



NORTH CENTRAL SECTION

INSTITUTE OF TRANSPORTATION ENGINEERS

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SIMULATION AND CAPACITY COMMITTEE

Meeting Summary

April 2023 Committee Meeting
Wednesday, April 26, 2023
3:00-4:30 PM Meeting
Virtual (Teams)

Attendees

- Kelsey Larsen - Bolton & Menk (Chair)
- Sharijad Hasan- UGPTI (Co-Chair)
- Austin Lovaas – KLJ
- Chris Loyd - Bolton & Menk
- Daniel Morgan – Caliper Corporation
- Emma Myers-Verhage – KLJ
- Kelsey Lindberg – SRF
- Mark Powers - KLJ
- Jacob Weiss – HDR
- Jonathan Atkins - City of Moorhead

Presentation and Q & A

- Jacob Weiss from HDR presented the simulation model prepared for the Fargo Moorhead MetroCOG Interstate Operation Analysis using TransModeler Traffic Simulation software by Caliper. In this study, he and his team worked on identifying current and future operational issues and limitations. They also proposed alternative solutions from geometric reconfigurations, traffic operations, and TSMO improvement perspectives.
- The presenter discussed various advantages of using TransModeler over other simulation software, which include faster model development and simulation runtime, end-to-end routing capability, and convenient integration of model development guidance.
- The speaker also talked about model parameter adjustments, like the Car Following model, vehicle fleet adjustment, conservative lane utilization, speed distribution, and adjusted demand curves for peak hours to better represent the interstate traffic movement on I-29 and I-94.
- In the explanation of a query on the car following model Daniel Morgan from Caliper Corporation informed the audience on various models like 'Modified GM,' 'Wiedemann,' etc., available in the TransModeler. Modified GM is their recommended car following model.



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- **Round Robin**

- There was no round-robin discussion due to time constraints.

- **Next Meeting:** June 2023 – If you would like to present at the upcoming meeting or a meeting in 2023, please reach out to Kelsey Larsen at Kelsey.Larsen@bolton-menk.com