

## **MEMORANDUM**

Date: June 17, 2009

TO: Colin Cooper, AICP

FROM: Don Odermott, PE  
Transportation Planning Engineer

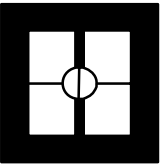
RE: Amberglen Transportation Work Plan  
Roadway and Transit Modeling Scenarios

Attached please find a summary of the roadway and transit investment scenarios which will be tested through Metro using the Metro 2035 transportation model. These have been developed through meetings with the project team, including representatives of Metro, TriMet, Washington County, and ODOT.

The intent of testing these scenarios is to start by establishing a roadway base model network, generally as a cleaned up version of the Metro 2035 model. This model has little additional transit investments in the study area, and a limited amount of roadway improvements identified in the local Transportation System Plan. Various additional roadway capacity improvements will be "layered on" in order to test the effects of each on mobility and capacity. The result is intended to be insight on the cost of improvements and the return on the individual investments.

The transit modeling scenarios are structured similarly by escalating from a minimal transit investment scenario (T-0) to a maximized transit investment scenario (T-4). Again the intent is to measure the resulting change in mode split (ped, bike, transit, Single Occupant Vehicle, HOV) and effect on roadway capacity from each increment of transit investment.

The final scenario, which blends the recommended transit and roadway network package, would be tested in scenario C-1. It is anticipated that this package would document the net effect of area buildout, increased density due to the proposed zoning revisions, and transportation investments on mobility within the study area. This will yield the financial target for transportation investments to adequately accommodate both the existing and future deficiencies under current zoning, and the additional impacts associated with the proposed upzoning of the Amberglen district. Related work will establish the cost relationship between mitigation needed to address buildout under current zoning and increased costs for mitigation specifically associated with the contemplated revisions to zoning and increased density.



## Amberglen Community Plan – Road/Transit Scenarios

### Roadway Alternatives:

R-0 Base scenario for initial model run: Metro 2035 Financially Constrained network with no I-5 tolling plus simple armature in Amberglen and South Hillsboro (see attachments for details).

#### Roadway network alternatives using 2035 O-D tables from R-0

R-1 Metro 2035 Financially Constrained network with local cleanup

R-2 R-1 + Hillsboro TSP improvements including spot amendments + 3-lane Wilkins extension east to 185th + more detailed local street connectivity and zone centroid connector placement

R-3 R-2 less Wilkins extension

R-4 R-2 + 206<sup>th</sup> overcrossing + 185<sup>th</sup> Interchange Base Alternative

Staff will meet with ODOT Design Unit to identify Interchange Alternatives. Staff will perform vehicle volume sensitivity testing of R-4 **for AM and PM peak periods** on network with the following:

- with and without 206<sup>th</sup> overcrossing
- with 173<sup>rd</sup> overcrossing as 3-lane vs. 5-lane
- with Stucki as 3-lane vs 5-lane
- with various Interchange configuration alternatives
- with alternative degrees of access management on arterials reflected by travel speeds

### Transit Alternatives:

Principal: to model transit investments on less than aspirational road network to test ability to reduce road improvement capacity through alternative mode investments.

T-0 R-2 roadway network including modest improvements to existing bus/LRT service as assumed in Metro 2035 Financially Constrained network

T-1 T-0 + TriMet Red Line extension to Evergreen + increased parking fees and alternative transit pass/fare assumptions, all to be determined.

T-2 T-1 + express bus on Evergreen from Tanasbourne Transit Center to industrial corridor

T-3 T-2 + express bus on US-26 from Sunset Transit Center to Tanasbourne Transit Center

T-4 T-3 + Frequent bus service on all arterials per Metro RTP assumptions

### Combined Alternative:

C-1 Recommended transit investment + recommended road improvements