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.

2020 Fall NCMUG Meeting

Wednesday, December 2, 2020
1:00 – 5:00 p.m.
Zoom Meeting Link: https://ncsu.zoom.us/j/91050131255

AGENDA

Moderator: Joe Schirripa, CDM Smith

- **INTRODUCTION**

- **COVID19 IMPACT**
  01:00-01:40 PM (40 minutes)
  COVID-19 Impacts on North Carolina Traffic Data
  Kerry Morrow, Traffic Survey Group Supervisor, NCDOT

  Learning Objectives:
  ➢ Understand how COVID-19 and associated mitigation efforts presented challenges for traffic data collection in North Carolina
  ➢ Learn about the pandemic's impacts on traffic volumes and travel trends in North Carolina in 2020 and beyond

  01:40-02:20 PM (40 minutes)
  Covid-19's Impact on Traffic, Travel Patterns, and Transportation System Performance
  Jaehoon Kim, Transportation Modeler, Jake Ford, Transportation Modeler, Durham-Chapel Hill-Carrboro MPO

  Learning Objectives
  ➢ Review the transportation system metrics before and during different phases of COVID-19 pandemic. This includes but not limited to number of accidents, vehicular speed by facility type and travel time reliability
  ➢ Analyze how overall travel was affected during the pandemic, including local transportation network usage, vehicle miles traveled and transit ridership at Durham transit center
  ➢ Understand the travel pattern changes, including percent and travel time changes by trip purpose and mode

  02:20-03:00 PM (40 minutes)
  COVID-19's Impact on Travel Patterns and Mode Choice
  Jorge A. Barrios, Senior Engineer; Mike Aronson, Principal Engineer, Kittelson & Associates, Inc.

  Learning Objectives
  ➢ Understand the impact of the COVID-19 pandemic on NC's travel patterns (so far)
  ➢ Learn about potential future shifts based on stated preference survey data
  ➢ Learn about data sources to continue tracking impacts and long-term changes
  ➢ Identify considerations for long-range travel forecasts and planning

03:00-03:40 PM (40 minutes)
Longitudinal Surveys to Understand Short- and Long-Term Impacts of COVID-19
Michelle Lee, Director; Abigail Rosenson, Senior Analyst, RSG

Learning Objectives:
➢ Survey methodology to achieve representative samples using panels
➢ Key COVID-19 travel implications, nationally and in North Carolina
   o Particular focus on demographic implications and attitudes about travel resumption
➢ Primary panel data applications

- **BIG DATA – USE**
  03:40-04:20 PM (40 minutes)
  Big Data & Pivoting in the NC Statewide Model (NCSTM)
  Stephen Tuttle, Senior Consultant, Steven Trevino, Consultant, RSG

  Learning Objectives
  ➢ Overview of the LBS data processing & expansion methodology used in the NCSTM
  ➢ The application of passive data to the NCSTM via the pivot process
  ➢ Review of the results from data expansion
  ➢ Further opportunities for Big Data applications, including (post) COVID applications and forecast scenarios

04:20-05:00 PM (40 minutes)
Microsimulation Model Calibration During a Pandemic – How Big Data Saved the Day
Graham Malone, Traffic Engineer, HDR; Michael Dennis, SC Public Traffic Lead, Ramey Kemp and Associates

Learning Objectives
➢ Using alternative means to calibrate model
➢ Using big data to develop better large OD tables to make calibration easier
➢ How big data can be used to supplement turning movement counts (TMC) during a pandemic

Other Notes:
Four (4) PDHs can be earned at the meeting.