

I-90 Tolling Project: Draft Purpose and Need Statement

Proposed I-90 Tolling Project

The Federal Highway Administration and the Washington State Department of Transportation propose to introduce tolling to the I-90 corridor between I-5 in Seattle and I-405 in Bellevue, subject to approval by the Federal Highway Administration and authorization by the Washington State Legislature. The total length of this corridor is approximately 7 miles.

Purpose of the I-90 Tolling Project

The purpose of the I-90 Tolling Project is to raise revenue for substantial transportation improvements in the Cross-Lake Washington Corridor and to help alleviate congestion on I-90 between I-5 and I-405.

Need for the I-90 Tolling Project

The movement of people and goods needs to be improved on both the I-90 corridor and the overall Cross-Lake Washington corridor. The following sections describe current and forecast future conditions in the corridor and demonstrate the need for tolling and congestion management.

Raise Revenue for Cross-Lake Washington Corridor Improvements

The tolling component of this project is needed to fund transportation improvements in the Cross-Lake Washington Corridor. Revenues generated from tolling I-90 will make a major contribution for the portion of the SR 520 Bridge Replacement and HOV Program that is currently unfunded. Without revenues generated from tolling I-90, the SR 520 Bridge Replacement and HOV Program will remain underfunded pending action by the state legislature. The revenues from tolling I-90 may also support other improvements in the Cross- Lake Washington Corridor.

Alleviate Congestion on the I-90 corridor

Current travel conditions in the I-90 corridor can be extremely congested, particularly during rush hour. The rush hour periods are defined as the three-hour morning peak period from approximately 6:00 a.m. to 9:00 a.m. and the evening peak period from



approximately 3:00 p.m. to 6:00 p.m. During these periods, traffic conditions in all lanes of the I-90 corridor can be characterized by reduced speeds or even stop-and-go traffic. Such conditions are measured by a rating system referred to as level-of-service (LOS) which ranks a roadway's performance on a scale from A to F with F representing very poor performance and high levels of delay. For planning purposes, WSDOT generally tries to maintain LOS D on urban highways. However, sections of the I-90 corridor during peak periods often fall to LOS E or LOS F, which are the lowest LOS ratings and show severe congestion. With variable rate tolling on I-90, some travelers will likely make their trips outside of the peak periods to avoid paying higher tolls, which would redistribute some trips on the I-90 corridor and help reduce peak period congestion.

Accommodate Regional Growth

Long-term forecasts for growth in the region show continued steady increases in population and employment, which means increased use of the region's highway network and increased congestion even with planned and foreseeable improvements to transit systems and demand management programs. The Puget Sound Regional Council's draft 2012 forecasts (which account for the current recession) anticipate the population of King County to increase from approximately 1.93 million in 2010 to 2.56 million in 2040, a 33 percent increase¹.

Commensurate with this increase in population, the region will see continued growth in employment. Puget Sound Regional Council draft 2012 forecasts employment in King County will increase an estimated 50 percent from about 1.2 million to about 1.8 million jobs between 2010 and 2040². The majority of this growth will occur in Seattle and the east side of Lake Washington. Because it is likely that some travelers will change their trips to non-peak periods, congestion during peak periods will likely be reduced resulting in tolling on I-90 improving overall throughput.

Provide Reliable Travel Conditions in the I-90 Corridor

Two of the most substantial outcomes of severely congested traffic conditions are increased travel time and reduced reliability. With heavily congested conditions, the difference in travel times between non-peak periods and peak periods increases. The heavily congested conditions also mean it is more difficult for motorists to maneuver

¹ Draft PSRC Land Use Forecasts Version 2_28_2012.xls

² IBID



and change lanes, which can result in crashes or near misses between vehicles. Further, due to the over-capacity conditions during the peak periods, a single crash can result in substantial travel time delays for many motorists.

These congested conditions mean that all travelers on the highway, including single-occupant vehicles, carpools, freight vehicles, and even transit riders have increasing difficulty estimating how long the trip will take. This decreasing reliability means that most travelers need to plan for a longer travel time, resulting in social and economic costs to all travelers. This can negatively affect efficiency, and over time increases the overall societal costs to move both freight and people.

Background

Cross-Lake Washington Corridor

I-90 between Seattle and Issaquah and SR 520 between Redmond and Seattle are parallel facilities that serve as the two main routes for crossing Lake Washington. For many travelers they serve as alternative routes for one-another and are referred to as the Cross-Lake Washington corridor.

The operation of I-90 across Lake Washington, especially between Seattle and Bellevue, affects the operation of SR 520 and vice versa. Currently, both highways are comprised of general-purpose lanes across the lake. I-90 also has reversible express lanes in the center roadway and an HOV lane in each direction between Mercer Island and I-405. The extension of the HOV lane eastbound from Mercer Island is currently under construction and HOV lanes in both directions between I-5 and Mercer Island will be completed in 2015³. After the completion of the HOV lanes, Sound Transit is planning to construct light rail in the center roadway. For SR 520, construction efforts are currently underway to provide a replacement SR 520 floating bridge that when completed will provide general purpose and HOV lanes across Lake Washington⁴. Variable time-of-day tolling is currently in operation on SR 520⁵.

³ I-90 Two-way Transit and HOV Project Record of Decision, September 2004

⁴ SR 520, I-5 to Medina: Bridge Replacement and HOV Project Record of Decision, August 2011

⁵ SR 520 Variable Tolling Project Finding of No Significant Impact, June 2009



Legislative Direction

The I-90 Tolling Project has been partially funded through House Bill ESHB 2190 - Supplemental Transportation Budget. The following portion of the bill provides direction to WSDOT:

\$1,500,000 of the motor vehicle account--federal appropriation is provided solely for the I-90 Comprehensive Tolling Study and Environmental Review project (100067T). The department shall undertake a comprehensive environmental review of tolling Interstate 90 between Interstate 5 and Interstate 405 for the purposes of both managing traffic and providing funding for construction of the unfunded state route number 520 from Interstate 5 to Medina project. The environmental review must include significant outreach to potentially affected communities. The department may consider traffic management options that extend as far east as Issaquah.

Regional Transportation Plan -Transportation 2040

Prepared and adopted by the Puget Sound Regional Council, the region's designated Metropolitan Planning Organization and Regional Transportation Planning Organization, the Regional Transportation Plan addresses regional mobility and accessibility. The Plan also recognizes that financial resources will be scarce and investments in transportation will need to be strategic. Decision-makers have deliberately looked at user fees and tolls to increasingly help fund proposed transportation projects. The Regional Transportation Plan sets out broad policy direction for a sustainable future with increasing reliance on user fees and tolls. It also calls for a clear relationship between tolling facility users and system benefits. A guiding principle is that toll policies should result in travel benefits for all users in the project corridor.

The Regional Transportation Plan also includes a project, the Two-Way Transit and HOV Project, which constructs HOV lanes on I-90 between I-5 and I-405 in three stages. The project is locally funded. Construction was completed in 2008 on Stage 1 to add westbound HOV lanes on I-90 between Bellevue Way and 80th Avenue SE on Mercer Island. Stage 2 was completed in early 2012, adding the eastbound HOV lanes for the same segment. By late 2015, Stage 3 construction is anticipated to have completed construction of the eastbound and westbound HOV lanes between Rainier Avenue S in Seattle and 80th Avenue SE on Mercer Island. The HOV lanes included with the Two-Way Transit and HOV Project may be converted to HOT as a separate project in an effort to more effectively manage congestion through the corridor.



The proposed tolling of I-90 is listed in the 2010 Action Strategy, of the Regional Transportation Plan (Appendix C). This Appendix includes a list of projects that comprise the Regional Ten-Year Transportation Investment Program. It lists the I-90 Tolling Project as Project #5435 and estimates the project cost at more than \$30 million (2008 dollars). The 2010-2013 Transportation Improvement Program (TIP) was last amended on October 25, 2012. However, this document does not include a project to toll travel lanes on I-90.

Existing I-90 Agreements

FHWA approved I-90 largely as it stands today in a 1978 Record of Decision. This document provides that transit shall have first priority in the use of the center lanes and that general Mercer Island traffic can also use those lanes provided bus and carpool speeds are maintained at 45 mph or greater. In addition, WSDOT and other local agencies have made decisions and commitments regarding future development on I-90, and have relied on those decisions in subsequent planning. FHWA is not a signatory to these agreements but acknowledges them as part of the local transportation planning process. WSDOT intends to continue to be guided by these previous decisions as reflected in these agreements. Key components of these agreements that are relevant to tolling in the I-90 corridor include:

1. the 1976 Memorandum Agreement between the City of Seattle, the City of Mercer Island, the City of Bellevue, King County, Metro and the Washington State Highway Commission, which clearly states that I-90 will be restricted to three general purpose motor vehicle lanes in each direction; and
2. the 2004 Amendment to the 1976 Memorandum Agreement, adopted by the Central Puget Sound Regional Transit Authority, the City of Bellevue, the City of Mercer Island, the City of Seattle, King County and the Washington State Transportation Commission. This amendment commits the parties to construction of High Capacity Transit in the center lanes of I-90, to minimize impacts to the existing bicycle/pedestrian path and to minimize Mercer Island loss of mobility by providing additional bus service and parking.