

# Rethinking I-94 Phase 2

## Traffic Working Group

### Monthly Meetings Recap:

*Last updated Oct. 1, 2020*

*The following is a summary of topics, outcomes, and action items that were discussed at the Traffic Working Group meetings.*

#### January 2020

- In January, the group discussed the I-94 microsimulation model. ATG presented to the group the “2040 No-Build MOE” and the “O-D Development Procedures for Alternatives” memos. The group was updated on ABM modeling assumptions for the alternatives and results of the TransModeler simulation.

#### November 2019

- In November, the group discussed travel demand forecasts. ATG presented information on peak travel (AM and PM) patterns and demand in both the eastbound and westbound direction for the year 2040. The group discussed using models to identify AM and PM peak period traffic patterns for east- and west-bound travel. By the November meeting, AM east bound and west bound modelling was completed, as was the PM east bound. The PM west bound modelling was completed in December.

#### October 2019

- Existing Conditions Draft Model: The group was provided an overview of the draft existing traffic conditions model. The draft model showed operations for the am and pm peak periods in both the westbound and eastbound directions. The subgroup provided feedback on the draft models and suggested some refinements. The feedback will be used to update the model and present to the larger traffic working group in November.

#### September 2019

- Updates on the ABM Model Validation Memo Discussion: Comments on the memo were discussed.
- Updates on the Traffic Forecasting Memo Discussion: Recommendation made to supplement ABM ridership forecasts with STOPS forecasts to see if STOPS show greater ridership sensitivity to transit service changes associated with scenarios. Project team proposed that 2040 model outputs from ABM model be used during the scoping phase for comparing alternatives. The STOPS program would be used for transit ridership in the Tier I evaluation. Other vehicle demand for managed lanes or transit alternatives would come from the ABM model. The use of STOPS for ridership forecasting will be added to the memo. It was agreed that we are not trying to reconcile the two models. Further discussions included usage of Transmodeler for bus simulation; incorporation of transit

alternatives; and usage of opening year forecasts.

- Addition of Potential Intersections in Microsimulation Discussion: A total of 32 intersections for intersection traffic counts and about 30 locations for pedestrian counts would be used; cameras and AI technology could be used to reduce time and costs; conclusion was to gather as much existing data as possible and postpone any new counts until next spring.
- Potential Changes in 2040 Socio-Economic Data Discussion: 2040 Socio-Economic data is being updated as part of the Comprehensive Plan Process. Data will be used in forecasting and a summary of the difference between the new forecast and the model will be prepared.

#### August 2019

- Revised Draft ABM Model Validation Memo Discussion: Overview given on ongoing work and provided updated validation memo and traffic forecasting methodology memo based on the previous round of comments. Overview given of model development methodology, adjustments incorporated in the model, and a statistical comparison of base model using a series of tests.
- Revised Draft Traffic Forecasting Memo Discussion: Overview given of the traffic forecasting methodology, performance measures such as AADT, corridor level VMT, VHT, regional (PMT and PHT), and person throughput. It was stated that ABM was ready to be applied in the corridor study and the team had made all the refinements that were appropriate for the scope and scale of the study. Working group was shown how to access the validation memo and traffic forecasting methodology memo, and summary of comments in SharePoint.
- Revised Draft Existing Traffic Conditions Report Discussion: Overview of potential geometric deficiencies (such as insufficient capacities, and excessive weaving movements) in the entire network was presented.
- Ongoing I-94 Microsimulation Activities Discussion: A video clip of the current I-94 microsimulation model was presented.

#### July 2019

- Existing Traffic Conditions Report Discussion: Overview provided of report and key concepts including the following items:
  - Major Factors Causing Operations Deficiencies
  - Locations with Operations Deficiencies
  - Crash rates for major weaving segments
- Ongoing Activities Discussion: Overview of ongoing activities including Microsimulation modeling and 2040 traffic forecasts.

#### June 2019

- Traffic Forecasting and Traffic Analysis Overview: Noted that forecasting memo was developed by ATG, which utilized the Met Council's Activity Based Model (ABM), and the traffic microsimulation was to be completed using Transmodeler.
- Schedule Overview: Following items noted regarding schedule:
  - Existing conditions through June 2019

- No-Build through November 2019
- Alternative modeling starting in February 2020
- Sensitivity Modeling through March 2021
- High-level screening Summer 2019 through next year
- Traffic Forecasting Status: Forecasting memo (handout) presented, which noted the project area, forecasting products, and Measures of effectiveness (MOEs) to be produced.
- Traffic Analysis Status: Origin-Destination (O-D) Data presented based on Streetlight and MnDOT counts. Existing traffic data (handout) presented, which showed 2015 O-D volumes and mainline/ramp volumes, in addition to speeds. It was noted that existing conditions report, and existing microsimulation were ongoing.

#### May 2019

- Traffic Analysis and Forecasting Approach Discussion: High-level overview of traffic analysis and forecasting approach.
- Role and expectations of Traffic Working Group Discussion: Discussion on how the Traffic Working Group Meeting will meet monthly and a Traffic Sub-Working Group (technical experts) will meet bi-weekly.
- ABM Model validation process and status Discussion: Review process overview and summary of estimates and issues.
- TransModeler approach and status Discussion: Approval given on approach
- Data Request and Concerns Discussion: Status and data presented on the following:
  - Crash Data
  - Geometric deficiencies, including stopping sight distance, vertical grades, and short acceleration/deceleration lanes
  - Existing traffic data from counts and streetlight
  - Segments with traffic operations deficiencies