NCITE Simulation and Capacity Committee (SimCap)

Meeting Date: July 19th, 2016, 1 to 3 pm
Location: MnDOT Waters Edge, 1500 W County Road B, Roseville, MN

Attendance:
Tyler Krage – Allient
Ken Levin – Hennepin County
Phillip Kulis – SRF Consulting
Kevin Sommers – MnDOT
Derek Lehrke – UMN (MTO)
Haifeng Xiao – SEH
Justin Sebens – Kimley-Horn – Remote via GoToMeeting
Ben Hao – AECOM - Chair
Joe DeVore – SRF Consulting - Co-Chair

I. Introductions

II. Presentation by Ben Hao (AECOM): VISSIM Modeling for Durham-Orange LRT Operations

- 17 mile corridor that was split into 2-3 mile segments for VISSIM analysis by several different companies.
  - VISSIM modeling methodology assumptions were necessary to keep consistency between different models.
  - Calibration requirements were also set on volume and speed results.
- Ben worked on the University Drive segment of the corridor modeling existing, no build, and 2 main alternatives with many iterations.
  - RBC signal controllers and VAP controlled gates were used.
- Traffic impact criteria was set for the project that identified where operations deteriorated.
  - Average Delay >25% compared to No Build
  - LOS Degrades 1 level
  - 95% queue > storage length
  - LOS D or better was acceptable

Conclusions:
- Most effective tool to model LRT operations and assessing LRT Impact
- Traffic Impact Criteria and modeling assumptions are necessary for a large scale project
- Used 3DS Max to create visualizations for the project
III. **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):
  - Updated Freeway Modeling Guidance was based on the 2008 CORSIM modeling guidelines and included updated language on MOE reporting including lane by lane results.

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

IV. **Round Robin/New Topics**

- **MnDOT signal timing** will soon be available online for all MnDOT controlled signals. This will be similar to the warrants database currently online.

**Next Meeting:**

Presentation: Jim McCarthy? -TBD
Tuesday, September 20th, 2016
1:00 pm – 3:00 pm at MnDOT Waters Edge