

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.

2021 Fall NCMUG Meeting

2:30-4:30 PM ET, Tuesday, November 9, 2021
Zoom Meeting Link: <https://ncsu.zoom.us/j/91354527327>

Agenda

Moderator: Joe Schirripa, NCDOT

- **INTRODUCTION**

- **DATA**

02:30-03:10 PM (40 minutes)

NextGen NHTS Data Products and Opportunities for NC¹

Daniel Jenkins, PE, National Travel Behavior Data Program Manager, FHWA Office of Highway Policy Information; Stacey Bricka, PhD, Senior Research Scientist, MacroSys

Learning Objectives

- Update on forthcoming national travel behavior data products that will be publicly available at no charge to users
- Summary of revised core national survey design (smaller, more frequently conducted survey effort, core variables for trending, other design changes)
- Introduction to NC aspects of the new passenger and truck OD national data products (OD structure, available variables, etc.) so MUG can get insights into how this data might inform their models.
- Overview of new add-on opportunities available through NextGen program

Abstract

The daily travel landscape is evolving at a much faster pace than ever before, including the development and widescale adoption of travel modes and the proliferation of data products that leverage passively generated mobility data. FHWA's NextGen NHTS is a complementary data program that offers both traditional survey data alongside OD Flow tables generated using passive data products. The survey has been redesigned to provide a smaller, more focused data set that is available on a biennial basis. The passive data component provides OD flow data for nationwide travel between zones and is available on an annual basis. Combining the strengths of each data set, the data provide a broad coverage of local and long distance travel patterns, personal and truck OD trip counts, and are released on an annual (OD products) or biennial (core survey data) cycle. As both data sources evolve, the NextGen NHTS provides an anchor and comparison point for agencies as they evaluate how to best invest in their data programs.

Bio

Daniel Jenkin

daniel.jenkins@dot.gov, FHWA, DC

Daniel Jenkins is FHWA's National Travel Behavior Data Program Manager, which includes oversight for the development and fielding of the NextGen NHTS core survey component and the NextGen NHTS pooled fund effort.

Stacey Bricka

stacey.bricka@macrosysrt.com, MacroSys, TX

Stacey Bricka is a Senior Research Scientist with MacroSys. She is part of the team that provides technical support to FHWA's NHTS program. She also provides survey guidance to MPOs and State DOTs with respect to their travel survey data programs.

¹ NCMUG_2021F_Abstract_BRICKA_Stacey_MacroSys_2021-09-15_NextGenNHTS091521.docx

- **HIGHWAY ASSIGNMENT**

03:10-03:50 PM (40 minutes)

Use of GPS Trip and Waypoint data for Route Choice Analysis²

Sam Granato, P.E., Transportation Engineer, Ohio Department of Transportation

Learning Objectives

- Travelers “caught in the act” of taking one route over other alternatives, all of which can be compared on criteria travel models can make use of (average time, reliability of time, and travel distance). Leading to more accurate travel modeling, and focused on what travelers actually experience on the roads in small to mid-size North Carolina (instead of a driving simulator or what they might claim in a “preference survey”).

Abstract

GPS trajectory (trip and waypoint) data, the backbone of road segment travel time data, and now also used for such things as electric vehicle dwell times and traffic signal coordination/performance, can also be used to analyze travel route choice to see if travel models focus on the right things or not. A filtered sample of “repeat” travelers in the database are analyzed to see how travel paths used compare to those not used on travel distance, average time, and reliability of time.

Bio

Sam Granato

Sam.Granato@dot.ohio.gov, Ohio Department of Transportation, Columbus, Ohio

Sam Granato worked for MPOs directly while a city employee in Alabama and Iowa, and now supports other MPOs in Ohio and West Virginia. He has a bachelor’s degree in Civil Engineering from the University of Illinois and a master’s in Urban Planning from the University of Iowa. (“I feel the need, the need for speed.” – Tom Cruise, in the movie “Top Gun”)

- **TRANSIT MODELING**

03:50-04:30 PM (40 minutes)

Regional STOPS Models³⁴

Dave Schmitt, CTG

Learning Objectives

- Reasons for developing regional STOPS models
- Difference between two types of regional STOPS models: ‘base’ and ‘planning’
- Examples of regional STOPS models in application
- How regional STOPS might benefit and be implemented in NC model/practice

Abstract

Because of its flexibility and standardization, STOPS is being used in ways beyond its primary focus of CIG corridor studies. CTG has developed two types of Regional STOPS models. One type is a Regional Base STOPS model that is used as a platform for multiple corridor STOPS models. The other type is a Regional Planning STOPS model, which essentially serves as the region’s mode choice model for MPO and/or Long-Range Transportation Planning analyses. This presentation will describe both types of regional STOPS models, and the conditions where they may be helpful to public agencies. Some examples of regional STOPS models developed around the country will also be provided.

² NCMUG_2021S_Abstract_GRANATO_Sam_OVPO_2021-02-24_2_GPStrajectories4RouteChoice.docx

³ NCMUG_2021F_Abstract_SCHMITT_Dave_CTG_2021-09-20_Regional_STOPS_models.docx [no learning points yet]

⁴ SCHMITT_Dave_JIN_Li_2021-09-24_email_Present_STOPS_LearnObject.pdf

Bio

Dave Schmitt

dschmitt@ctgconsult.com, Connetics Transportation Group, Inc., Orlando, FL

Mr. Schmitt has 26 years' experience working on travel demand models around the country. Mr. Schmitt has led the developed of Regional Base models in Minneapolis/St. Paul, the Miami/Ft. Lauderdale/West Palm Beach region, Atlanta, New Orleans, and Columbus Ohio. Mr. Schmitt has led the development of Regional Planning STOPS models in Corpus Christi Texas and the Greater Orlando/Central Florida region.

Other Notes:

Two (2) PDHs can be earned at the meeting.