

VTM Connection

Virginia's Transportation Modeling Newsletter

NHI Travel Demand Forecasting Course a Success

The National Highway Institute (NHI)'s Introduction to Travel Demand Forecasting Course (#152054) was hosted by VDOT in Richmond from October 2nd through October 6th. The course instructors were Joel Freedman and David Ory from Parsons Brinckerhoff. The course covered the traditional four-step travel model approach of trip generation, trip distribution, mode choice, and traffic assignment in travel demand forecasting. The course also included presentations on the development of land use forecasts, network and zone structures, the use of geographic information systems (GIS) and an interactive PC based training workshop.

A total of twenty five participants attended the course from state, MPO, and local agencies. Participants came from variety of backgrounds and included a mix of new technical staff and veteran planners seeking to learn more about travel demand forecasting. "Learning the theory and fundamentals of travel demand forecasting before stepping into it is a good first step," said senior GIS analyst Matt Merrill of VDOT-TMPD. "I have a much better appreciation of the travel demand forecasting process and all the variables involved," added GIS manager Bryan Kelley of VDOT-TMPD.



From Top to Bottom: Juyin Chen, Matt Merrill, Liz McAdory, and Archita Rajbhandary working together during the training.



From Left to Right: Chuck Proctor, Rick Youngblood, John Giometti, and Dale Stith working through an exercise during the Travel Demand Forecasting Software workshop.

In Virginia, several MPO and Planning District Commission staff attended the training from Hampton Roads, Richmond, and Roanoke. "The training was very useful and it was very beneficial to revisit the concepts after having had several years of practical experience," said Mark McCaskill, a senior planner with the Roanoke Valley-Alleghany Regional Commission (RVARC).

Look for information on future training opportunities in the News Brief section of VTM Connection.

2006 Citilabs Software Training a Success

VDOT sponsored its 2006 Citilabs software training in Richmond from December 4th through December 8th. A total of 22 participants attended from the Fredericksburg, Hampton Roads, Richmond, and Roanoke Planning District Commissions (PDCs), and VDOT. Citilabs' software is the standard software platform used for travel demand modeling in Virginia and by the Metropolitan Washington Council of Governments (MWCOC). Citilabs is the software vendor for MINUTP, TRANPLAN, TP+, CUBE Base, and CUBE Voyager.



Front: Juyin Chen and Andy Pickard work on an exercise during Citilabs training.



Citilabs Training Participants

Participants came from a variety of backgrounds and included a mix of new and seasoned modelers seeking to learn more about using Citilabs software for travel demand modeling. The course instructor was Wade White, the Regional Director for Citilabs' Annapolis, MD office. The first half of the course focused on Model Application using CUBE Base. The second half of the course focused on Model Development and Scripting using CUBE Voyager. The course also discussed several software extensions including Reports, Analyst,

Cargo, and Cluster. To provide participants with hands on Virginia modeling experience, a modified version of the Winchester MPO model was used in the training in addition to the standard Cubetown model used in standard Citilabs training courses. The Virginia Statewide Model (VSM) and Richmond/Tri-Cities (RTC) models were also presented to participants during the course.

VDOT modeling staff plan to use what they learned in the training to help move existing TP+ script and CUBE TP+ models into CUBE Voyager, better utilize CUBE Base functionality, and help better integrate transportation networks with GIS and Statewide traffic databases. Several PDC and MPO modeling staff who attended the training are looking to



Front Row, From Right to Left: Dale Stith, Bahram Jamei, and Juyin Chen during the Citilabs Training.

use their respective travel demand models to better support transportation applications in their areas.



Participants listen to instructor Wade White.

VDOT plans to continue to sponsor Citilabs software training for State, PDC, and MPO modeling staff in Virginia in the future. Look for more information in future issues of VTM Connection.

NHTS Add-On Program Update



Virginia officially joined the Add-On Program in July, when VDOT committed \$2.5 million for 12,000+ samples statewide. The National Household Transportation Survey (NHTS) project team made a presentation to the Virginia Transportation Model (VTM) User's Group at its November 15th meeting. Heather Contrino, the NHTS project manager, provided an overview of the NHTS program and described the upcoming schedule. FHWA is currently in the process of completing consultant selection and expects to complete the selection process by Spring, 2007. Survey pretesting is expected to occur nationally in Summer, 2007.

VDOT Transportation Mobility Planning Division (TMPD) staff plans to begin working together with District, PDC, and MPO staff throughout the state starting in Summer, 2007 to discuss sample size, survey design, and other survey logistics. The current NHTS Add-On schedule for Virginia is:

1. Finalize Sample Sizes & Survey Design (Fall, 2007)
2. Begin Survey Data Collection (Fall, 2007 to January, 2008)
3. Survey Data Collection Completed (Fall, 2008 to January, 2009)
4. Processing and review of survey data (Winter, 2009 to Fall, 2009)
5. Survey data available for Travel Demand Modeling and other Transportation Planning applications (Late 2009)
6. NHTS Survey Documentation (2010)
7. Training in using NHTS Survey Data (2010)

Since the survey will be conducted over a full one year period, survey results will provide an opportunity to study both daily and seasonal variation. Survey results will also provide a wealth of data on multimodal travel both within metropolitan areas and statewide. Data from these surveys will be used to support both metropolitan and statewide travel demand modeling and other transportation planning application efforts throughout the state. Some sampling will also be conducted in Northern Virginia for comparison with the ongoing Metropolitan Washington Council of Governments (MWCOCG)'s Activity Based Household Travel Survey.

Look for updates on this survey effort in future editions of VTM Connection. For more information on Virginia's NHTS Add-On survey program, contact Paul Agnello at (804) 786-2531 or paul.agnello@vdot.virginia.gov

Highlights of Virginia Travel Demand Modeling Activities

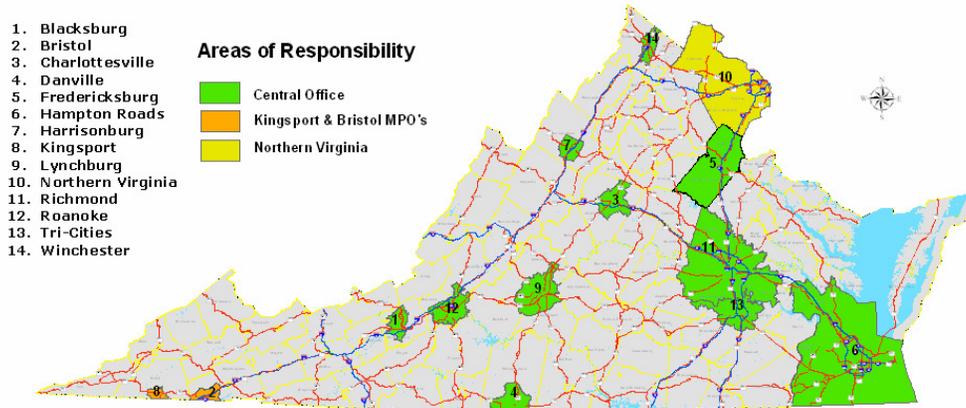
No.	District/MPO Area	Contact(s)	Current/Recent Activities
1	Washington, DC	Bahram Jamei	Activity Based Household Travel Survey Underway
2	Northern Virginia	Bill Mann	I-95/I-395 PPTA Study
3	Hampton Roads	Michael Hester Andy Pickard	Mode choice module converted from FORTRAN into TP+. Air Quality Conformity Analysis.
4	Richmond	Jeremy Raw	Model enhancements made in preparation for Long Range Plan.
5	Tri-Cities	Jeremy Raw	Model enhancements made in preparation for Long Range Plan.
6	Fredericksburg	Nelson Newton	Review of TAZ structure and Land Use Data in preparation for Long Range Plan.
7	Roanoke	Nelson Newton and Mark McCaskill	Validation of model and review of results. Developing 2035 model for upcoming Long Range Plan.
8	Danville	Nelson Newton	Model is in the process of being converted into CUBE Catalog format using TP+.
9	Charlottesville	Paul Agnello	US 29 Study



News Briefs:

1. **Roanoke PDC joins the VTM User's Group.**
2. **Federal TAZ-Up process of creating 2010 TAZ structures for all MPO Areas and Statewide (for rural areas) is expected to start in Late 2007**
3. **Upcoming Training/Events:**
 - a. TRB Annual Conference, DC: January 21st-25th, 2007
 - b. VTM Meeting, February 14th, 2007, Videoconference
 - c. Virginia CTPP Training, Northern Virginia: April 24-26th, 2007

Travel Demand Modeling Regions



VDOT Travel Modeling Contacts:

Travel Demand Modeling:

Central Office: Paul Agnello (804) 786-2531 or Paul.Agnello@VDOT.Virginia.gov

Northern Virginia: Bill Mann (703) 383-2211 or Bill.Mann@VDOT.Virginia.gov

Key Travel Modeling Websites:

VDOT Travel Modeling (Available for VDOT Intranet Users Only):

<http://insidenvdot/Planning/Document%20Library/Transportation%20Modeling%20Website.aspx>

Hampton Roads PDC Travel Modeling:

<http://www.hrpd.org/transport/travdemand.shtml>

Metropolitan Washington COG Travel Modeling:

<http://www.mwcog.org/transportation/activities/models/>

FHWA Travel Model Improvement Program (TMIP): <http://tmip.fhwa.dot.gov/>