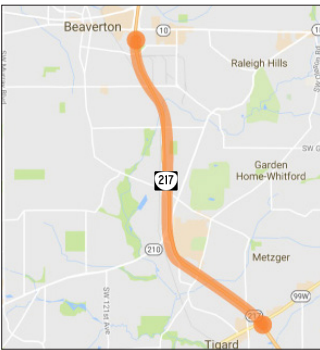
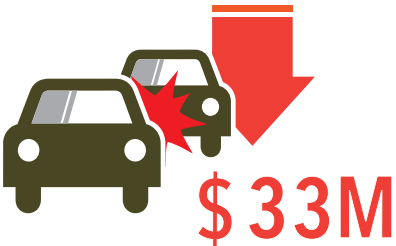


OR 217 AUXILIARY LANES: Beaverton - Hillsdale HWY to OR99W Improving the Safety and Reliability of OR 217.



CONGESTION
AND DELAY
CAUSED BY
BOTTLENECKS



CRASH SAVINGS
OVER 20 YEARS



ANNUAL TRAVEL
TIME SAVINGS

PROBLEM

- Short weaving distances contribute to high crash rates, with approximately 70% of crashes as rear end collisions.
- Afternoon peak travel times on OR 217 are unpredictable and unreliable, varying from less than 10 minutes to more than 30 minutes.
- Closely spaced interchanges cause significant bottlenecks, leading to high crash rates. Crashes increase congestion, causing more delay.

SOLUTION

- Extend auxiliary lanes south from Beaverton-Hillsdale Highway to OR 99W and north from OR 99W to Scholls Ferry Rd to reduce recurring bottlenecks.
- Provide a direct connection from one interchange ramp to the next and allow for more stable traffic flow at OR 217 interchanges.
- Remove short weaving movements from the highway to improve safety and reliability.



PROJECT BACKGROUND

OR 217 has 10 interchanges in just over seven miles of highway, with some of the shortest interchange spacing in the region. ODOT together with Washington County, the cities of Beaverton, Tigard, Hillsboro, Lake Oswego and Tualatin and Metro has extensive planning studies and recommendations for OR 217 that would enhance mobility, but have high costs in the range of \$500 million to \$1 billion.

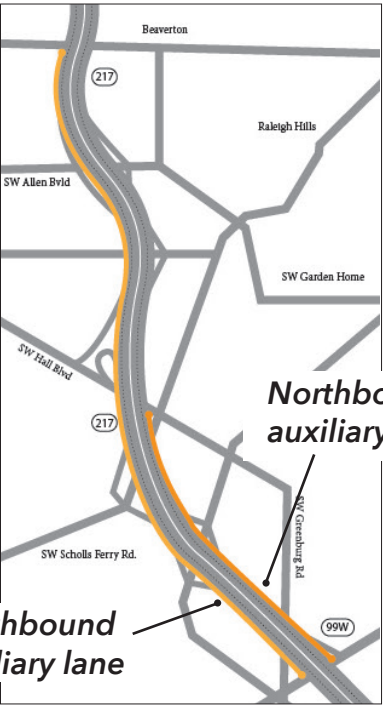
To address regional mobility needs, ODOT focused on low-cost, effective and immediate solutions to improve specific bottleneck locations. Auxiliary lanes build on this cost-effective approach to improve and effectively manage the existing freeway. These types of improvements work to reduce congestion, reduce crashes, address recurring bottlenecks, and improve reliability.

These improvements are not intended to address capacity-related congestion problems, but rather to provide immediate and long-term safety improvements at bottleneck locations.

To complement the planned auxiliary lanes, ODOT also has deployed low cost traffic management technology on OR 217. These systems dynamically manage traffic demand and capacity based on prevailing conditions. Initial results indicate that the Active Traffic Management (ATM) system is improving safety, reliability and highway user through-put.

IMPLEMENTATION STRATEGY

There is funding for developing and designing the southbound auxiliary lane and collector-distributor road for the Allen Blvd to Denney Rd interchanges (Phase I). ODOT could package the southbound (Phase I) and northbound (Phase II) auxiliary lanes for efficiency. Phase III will develop a phasing plan for investments to achieve the highest operational return, such as designing and constructing targeted interchange improvements or the incremental completion of the third lane.



KEY ELEMENTS

Local and regional traffic on the OR 217 corridor will benefit most from the auxiliary lane extension. Only 10% to 15% of the trips on OR 217 are through trips from one end to the other. The other 85% to 90% of trips use one or more of the interchanges along OR 217. The auxiliary lanes will separate slower traffic movements from the freeway, helping smooth traffic flow and reduce the potential for crashes.

Short distances between entrances and exits provide little room to merge and weave, slowing freeway traffic.

SPECIAL FEATURES

A collector-distributor road at the Allen Blvd and Denney Rd interchanges will remove the extremely short weaving section that is one of the worst bottlenecks in the corridor and has a high frequency of crashes. This road will provide a place for existing traffic to wait to access cross streets, rather than backing up onto the freeway.

An auxiliary lane allows vehicles to merge outside of the main through-lane, improving safety and traffic flow.



PROJECT COST ESTIMATE

\$95 - \$100 MILLION - NB & SB AUXILIARY LANES
\$50 MILLION - PHASE III IMPROVEMENTS

PROJECT READINESS

PROBLEM ID SHOVEL READY

VALUES & GOALS



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