Resources for Using State-of-the-Art Travel Demand Models

Primer on how to use advanced integrated travel demand models

Many states and metropolitan planning organizations (MPOs) are considering moving forward with new activity-based (AB) models. The skills required to build, test, and implement an AB model are limited, however, to a small number of MPOs, state departments of transportation, vendors, and consulting firms.

The Solution

This project will develop a practical how-to guide on AB models for managers and practitioners. Delivered as an online manual, the primer will support use of the Dynamic Integrated Travel Demand Model and Time Sensitive Network open-source models produced in the C10A and C10B projects. These models link travel behavior choices, such as departure time or route, with congested network conditions and land-use models to better reflect real-world dynamics. By using these models, planners can more directly test the effects for various alternatives on congestion.

In addition to the primer, the project will deliver a strategic implementation plan that addresses the benefits, issues, and barriers to migrating from a “traditional” approach to using travel-demand modeling to an AB modeling approach.

How can you learn more?

The online primer will be incorporated into the Travel Forecasting Resource (TF Resource) website hosted by TRB at www.tfresource.org. The site is a collaborative effort to collect travel forecasting resources and to augment them with the experience and practical understanding of the travel forecasting community. This project is active and the primer is expected to be available in mid-2014. For more information, contact Brian Gardner at FHWA, brian.gardner@dot.gov; Matt Hardy at AASHTO, mhardy@aashto.org; or Steve Andrle at TRB, Sandrle@nas.edu.

About SHRP2 Implementation

The second Strategic Highway Research Program is a national partnership of key transportation organizations: the Federal Highway Administration, the American Association of State Highway and Transportation Officials, and the Transportation Research Board. Together, these partners conduct research and deploy products that will help the transportation community enhance the productivity, boost the efficiency, increase the safety, and improve the reliability of the Nation’s highway system.

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