Public infrastructure is an important factor in urban economic development. Whether local governments can carry a large part of the burden of financing public investment without severely curtailing other necessary programs is not clear. What is clear is that the longer public works improvements are neglected, the harder it will be to break the cycle between deteriorating infrastructure and economic growth.

**Footnotes**


**References**


**BULK RATE**

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The trend is increasing for both the As can be seen in figure 1, the situation is similar in Chicago: 90 cents of Denver, spend only 20 cents of every $50 per person per year.

Current stock of public capital at its present level, according to our estimates, amounts to more than $500 per person per year. As can be seen in figure 1, the situation is similar in Chicago. 90 cents of every public investment dollar goes toward keeping public capital stock at its present level. Places that have had a robust economy during the past decade, such as Atlanta, Dallas, and Denver, spend far more than their capital stock built since 1970. Mature cities tend to spend most of their public investment dollar to keep the nation's public infrastructure intact, or at least ensure that they have at least a portion of what they created in the past. Mature cities tend to spend the greatest portion of their public investment dollars to keep public capital at its current level for two reasons. First, these cities simply have greater stock per person, due to a longer history of accumulating stock or due to a population decline. Second, their public works expenditures are decreasing, especially with respect to the existing capital stock. Another way to view the problem facing older industrial cities is to look at the age of their public capital stock. One measure of age is the percentage of their current capital stock put in place within the last 15 years. As shown in figure 2, the average for 40 urban areas is 37 percent. For Cleveland and Chicago the value is about 20 percent—almost half the sample average. In contrast, Atlanta and Dallas have had more than 40 percent of their capital stock built since 1970.

This difference in age across various types of cities is disturbing not only with respect to the condition of capital stock in cities like Cleveland, but also with respect to the ability of local areas to adapt to changing demands for infrastructure. Not only does the spatial demand for infrastructure change, but the demand for the various types of infrastructure also varies. Suburban airports have replaced downtown railroad stations, freeways have replaced trolley systems, and an information-based economy is encouraging on a material-processing economy. Thus, lack of discretion in how limited funds can be spent is a serious problem for older cities in their efforts to position themselves for future economic development.

The Importance of Public Infrastructure to Economic Development The importance of public infrastructure to economic development might be captured in one business owner's response to the possible closing of Cleveland's Eagle Avenue ramp. "The ramp is the only way for my east side customers to find us." When the ramp did close for repairs, no businesses reportedly shut down. It is not clear, however, what would have happened had the ramp closed permanently. Implicit in much of the discussion of the need for public infrastructure is the belief that deterioration in the quality of a city's public capital stock reduces the city's attractiveness to firms and residents, stifling economic development, productivity, and the creation of jobs. Furthermore, policymakers concerned with regional issues have claimed for years that public infrastructure investment is one of the primary means to implement a regional growth strategy. Empirical studies support the established intuition that public infrastructure plays an important role in economic development. In general, these studies show that public infrastructure investment affects the growth rate of a region as measured by personal income.

The effect of public infrastructure on economic development can come through various channels. Research has found that the level of public infrastructure significantly affects manufacturing output in metropolitan areas. Studies also show that public investment stimulates private investment, both in local economies and at the national level. Of particular importance to the issues discussed here is the finding that public investment has had a greater effect on net capital formation in distressed cities than in growing cities. Furthermore, studies show that specific types of infrastructure, such as transportation and communication, have a larger effect on economic growth than do other types of infrastructure.

If public infrastructure indeed provides important services to the private sector, then another way to measure the condition of the nation's infrastructure is to compare the growth of public investment to private investment. We find that the annual rate of public works investment versus private manufacturing investment in U.S. cities has declined steadily since the 1950s. Between 1958 and 1978, manufacturing private capital stock has grown at an annual rate of 2.7 percent, while public capital stock has grown at an annual rate of 1.6 percent. These trends cast doubt on the ability of current levels of infrastructure to support future economic expansion.

Sources of the Problem The reason for the general decay of the nation's infrastructure are many and varied, and no single factor can be blamed. For Cleveland and cities like it, much of the problem can be traced to an aging industrial base, which yields a double-edged sword, both reducing the fiscal base and increasing the need for welfare programs. In many cities, immediate welfare needs have supplanted the longer-run benefits of public investment programs. For example, poverty-related social expenditures per capita in Cleveland increased 55 percent from 1977 to 1985, while the average of these expenditures for a representative sample of 37 large urban areas increased only 13 percent. Meanwhile, per capita expenditures on development services in Cleveland fell 6 percent over the same period, while the average in other urban areas increased 10 percent. While needs have increased and local resources have declined, federal assistance has fallen. Federal grants in aid have dropped to 20 percent of local government receipts in 1985 from a high of 30 percent in the late 1970s. This percentage matches the federal government's role in 1965, which predates major federal initiatives such as the Clean Air and Water Acts, general revenue sharing, and many block grant programs. The states have picked up about half of the loss of federal funds, but local governments must absorb the shortfall through some combination of raising additional revenues, eliminating services, cutting back on welfare transfers, or reducing public investment. The greatest impact of reduced federal assistance to local governments has been on infrastructure projects primarily because of the way in which various levels of government have assumed responsibility for public works. Local governments are responsible for construction of over 90 percent of the public works investment in the country, and this percentage is growing. More than half of the financing for these projects comes from federal grants, however, and this percentage is declining. The federal budget for 1988 and the proposed budget for 1989 have further reduced some of the key public works programs and have called for the elimination of others, including Urban Development and Assistance Grants and the Economic Development and Assistance Administration. Highway funding is the only area that remains unscathed, partly because its expenditures come from a trust fund and do not compete for funds from the general budget.