

Highlights of [GAO-04-744](#), a report to the Ranking Minority Member, Committee on Commerce, Science, and Transportation, U.S. Senate

## Why GAO Did This Study

Passenger and freight traffic are expected to grow substantially in the future, generating additional congestion and requiring continued investment in the nation's surface transportation system. Over the past 12 years, the federal government has provided hundreds of billions of dollars for investment in surface transportation projects through the Intermodal Surface Transportation Efficiency Act of 1991 and its successor legislation, the Transportation Equity Act for the 21<sup>st</sup> Century. Reauthorization of this legislation is expected to provide hundreds of billions of dollars more in federal funding for surface transportation projects. For this investment to have the greatest positive effect, agencies at all levels of government need to select investments that yield the greatest benefits for a given level of cost.

This report provides information about the processes that state and regional transportation decision-makers use to analyze and select transportation infrastructure investments. GAO identified (1) key federal requirements for planning and deciding on such investments, (2) how benefit-cost analysis facilitates sound decision-making, and (3) other factors that decision-makers consider in evaluating and deciding on investments. We provided copies of this report to the Department of Transportation for its review. The Department generally agreed with the report's contents and provided technical comments, which we incorporated as appropriate.

[www.gao.gov/cgi-bin/getrpt?GAO-04-744](http://www.gao.gov/cgi-bin/getrpt?GAO-04-744).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Kate Siggerud, (202) 512-2834, [siggerudk@gao.gov](mailto:siggerudk@gao.gov).

June 2004

# SURFACE TRANSPORTATION

## Many Factors Affect Investment Decisions

### What GAO Found

Federal requirements specify the overall approach that states and regional organizations should use in planning transportation infrastructure projects, but generally do not specify what analytical tools planners should use to evaluate projects. These key requirements include developing strategic goals and objectives; considering a wide range of environmental and economic factors; preparing long- and short-range plans; and ensuring an inclusive process that involves many stakeholders.

The Office of Management and Budget, the Department of Transportation (DOT), and GAO have identified benefit-cost analysis as a tool to help decision-makers identify projects with the greatest net benefits. The systematic process of benefit-cost analysis helps decision-makers organize information about, and determine trade-offs between, alternatives. Researchers also acknowledged challenges in applying benefit-cost analysis, including quantifying some benefits and costs, defining the scope of the project, and ensuring the precision of estimates used in the analysis. Ongoing research by DOT and others is aimed at improving and expanding state and regional decision-makers' application of benefit-cost analysis.

Many of the transportation planners we interviewed said that factors other than the analyses developed during the planning process often influenced final investment decisions. For example, state and regional decision-makers must consider the structure of federal funding sources. Since federal funding often is tied to a single transportation mode, it may be difficult to finance projects that do not have dedicated funding, such as railroad improvement projects. In addition, decision-makers must ensure that wide-ranging public participation is reflected in their deliberations and that their choices take into account numerous views. In some cases, voter support through referenda is required before a project may proceed or financing can be secured. The physical constraints of an area may also affect investment choices. Difficulties in expanding capacity and limits on existing infrastructure may direct investments to preserving and maintaining existing facilities or improving operations. Finally, multistate transportation corridors present special challenges in coordinating investment decisions.

### Key Factors Affecting Transportation Planning Decisions

