

2015 Spring 2014 NCMUG Meeting

Wednesday, April 29, 2015

9:30 a.m. – 12:30 p.m.

Room 306A, Raleigh Convention Center
500 South Salisbury St, Raleigh, North Carolina

Agenda

Moderator: Joe Schirripa, NCDOT

- INTRODUCTION
- MODEL APPLICATION, PLANNING, FORECAST AND POST-MODEL PROCESS

Report 716 – Travel Demand Forecasting: Parameters and Techniques (40 minutes)

Jay Evans, P.E., AICP, Cambridge Systematics, Inc.

Learning Objectives:

- Provide background and overview of the project objectives and methodology
- Present an overview of key aspects of the final report
- Highlight potential relevant applications

Interfacing the Regional Model with Statewide Model to Improve Regional Commercial Vehicle Travel Forecasting (30 minutes – canceled due to presenter's sickness)

Bing Mei, P.E., Triangle Regional Model Service Bureau, ITRE, NCSU

Learning Objectives:

- Provide reasons for interfacing the TRM with the NC Statewide Model
- Methods to link the two models
- Calibration of the resultant base year external trip matrices
- Application of the external trip model for forecasting

A County Adaptation of the Regional Travel Demand Forecast Model (35 minutes)

Dan Goldfarb, P.E., Vanasse Hangen Brustlin, Inc.

Learning Objectives:

- County model validation
- Challenges applying a regional model for local planning needs

Toll Forecasting – A Project-Level Modeling Approach (35 minutes)

Bradley Reynolds, P.E., PTOE, HNTB North Carolina P.C.

Learning Objectives:

- To gain a better understanding of one project-level forecast modeling approach for toll and managed lanes facilities.

Tools and Techniques to Improve Model Resolution (40 minutes)

Paul Ricotta, Caliper Corporation

Learning Objectives:

- To discuss, understand, and identify the limitations of regional travel forecasting techniques and their application to site impact analysis, operational improvements to corridors, and the calculation of Level of Service.
- What tools are available for integrating demand model output with operational level analysis and engaging stakeholders and the public and what is the level expertise required to operate them.
- Understanding how these methods are used and applied to bridge the gap between planning level and engineering analysis.

Other Notes:

Three (3) PDHs can be earned at the meeting (roster sheet & forms will be provided).

Presenters' Bio:

Jay Evans, 2015Apr9 email:

Jay Evans is a Principal and the national Business Operations Manager for Cambridge Systematic's Transportation Modeling Division. He is a specialist in travel demand forecasting and multimodal transportation planning, with more than 20 years of consulting experience. Mr. Evans was an author for nine volumes of the acclaimed Transit Cooperative Research Program Report 95 Series, "Traveler Response to Transportation System Changes." He holds a Masters of Business Administration degree from the University of Virginia and a Bachelor of Science in degree in Civil and Environmental Engineering from Cornell University. He is a licensed Professional Engineer in North Carolina and a member of the American Institute of Certified Planners.

Bing Mei, 2015Apr25 email:

Bing Mei works with the Triangle Regional Model Service Bureau at ITRE as a Senior Research Associate. He is a Professional Engineer with specialties in transportation system modeling and planning, traffic microsimulation, travel surveys, and transportation application software development. He holds both Bachelor's and Master's degrees in Civil Engineering with a concentration in transportation engineering and planning.

Dan Goldfarb, 2015Mar26 email

Dan Goldfarb, PE, has worked in the transportation field for over two decades, both in the United States and abroad. He has experience in multimodal analysis and transportation modeling for planning applications, transportation demand management, as well as traffic operational analysis. He recently rejoined VHB as the transportation planning manager for Northern Virginia. He started his career at COMSIS Corporation in the early 1990's, worked overseas for Uribitran Associates out of their New York City office, and then returned to the Washington, D.C. Metropolitan Area in early 2000's and worked for BMI, Cambridge Systematics, and VHB.

Dan has a bachelor's of arts in political science from the University of Florida. A bachelor's of science in civil engineering from the University of Maryland College Park, and a master's of science in civil engineering from Virginia Tech.

Bradley Reynolds, 2015Apr2 email:

Bradley Reynolds, PE, PTOE, is a transportation project manager at HNTB. He joined HNTB in 2007 and is responsible for the NC traffic group which includes modeling, forecasting, analysis and simulation efforts. Prior to HNTB, he was a traffic engineer at McAdams Company and analyzed development traffic impacts. Mr. Reynolds has a Master of Business Administration from Appalachian State University and Bachelor of Science in Civil Engineering from North Carolina State University.

Paul Ricotta, 2015Apr28 email:

Paul Ricotta is a Principal Engineer and at Caliper Corporation who leads and manages projects to develop travel demand models and other transportation applications in TransCAD and TransModeler. Mr. Ricotta has been closely involved in the modeling efforts in over 20 states, including North Carolina. He has instructed over 1000 transportation professionals in the productive and successful use of Caliper products and has routinely presented research at leading transportation conferences. He has over 17 years of experience in transportation modeling and a M.S. in Civil Engineering from Georgia Institute of Technology and a B.S. in Civil Engineering and Mathematics from Rennselaer Polytechnic Institute. He is instrumental in the evolution of Caliper software products.