NCMUG Vision: To provide a forum for sharing knowledge and experiences of using state-of-practice transportation modeling tools,techniques and innovations appropriate to answer transportation planning and policy questions for the State of North Carolina and promote its implementation across the State.

2023 Spring NCMUG Meeting

Wednesday, April 26, 2023
10:00 AM

Greenville Convention Center
Greenville, NC

Agenda

Moderator: Joe Schirripa

Welcome

A Multi-Survey Perspective on Teleworking in the Post-Pandemic Era

Si Shi, Research Associate, NC State ITRE
Kyeongsu Kim, Director, RSG

Learning Objectives

- Understand recurrent survey methodologies to collect travel information during periods in which travel behaviors change very quickly.
- Observe trends in teleworking before, during, and following the height of the COVID-19 pandemic in the research triangle and New York City regions.
- Highlight trends that may continue to evolve over the next few years and what this means for transportation data users.

Long Term Impacts of COVID 19 on Travel Modeling (20 minutes)

Penelope Weinberger, AASHTO

Learning Objective

- Exploring data on remote work

Scenario Planning for CRTPO's 2050 MTP

Robert W. Cook, AICP, Director, Charlotte Regional Transportation Planning Organization
Martin Kinnamon, PE, Senior Travel Demand Modeler, Charlotte DOT

Learning Objectives

- Scenario Planning's role in the 2050 CRTPO MTP
- Utilization of the Metrolina Regional Simplified Tour Based Model to help discern impact of the following "change factors" on the regional transportation system:

- Connected and autonomous vehicles (CAVs)
- Changing growth and development patterns
- Trends toward working from home

Guidance on Considering CAVs in Travel Demand Models (20 minutes)

Joseph Hummer, PhD, PE, State Traffic Management Engineer, NCDOT, and
Leta Huntsinger, PhD, PE, Associate Director, ITRE

Learning Objectives

- Establish the need for project-level traffic forecasts that account, as well as possible, for connected and automated vehicles (CAVs) that will likely be on NC roads in great numbers by our design years.
- Describe how a research project initiated by NCDOT and being conducted by ITRE will fill that information gap and provide a means to make such forecasts.

Big Data Use Cases in the Metrolina Region

Alex Riemondy, AICP, Senior Travel Demand Modeler, Charlotte Department of Transportation
Marlee Henninge, Transportation Planner, Charlotte Department of Transportation

Learning Objectives

- Understand how big data can be used to support micro and macro transportation analyses through specific use cases
- Outline how traditional tools such as pneumatic tube traffic counts can be used in tandem with big data analytics platforms
- Discuss the caveats and limitations of big data

New Uses of Big Data

Vince Bernardin, Ph.D., Caliper Corporation

Learning Objectives:

- Familiarity with truck route choice and big data for it
- Familiarity with a range of big data metrics for activity-based model calibration

Model Development and Long-Range Planning Across NC

NCDOT, Triad Region, Triangle Region, Metrolina Region

Note: 2 PDHs can be earned for this meeting