



Understanding the Impact of Highway Capacity Projects on the Economy

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Many local, regional, and state transportation planners and consultants have attended public meetings at which proponents claim that a proposed project will save the local economy, and opponents counter that the effects will be detrimental to the economy or to the local quality of life. For the staff of transportation planning agencies, determining the validity of either party's claims or the issues that are likely to arise can be difficult.

To inform discussion and decision making with real-world experience, SHRP 2 developed a national database of case studies on the economic and land development impacts that have followed the completion of highway and highway-intermodal projects. The associated software tool for viewing and using this information is called TPICS, for Transportation Project Impact Case Studies; the tool can be accessed on the web.¹

Documented Impacts

The database comprises 100 completed case studies, with pre- and postproject data, to show changes in economic and land development conditions. Each

¹ www.tpics.us.

case study portrays changes in the immediate project areas, compares the changes with corresponding county and statewide trends for the same time period, and uses interviews to identify the relative influence of the transportation project on the economic outcomes. Whenever possible, the impacts are measured in terms of changes in property values, building construction, tax revenue, employment, and income levels.

The case studies represent all major project types, including intercity highways, urban beltways, local access roads, bridges, interchanges, and intermodal passenger and freight terminals. The projects span all regions of the continental United States, urban and rural settings, and different levels of economic distress.

The TPICS web tool provides transportation planners with a way to search for relevant case studies by type of project and type of location or setting. The case studies offer details of the projects, the economic impacts, and the factors that affected the outcomes. The web tool also allows users to specify a type of proposed project to see the range of impacts that would be expected based on the case study experience.



Among the case studies featured in the TPICS database is the construction of I-295 in Virginia.

PHOTO: VIRGINIA DOT



Applying the Tool

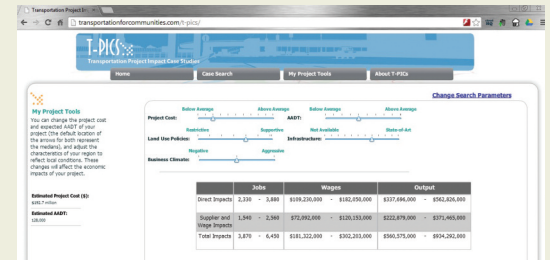
These features have three important uses:

1. Early-stage policy or strategy development, for identifying the magnitude and types of tradeoffs to consider;
2. Early-stage sketch planning, for identifying local barriers and success factors to address in later, more detailed planning steps; and
3. Information for public hearings and discussions, by showing how similar types of projects have affected other areas.

In addition, researchers can access the 100-case study database for further analysis and can develop and add case studies, increasing the usefulness of the TPICS database. The SHRP 2 report, *Interactions Between Transportation Capacity, Economic Systems, and Land Use*, describes in detail the findings that emerged from an analysis of patterns in the case studies.²

In terms of the multistage transportation planning process, TPICS supports the initial screening

² www.trb.org/Main/Blurbs/166934.aspx.



TPICS users can narrow their searches by type of project and type of location.

of proposals and the development of sketch-level, conceptual plans. The tool does not require information on project costs or the expected impacts on traffic flow. The user specifies a type of project and location or setting, and TPICS displays the range of typical costs, typical impacts, and the local factors in the impacts. TPICS therefore does not replace the need at later planning stages for a project-specific analysis of transportation and economic conditions; a project-specific analysis requires more sophisticated tools for forecasting travel demand and economic impacts.

Minnesota Kicks the Tires on TPICS

Pilot-Testing a Web Tool for Assessing Economic Impacts

MATT SHANDS

Not long ago, mobility, access, and safety determined the priorities and the selection of most investments in transportation infrastructure. Today, with an increasingly competitive global economy and a political emphasis on job creation, many state departments of transportation (DOTs) and regional metropolitan planning organizations have established programs to direct funding toward transportation projects that promote business expansion and economic development. In response, SHRP 2 has produced a web-based, economic impact assessment tool, Transportation Project Impact Case Studies, or TPICS, that provides access to a national database of case studies for assessing the potential economic effects of transportation improvement projects.

SHRP 2 enlisted Minnesota DOT, along with partners at the University of Minnesota and Regional Economic Models, Inc., a firm based in Amherst, Massachusetts, to pilot-test the TPICS web tool. The test will analyze and compare the findings derived from the model against the observed economic impacts of the completed projects.



PHOTO: MATT SHANDS

Minnesota DOT and partners will pilot test the TPICS web tool to compare the predicted and observed economic effects of transportation improvement projects.

Two benefits are expected from the pilot test: first, the Minnesota DOT team will conduct a review of the TPICS tool and make recommendations; second, case studies of the 20 projects that the team is evaluating could be added to the project database. Both efforts will contribute substantially to the utility of the tool.

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