

Phase 1

Uncalibrated Base Microsimulation Model and Documentation

Model documentation shall be submitted detailing the microsimulation model. This will include the model inputs, assumptions and QA/QC documentation.

1. Speed Characteristics

- a. Show speed limit sign locations on an aerial
- b. Show a print screen of the model and indicate the locations of the desired speed distributions
- c. Define the speed profiles and how they were derived (should use speed distributions from speed study)

2. Existing Geometrics and Operations

- a. Identify and justify any data used to define unique geometry elements, such as, but not limited to:
 - i. lane closures,
 - ii. grade information,
 - iii. lane change information,
 - iv. lane utilization, etc.
- b. Identify and justify changes to defaults in the model

3. Signal Phasing and Timing

- a. Describe each controller type and associated files
- b. Provide all controller information coded into the model (i.e., .rbc file)
- c. Notes should be included if additional information needs to be explained on a specific signal
- d. Screen shot of the actual Vissim model for each signalized intersection with labels for all signal heads and detectors

4. Vehicle Classification

a. All classification categories' percentages and inputs

The above documentation shall be submitted along with the microsimulation model. The model should have everything in the Phase 1 Checklist and follow the methodologies written in DOTD's Vissim Modeling Techniques publication. The model should have all routes coded in order to perform an adequate review. Since vehicle routes are based on percentages, only include enough volumes to illustrate how the corridor works without congestion.

Deliverables:

- Model Documentation
- Model
- QA/QC Checklist