

Transportation and Traffic

Transportation Goals for the Project:

- Improve safety for all modes of travel
- Improve mobility for all travel modes by reducing congestion and delay
- Accommodate future local and regional demands on the facility

Purpose of Transportation and Traffic Study is to evaluate the operation and safety effects of the project alternatives

- Typically 20-year evaluation (Design Year 2030)
- “Operations” = efficiency. Operations measures the congestion and mobility by estimating the delay a vehicle would experience at intersections.
- Safety effects consider frequency and severity of accidents
- Also consider effects on pedestrians, transit, and freight mobility
- This work supports other environmental studies including Air Quality, Noise, Surface Water

Methodology for Traffic study

- Data collection
 - Review City's Transportation Master Plan model (completed in 2005)
 - Count existing traffic and pedestrian activity
- Forecast future traffic demand
 - City and PSRC determine growth factor
- Perform Operations analysis
 - Build a model to simulate traffic in the Design Year 2030
 - Model includes proposed new signals at N 182nd Street and N 195th Street
 - Optimize intersection improvements and signal timing. Intersection improvements include new turn lanes and storage length for turn pockets.
- Channelization layout and project footprint

Methodology for Safety study

- Review WSDOT accident data to look at existing accidents and severity
- Evaluate effects of each solution and consider all modes of travel

Findings (So Far) for Aurora Project:

- Three project alternatives are similar in traffic results
- All signalized intersections in project area will operate at “Level of Service F” in Design Year 2030 if no action is taken
- With project implemented, all signals expected to operate at Level of Service E or better in Design Year 2030
- Will see more north-to-west movements on Midvale Avenue
- 185th Street intersection proposed changes