Submitted Via Email

Angela Freudenstein
Washington State Department of Transportation
999 Third Avenue, Suite 2424
Seattle, WA 98104

Peter Hahn, Director
Seattle Department of Transportation
PO Box 34996
Seattle, WA 98124-4996

December 12, 2010

Dear Ms. Freudenstein and Mr. Hahn,

I-053-001

This letter provides my comments on the draft environmental impact statement (DEIS) for the Alaskan Way Viaduct Replacement Project ("AWV"). I am a resident and property owner in downtown Seattle and a semi-retired lawyer with thirty eight years of experience as a practicing attorney and as a manager in the public and nonprofit sectors. I have long followed the AWV Project and have made a number of comments to both State and local officials. I understand that the existing viaduct structure is damaged, dangerous and must be replaced to protect the public. I also support as a worthy aspiration the creation of a better central waterfront for Seattle.

But, unfortunately, I do not believe that the DEIS, in its present form, will well serve decision makers as they seek information to guide one of the most important public facilities decisions now on the State and local agenda. The key defects in the document include the failure to property analyze the implications of the fact that the preferred deep bored tunnel alternative is a tolled facility that does not honestly qualify for consideration under the projects Purpose and Need Statement. These and other defects are discussed below.

1. The Purpose and Need Statement is Too Narrow

The Statement of Purpose and Need is a critical part of any EIS as it circumscribed the range of alternatives that are considered. In this case, the Project's Purpose and Need Statement (Ch 1 pg 4) was rewritten from the even handed "The project will maintain or improve mobility, accessibility, and traffic safety for people and goods along the existing Alaskan Way Viaduct Corridor" to feature the much narrower concept of "vehicle capacity." Using the term capacity instead of mobility eliminates from consideration potentially viable and cost effective solutions that include transit, demand management, or available capacity on other facilities. Please explain why this change was made. Was this done to artificially and dishonestly favor the Deep Bored Tunnel preferred alternative? Unless this change is explained in the FEIS, many citizens will no

I-053-001

Chapter 9 and Appendix C, Transportation Discipline Report of the 2010 Supplemental Draft EIS discussedthe possible effects of tolling. In the Final EIS, updated information on the effects of tolling is provided in Chapter 5 and Appendix C.

Changes made to the project's purpose and need statement in 2010 did not serve to narrow the scope of concepts that could be considered. Instead the changes that were made allowed for a broader scope of solutions to be considered. The purpose and need statement presented in the 2006 Supplemental Draft EIS stated "the project will maintain or improve mobility, accessibility, and traffic safety for people and goods along the existing Alaskan Way Viaduct Corridor..." This purpose indicated that mobility must be maintained or improved. The project's current purpose and need statement is less restrictive by stating that it will provide a facility that "provides capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle". An important difference between the two purposes is that the earlier purpose statement required mobility to be maintained or improved, the updated purpose statement is focused on providing capacity to efficiently move people and goods to and through downtown Seattle, but it doesn't specify that existing capacity must be maintained.

Submitted Via Email

I-053-001

doubt think so and question the fairness and adequacy of the environmental review because it is questionable under SEPA to frame the purpose statement so narrowly as to exclude reasonable alternatives. This question is especially cogent given that the real world consequences of tolling the tunnel as described in Chapter 9 of the Impact Statement would force any fair minded decision maker or citizen to conclude that the deep bored preferred alternative actually fails to provide the practical vehicle capacity that the reworked purpose and need statement would require. (See below.)

I-053-002

2. **Significant Traffic Impacts Resulting From Tolling are not Adequately Analyzed**

The DEIS states "As currently defined, the Bored Tunnel Alternative does not include tolls." (Ch 9 Pg 205) The impact analysis throughout the document - travel times, traffic volumes, greenhouse gas emissions, and storm water runoff - assume no tolling. But as material on WSDOT's website for the Project makes clear, tolling revenue is a necessary part of the basic funding plan for the deep bored preferred alternative. While it may be argued that the method of paying for the Project is beyond the scope of environmental review, this is surely neither a satisfactory nor a responsible answer when the funding mechanism, in this case the use of tolling, will dramatically affect tunnel usage and, by so doing, generate profound environmental impacts were the preferred alternative to be implemented as proposed.

Without tolls, the lack of downtown ramps would sends 29,000 of the current Viaduct's daily traffic to Seattle streets. When tolling is put in place, as it must be under the financing plan, an additional 40,000 to 45,000 vehicles would be diverted to the surface streets. Thus perhaps as many as 74,000 daily trips would be on City streets outside the tunnel while only 41,000 would use the proposed $3.1B facility. It is hard to understand how the preferred alternative, if honestly described, can be passed off as meeting the "Purpose and Need" of maintaining vehicle capacity. How this amazing alchemy is accomplished should be explained to non-wizards in the FEIS.

Moreover, the current DEIS should be formally supplemented to include in the modeling and analysis throughout the document the impacts of tolling. Without this additional information, the DEIS inadequately depiction the real world functioning of the tunnel as well as the traffic and other environmental impacts of the project as it is actually proposed to be implemented by the State. Moreover, the Supplement should include a mitigation plan to show, if it can, how WSDOT will prevent, resolve, or mitigate the unacceptable adverse impacts to the functioning of Seattle's transportation system. Merely discussing tolling in the analytically isolated add- on Chapter 9 is not enough.

I-053-002

The Final EIS and Appendix C, Transportation Discipline Report, expands on the tolling analysis conducted for the 2010 Supplemental Draft EIS. The impacts of tolling described in the Final EIS are consistent with those described in Chapter 9 of the 2010 Supplemental Draft EIS. Because of this, the FHWA and WSDOT determined a Supplemental EIS was not needed. This evaluation is documented in Appendix X, Tolling Re-evaluation Memo.

A discussion explaining how the alternatives, with or with out tolls, meets the project's purpose and need is provided in Chapter 5 of the Final EIS.

If the new facility is tolled, traffic diversion is expected. Effects of diversion are discussed in both the 2010 Supplemental Draft EIS and the Final EIS. The tolling scenario evaluated for the three build alternatives in the Final EIS is the most conservative of the scenarios considered in the 2010 Supplemental Draft EIS, meaning that it results in the most diversion from SR 99 to city streets and I-5. The lead agencies acknowledge that a long-term solution should be sought to minimize the amount of diverted traffic in order to optimize operation of the transportation network. Strategies for optimization will be developed by the Tolling Advisory Committee (TAC). The TAC is not a decision-making body so when it completes its work additional action may be required by the state, city, Port of Seattle, and/or King County in order to implement TAC strategies or other tolling mitigation strategies developed prior to project completion. If needed, additional environmental analysis may be performed to evaluate the potential effects of proposed strategies before implementation.

Submitted Via Email

I-053-003

3. What if Nature Takes a Hand?

The saga that is the AWV began with an earthquake which, among other things, seriously damaged the Viaduct. Since then, there has been much alarming talk (and even more alarming videos) about what might happen should another quake or some other disaster force the Viaduct to be closed before the deep bored tunnel is ready for whatever vehicle traffic chooses to pay to use it. In fact, the Governor herself once pledged that the Viaduct would be closed by 2012. Presumably this pledge is now "inoperative" because the State has chosen as its preferred alternative the option which keeps the hazardous Viaduct in use for the longest time compared to other alternatives.

As I understand it, local transportation officials have developed plans to respond to an emergency Viaduct closure. The DEIS should be supplemented, either by WSDOT or the City, to include information about these plans. Informed by this data, local and State decision makers could consider implementing these measures sooner so that the dangerous Viaduct may be closed earlier so that public safety is enhanced by avoiding the heightened threat to Viaduct stability caused by construction related soil settlement as described in the DEIS. And, as a bonus benefit, the Governor might actually make good on her public promise.

I-053-004

4. The Project's Financial Plan is Not Firm and the Contingency Mostly Spent

The State Legislature has capped State funding for the Project at of $2.4 billion. The rest of the funding package - $700M - is built on sand. The Port of Seattle's promised $300 million has not been formally committed to and may not be. Moreover, the $400M required to be raised by future tolls may be on thin ice. The State may be unable to bond based on tolling revenue because the State is at or close to the Constitutional debt limit and SR-520 and the AWV projects are dependent on raising $2.4 billion in new bonds.

I-053-005

Then there is the matter of cost overruns. Neither the State nor the City of Seattle has been willing to accept responsibility for paying these potential costs and each claim to think that this responsibility is on the other. But experts hired by the City saw a 40% probability that cost overruns will occur. And that was before the State acted to commit more that 75% of its 415M contingency before the Tunnel portion of the Project has even begun.

In addition, the State has said publicly that it intends to deal with any emerging cost problems by "managing scope."

I-053-003

The Final EIS Chapter 2, Alternatives Development, addresses sudden unplanned loss of SR 99 (Viaduct Closed Scenario 1) and catastrophic and complete collapse of SR 99 (Viaduct Closed Scenario 2). Appendix C, Transportation Disciple Report, addresses the traffic effects of these scenarios in detail. The preferred Bored Tunnel Alternative is a safe alternative. Generally, structural engineers agree that tunnels are one of the safest places to be during an earthquake because the tunnel moves with the earth. No Seattle tunnels were damaged during the 2001 Nisqually earthquake, including the Mt. Baker and Mercer Island I-90 tunnels, Battery Street Tunnel, Third Avenue Bus Tunnel, and Burlington Northern Tunnel.

The bored tunnel would be built to current seismic standards, which are considerably more stringent than what was in place when the viaduct was built in the early 1950s. The bored tunnel design includes improving relatively soft, liquefiable soils found near the south tunnel portal. Emergency exits would be provided every 650 feet in the tunnel. Project engineers have studied current data on global warming and possible sea level rise and concluded that the seawall provides enough room to protect the tunnel from rising sea levels. The engineers also considered the possible threat of tsunamis during the design process.

I-053-004

The state legislature authorized funding to replace the Alaskan Way Viaduct in RCW 47.01.402. According to this law;

"The legislature finds that the replacement of the vulnerable state route number 99 Alaskan Way viaduct is a matter of urgency for the safety of Washington's traveling public and the needs of the transportation system in central Puget Sound."

This legislation also authorizes WSDOT to obligate two billion eight

Submitted Via Email

I-053-005 The DEIS should be supplemented to provide a backup plan that discloses in detail how the State plans to respond to the uncertainty described above including exactly which elements of the Project scope will be sacrificed if necessary to avoid cost overruns.

I-053-006 **5. The Project's Economic Benefits Should be Better Explained**

Project boosters have made much of the alleged economic benefits of the Project and specifically its Deep Bored Tunnel preferred alternative. Hence, the Economics Discipline Report ("EDR") that is part of the pending DEIS takes on special importance to the public and decision makers.

A. Direct Job Creation: The EDR states that the average number of temporary jobs created by the Deep Bored Tunnel portion of the project would total 480. The Report goes on to state that the peak number of workers per day would be 200 during the most intense period of construction. The EDR does not explain how, as a matter of simple math, it is possible that the average job number can exceed the peak daily job count. The FEIS should clarify this. Moreover, how many of these jobs will actually be "local" as opposed to filled by technical specialists in the tunneling industry who move about as tunneling work presents itself? The EDR doesn't say. *See* EDR at 88-89. The FDIS should provide this information. .

B. Direct Job Elimination: Deep Bored Tunnel construction will actually eliminate or displace some existing local jobs. In the South Portal area the job loss is estimated at 25. EDR at 9. The job loss at the North Portal is expected to be 119 for a total of 144. EDR at 11. At least some of this job loss will probably be temporary but that is also true of the jobs created. So it would seem fair to net out the loss and set the temporary direct job creation number at 336. The FEIS should acknowledge this

C. Indirect Economic Impact: The Bored Tunnel portion of the Project is estimated to cost $1,960M. This amount includes more than just the tunnel. It includes the tunnel boring machine, the interior roadway, tunnel systems, operations buildings and portal connections. The EDR estimates that new demand for construction would generate gross direct effects equal to the capital cost of $1,960 million in construction dollars and this amount would be multiplied to total approximately $3,688 million for all industries in the Puget Sound region not directly involved with the replacement of the viaduct. But, according to the EDR only 8 percent of the overall construction costs would be new money resulting from the Federal contribution to the Project. (EDR Exhibit 6-2). All other funding would come from the state or the Puget Sound region and would likely be spent and multiplied in the local/state economy even without the Project. But how much of total Project expenditures will actually occur locally? The EDR skips over this lightly, so questions remain that the FEIS should address. The apparent successful bidder is national and international in make-up. Isn't it likely that a substantial amount of Project direct and secondary spending will actually take place outside of Washington and perhaps outside of the United States? For example, where will the Tunnel Boring Machine be fabricated? What about the portion of Project expenditures that necessarily goes to contractor overhead and profit? Won't this money be spent where the successful firms are based? The FEIS provide additional information to clarify these matters.

hundred million dollars. In order to fund this obligation the legislation further identifies sources of funding: $2,400,000,000 of state funding; $400,000,000 of toll funding.

In the absence of toll funding WSDOT would still have the authorization to issue contracts up to $2,800,000,000 but the mix of funding sources would change. It is assumed that the toll funding would be replaced by new or reprioritized federal, state, or local funding sources.

The legislation authorizing WSDOT to proceed with the project also has a provision that those in Seattle who benefit from the project should be responsible for cost overruns. WSDOT interprets this as a statement of legislative intent that would need clarification to become operative.

I-053-005

The bored tunnel cost estimate is based on WSDOT's Cost Estimate Validation Process for large projects, which was developed in 2002. This process uses outside experts to help establish a more comprehensive budget at the early stages of a project and identify risks that need to be actively managed. It takes into account project changes, mitigation, inflation and risk - something projects that experience cost overruns generally fail to do.

Independent experts and cost estimators experienced in tunnels, underground construction, and megaproject delivery have reviewed the bored tunnel cost estimate. The viaduct replacement project also has a technical advisory team with more than 295 years of collective experience delivering projects around the world that provides guidance on risk management, construction methods, and oversight.

To better understand the conditions we would encounter during construction, crews have conducted more than 100 borings for soil samples, some up to 300 feet deep, and more than 300 surveys of

Submitted Via Email

I-053-006

D. Compared to What? The EDR's scope is limited to consideration of the Deep Bored Tunnel option so it is hard to find a basis for perspective. How, for example, would the economic impact of the DBT compare to a Surface and Transit option? We can only speculate, but it seems reasonable to think that more of the money spent on surface transit would stay at home with no international consortia, no exotic Tunnel Boring Machine to import and no nomadic specialist workforce to recruit from around the world. But perhaps the added buses for the transit element would be from overseas. Moreover, it is likely that the jobs lost as a result of property needed for Tunnel portals would be spared if no such structures were needed. Possibly parking spaces and the associated City revenue could be saved as well. The FEIS should provide this comparative information.

E. Loss of City Revenue and Higher O&M Costs: The EDR points out that the DBT project will eliminate a number of parking spaces, mostly in the areas of the north and south portals. This parking loss is expected to cost the City about $2.1M in annual revenue. The Report does not discuss how the City is expected to make up this ongoing revenue loss. The EDR reports that annual operations and maintenance costs of a Deep Bored Tunnel enhanced SR99 are expected to exceed current expenditure by an estimated $2.6M to $4.1M annually. The Report does not state this, but presumably most, if not all of these costs will fall on the State. It is also not stated what the O&M costs of tolling the Tunnel will be. The projected O&M increase is surprising given that the proposed facility will presumably be "state of the art" in terms of maintenance efficiency compared to the current damaged and dangerous Viaduct. The fact that these costs are slated to increase raises clear sustainability issues that the EDR neither discusses nor explains. The FEIS should discuss these issues.

Sincerely,

Bryan Glynn
1415 Second Avenue, #2205
Seattle, WA 98101-2072
206.683.2933
Bglynn1018@aol.com

CC Mayor Mike McGinn
Members, Seattle City Council

buildings and other structures along the tunnel route. This information, along with the other analysis completed, also helps to identify and manage risk.

The legislation authorizing WSDOT to proceed with the project obligates two billion eight hundred million dollars. Although the legislation also has a provision that those in Seattle who benefit from the project should be responsible for cost overruns. WSDOT interprets this as a statement of legislative intent that would need clarification to become operative.

I-053-006

A. The sentence is corrected in Section 6.6.2 of the Economics Discipline Report for the Final EIS and should read "...the average number of jobs directly related to construction would be 450 per year, although up to 480 workers per day could be required...". The project does not have control over the geographic distribution of the labor force. While it is expected that some tunneling experts would come from outside of the region, there is a sufficient labor force with heavy civil construction experience within the Puget Sound Region to staff the construction phase of this project.

B. The jobs displaced due to property acquisition are not counted as jobs eliminated unless the business either ceases to operate or relocates outside of the Puget Sound Region. Although the project will compensate property owners and businesses under the Uniform Relocation Act, as described in the Land Use Discipline Report (Appendix G of the Final EIS), the project cannot control where the businesses relocate or if the businesses cease to operate.

C. The sales tax generated, as discussed in Section 6.6.1 of the Economics Discipline Report for the Final EIS, identifies the anticipated amount of sales tax generated for each of the build alternatives evaluated in the Final EIS. Using the combined state and local tax rate

for the project area of 9.5%, the Bored Tunnel Alternative (which is estimated to generate $100 million in sales taxes) would require that $1,053 million of the total $1,788 million construction cost (total cost less right-of-way, which will not generate sales taxes) be spent on the local economy. The environmental analysis team does not have access to the cost proposal of the potential bidders for this construction work.

D. The 2010 Supplemental Draft EIS was focused on the Bored Tunnel Alternative. However, the Economics Discipline Report for the Final EIS evaluates all the build alternatives that meet the purpose and need for the project; please see this document, Appendix L, to compare the economic effects of the propose alternatives. The Surface and Transit Alternative was eliminated from final analysis because it did not meet the purpose and need for the project in terms of traffic mobility. For more information, see the Final EIS Appendix W, Screening Reports, which includes the Surface and Transit Scenario Year 2030 Analysis Results.

E. The City considers the loss of parking revenue as a portion of their "in-kind" financial contribution to the project. WSDOT will operate the SR 99 facility when it is completed and will have to account for this cost into their future budget requests to the legislature. The annual cost of tunnel operations and maintenance is small compared to either the catastrophic loss of the existing viaduct or to the cost of congestion for the other build alternatives due to the long-term closure of the viaduct structure during construction.