

Simulation and Capacity Analysis User Group: Louisiana

EDUCATIONAL MEETING #4

Thursday, September 12th, 2019 | 11:00 am – 12:30 pm [CST] Call-In: +1 (646) 558-8656; Access Code: 996 081 381 Webinar: https://zoom.us/j/996081381 Room 175 | Transportation Training & Education Center 4099 Gourrier Ave | Baton Rouge, LA 70808

1. Objectives

- Learn how cluster analysis (as described in FHWA-produced traffic analysis guidance) has been applied to identify representative travel conditions on an illustrative, freeway case study (through a series of example investigations).
- Learn how data from NPMRDS (along with traditional data sources) are being utilized to calibrate/validate the Capital Region Planning Commission's (CRPC's) travel demand model.
- As a group, discuss SimCap-related topics of interest and identify future presentation topics/activities to pursue.
- Obtain one (1) professional development hour (PDH).
- Keep SimCap Louisiana active and engaged!

2. Agenda

Time	Item/Description
11:00 – 11:05 AM	Welcome and Introduction Christopher Melson & Stephen Mensah
11:05 -	Identifying Travel Conditions using Cluster Analysis: Illustrative Investigations
11:35 AM	Christopher Melson Program Manager Louisiana State University (LSU)
	Traditionally, analysts have used a single "normal" day as a basis for evaluating transportation improvement alternatives. However, it is important to evaluate potential improvements across the entirety of travel conditions that occur. FHWA has introduced a method to identify these travel conditions using cluster analysis (clustering conditions occurring over an entire year into a handful of representative travel conditions/days). This was introduced in <u>Scoping and Conducting Data-Driven</u> <u>21st Century Transportation System Analyses</u> and defined in the 2019 update to <u>Traffic Analysis Toolbox</u> <u>Volume III: Guidelines for Applying Traffic Microsimulation Modeling Software</u> . Mr. Melson will present his own experience using this method (and other similar methods): showing several illustrative investigations he conducted through a case study (I-405 corridor in Washington state).
11:35 – 12:05 PM	Utilizing the NPMRDS for Model Calibration/Validation
	Pong Wu Sr. Transportation Planner Capital Region Planning Commission (CRPC)
	The National Performance Management Research Data Set (NPMRDS) provides historical, link-based speed and travel time data. LaDOTD recently sponsored workshops over the NPMRDS – encouraging its use among LaDOTD and Louisiana MPOs. This presentation will discuss how the speed and travel time data from the NPMRDS along with traditional data sources (e.g., traffic counts, etc.) are being utilized to calibrate/validate CRPC's travel demand model.
12:05 – 12:30 PM	Mini Roundtable All Facilitated by Christopher Melson
	Open discussion for all participants to share, discuss, and identify SimCap-related topics of interest. This may include upcoming events, identifying presentation topics for the next meeting, identifying future activities to pursue, and any other topics members would like to discuss. Participants are encouraged to identify topics they would like to discuss beforehand.