

Title:	Integration of Stated Preference and Revealed Preference Methods in Regional Travel Survey Programs
The Problem:	<p>The focus of transportation planning today is not just on infrastructure development, but also on Travel Demand Management (TDM). In addition to improving the accuracy of demand quantification, travel demand forecasting models must incorporate TDM policy analysis capabilities, including congestion pricing and time-of-day shifting strategies. The development of such policy-sensitive travel demand models requires data on individual choice behavior that traditional travel surveys do not gather. Traditionally, travel surveys only capture a record of past travel, also known as revealed preference, or RP. Stated preference (SP) methods, on the other hand, observe the behavioral choices of individuals when confronted with hypothetical situations. Regional travel surveys that integrate RP and SP methods would thus contribute significantly toward the development of travel demand models that are better suited to policy analyses, especially in assessing alternatives that do not currently exist.</p> <p>The integration of RP and SP methods in regional travel surveys must be cleverly designed to balance the incorporation of all the important policy scenarios and the consequent survey burden. This is further complicated by the fact that the design of an SP experiment is dependent on the specific policy scenario.</p> <p>Guidelines and a practical methodology are thus important inputs in the development of a successful RP-SP integrated travel survey. Almost every MPO and TxDOT district office that undertakes transportation demand forecasting and policy evaluation is impacted by this problem.</p>
Technical Objectives:	<p>The objective of this project is to propose a general methodology to integrate RP and SP methods in regional travel surveys, which can be used by TxDOT and metropolitan planning organizations.</p> <p>The researchers shall address the following:</p> <ol style="list-style-type: none"> 1. Assess existing integrated surveys to identify the advantages and limitations of techniques that are in practice. 2. Develop a practical methodology for developing an integrated travel survey using lessons from the assessment. 3. Provide a proof of concept or hold a focus group to test the methodology. 4. Make recommendations to guide the planner in designing experiments to represent specific policy scenarios. <p>The expectation of this project is that the end product will obtain a TRL level 6.</p>
Desired Deliverables:	<ol style="list-style-type: none"> 1. Technical memorandum for each task completed. 2. Monthly progress reports. 3. Value of Research (VoR) that includes both qualitative and economic benefits, to be included in the final research report. 4. Research report documenting the findings of the research, including a general methodology to integrate RP and SP methods in regional travel surveys, which can be used by metropolitan planning organizations. 5. Project Summary Report.
Proposal Requirements:	<ol style="list-style-type: none"> 1. Utilize the "Proj/Agre" and "PA_Form" templates located at the TxDOT RTI website. 2. Proposals will be considered non-responsive and will not be accepted for technical evaluation if they are not received by the deadline or do not meet the requirements stated in RTI's University Handbook, which is also located at the RTI website. 3. Proposals should be submitted in PDF format, 1 PDF file per proposal. File name should include project name and university abbreviation. 4. This project will be tracked during the life of the project using a Technology Readiness Level (TRL) scale. For more information about the use of a TRL, click.