



# Oregon

Kate Brown, Governor

## Department of Transportation

### Region 2 Tech Center

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**DATE:** January 5, 2022

**TO:** Casey Knecht, PE  
Development Review Coordinator

**FROM:** Arielle Ferber, PE  
Traffic Analysis Engineer

**SUBJECT:** Newberg SEC of Brutscher and East Portland (Newberg, OR) – Outright Use  
TIA Review Comments

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ODOT Region 2 Traffic has completed our review of the submitted traffic impact analysis (dated November 30, 2021) to address traffic impacts due to development southeast of the Pacific Highway No 91 (OR 99W) at Brutscher Street intersection in the city of Newberg, with respect to consistency and compliance with ODOT's Analysis Procedures Manual, Version 2 (APM). The APM was most recently updated in October 2020. The current version is published online at: <http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx>. As a result, we submit the following comments for the City's consideration:

Recommended analysis items to be addressed:

1. The *Oregon Highway Plan (OHP)* v/c mobility target for OR 99W (statewide highway, freight route, within UGB, non-MPO, 35 MPH) at the Springbrook intersection is 0.85 rather than 0.80 as cited (*OHP* Table 6 was revised on 12/21/2011). The OHP v/c mobility target for OR 99W (statewide highway, freight route, within UGB, non-MPO, 45 MPH) at the Vittoria Way and Providence Drive intersections is 0.80 rather than 0.90 as cited. The study should be updated to compare operations to the accurate mobility standards. This will have an effect on the operational analysis results.
2. ODOT has determined the Synchro default ideal (unadjusted) saturation flow rate of 1900 pcphgl is not appropriate outside of the Portland, Salem, and Eugene MPO urban areas (*APM* Version 2, Section 3.5.3). For this study, the ideal saturation flow rate should be 1750 pcphgl.
3. This area of Newberg is covered by an urban travel demand model. Therefore, it is recommended that model data be utilized and link data post-processed per *NCHRP 765* to determine the appropriate method, either growth or difference (incremental), to determine future design hour volumes (*APM* Version 2, Section 6.12).
4. The analysis does not take into account the Crestview Crossing development located just north of the OR 99W at Providence Drive intersection. While the Crestview Crossing development used a 2020 Build year, the project is still currently under construction and it would be reasonable to assume the

development will be completed by 2023. The Crestview Crossing development's mitigations at the OR 99W at Providence Drive intersection includes the addition of a fourth leg. It is recommended the study be updated to include the Crestview Crossing development traffic volumes as well as associated approved mitigations.

5. The Haworth Avenue at Springbrook Road intersection traffic signal warrant analysis only reviewed for Warrant 3 (Peak Hour), however, Warrant 3 (Peak Hour) is typically reserved for unusual cases such as office complexes, manufacturing plants, or industrial complexes which attract or discharge large numbers of vehicles over a short time. ODOT preliminary traffic signal warrants (see APM Section 12.4.1) may be a more appropriate analysis to determine if the intersection is a good candidate for signalization.
6. It appears for the signalized intersections incorrect critical movements were used in several of the v/c calculations, primarily during the PM peak hour. For example, OR 99W at Providence in the PM peak hours should utilize WBT+NBL movements to calculate v/c rather than EBT+WBL+NBL during the 2023 Background and Buildout PM peak hour conditions. It is recommended that the v/c calculations be reviewed and updated as appropriate.
7. Analysis of the Brutscher Street at Site Access intersection assumes a three-leg intersection, however, per the site plan the Site Access will be located directly across from an access point to a significant development and will add a fourth leg to an existing intersection. It is recommended that a count be collected at the existing intersection and the analysis updated as appropriate.
8. Figure 1 should display dual westbound lefts, rather than a singular left, at the OR 99W at Springbrook Road intersection and exclusive northbound left- and right-turn lanes, rather than a shared left-right lane, at the OR 99W at Providence Drive intersection. The analysis analyzed the correct laneage, therefore, this will not have an effect on the operational results or conclusions of the study.
9. When reporting the 95<sup>th</sup> percentile queues, study shall ensure all estimated queue lengths are consistently rounded up to the next 25 feet.
10. The Simulation Summary should be provided along with the SimTraffic reports to confirm that queueing analysis was conducted in accordance with Chapter 15 of the APM.

Proposed mitigation comments:

11. ODOT maintains jurisdiction of the Pacific Highway No 91 (OR 99W) and ODOT approval shall be required for all proposed mitigation measures to this facility.
12. No mitigation measures to OR 99W have been proposed. This conclusion appears reasonable for the proposed development. While comments #2 - #7 will have an effect on the operational analysis results, it is unlikely they will be significant enough to have an effect on the conclusions of the study due to the relatively low volume of site related trips traveling through the study area intersections.

Thank you for the opportunity to review this traffic impact analysis. As the analysis software files were not provided, Region 2 Traffic has only reviewed the submitted report.

While comments #2- #7 will have an effect on the operational analysis results, it is unlikely they will be significant enough to have an effect on the conclusions of the study due to the relatively low volume of site related trips traveling through the study area intersections. If the City determines any of the above comments merit the need for reanalysis, we would be willing and able to assist with a second round of review.

If there are any questions regarding these comments, please contact me at (503) 986-2857 or [Arielle.Ferber@ODOT.state.or.us](mailto:Arielle.Ferber@ODOT.state.or.us)