives that the programs offer to both infrastructure users and state and local infrastructure managers.

Management

This transition from the need for construction to the need for management (including maintenance, rehabilitation, and replacement) is evident in almost

all modes. In highways, for example, the rate of return on projects maintaining the condition of the federal-aid highway system is estimated to be on the order of 30 percent to 40 percent, while the rate of return on new construction, except in certain congested urban areas, is very low. For aviation, the most pressing general need is to modernize the air traffic control system. Congestion at many airports could be addressed more cheaply by improving management than by expanding capacity. In mass transit, newly constructed systems have floundered; most of them have excess capital equipment. Nationwide, use of mass transit is low relative to capacity (about 20 percent nationally), and transit fleets are too large. The older major urban systems, however, are more heavily used and need repair. At the same time, an unobligated balance of \$1.5 billion sits in transit accounts for lack of new construction projects that qualify for aid.

Construction clearly is not a thing of the past. However, where construction needs exist (as they do to some extent in all modes), they are for specific regional purposes rather than for completing a national network. Moreover, these construction needs are typically aimed at alleviating congestion rather than leading or promoting growth. In some cases, congestion is real but new construction is so difficult or expensive that it is necessary to search for other ways to alleviate delays.

Incentives

As currently structured, federal infrastructure programs fail to provide either infrastructure users or state and local managers with incentives to make efficient choices. By failing to charge users an amount that reflects the cost of providing the services they enjoy, federal programs can lead to inflated perceptions of the demand for infrastructure and to overuse and congestion in existing facilities. Current programs also give state and local managers few incentives to solve infrastructure problems with "nonstructural" approaches, and in many cases allow managers to select projects that create local, rather than national, benefits.

Charging appropriate fees can lead to more efficient use of infrastructure. Making roads, ports, and mass transit available without any fees tends to encourage their overuse and rapid deterioration; charging excessive prices, however, could lead to underuse and reduce the productivity of the infrastructure investment. In only one of the seven major federal programs--highways--are taxes on users now high enough to defray most federal spending. In the case of aviation, taxes on users cover about 65 percent of the federal spending that benefits them, and in other programs users pay only a trivial share. And even in the programs that are funded largely by users, 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 the costs they create. In each of these programs, below-cost pricing may lead to greater use of infrastructure services than users would be willing to pay for, giving infrastructure providers an exaggerated perception of investment needs.

Other common problems concern the incentives given to state and local infrastructure managers. For instance, the structure of federal financial assistance may lead state and local infrastructure managers to substitute federal funds for their own. This phenomenon of "fiscal substitution" can be identified in a variety of modes, most notably in wastewater treatment (where federal grants appear not to have led to more rapid construction of wastewater plants and may in fact have led to deferrals of plant construction as communities waited for federal assistance) and in highway programs outside the original Interstate system.

Moreover, even where federal grants have not substituted for local funding, they may have altered the choices made by local officials without satisfying federal interests. In mass transit, for example, capital purchases are subsidized to a far greater extent than are maintenance expenditures, and municipalities regularly retire buses before the end of their useful lives and then use federal funds to purchase equipment they do not really need.

OPTIONS FOR FEDERAL INFRASTRUCTURE PROGRAMS

I will focus here on two of the strategies considered in *New Directions*: pricing infrastructure services more efficiently and broadening the eligibility criteria for grants.

Pricing Infrastructure Services

Better pricing of the nation's infrastructure facilities could further a number of goals. First, and perhaps most important, greater reliance on user fees could reveal how much people value different infrastructure services. By giving managers better information about the cost-effectiveness of different projects, user charges could improve the quality of infrastructure investments. At the same time, proper pricing of infrastructure facilities could ameliorate the congestion that affects much of the country's infrastructure, whether that congestion is specific to particular localities (as with highways and inland waterways) or to particular times of day (as in aviation).

An increased reliance on user fees has two drawbacks. First, economic efficiency may not be the only goal of an infrastructure program. To the extent that federal subsidies are intended to provide nonmonetary income transfers (as in the case of federal support for water supply, mass transit, and

aviation services to small towns), increased user fees would be at odds with this purpose. Second, the user fee that promotes efficiency will not always equal the fee that recovers costs. If receipts from user fees fall short of financing all investments that pass the benefit/cost test, requests for additional general funding, though meritorious, could be greeted with skepticism. Conversely, user fee receipts that exceed spending could generate irresistible pressure to spend on projects that do not pass the benefit/cost test.

Broadening Eligibility Criteria for Federal Infrastructure Programs

The principal advantage of broadening eligibility criteria for federal grants lies in the greater efficiency of the infrastructure investments that might result. State and local economic development officials face a growing need for institutional and sectoral coordination in planning. Regional transportation planners, for example, will have to decide on a combination of aviation, rail, and highways to provide mobility and ease congestion. By virtue of their greater proximity to local problems, state and local governments might be able to choose a more efficient set of projects if those choices were not distorted by federal subsidies that varied by type of infrastructure.

Broadening the eligibility criteria for grants would have three drawbacks. First, state and local governments could more easily substitute federal funds

for their own resources. Such substitution may conflict with the goal of increasing the total amount of resources devoted to a particular type of infrastructure, but it may not be problematic for other goals. Second, broader criteria would make it more difficult to influence the choices of state and local managers, for doing so requires the matching rates for grants to vary according to the characteristics of each infrastructure type. (However, since most grants are closed-ended, federal influence currently may be limited anyway.) Finally, broadly defined federal grants would reduce the Congress's ability to define different target populations for each type of infrastructure. One purpose of mass transit grants, for example, is to increase the mobility of the poor; highway grants, in contrast, are intended to benefit all drivers, without explicit reference to income.

CONCLUSION

In the last 40 years, this nation has accomplished many of the goals that it set when establishing its major infrastructure programs. Further progress will depend on our ability to structure federal programs in ways that reflect the changing nature of the challenges that these programs are meant to address.