



Project Information Form

Project Title	A Data Driven Approach to State Transportation Investment Decisions: a Transportation Project Investment and Evaluation Resource (T-Pier)
University	Georgia Institute of Technology
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Funding Source(s) and Amounts Provided (by each agency or organization)	NCTSPM: \$150,000
Total Project Cost	\$150,000
Agency ID or Contract Number	DTRT12GUTC12 NCTSPM 2013-015
Start and End Dates	11/1/2013 - 7/1/2015
Brief Description of Research Project	<p>The primary objective of this research is to provide a data-driven resource that planners and engineers, policymakers, service providers and researchers can use to determine how investments should be made in the future by balancing available resources to maximize return on investment (ROI). This is achieved in three ways: (1) development of a multi-criteria investment performance tool to measure the economic contributions of performance measures by simulating travel behavior in response to each potential project, (2) development of a resource allocation toolkit to prioritize all potential projects to optimally distribute funds subject to budget and other constraints and (3) inclusion of sophisticated financial instrumentation to measure long-term ROI.</p> <p>The proposed research will deliver a comprehensive decision support system in one toolbox called the <i>Transportation Project Investment and Evaluation Resource (T-PIER)</i>. T-PIER will be equipped to examine the performance of each objective in small and medium scale transportation networks with multiple interacting modes such as driving, biking, and walking. The proposed tool will assist planners and engineers</p>



	determine the optimal allocation of projects for obtaining maximum benefits when resources are limited and scarce. The proposed T-PIER framework combines both a travel demand and resource allocation model to interactively communicate and obtain an optimal set of projects to maximize ROI.
Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos)	<i>Nothing to report at this time</i>
Impacts/Benefits of Implementation (actual, not anticipated)	<i>Nothing to report at this time</i>
Web Links <ul style="list-style-type: none">• Reports• Project website	In development