**NCHRP Project 08-36**

**Proposed Research Problem Statement**

1. **Title**

Assessing the Utility and Costs of Statewide Travel Demand Models

1. **Background**

**This proposal is to examine the costs and utility associated with developing and maintaining statewide travel demand models.**

There has been a great deal of interest among state DOTs in developing a statewide travel demand model (STDM). It is our understanding that approximately half of all states have an operational statewide model. The motivation for having a STDM stems from the desire for statewide consistency in data input, modeling assumptions and forecasting methods. Statewide models;

1. serve as a way to connect model outputs of converging MPOs,
2. allow for forecasting of rural and intercity travel,
3. improve a DOT’s ability to evaluate various transportation policies, improvements and planning scenarios, and
4. improve the understanding of interstate and intrastate commodity movements.

With limited resources, state transportation agencies must carefully weigh the anticipated benefits of building and maintaining a statewide model against the costs. Today, data is more readily available and often at a lower cost. This research would examine the costs and utility among a sampling of those states that currently maintain STDM. Assuming that statewide models provide greater value in certain scenarios but not all, the sample would include a cross section of states, from small to large, from urban to rural, and including states that are experiencing strong growth as well as those that are not. The proposed research would summarize costs, both initial and recurring. The research would document how the statewide model is used in support of multimodal planning and, to the extent practical, quantify the value of these models.

1. **Statement of Urgency**

For states that do not have a STDM, the question of whether or not the value warrants the resources required is periodically raised by those that would share in the benefits. The insight gained through this research will inform and guide states that are considering the development of a statewide model.

For states that are currently maintaining a statewide model, the findings would provide something of a benchmark from which to compare costs and utility.

1. **Project Objective(s)**
2. Identify the array of users and applications of STDMs, and
3. Identify the challenges, costs, and benefits of developing a model.
4. **Relationship to Existing Body of Knowledge**

*There has been research specifically assessing the feasibility and benefit of statewide models for individual states.* There are also studies that have focused on enhancing the use of travel demand models, but fall short of answering the broader question of costs and utility of *statewide* travel demand models.

1. **List of Anticipated Work Tasks**
2. Survey of other state’s practices, including costs and resources associated with developing, updating, and maintaining their STDM, all business areas and outside organizations that have benefited, how they are managed and updated, types of models used, how other models are incorporated, and any other questions the researcher deems appropriate.
3. Search and review all relevant literature, data collection, and modeling efforts currently underway.
4. Document costs associated with the development and maintenance of statewide models as well the utility of the models in support of planning. To the extent practical, quantify the value of the statewide models.
5. **Estimate of Funds Needed**

$60,000

1. **Estimate of Time Needed to Complete the Research**

1 year

1. **Name, Affiliation and Contact Information of Submitter(s)**

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1. **Date of Submittal**

03/31/15