From: John Niles [mailto:niles@globaltelematics.com]
Sent: Monday, December 13, 2010 11:58 PM
To: AWV SDEIS Comments
Subject: comment for the record

Memo to SR 99 tunnel project sponsors:

I-117-001

Speaking just for myself as a professional transportation policy analyst, an occasional Viaduct user, and a Seattle citizen who has studied the Draft Supplemental EIS for the Alaskan Way Viaduct Replacement, I note that the Alaskan Way Viaduct Replacement Project does not appear on its face to meet three of the six bulleted project purposes stated on page 4 of Chapter 1. Quoting,

• Provide capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle.

• Provide linkages to the regional transportation system and to and from downtown Seattle and the local street system.

• Avoid major disruption of traffic patterns due to loss of capacity on SR 99.

I-117-002

From reading the SDEIS, it appears to me that the preferred alternative of an SR 99 tunnel instead of an SR 99 viaduct will move automobiles, freight, and transit less efficiently to, from, and through downtown Seattle by eliminating important existing SR 99 linkages to and from downtown and the local street system, likely leading to major disruptions of traffic patterns due to loss of capacity on SR 99 that is critical for achieving the first two of the three bullets I have highlighted above for your attention. Much of the SR 99 traffic of the type seen in the present day is going to be non-served by the SR 99 tunnel and thus pushed onto City of Seattle streets.

I make this assertion based on comparing the maps of 2015 vehicle flows for the present Viaduct (Appendix C, PDF page 79, Exhibit 4-4) and for the bored tunnel configuration (Appendix C, PDF page 157, Exhibit 5-4) from the Transportation Discipline Report. I have inserted these two maps next:

I-117-001

Thank you for submitting your comments. Our responses below respond to each of your specific comments.

I-117-002

With the Bored Tunnel Alternative, traffic using the Stadium area ramps to access downtown would disperse over several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues. Traffic analysis indicates that this arrangement would result in comparable or better overall traffic distribution and flow than is experienced with the current Columbia and Seneca Street ramps. This is because the current ramps concentrate traffic to a single, congested location in the central downtown. The relocated ramps would instead allow drivers to diffuse through the street grid using many different paths.

Please see the Final EIS and Appendix C, Transportation Discipline Report for additional details about how the proposed build alternatives with or without tolls would affect other measures of transportation efficiency, such as travel times, vehicle volumes, and effects to I-5 and surface streets.

Exhibit 4-4
Existing Daily SR 99 Traffic Patterns

Exhibit 5-4
Daily SR 99 Traffic Patterns - 2015 Project

I-117-002

A cursory examination of the two side-by-side maps shows that the 86,600 daily vehicle flow projected in 2015 for the untolled tunnel version of SR 99 does not come up close to the 111,200 daily flow on the modeled 2015 version of the present-day Viaduct. Traffic from the Interbay on Western/Elliot is channeled onto the waterfront surface boulevard. The non-functionality of the mobility situation before and after the tunnel to users from south of downtown is revealed in the numbers for bored tunnel vehicle flow in the two maps above for West Seattle/Harbor Island and SR 99 / East Marginal Way: 33,100 before and 23,800 after for the former; 53,900 before and 43,000 after for the latter. These are big differences! The elimination of access exit/entrance ramps to Western/Elliot and to the Seattle CBD is the reason for this, as the SDEIS explains.

These changes in the basic SR 99 ramp configuration mean that a significant fraction of the vehicles now using the Viaduct to move efficiently through or into downtown Seattle are likely to use City of Seattle surface streets when the Viaduct and its ramps are gone. The likelihood of a toll being charged for passage through the deep bore tunnel is likely to lower vehicle usage of the tunnel further, as shown in Exhibit 9-9, Chapter 9 of the SDEIS.

I-117-002 My sense of the modeling data presented is that SR 99 in the preferred alternative will indeed work better than the present-day Viaduct configuration for travelers starting out on the present day SR 99 alignment that will continue to exist in the future north and south of central Seattle. This aspect of the Viaduct replacement is a simple result of the new bypass tunnel having reduced traffic attraction because of no entrance/exit ramps between its north and south portals, plus the fact that it can be tolled in a way to keep it free flowing for whatever future traffic emerges.

I-117-003 A question that I didn't see satisfactorily answered in the SDEIS is an explanation of why the non-achievement of three stated project purposes in the performance of the preferred SR 99 future configuration avoids a violation of State or Federal regulatory covenants on the use of government funds to construct a preferred Alaskan Way Viaduct replacement that does not reach the functionality of the original. It appears to me that what is happening in this project is a State and Federal-funded downsizing of SR 99 functional capacity as specified in the three project purpose bullets I cite, with a transfer of SR 99's functional reason for being to City of Seattle local streets. What is the authority to use State and Federal Government funds to force this shift of function to the Municipality of Seattle? Please explain in the Final EIS.

I-117-004 I'll close by noting that some in Seattle would like to see the Viaduct removed and a future SR 99 routed through the Battery Street tunnel to a waterfront boulevard, with no bored tunnel in existence. While I read the DSEIS as finding this alternative much less compliant with the project purpose bullets I noted, this alternative is attractive because it avoids the significant risks in building a tunnel, and it does leave the bored tunnel construction resources on the table for allocation to Interstate 5 improvements and also to construction of some underpasses/overpasses and creation of walls and a lid over an SR 99 waterfront boulevard/throughway that would allow its speed to be set higher than for a typical urban route, with cross street intersections eliminated, and usable civic space placed on top of a lid.

When the poor performance of the deep bore tunnel in meeting project objectives as noted here is combined with the risk of failure to complete the the largest diameter tunnel ever attempted on time and on budget, I am forced to conclude that the alternatives for maintaining SR 99 through central Seattle without the need to deploy a 58 foot boring machine have been insufficiently considered in the SDEIS.

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I-117-003

This project has been developed through a partnership of three lead agencies - FHWA, WSDOT, and the City of Seattle. These three agencies have developed the build alternatives evaluated through the EIS process identified the Bored Tunnel Alternative as the preferred alternative. The discussion of how the Bored Tunnel Alternative meets purpose and need was provided in the 2010 Supplemental Draft EIS and update in the Final EIS. The functions of SR 99 for drivers heading to and through Seattle continues to be provided by the Bored Tunnel Alternative. The state and federal government are not forcing a functional shift to the City of Seattle, rather these three agencies are and have been working jointly on this project and the implementation of a solutions that meets the needs of the three agencies and the broader public that they serve.

I-117-004

Your comment about the attractiveness of the Surface Alternative is noted. However, this alternative was eliminated from further consideration because it reduced roadway capacity and that does not meet the project's purpose. The six-lane surface street proposed as part of this alternative would reduce roadway capacity on SR 99 through downtown by 40 to 50 percent by 2030.

Environmental documentation for the project has been prepared in compliance with the National Environmental Policy Act (NEPA)(42 U.S.C. 4322(2)(c)) and the State Environmental Policy Act (SEPA)(Ch. 43.21 C RCW). Chapter 2, Alternatives Development, of the Final EIS describes the history of the project, including how the Purpose and Need was updated and how the alternatives developed. All of the alternatives have been evaluated based on their ability to meet the Purpose and Need.

Yes, there are risks inherent in a project of this magnitude. The lead

agencies are actively managing risks by setting aside money in the project budget to cover risk associated with construction, utilizing independent experts and cost estimators to review the bored tunnel estimate, and performing soil investigations throughout the project area to learn as much about the ground conditions as possible before the start of construction. These are just a few examples of the risk management activities undertaken as part of this project.