
2.0 Purpose and Need Statement

2.1 Purposes of the Action

The purpose of this project is to provide an efficient and functional transportation route in the SR 302 corridor between SR 302 at Key Peninsula Highway and SR 16 in Pierce County. The preferred alternative will address the following:

To design improvements that will increase the level of safety for all travelers who use the route.

To meet or exceed the standards for intersection and highway level of service during the average weekday peak hour.

To improve the average weekday peak hour travel time for those who use the route.

To consider the accommodation of non-motorized modes based on WSDOT policies.

2.2 Need for the Action

Safety

Collision records for SR 302 (2002 – 2006) indicate over twice as many annual collisions per mile in the study corridor (18.0 collisions per mile on average) as compared to the figure for the entire route (8.7 collisions per mile on average). Even when traffic volume is taken into account, collision rates for four out of 6 miles in the study corridor have greater than the statewide average number of collisions per vehicle miles traveled for similar highways.

Transportation Demand and Capacity

Delays to travelers on SR 302 due to traffic congestion have been well documented during the AM and PM peak travel hours. These delays are associated with level of service (LOS) conditions that are below the standards established by PSRC (LOS C) at a number of SR 302 intersections between the current year and 2030, including 118th Ave., 94th Ave., Goodrich Dr., 144th St. (and SR 302 Spur), and SR 302 at SR 302 Spur (Purdy). It's also expected that the delays associated with unsignalized intersections will also increase over the same period. Signal queues today at Purdy are commonly known to exceed a mile in length daily during peak hours. These queues are known to create congestion at times on the SR 16 northbound off ramp to SR 302 (over one mile away) during the PM peak period, and to adversely affect travel time in the corridor during both the AM and PM peak periods.

An estimate of the highway level of service in the study corridor is already below the PSRC (LOC C) threshold, and that LOS is expected to worsen in the forecast year.

Bicycle and Pedestrian Uses

Bicyclists and pedestrians using SR 302 today rely on the roadway shoulder area for travel. These shoulders vary between 3 and 5 feet wide in most places along the study corridor. Projects resulting from this study will consider increasing the shoulder width, or providing a separate path, in order to improve non-motorized travel. In developing solutions that affect non-motorized users, both local and regional interests and plans will also be considered in this study.

Regional and Statewide Planning

Improvement of SR 302 is included in key statewide and regional transportation plans, including the WTP and PSRC Destination 2030. These plans examine and document the interaction between transportation improvements, and therefore play an essential role in optimizing the impact of transportation dollars investments.

One of the ways that the Washington State Legislature contributes to statewide transportation objectives is through line item appropriation. By funding the study of potential transportation improvements on SR 302, the legislature has indicated its own interest in solving transportation problems affecting the communities served by the route.