



**Washington State
Department of Transportation**

SR 167 Toll Feasibility Study



**Prepared for Governor Chris Gregoire
and the 2010 Washington State Legislature**

September 2010

1. Executive Summary

Background

Planning for the lower Puyallup Valley section of State Route (SR) 167 began more than 40 years ago when freeway corridors for Interstate 5, SR 167, SR 410 and SR 512 were proposed. By the late 1980s, a four-lane highway from I-405 in Renton to SR 161 in Puyallup was completed. However, completion of the lower Puyallup Valley portion was delayed due to lack of funding.

In 1990, the Federal Highway Administration (FHWA) selected the lower Puyallup Valley portion known as the SR 167 extension, as a pilot project for a two-tiered Environmental Impact Statement (EIS). Tiering allowed the Washington State Department of Transportation (WSDOT) to identify a preferred corridor (Tier I) before moving forward with more detailed analysis of corridor design (Tier II). The Tier I EIS was approved by FHWA in 1999 and the Tier II final EIS was completed in 2006. FHWA signed the Record of Decision (ROD) for the Tier II EIS the following year.

The full scope of the project as defined in the ROD include three lanes in each direction from SR 161 to I-5 (two general purpose lanes and one HOV lane), and two lanes in each direction west of I-5. It includes five interchanges at SR 161, Valley Avenue E., I-5, 54th Avenue E. and SR 509. Truck weigh stations and two park-and-ride lots are also included. The extension fills a critical link missing in the state's highway network. Its completion is expected to:

- Relieve congestion on local roads and other highways by providing new travel options.
- Move freight faster, more safely and more economically. This is especially important in helping the Port of Tacoma remain competitive given the increasingly intense competition from Canada, Mexico and the Panama Canal.
- Improve regional mobility.
- Enhance surface water quality and improve stream habitat feeding into Commencement Bay.

Since the late 1990s, numerous efforts have been made to fund the project's construction through statewide or regional revenue sources. To date, more than \$160 million has been secured and/or invested in the project. These funds enabled the completion of 20% of design and about half of the right-of-way acquisition. More than \$1.9 billion is still needed to acquire the remaining right-of-way and complete the design and construction.

State Route 167 Extension Project Vicinity Map



Legislative directive

In 2009, the Washington State Legislature directed Washington State Department of Transportation (WSDOT) to determine the feasibility of administering tolls within the SR 167 corridor. Specifically, WSDOT was asked to examine the following:

- The potential for variable tolling to generate revenues for needed transportation facilities within the corridor.
- Maximizing the efficient operation of the corridor.
- Economic considerations for future system investments.

The Legislature directed WSDOT to report the study findings to the Washington State Transportation Commission (WSTC) periodically throughout the study process and to report the final findings to the Joint Transportation Committee (JTC) by Sept. 30, 2010.

Options studied

WSDOT worked closely with stakeholders from affected cities and jurisdictions, the Puget Sound Regional Council, and the FHWA to evaluate six different combinations of construction and tolling options. See Sections 5 and 6 of the report for detailed descriptions of these options.

For each option, the study estimated the amount of funding needed for construction, revenue generated through tolling, remaining funding gap, and effects on traffic under various tolling configurations.

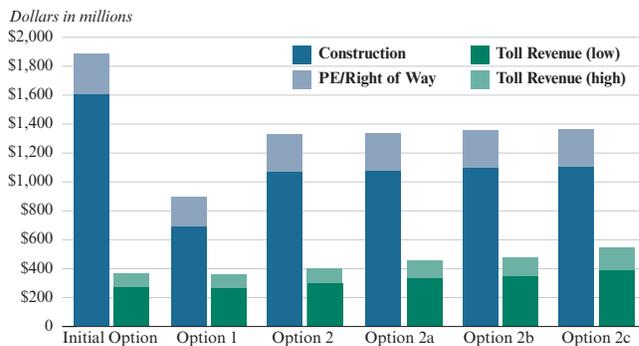
Summary of findings

- Expected Toll Revenue
 - Tolling is expected to generate a significant amount of revenue to fund the project's construction, ranging from about 17% of the initial study option to about 50% of option 1 – constructing one lane in each direction from I-5 to SR 161.
 - The bonding capacity of the toll revenue is heavily dependent on the financing assumptions, such as debt repayment options, types of bonds used and market conditions at the time of bond issuance.
 - Spreading the tolls to a portion of the existing SR 509 near the Port of Tacoma could reduce traffic diversion and help generate an additional \$40 million to \$50 million to fund the project. Converting the high occupancy vehicle (HOV) lanes to high occupancy toll (HOT) lanes on I-5 between the King/Pierce County Line and SR 16 would help generate another \$75 million to \$90 million. However, legislative actions are required to place tolls on these facilities and to use the revenue to help fund the SR 167 extension project.

- Maximize Operational Efficiency of the Corridor
 - Revenue focused tolling is expected to reduce traffic demand by about half compared to a toll free condition, creating the opportunity to downsize or phase construction. Tolling not only makes the corridor operate more efficiently, but also reduces upfront construction cost making the project more feasible.
- Future Economic Considerations
 - Among all the options studied, additional revenue ranging from more than \$800 million to nearly \$1.6 billion is needed to fund the project depending on how the project construction is phased.
 - Right-of-way needs to be secured prior to bond issuance to minimize risk and financing cost.

Figure 1-1 shows the project cost, expected revenue, and remaining funding gaps for the options studied.

Figure 1-1: Summary of project cost, revenue and funding gap (In year of expenditure dollars assuming project completion by 2020)



Due to limited resources and time available to conduct this study, WSDOT did not conduct an open house or public workshop. Therefore, we do not have public input on the options studied and findings. WSDOT recommends conducting a comprehensive toll study that includes more refined assumptions for WSTC and legislative consideration. Further, the study should also provide opportunities for public input.

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 There is a high degree of uncertainty in toll revenue projections, especially for a road that doesn't exist today. Additional variation in the toll funding contribution projections will be a function of the type of debt instruments used, market conditions and interest rates at the time the debt is issued, and policy decisions regarding how the debt is structured.

The assumptions used in this analysis may be somewhat optimistic because repayment of debt was tailored to the assumption that tolls will escalate at 2.5% annually to keep pace with inflation. The estimated toll funding contribution would be somewhat lower if more conservative assumptions regarding toll escalation are adopted.
