NCITE Simulation and Capacity Committee (SimCap)

Meeting Date: September 20th, 2016, 1 to 3 pm
Location: MnDOT Waters Edge, 1500 W County Road B, Roseville, MN

Attendance:
Kevin Sommers – MnDOT
Jim Henricksen – MnDOT
Pat Otto – MnDOT
Jesse Larson – MnDOT
Graham Johnson - SEH
Haifeng Xiao – SEH
Phillip Kulis – SRF Consulting
Mark Powers – Stantec
Sudheen Dhulipala - WSB
Jim McCarthy - FHWA
Ben Hao – Hennepin County - Chair
Joe DeVore – SRF Consulting - Co-Chair

I. Introductions


➢ HCM History
  o 1950s – focused on interstate capacity
  o 1965 – Added LOS criteria
  o 1985 – added research/pedestrian/bicycle criteria
  o 2000/2010 – New research and multiple parts

➢ Major changes for 2016
  o Roundabout capacity
  o Alternative Intersection Analysis

➢ Updates are usually made in online version 4 before the printed update. Online software includes updated sections and example problems

➢ Freeway Facilities updates
  o Freeway work zone method
  o Truck effects on operations
  o Managed lane analysis for left side entering/exiting
  o Calibration Techniques

➢ Urban Street reliability and Arterial work zones

➢ Alternative Intersection Analysis
  o Added At-Grade interchange evaluation
  o Experienced Travel Time criteria for use with J-turns and other alternative intersections.
III. **Presentation by Joe DeVore (SRF Consulting Group):** Snelling Midway Soccer Stadium Transportation Study

- **Study Background**
  - Stadium proposed to be open 2018/2019
  - 20,000 seats expandable to 25,000
  - Transit/Multimodal focused location

- **Multimodal analysis completed using VISSIM/VISWALK**
  - Transit and Shuttle routes implemented with VISWALK areas

- **Event Management includes:**
  - 31% to LRT
  - 44% to shuttle to offsite locations
  - How to route pedestrian to these transit locations.

- VISSIM model results used were Pedestrian Queuing and Pedestrian Network Performance.
- Visualization Video was made to show station area queues and identify improvement locations.

IV. **Task Group Updates:** The following updates were given on the different task groups.

- **Update MnDOT Freeway Modeling Guidance:** Freeway Calibration / Freeway Capacity / LOS Criteria / Transition Links / High Link Speeds (>80 mph):
  - Lane by lane MOEs are important for CORSIM results moving forward.
  - Using OD volumes made available from Inrix Data can be very beneficial for calibration.

- **Mesoscopic/DTA modeling will have an update on the metro area model which includes all roadways inside the 494/694 beltway.**

V. **Round Robin/New Topics**

- Phil Kulis commented that VISSIM testing showed that 1500 veh/hour were very hard to simulate through a single lane roundabout. With low gap acceptance, we was able to get 1300-1400 veh/hour.

- Mark Powers volunteered to share findings from the Rochester 2nd Street project for a future NCITE SimCap Meeting.

**Next Meeting:**

Presentation: TBD
Tuesday, November 22nd, 2016
1:00 pm – 3:00 pm at MnDOT Waters Edge