

Many Factors Impact I-5 Traffic Congestion in the South Metro/North Willamette Valley Region

By Nancy Kraushaar, PE
Community Development Director / City Engineer,
City of Wilsonville

The City of Wilsonville is taking multiple steps to improve mobility within the community and to address issues around traffic congestion and safety. Accompanying articles in this issue summarize a number of important road and alternative transportation projects being advanced by the City that provide more routes and travel options and offer suggestions on how to deal with traffic congestion.

One specific area that frustrates many travelers is the major traffic-convergence zone of the I-5/Wilsonville Road interchange and nearby intersections of Boones Ferry Road to the west and Town Center Loop to the east. In the mid-2000s, the City worked with ODOT on a \$21 million project to improve the I-5 interchange capacity by 50% for vehicles passing through the interchange on Wilsonville Road or entering/leaving I-5. Despite these substantial improvements, when I-5 reaches maximum traffic-flow capacity during morning/evening peak-commute hours, on some weekends or when there is an incident on I-5, the interchange area can clog-up, similar to many popular I-5 or I-205 interchanges in the Portland metro region.

With the greater Portland/Vancouver metro population increasing rapidly over the past five years to 2.4 million—over 3,300 people move here every month—coupled with significant employment recovery since the end of the Great Recession, we are collectively dealing with more drivers and vehicles than ever before. More than half the region's new residents moved here from other parts of the country, the 13th largest domestic migration among U.S. metro areas. Metro regional government predicts that another 400,000 new residents are expected by 2035.

While the City's public investment in local transportation system improvements can readily handle our town's growth, the most significant

traffic-congestion issues in Wilsonville arise when I-5 traffic reaches the highway's capacity. Wilsonville is especially impacted by traffic on I-5 since all of our east-west arterials lead to/from I-5 and the only freeway crossings are at Elligsen, Boeckman and Wilsonville Road. As I-5 fills during rush hour, traffic in the area of the interchanges is impacted; congestion then spreads out from the interchange area to local streets.

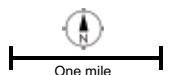
A main issue for Wilsonville in relation to I-5 concerns both regional/interstate traffic-movement and the local-area design of the freeway—major factors over which the City has no control.

• **Very large volume of traffic:** As the West Coast's major arterial, I-5 carries more vehicles than any other road in Oregon. Over 120,000 vehicles pass by Wilsonville each day; the I-5

Continued over



To Salem



Boone Bridge carries nearly as much traffic as the I-5 “Columbia River Crossing” Interstate Bridge (only four percent less) and one-third more semi-trucks. As the state and especially the greater Portland area continue to grow in population, jobs and housing costs, more people are commuting to metro-area jobs from outside the region, including the Willamette Valley.

• **Too many I-5 interchanges too close together:**

Just south of Wilsonville I-5 has four separate sets of on/off ramps located within a span of just under two miles: Wilsonville Road, Miley Road, Highway 551 and the Rest Area. This quantity of freeway exits is double the number now allowed, since each freeway on/off introduces automobile weaving-patterns or lane-changes that cause conflicts and result in congestion—the primary cause of highway accidents. Over one-third of the traffic on I-5 in this area is entering or exiting the highway, which creates tremendous conflicts and adds to congestion.

• **Roadway conditions are inconsistent:** The Boone Bridge represents a very different roadway cross-section than the interstate conditions to the north and south. The Willamette River and constrained shoulder edge conditions introduce driver-distraction from the typical I-5 landscape and wide shoulder conditions to cause traveler uncertainty that contributes to congestion.

• **I-5 geometry design:** I-5 makes a sweeping curve with substantial elevation change near the Willamette River in the vicinity of all these on/off ramps that further aggravates traffic flow and can induce incidents such as rear-end collisions the tie-up the freeway.

• **Major highway interchange merges on I-5:** Wilsonville is sandwiched between two major highways that merge on or off I-5. Highway 551 (Wilsonville-Hubbard Cut-Off, or the “I-5/99E Connector”) just south of Wilsonville and I-205 to the north both start/terminate at I-5, resulting in an additional lane of traffic seeking to merge onto or depart I-5. In the case of merges, however, I-5 has no additional capacity to accept a whole other lane of traffic. These major highway connections induce further weaving lane-changes on I-5 that

result in slowing and incidents that result in traffic back-ups.

These issues illustrate why Wilsonville closely monitors and may oppose proposals such as new urban-level development immediately south of Wilsonville and future potential I-5/99W Connector connections to I-5 in North Wilsonville.

Wilsonville is not giving up, however. In addition

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tion to local street improvements and quality transit services, the City is working with regional and state partners to advance a number of transportation strategies, as Mayor Tim Knapp details on page 1. Additionally, Wilsonville residents

and commuters can consider other transportation strategies around routing/timing of trips and utilizing transit and alternative transportation options. Especially important for community mobility is that Wilsonville continues to enhance the transportation grid as we move from a small rural community with “farm-to-market” roads to a modern urban city.

For more information, contact Nancy Kraushaar, PE, Community Development Director/City Engineer, at 503-570-1562; kraushaar@ci.wilsonville.or.us.

Nancy also serves as the Clackamas County Cities representative to the Metro Transportation Policy Alternatives Committee (TPAC) that advises the Joint Policy Advisory Committee on Transportation (JPACT).

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