

INFRASTRUCTURE ISSUES

FINDINGS AND RECOMMENDATIONS OF THE NATIONAL COUNCIL ON PUBLIC WORKS IMPROVEMENTS

Michael C. Bell

Principal Research Scientist
Johns Hopkins University
Institute for Policy Studies

Introduction

The quality of a nation's infrastructure is a critical index of its economic vitality. Reliable transportation, clean water, and safe disposal of wastes are basic elements of civilized society and a productive economy. In its final report, Fragile Foundations: A Report on America's Public Works, the National Council on Public Works Improvement concluded that there is convincing evidence that the quality of America's infrastructure is barely adequate to fulfill current requirements and insufficient to meet the demands of future economic growth and development.

The Council concluded that unless we dramatically enhance the capacity and performance of the nation's public works, our generation will forfeit its place in the American tradition of commitment to the future. Without such an effort, our legacy will be modest at best. At worst, we will default on our obligation to the future, and succeeding generations will have to compensate for our failures.

The Council found that most major categories of public works in the United States are performing at only passable levels. Water supply and water resources remain in reasonably good shape, due in part to the mixture of self-reliant publicly and privately owned systems, although some public water systems suffer from low subsidized pricing structures, stricter water purity standards and numerous cases of source contamination.

Highways, Roads and Streets

The Council evaluated the highways, roads, and streets as being in relatively good condition. In 1984, the capacity of U.S. roads swelled from increased motor fuel tax earnings. Since 1985 improved pavement conditions have helped with the steady rise in usage of roads, bridges, and highways, although increased congestion, especially in urban areas, plays a significant role in future plans. For example, in Los Angeles County congestion causes an annual loss of \$57 million in wasted time and 72 million gallons of wasted gasoline. Since 1985 higher user taxes, supporting greater investment, have assisted in spending keeping up with current needs. However, future population increases, increased travel patterns, and regional shifts will demand further expansion.

Wastewater Treatment

Other public works systems, primarily those designed to protect our environmental quality, have serious and growing problems. Secondary wastewater treatment facilities, serving over 75 % of the U.S. population, protect the nation's drinking water and environment. Despite the federal government's investment of \$44 billion in sewage treatment facilities since 1972, water quality throughout the U.S. has neither improved nor deteriorated. This paralysis is attributed to population growth, major industrial expansion, uncontrolled runoff from farmlands, and highways and declining productivity at many facilities.

Solid Water Management

The Council viewed solid waste disposal and management to be in a dire predicament. From 1960 to 1985 waste disposal per person multiplied 35 % — from 2.3 to 3.1 pounds per person each day. Per capita spending on solid waste facilities during this same period increased over 80%. With current more stringent environmental regulations, the cost of garbage disposal will increase more rapidly in the future. After the enactment of the RCRA and other amendments, few new landfills opened, while numerous existing ones closed. Massachusetts had five hundred active landfills in 1970. In 1980, they decreased to four hundred and further reductions have left many fewer landfills in operation.

Since large amounts of time are required to site and develop landfills or waste-to-energy facilities, planning to avert a crisis must begin.

Hazardous Waste Disposal

The situation for hazardous waste disposal is just as critical. Each year industry generates two tons of hazardous waste per person. Little is known about the current capacity of U.S. hazardous waste management facilities to deal with the tremendous increase in its generation. Most treatment, storage, and disposal facilities are onsite and managed by private firms. The Bureau of Census estimates the private cost of hazardous waste management reached nearly \$2.5 billion in 1984. Just as with solid waste, long lead times are required to plan hazardous waste facilities, so again action must occur now.

A Strategy for the Future

To respond to these concerns, the Council formulated and presented to the Congress and the President a comprehensive strategy for enhancing the capacity and performance of the nation's public works. The Council called for a national commitment, from the public and private sector, to increase by up to 100% the amount of capital that

the nation invests annually in new and existing infrastructure. The Council recognized that such a commitment is only one of many critical claims on the nation's resources. Therefore, they supported appropriate actions to redress the imbalance between consumption and savings so that future infrastructure commitments will not be shortchanged and this generation can act responsibly to meet its stewardship responsibilities.

Mobilizing adequate financing to meet our current and future public works needs should be guided by the following principles:

- + Users and other beneficiaries should pay a greater share of the cost of infrastructure services.
- + The federal government should be a reliable partner in financing public works.
- + States should develop comprehensive infrastructure finance strategies.
- + Local governments should give budgetary priority to funding the maintenance of existing facilities and we as shareholders in America's capital stock, should demand no less.

The Council recognized that spending more money was not the only appropriate response. The Council felt that the capacity and performance of the nation's infrastructure could be improved through other means besides just spending more. They were concerned that steps be taken to ensure that resources spent on the nation's infrastructure be spent as efficiently as possible. As a result, they concluded that a strategy to upgrade America's infrastructure must incorporate other tactics in addition to increased investment. Thus, the Council also recommended,

- + Clarification of the respective roles of the federal, state, and local gov-

ernments in infrastructure construction and management to increase accountability

- + More flexible administration of federal and state mandates to allow cost-effective methods of compliance
- + Accelerated spending of the federal highway, transit, aviation, and waterways trust funds
- + Removal of unwarranted limits on the ability of state and local governments to help themselves through tax-exempt financing
- + Strong incentives for maintenance of capital assets and the use of low-capital techniques such as demand management, coordinated land-use planning, and waste reduction and recycling
- + Additional support for research and development to accelerate technological innovations and for training of public works professionals
- + A rational capital budgeting process at all levels of government

Conclusion

Progress on all of these matters is important. No single approach by itself will be adequate. More money alone will not suffice. More effective management alone will not get the job done. Technology will not save the day. The complexity of these systems and their attendant problems demand a broad-based strategy to be pursued simultaneously.

The longer the delay in implementing such a comprehensive strategy, the greater the cost to the nation and to each of us individually. Such an agenda, however, cannot be accomplished in a short period. The nation's infrastructure problems can only be dealt with effectively if we begin to mobilize resources now, and if all levels of government and the private sector dedicate themselves to a sustained effort. Elected officials and the public at large must recognize that capital expenditures are not the only cost of public works; rather, the expense incurred through delays in providing needed services, added to the value of local economic opportunities, often can exceed direct budget costs. To reach this goal by the turn of the century, we must start now to rebuild what we have neglected, to repay where we have borrowed, and to invest again in our future and our children's future.