

2015 Fall NCMUG Meeting

Thursday, November 19, 2015

1:00 p.m. – 5:00 p.m.

Room 2600, ITRE/NCSU

909 Capability Drive, Research Building IV, Raleigh, North Carolina 27606

Presenters Bio Info

- **MODELING MANAGED LANES**

Modeling Managed Lanes for Traffic and Revenue Forecasting

James Mooradian, Planner, CDM Smith

Bio [Roberto Miquel 2015-10-22 email]

Mr. Mooradian is a planner and modeler at CDM Smith specializing in travel demand modeling for toll road studies. During his three years at CDM Smith, he has performed modeling work for several managed lane studies, including I-295, I-95, and I-275 in Florida, I-10 in California, I-95 in Connecticut, and I-40 in Raleigh, North Carolina. In addition, he has a substantial background in statistics with a concentration in applied statistical modeling, machine learning, and analysis of large datasets. Prior to working for CDM Smith, he studied at the University of Connecticut, receiving Masters Degrees in Civil Engineering and Statistics.

Express Lane Time of Day Model (ELToD)

Jeanette Berk, Senior Consultant, RSG

Bio <http://www.rsginc.com/jeanette-berk>:

Jeanette is a recognized leader in quantitative analyses as it relates to travel demand and, in particular, ridership forecasts. She recently joined RSG and brings valuable experience as a project manager, technical leader, and contributor on a wide variety of modeling projects and related research in Florida.

Prior to joining RSG, Jeanette's career spanned from working at the North Florida TPO and the FDOT-D2 to serving as a Tri-Chair of the Florida Model Task Force and as a staff extension at the Jacksonville Transportation Authority. Most recently, she earned a Master's Degree in Practical Philosophy and Applied Ethics from the University of North Florida. Her thesis focused on the concept of Deliberation and its role in a democratic society.

Jeanette lives in historical Saint Augustine, Florida, where she is actively involved in local politics and enjoys playing both indoor and outdoor soccer. She has a daughter attending the University of Florida in Gainesville and a son at Clark University in Massachusetts.

EDUCATION

MA, Practical Philosophy and Applied Ethics, University of North Florida

MPA, Public Administration, University of North Florida

BA, Language & Sociology, Jacksonville University

Development of Managed Lane Model Based on Meso-Scopic Simulation Approach (40 minutes)

Heejoo Ham, Ph.D., Director of Technical Support, Citilabs

Bio [Heejoo Ham email to Tae-Gyu Kim, 2015-10-13]

Dr. Ham is a transportation planner and engineer with over 20 years experience. He leads the technical support team at Citilabs and is responsible for assisting the users' inquiries, quality assurance of Cube products, training courses, research studies, model developments, and model optimizations. He holds Ph.D. degree in transportation engineering from University of Illinois at Urbana-Champaign. He also worked in URS Corporation over 7 years to develop travel demand forecasting models as well as to conduct various transportation planning projects including a toll revenue study.

Managed Lanes Coding in Travel Demand Models

Brian Wert, PE - NCDOT State Traffic Forecast Engineer

Bio [Brian Wert 2015-10-21 email]

Brian Wert, PE, is the NCDOT State Traffic Forecast Engineer. He has almost 15 years of experience and has worked extensively with travel demand models, traffic forecasts, operational analysis, and microsimulation. He is currently updating NCDOT forecast procedures in light of new guidance from NCHRP 716 and 745.

- **MICRO-SIMULATION MODEL**

A National Freight Micro-Simulation Using Open Software

Gregory Macfarlane, Ph.D., WSP | Parsons Brinckerhoff

Bio [Gregory Macfarlane 2015-10-05 email]

Gregory Macfarlane has two Latin professors for parents and is married to a high school Latin teacher; how he ended up as an engineer is anyone's guess. Regardless, he has been with the Systems Analysis Group of WSP | Parsons Brinckerhoff since 2014; he has previously worked for the National Center for Sustainable Transportation and the Utah Transit Authority. He holds graduate degrees in economics and civil engineering from the Georgia Institute of Technology and a bachelors degree in civil engineering from Brigham Young University.

Simulation Based Dynamic Traffic Assignment for Planning Applications

Daniel Morgan, Caliper

Bio [Yanping Zhang 2015-11-10 email]

Daniel Morgan

Dan Morgan is a Vice President at Caliper Corporation and the product manager for TransModeler, Caliper's microsimulation software platform. Mr. Morgan manages a wide variety of projects involving the development and calibration of wide-area microsimulation models for private sector and government clients. With Caliper for 13 years, Mr. Morgan has been actively involved in research and development projects relating to regional microsimulation, microsimulation of dynamic pricing, and the integration of micro-simulation with travel demand models and with Highway Capacity Manual methods.