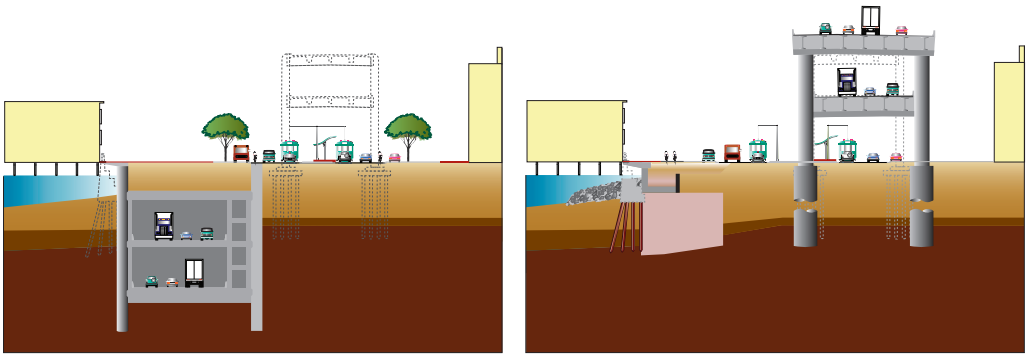
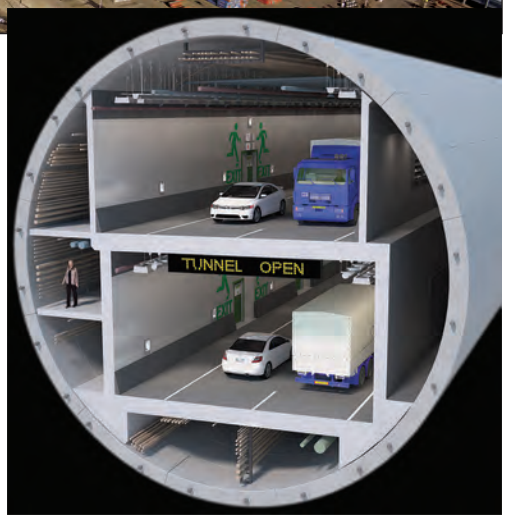
ALASKAN WAY VIADUCT REPLACEMENT PROJECT

Final Environmental Impact Statement

APPENDIX T 2010 Supplemental Draft EIS Comments and Responses





Submitted by:
PARSONS BRINCKERHOFF

Prepared by:
PARAMETRIX

U.S. Department of Transportation
Federal Highway Administration

Washington State
Department of Transportation

City of Seattle

JULY 2011

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United States Department of the Interior
NATIONAL PARK SERVICE
Klondike Gold Rush National Historical Park - Seattle Unit
319 Second Avenue South
Seattle, Washington 98104

IN REPLY REFER TO:

L7619 (KLSE)

December 13, 2010

Angela Freudenstein
Alaskan Way Viaduct Replacement Project
999 3rd Ave, Suite 2424
Seattle, WA 98104-4019

Dear Ms. Freudenstein:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the Alaskan Way Viaduct Replacement Project. The National Park Service supports any alternatives which will improve the safety of motor vehicle travel through downtown Seattle. However, I would like to share concerns regarding potential adverse effects outlined in the DEIS. This letter's purpose is to encourage solutions and mitigation strategies that would result in continued preservation of historic character for the Pioneer Square National Historic Landmark, the Pioneer Square National Historic District, and the operations of Klondike Gold Rush National Historical Park.

F-001-001

The current DEIS notes that the Polson Building and the Western Building, both contributing buildings to the Pioneer Square National Historic District, may experience settling during the proposed project which could result in severe damage to the structures. The document mentions that even with mitigation, the Western Building may require demolition. As both these buildings contribute to the historic character of the District, I would highly encourage the planning team to continue to develop solutions that would prevent adverse effects resulting from a loss of these particular historic resources; as well as minimize damage to the additional 12 historic structures listed in the DEIS.

F-001-002

The DEIS also includes information regarding a significant increase in traffic through the Pioneer Square National Historic District. The District is currently a pedestrian friendly neighborhood, conducive to the provision of walking tours by National Park Rangers for visitors to Seattle. The National Park Service is working with the Alliance for Pioneer Square and more than 40 public stakeholders to develop the *Trail to Treasure* self guided walking tour through the District. I am concerned that increased traffic volume, as proposed in the DEIS, would significantly inhibit the safe and pleasant provision of visitor services that Klondike Gold Rush NHP provides along the streets and sidewalks of Pioneer Square and impact the *Trail to Treasure*. These types of visitor services draw tourists to Pioneer Square, significantly contributing to the economy of the area. I would encourage you to seek traffic solutions and mitigations that do not increase through traffic in Pioneer Square, but rather improve local traffic conditions, provide adequate parking for visitors, and markedly contribute to a safe, pleasant pedestrian atmosphere.

Once again, thank you for the opportunity to provide comments on the DEIS for the Alaskan Way Viaduct Replacement Project.

Sincerely,

Karen Beppler-Dorn

Karen Beppler-Dorn
Superintendent

F-001-001

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the

alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural, and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

F-001-002

Modest increases in traffic volumes are expected between 2015 and 2030. In most cases, these traffic volume increases are related to expected population and employment growth in the study area and region. The new ramps near the stadiums would provide more direct access for people accessing the south downtown and Pioneer Square areas. Appendix C, Transportation Discipline Report, addresses traffic impacts on the Pioneer Square neighborhood. Included within the discipline report are a variety of metrics looking at roadway and intersection performance. These analyses were performed with analytical tools using data for a range of modes including pedestrians, trucks, transit, ferries, and automobiles. Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse on to a variety of streets in the area such as S. Royal Brougham Way, Alaskan Way, First Avenue, Fourth Avenue, etc. As part of the preferred Bored Tunnel Alternative and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential traffic congestion in Pioneer Square. For example, the south portal configuration includes bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the city’s Complete Street goals and include treatments for pedestrians, bicycles,

freight, and adjacent land uses. Please refer to Chapter 5, Permanent Effects, of the Final EIS for the discussion of transportation effects for the build alternatives.

GSA

GSA Northwest/Arctic Region

Ms. Angela Freudenstein
Alaskan Way Viaduct Replacement Project
999 Third Ave, Suite 2424
Seattle, Washington 98104

RE: GSA Comments on the Supplemental Draft Environmental Impact Statement – SR 99 Bored Tunnel.

Dear Ms.Freudenstein.

GSA has reviewed the Supplemental Draft Environmental Impact Statement for the proposed SR 99 Bored Tunnel project and the project's specific impact on the existing Federal Office Building located at 909 First Avenue in downtown Seattle. The presentation of these comments is not an acceptance of the EIS or an approval of work in, around or under, the Federal Office Building nor is it an endorsement of the Bored Tunnel option for the Seattle Viaduct Replacement Project. Additionally, this response does not necessarily represent all of GSA's concerns associated with this project option.

The specific issues associated with the 2010 Supplemental Draft EIS for the Bored Tunnel Option are as follows:

F-002-001

1. Tunnel elevation under the Federal Office Building remains unresolved. Conflicting data and ambiguity of details leads GSA to believe that the top of the tunnel will be seventy-five feet (75') below the Federal Office Building's basement which places the tunnel right at the base of the foundation piers. Other sections indicate that the bottom of the tunnel will be one hundred feet (100') below the Federal Building's basement which, when subtracting the fifty-four foot (54') diameter, places the top of the tunnel approximately forty-six feet (46') below the Federal Office Building basement and in the middle of the foundation piers. Both described elevation place this historic building and its occupants in permanent jeopardy.

2. Appendix G of the Draft EIS states that "Subsurface property acquisitions would be required for between 52 and 59 parcels for the proposed 54-foot bored tunnel. "The subsurface property acquisition would consist of a three-dimensional corridor below the surface of the ground for the tunnel, and they would not affect land uses on the

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www.gsa.gov

F-002-001

FHWA, WSDOT, and the City of Seattle acknowledge these comments. The top of the bored tunnel would be approximately 115 feet below the ground surface at Madison Street. Design drawings for the Federal Building show that the wood piles below the building extend as much as 51 feet below the ground surface. The wooden piles are likely founded in glacially overconsolidated material. The distance between the bottom of the piles and the top of the bored tunnel would be approximately 64 feet. The subsurface property acquisition would be outside the practical building requirements for typical building foundations and zoning requirements. The lead agencies will continue to coordinate with GSA during the final design process to address concerns about potential effects to the Federal Building, including an acquisition strategy and mitigation measures, if they become necessary.

F-002-001

surface because the limits are outside the practical building requirements for typical building foundations and zoning requirements."

a. Such a conclusion regarding the Federal Office Building site relies upon inaccurate and unreliable data. Considering that the top elevation of the tunnel is not known, it is possible that the tunnel could have significant impact on GSA's ability renovate or expand the facility. For example, should it be necessary to replace the existing timber pile foundation system, the tunnel could prevent installation of new piles. Modern pile foundations extend significantly deeper than the timber piles which currently support the Federal Office Building. Piles on a renovation project just south of downtown Seattle extend as much as one hundred sixty feet (160') below grade. The presence of the tunnel would hamper installation and increase the cost of any project requiring new foundation piles.

3. Attachment "A" of the EIS indicates that the proposed tunnel routing requires a construction easement and a subsurface acquisition for the Federal Office Building site. A proposed agreement for any such acquisition, easement, or acquisition strategy has not yet been presented to GSA for review.

a. Additionally, Exhibit A-1, Appendix G, page A-1 of the EIS indicates that the subsurface easement area required would be 18,930 square feet and a volume of 3,066,585 cubic feet. Exhibit 6-2, Appendix G, page 73 states that a construction easement of 59,239 square feet would be needed for settlement mitigation. How do these two easement calculations relate to each other and is the settlement mitigation permanent or is it limited to a specific period after the tunnel is constructed? What happens should settlement occur after the tunnel is fully operational?

F-002-002

4. Page A-1 of Appendix G lists properties that the EIS suggest may have negative foundation impacts due to the tunnel location. The Federal Office Building is not included in this list but is identified elsewhere in the document as a structure that will be subject to the 2 – 3 inches of settlement due to the construction. Since the tunnel will only impact a portion of the Federal Office Building, differential settlement may occur. A historic masonry structure like the Federal Office Building could experience cracking of brittle finishes and even cracking through the mortar joints due this settlement. While the compensation grouting process may mitigate some of these issues it cannot prevent the problem completely. Additionally, the compensation grouting could impact GSA's ability to perform future foundation repairs by creating a barrier to pile installation.

F-002-003

5. During a major modernization of the Federal Office Building in the mid 1990. GSA discovered a methane gas build-up in the space between the ground and parking level concrete floor slab. GSA's investigation revealed that the Federal Office Building site was part of a large land reclamation effort performed by the City of Seattle in the early 1900's (tidal areas were backfilled to create land for city building

2

F-002-002

This concern is noted by the lead agencies. Appendix G, Land Use Discipline Report, of the Final EIS notes that Federal Building will receive Level 3 monitoring. Level 3 monitoring is the most intensive monitoring used for the most vulnerable historic buildings. This monitoring would include manual surveying, tilt meters, crack monitors, and GPS monitors to detect differential settlement as it occurs. Damage caused by the project to historic buildings would be repaired. The subsurface property acquisition would be outside the practical building requirements for typical building foundations and zoning requirements. The lead agencies will continue to coordinate with GSA on an acquisition strategy for this property. Chapter 8, Mitigation of this Final EIS describes how project effects would be mitigated.

F-002-003

The design-build contractor must comply with WISHA regulations for underground construction (tunneling) WAC 296-155-730 Tunnels and Shafts, which requires that the atmosphere in underground work areas be tested quantitatively as often as necessary to ensure a safe work environment. The tunnel boring machine would be equipped with a continuous flammable gas monitoring system capable of monitoring conditions within the occupied working spaces and shutting down the electrical power if statutory limits are exceeded. The contractor would also be responsible for potential mitigation measures including ventilation. Other engineering controls and procedures would be implemented as necessary. In the vicinity of the Federal Building, the tunnel would be advanced through glacial soils at a depth well below the wood debris area. The tunnel would be under the water table, and the level of methane dissolved in the water should not change in overlying soils because of the tunneling operation.

F-002-003

expansion). The backfill material contained a significant amount of organic material that has since decayed and produced methane gas as a by-product. What is the proposed method for monitoring and mitigating any methane gas build-up within the tunnel and specifically around the Federal Office Building?

F-002-004

6. While these comments do not necessarily reflect all of GSA's concerns regarding the construction of the Bored Tunnel Project under the Federal Office Building they do serve as a guidepost for issues that need to be resolved prior to the start of construction.

If you have any questions, please feel free to contact me at 253.931.7326.

Sincerely,

Carrie L. Mosher
Director, Portfolio Management Division
GSA, PBS Northwest/Arctic Region

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F-002-004

WSDOT will continue to coordinate with GSA throughout the design and construction process to address your concerns.

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OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

December 13, 2010

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Anjela Freudenstein
AWV Environmental Manage
AWV Project Office (Wells Fargo Building)
999 Third Ave, Suite 2424
Seattle, Washington 98104 - 4019

Re: U.S. Environmental Protection Agency (EPA) comments on the Alaskan Way Viaduct Replacement Project (AWVRP) 2010 Supplemental Draft Environmental Impact Statement (2010 SDEIS) and Section 4(f) Evaluation.
EPA Project Number: 01-050-FHW.

Dear Ms. Freudenstein:

The EPA has reviewed the AWVRP 2010 SDEIS and we are submitting comments in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Under our policies and procedures, we evaluate the environmental impact of the proposed action and the adequacy of the impact statement. We have assigned an EC-2 rating to the 2010 SDEIS. A copy of the EPA rating system is enclosed.

EPA has coordinated with the lead agencies on this project since at least February 2002. Between February 2002 and today, EPA has submitted nine letters and attended numerous agency meetings. In our June 2, 2004 comments on the Draft EIS we commended the lead agencies because, "all of your proposed alternatives incorporate multi-modal transportation features such as enhancements to existing facilities for non-motorized transportation, and expanded efforts to improve transit and reduce single-occupancy vehicle trips." In our September 22, 2006 comments on the Supplemental Draft EIS we recommended that an "air pollutant emission control plan" be integrated into the Final EIS. In our September 18, 2008 and July 10, 2009 scoping letters for the 2010 SDEIS we recommended a full suite of diesel mitigation measures and maximizing efforts to improve the Combined Sewer System. On November 3, 2009 we commented on your draft revised purpose and need statement and recommended the addition of an "environmental need" to the project. Overall, the 2010 SDEIS is responsive to the majority of our concerns and we appreciate the lead agencies' sustained and effective interagency coordination efforts.

There are numerous notable accomplishments in the 2010 SDEIS. For example, we commend you for your clear summaries of water quality conditions in the Duwamish River, Elliott Bay, and Lake Union as well as your description of stormwater management on the viaduct and Alaskan Way (2010 SDEIS, Chapter 4, Questions 24 and 25). We also appreciate your disclosure of worst-case CO concentrations at receptor locations and your selection of a

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Tier 3 approach for Mobile Source Air Toxics (MSATs) from FHWA's September 30, 2009 *Interim Guidance Update on Air Toxic Analysis in NEPA Documents.* EPA also would like to note your responsiveness to our concern that the appendices were referenced as whole documents in the main text of the 2006 SDEIS – the inclusion of specific page numbers and sections in the Appendices for related information in the main text of the 2010 SDEIS is part of your larger achievement to have created a generally readable, organized and informative NEPA document for a complex project.

F-003-001

Our enclosed detailed comments describe environmental impacts which EPA believes should be avoided to fully protect the environment as well as concerns about insufficient information. Corrective measures may require changes to the preferred alternative or the application of mitigation measures that can reduce impacts. Our primary environmental concerns relate to the potential for increased transit travel times and environmental justice impacts from tolling and construction. We also believe the 2010 SDEIS does not contain sufficient information in the following areas.

1. Information about how "The purpose and need of the project were updated to reflect current state and local priorities as expressed through the Partnership Process." (2010 SDEIS, p. 53).
2. Information about the alternatives development process, especially how design concepts were evaluated.
3. Comparative information among alternatives on impacts to air quality and water resources.
4. Information on optimization measures which would be required to avoid unacceptable impacts to transit and environmental justice populations from tolling.

To address our environmental and informational concerns, we provide a series of related recommendations in the enclosed comments.

- With regard to points 1 and 2, we recommend additional information on the relationship between Partnership Process guiding principles and evaluation measures and, respectively, the elements of the 2010 SDEIS's purpose and need statement and screening criteria.
- With regard to comparative information on air quality and water resources impacts among alternatives we recommend the FEIS determine and disclose which of the alternatives has the lowest air quality impacts and best improves water quality.
- With regard to the optimization measures which would be required to avoid unacceptable impacts to transit and environmental justice populations, we recommend the lead agencies develop and disclose measures which would effectively reduce predicted transit travel times and avoid potential adverse environmental justice impacts from tolling.
- We also recommend and cite examples of transportation contract language to mitigate air quality and noise impacts from construction as well as encourage the lead agencies to commit to various specific proposed construction mitigation measures found throughout the 2010 SDEIS and Appendices.

Altogether we believe the Alaskan Way Viaduct Replacement Project is a unique opportunity to address regional goals to achieve a sustainable transportation system. Such a system can best

F-003-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. Please see the following responses to each of your detailed comments.

be achieved by making clear decisions to reduce short, medium and long-term impacts from transportation to air quality, water resources and climate change.

Thank you for this opportunity to comment and if you have any questions or concerns please contact Erik Peterson of my staff at (206) 553-6382 or by electronic mail at peterson.erik@epa.gov. You may contact me at (206) 553-1601.

Sincerely,

Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosure:
U.S. Environmental Protection Agency Detailed Comments on the Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft Environmental Impact Statement and Section 4(f) Evaluation
EPA Rating System for Draft Environmental Impact Statements

U.S. ENVIRONMENTAL PROTECTION AGENCY DETAILED COMMENTS ON THE ALASKAN WAY VIADUCT REPLACEMENT PROJECT 2010 SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT AND SECTION 4(F) EVALUATION

Purpose and Need

F-003-002

We do not believe the 2010 SDEIS sufficiently discloses how, "The purpose and need of the project were updated to reflect current state and local priorities as expressed through the Partnership Process." (2010 SDEIS, p. 53). While certain elements of the purpose and need were added to, "…more closely align it with the guiding principles established for the Partnership Process." (e.g., "Protect the integrity and viability of adjacent activities on the central waterfront and in downtown Seattle") other guiding principles were not addressed within the purpose and need (e.g., "Create solutions that are fiscally responsible" and "Improve the health of the environment").

We are especially concerned that the 2010 SDEIS does not describe why the Partnership Process Guiding Principle "Improve the health of the environment" is not represented in the 2010 SDEIS purpose and need. Identification of the specific guiding principles represented in the project's purpose and need is important because the potential action alternatives ("design concepts") were evaluated and screened by the lead agencies using criteria developed based on the project's purpose and need statement.

Recommendation:

- We recommend that the FEIS discuss the reasoning behind not representing the Partnership Process's guiding principles "Create solutions that are fiscally responsible" and "Improve the health of the environment" in the 2010 SDEIS's purpose and need.

Alternatives Development

F-003-003

We do not believe the 2010 SDEIS sufficiently discloses the relationship between the hybrid scenarios recommended by the Partnership Process's Independent Project Management Team (I-5, Surface and Transit, Elevated Bypass, and Bored Tunnel) and the range of alternatives analyzed in the 2010 SDEIS (2006 SDEIS Elevated Structure, 2006 SDEIS Tunnel (Cut-and Cover Tunnel), and Bored Tunnel Hybrid). While the 2010 SDEIS sufficiently describes why the Partnership Process Bored Tunnel Hybrid is included as an action alternative (e.g., the 2009 Recommendation from the Governor, County Executive, and Mayor), we do not believe the 2010 SDEIS sufficiently describes why the Partnership Process I-5, Surface and Transit Hybrid, is not included as an action alternative.

Our specific concern centers on the 2010 SDEIS's description of apparently higher screening weights for mobility and north-south capacity relative to construction disruption and connections between downtown and the waterfront. We are especially interested in how 2010 SDEIS screening criteria were weighted because the Partnership Process evaluation measures (Appendix S, Exhibit 3-3) appear to be conceptually similar, yet, they were used to eliminate the Cut-and-Cover hybrid scenario and included the I-5, Surface and Transit hybrid scenario. The

F-003-002

FHWA, WSDOT, and the City of Seattle have updated the project's purpose and need to reflect, but not fully incorporate, the guiding principles of the Partnership Process. The guiding principles developed in the Partnership Process reflected a broad range of considerations, which included not only the goals of the project, but also the manner in which those goals should be achieved. A purpose and need statement in the NEPA process is different: it reflects the reasons why the proposed action is being undertaken. The project is being undertaken to improve public safety and reduce the risk of catastrophic failure in an earthquake, as further described in the purpose and need statement. Environmental impacts and fiscal responsibility are important factors considered in deciding how to achieve those goals, but they are not the reasons why this project is being undertaken; therefore, they were not included as elements of the purpose and need. This approach to defining the purpose and need is consistent with FHWA's policies and practices, which recommend focusing the purpose and need statement on the reasons why a project is proposed. See FHWA, "The Importance of Purpose and Need in Environmental Documents" (Sept. 18, 1990) which states, "In summary, the purpose and need section in the EIS lays out why the proposed action, with its inherent costs and environmental impacts, is being pursued."

F-003-003

As part of the alternatives development process for the project, the Elevated Structure and Transit Hybrid and the I-5, Surface and Transit Hybrid developed through the Partnership Process were considered in the 2010 Supplemental Draft EIS. For reasons discussed on pages 53 through 58 of the 2010 Supplemental Draft EIS, these concepts were screened out as potential build alternatives for further evaluation in the EIS. As documented on page 53 of the 2010 Supplemental Draft EIS, "None of the concepts met all of the screening criteria. The screening criteria were applied by first determining if a proposed design concept

F-003-003 2010 SDEIS design concept reevaluation process, on the other hand, eliminated the I-5, Surface and Transit hybrid scenario and included the 2006 SDEIS Tunnel.

Recommendation:

- We recommend that the FEIS include additional information on how the 2010 SDEIS's screening criteria differed from the Partnership Process's "Evaluation Measures" (Appendix S, Exhibit 3-3). Please discuss whether or not and how differences between the 2010 SDEIS screening criteria and the Partnership Processes evaluation measures influenced the development of alternatives.

F-003-004

- We recommend that the environmentally preferred alternative be identified from among all of the alternatives (2004 DEIS, 2006 SDEIS and 2010 SDEIS) considered throughout this NEPA process.

Air Quality

F-003-005 We are concerned that the 2010 SDEIS does not present air quality impacts in a sufficiently comparative form. More information is needed to understand the difference in potential air quality impacts among alternatives to a degree where the analysis could provide a basis for choice (40 CFR Part 1502.14). We also believe more air quality information is needed in order to support the eventual identification of an environmentally preferred alternative.

The 2010 SDEIS's answer to question 18 "How would effects to air quality compare?", for example, focuses on similarities and does not sufficiently compare differences among the alternatives. We agree that regardless of the alternative chosen, emissions (NAAQS and MSATs) will be lower than present levels in the design year as a result of EPA's national control programs. Providing an environmental basis for choice related to air quality or supporting the systematic identification of the environmentally preferred alternative, however, will require a greater focus on the differences among alternatives than that which is presented in the 2010 SDEIS.

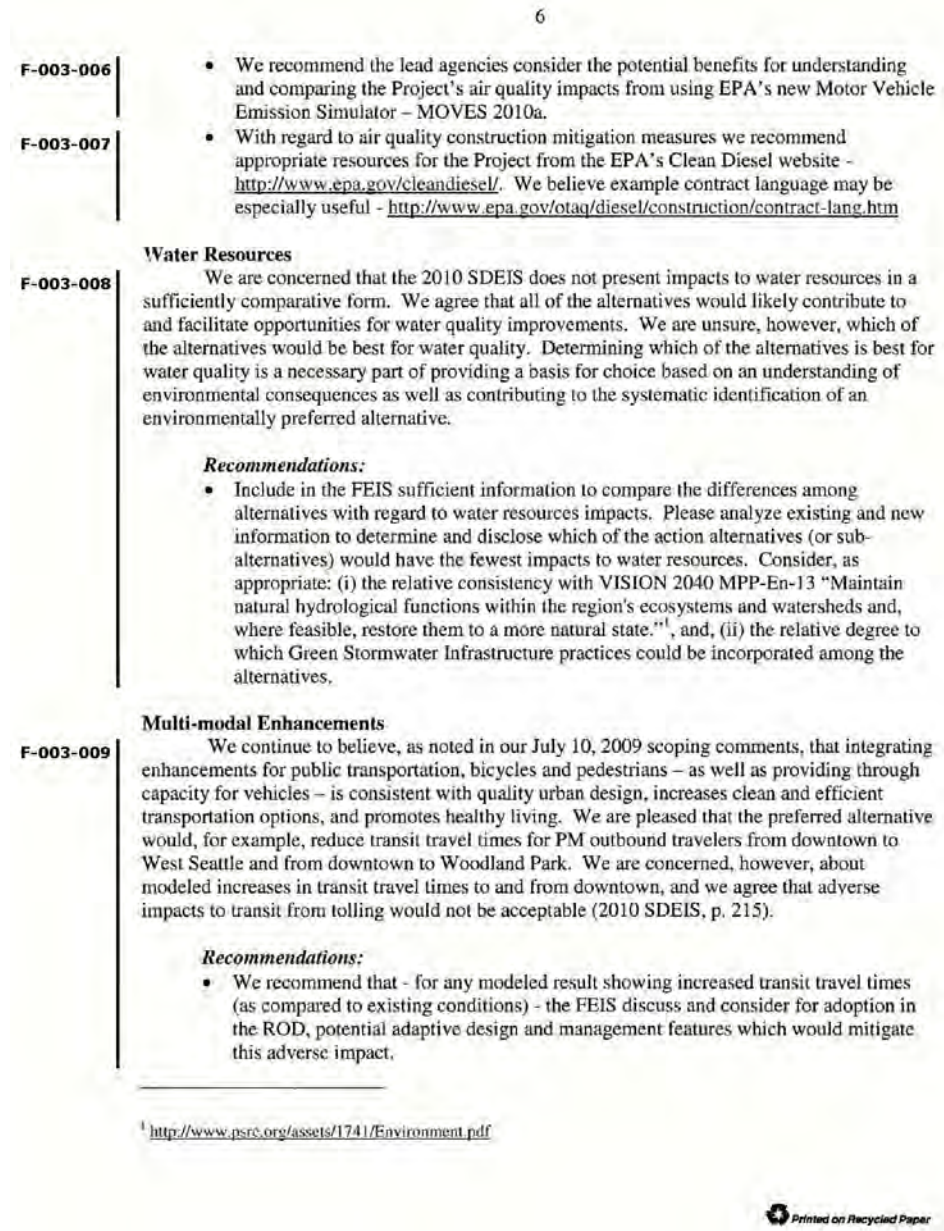
Readers interested in the air quality differences among alternatives have to review both the 2010 SDEIS's Appendix M as well as the 2006 SDEIS's Appendix Q. While such an effort may be considered reasonable given the complexity of the Project, we believe the information presented is insufficient because the Appendices cannot be directly compared. First, the intersections of interest (receptor locations) are different for the 2006 analysis and for the 2010 analysis (see 2010 SDEIS Appendix M Exhibits 5-1 and 5-4 as well as 2006 SDEIS Appendix Q Exhibits 5-1 and 5-2). Second, while the 2010 SDEIS's Appendix M notably discloses quantitative MSAT emissions for the Bored Tunnel Alternative (Exhibit 5-4) there is no comparable MSAT emissions disclosure in the 2006 SDEIS's Appendix Q for the Cut-and-Cover Alternative and the Elevated Structure Alternative.

Recommendations:

- Include in the FEIS more sufficient information comparing the differences among alternatives with regard to air quality impacts. Please analyze existing and new information to determine and disclose which of the action alternatives would have the lowest air quality impacts.

could meet the first element of the project purpose - providing a facility that meets current seismic safety standards. All of the design concepts considered met this criterion and were advanced. Concepts that satisfied the seismic design criterion were evaluated against the screening criteria for the remaining elements of the project purpose. In this stage of the screening analysis, design concepts were not required to achieve each of the project purposes. Instead, they were evaluated based on their overall ability to achieve the project purposes. In cases where two similar concepts were being considered, the concept that better satisfied the screening criteria was advanced and the other was eliminated. In cases where a concept had substantial deficiencies in its ability to achieve one or more elements of the project purpose, such that it would substantially compromise mobility, or if that concept had other major drawbacks, such as severe impacts on the local community, the concept was designated as unreasonable and was eliminated."

As the quoted sections of the 2010 Supplemental Draft EIS describe, the criteria for mobility and capacity were not more heavily weighted than the other screening criteria. The I-5, Surface and Transit Hybrid was screened out because the lead agencies found it had greater effects to overall mobility than was assumed in the Partnership Process analysis. For example, in 2030 the Surface and Transit Hybrid had approximately 35,000 more vehicles per day on I-5 than the other three alternatives. The analysis completed for the Partnership Process focused on transportation conditions in the year 2015, and the analysis presented in the 2010 Supplemental Draft EIS focused on the project's design year of 2030. For reasons identified in the 2010 Supplemental Draft EIS, analyzing the I-5, Surface and Transit Hybrid in 2030 showed that this concept did not meet the project's purpose and validated the rationale for not evaluating this concept further. Details of that traffic analysis are provided in Attachment A of Appendix C to the 2010 Supplemental Draft EIS. In addition, the Final EIS Appendix W, Screening Report, includes the updated Surface and Transit Scenario Year 2030 Analysis Results.



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F-003-006
- We recommend the lead agencies consider the potential benefits for understanding and comparing the Project's air quality impacts from using EPA's new Motor Vehicle Emission Simulator – MOVES 2010a.

F-003-007
- With regard to air quality construction mitigation measures we recommend appropriate resources for the Project from the EPA's Clean Diesel website - http://www.epa.gov/cleandiesel/. We believe example contract language may be especially useful - http://www.epa.gov/otaq/diesel/construction/contract-lang.htm

Water Resources

F-003-008
We are concerned that the 2010 SDEIS does not present impacts to water resources in a sufficiently comparative form. We agree that all of the alternatives would likely contribute to and facilitate opportunities for water quality improvements. We are unsure, however, which of the alternatives would be best for water quality. Determining which of the alternatives is best for water quality is a necessary part of providing a basis for choice based on an understanding of environmental consequences as well as contributing to the systematic identification of an environmentally preferred alternative.

Recommendations:

- Include in the FEIS sufficient information to compare the differences among alternatives with regard to water resources impacts. Please analyze existing and new information to determine and disclose which of the action alternatives (or sub-alternatives) would have the fewest impacts to water resources. Consider, as appropriate: (i) the relative consistency with VISION 2040 MPP-En-13 "Maintain natural hydrological functions within the region's ecosystems and watersheds and, where feasible, restore them to a more natural state."[1], and, (ii) the relative degree to which Green Stormwater Infrastructure practices could be incorporated among the alternatives.

Multi-modal Enhancements

F-003-009
We continue to believe, as noted in our July 10, 2009 scoping comments, that integrating enhancements for public transportation, bicycles and pedestrians – as well as providing through capacity for vehicles – is consistent with quality urban design, increases clean and efficient transportation options, and promotes healthy living. We are pleased that the preferred alternative would, for example, reduce transit travel times for PM outbound travelers from downtown to West Seattle and from downtown to Woodland Park. We are concerned, however, about modeled increases in transit travel times to and from downtown, and we agree that adverse impacts to transit from tolling would not be acceptable (2010 SDEIS, p. 215).

Recommendations:

- We recommend that - for any modeled result showing increased transit travel times (as compared to existing conditions) - the FEIS discuss and consider for adoption in the ROD, potential adaptive design and management features which would mitigate this adverse impact.

[1] http://www.psrc.org/assets/1741/Environment.pdf

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F-003-004

The environmentally preferred alternative will be identified in the Record of Decision. It will be identified from among the alternatives considered through the NEPA process.

F-003-005

Intersections were screened for the 2006 and 2010 analysis. Those intersections with the highest volume and highest delay were evaluated for impacts. All alternatives would meet the national ambient air quality standards (NAAQS); thus, no impacts would occur.

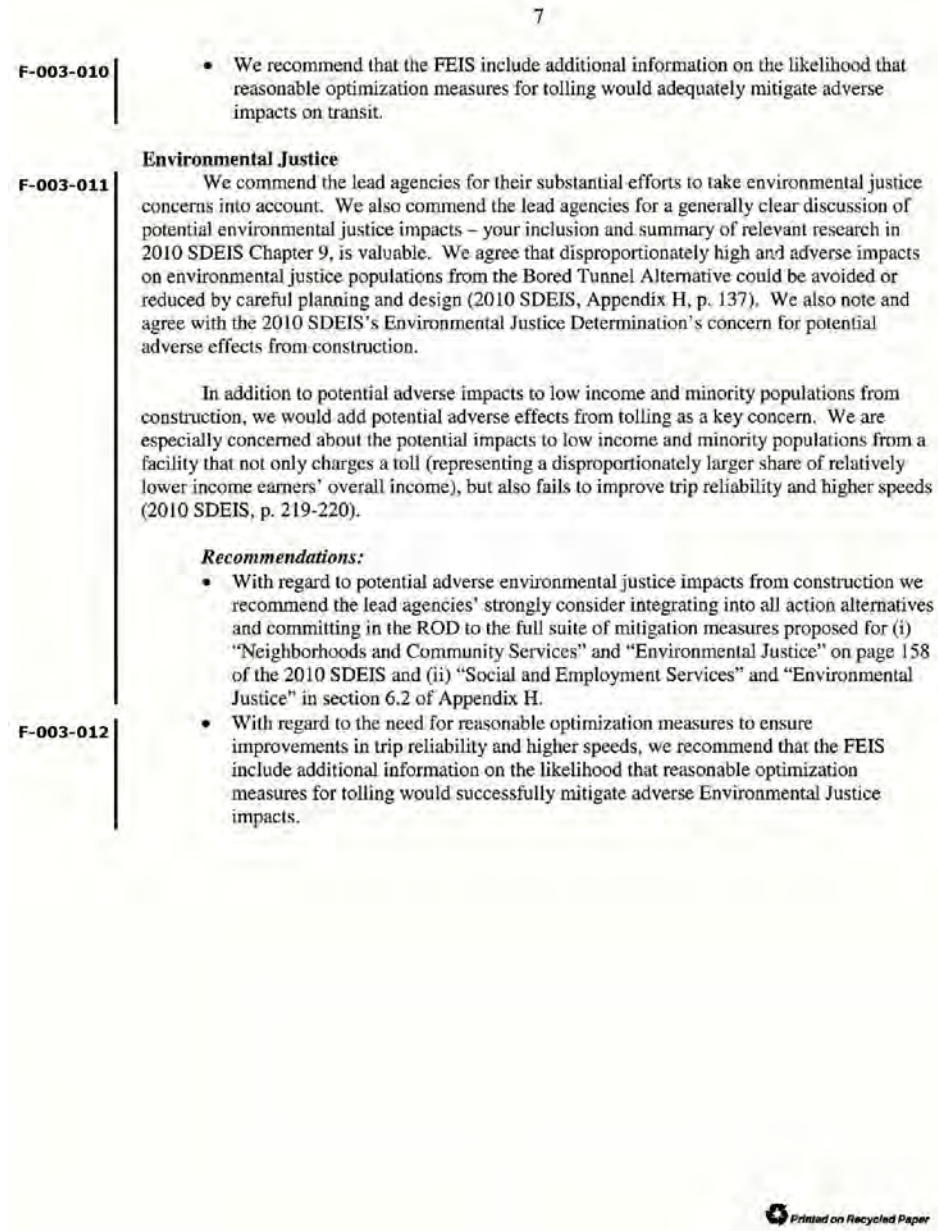
The Final EIS estimates the Mobile Source Air Toxic (MSAT) emissions for all build alternatives (Bored Tunnel, Cut-and-Cover Tunnel, and Elevated Structure) under both the tolled and non-tolled conditions. All build alternatives, under both tolled and non-tolled conditions, would meet the national ambient air quality standards (NAAQS).

Please refer to Appendix M, Air Quality Discipline Report, for additional detailed analysis.

F-003-006

Energy estimates for vehicles using the project's roadways were calculated using the 2010 Motor Vehicle Emission Simulator (MOVES2010a) model to assess greenhouse gas effects. Please refer to Appendix R, Energy Discipline Report, for additional detailed analysis.

The models used for assessing air quality effects are described in Appendix M, Air Quality Discipline Report. For example, the Washington State Intersection Screening Tool (WASIST) was used in all mobile source intersection analyses. This screening model was used for determining reasonable worst-case CO concentrations at signalized intersections throughout Washington. The results are based on the latest



7

F-003-010 • We recommend that the FEIS include additional information on the likelihood that reasonable optimization measures for tolling would adequately mitigate adverse impacts on transit.

Environmental Justice

F-003-011 We commend the lead agencies for their substantial efforts to take environmental justice concerns into account. We also commend the lead agencies for a generally clear discussion of potential environmental justice impacts – your inclusion and summary of relevant research in 2010 SDEIS Chapter 9, is valuable. We agree that disproportionately high and adverse impacts on environmental justice populations from the Bored Tunnel Alternative could be avoided or reduced by careful planning and design (2010 SDEIS, Appendix H, p. 137). We also note and agree with the 2010 SDEIS's Environmental Justice Determination's concern for potential adverse effects from construction.

In addition to potential adverse impacts to low income and minority populations from construction, we would add potential adverse effects from tolling as a key concern. We are especially concerned about the potential impacts to low income and minority populations from a facility that not only charges a toll (representing a disproportionately larger share of relatively lower income earners' overall income), but also fails to improve trip reliability and higher speeds (2010 SDEIS, p. 219-220).

Recommendations:

- With regard to potential adverse environmental justice impacts from construction we recommend the lead agencies' strongly consider integrating into all action alternatives and committing in the ROD to the full suite of mitigation measures proposed for (i) "Neighborhoods and Community Services" and "Environmental Justice" on page 158 of the 2010 SDEIS and (ii) "Social and Employment Services" and "Environmental Justice" in section 6.2 of Appendix H.

F-003-012 • With regard to the need for reasonable optimization measures to ensure improvements in trip reliability and higher speeds, we recommend that the FEIS include additional information on the likelihood that reasonable optimization measures for tolling would successfully mitigate adverse Environmental Justice impacts.

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version of EPA's emission factor algorithm (MOBILE6.2.03) and EPA's CAL3QHC mobile source dispersions model.

F-003-007

Construction mitigation for air quality is described in Chapter 8 of the Final EIS. WSDOT's traffic management plan will also address idling and the project is considering barging as recommended by the measures from EPA's Clean Diesel website. Please refer to Appendix M, Air Quality Discipline Report, for additional details on strategies and measures for reducing air pollutant emissions.

F-003-008

The 2010 Supplemental Draft EIS focused on the Bored Tunnel Alternative compared to existing conditions and the Viaduct Closed (No-Build) Alternative. The Final EIS presents a complete analysis of changes in surface water for all the alternatives in Chapter 5 and in Appendix O, Surface Water Discipline Report, Chapter 5. Both land use changes and annual pollutant loading are quantified in a comparative format for each alternative The potential implementation of Green Stormwater Infrastructure practices is discussed qualitatively.

F-003-009

As indicated in Chapter 7 Appendix C, Transportation Discipline Report of the Final EIS, the tolling scenarios would not have major effects on transit travel times or transit mode shares at selected screenlines. Specific optimization strategies affecting general-purpose traffic would be determined in cooperation with other agencies.

F-003-010

As indicated in Chapter 7 Appendix C, Transportation Discipline Report of the Final EIS, the tolling scenarios would not have major effects on transit travel times or transit mode shares at selected screenlines.

8

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections
The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns
EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections
EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory
EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment, February, 1987.

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Specific optimization strategies affecting general-purpose traffic would be determined in cooperation with other agencies.

F-003-011

Thank you for your comment. Chapter 8 of the Final EIS presents the mitigation measures that the lead agencies will implement to address effects to environmental justice populations. Some of the specifics related to outreach activities during construction will be determined as the project develops. WSDOT will work with adjacent service providers including The Compass Housing Alliance (formerly The Compass Center), Heritage House, Bread of Life Mission, Pike Market Senior Center, Plymouth Housing Group, Catholic Seamen's Club, and Rose of Lima House to identify concerns and solutions for potential construction-related effects.

F-003-012

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King

County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

U.S. Department of Transportation
Federal Transit Administration

REGION X
Alaska, Idaho, Oregon, Washington

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December 17, 2010

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Ms. Angela Freudenstein
Alaskan Way Viaduct Replacement Project
999 Third Ave., Suite 2424
Seattle, WA 98104

Re: Federal Transit Administration Comments on the Alaskan Way Viaduct Supplemental Draft EIS

Dear Ms. Freudenstein:

Thank you for the opportunity to comment on the Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft Environmental Impact Statement. The Federal Transit Administration (FTA) recognizes that this project presents enormous complexity in every facet. Within that context, we respect the serious work that the AWV team has done and the significant commitment that the team has made to identify and minimize adverse effects.

F-004-001 While the purpose and need of this project is to provide a replacement transportation facility that will "provide capacity of automobiles, freight and transit to efficiently move people and goods to and through downtown Seattle," it is not apparent from the SDEIS that transit capacity will be effectively maintained through the proposed transit enhancements and mitigation. In particular, the impacts of traffic diversion from tolling on public transportation need further refinement in either a supplemental DEIS or the FEIS.

It is our hope the attached comments may help the team refine its analysis and improve the environmental documentation of the Project. We sincerely apologize for not being able to complete our review more promptly.

Sincerely,

R.F. Krochalis
Regional Administrator

cc: David Moseley, Washington State Ferries
Joni Earl, Sound Transit
Kevin Desmond, King County Metro
Paul Hahn, City of Seattle DOT

F-004-001

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes that the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently, WSDOT is providing funding for King County on the S. Holgate Street to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is ongoing and monitored regularly to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system. WSDOT will also work with the County to identify funding sources for the service originally contemplated in the January 2009 agreement.

Chapter 5 of the Final EIS includes analyses for each of the alternatives both with and without tolls. How tolls might be implemented as part of the proposed action will be refined further should the state legislature authorize tolls. The potential effects resulting from analyses described in Chapter 5 of the Final EIS represent a conservative tolling analysis meaning that we anticipate expect effects will be notably less than described in the Final EIS.

FTA COMMENTS
Alaskan Way Viaduct Replacement Project
Supplemental Draft Environmental Impact Statement (November 2010)
December 14, 2010

FTA's concerns with the SDEIS relate primarily to how the document generally approaches the analyses of tolling and cumulative effects, and specific details concerning the analysis of transit.

Comments relating to the SDEIS's approach

F-004-002 Inadequate and confusing presentation of tolling impacts. Chapter 9 introduces tolling, presenting it as a design option, and shows it to be a factor that apparently could cause significant changes in the way any of the alternatives would operate: "For the Seattle Center City area, Vehicle Hours of Delay in 2015 is projected to increase between 3 percent and 20 percent when compared to untolled 2015 Bored Tunnel." (p. 208) "[M]odeling results show the diverted traffic on Second and Fourth Avenues would increase travel times by 4 to 8 minutes for traffic traveling in general-purpose lanes under Bored Tunnel Toll Scenarios A and C. . .." (p. 215) "Under all tolling conditions, vehicle trips would increase by up to a third at intersections in the project area." (p. 222). With consequences of that magnitude, FTA would not expect the SDEIS to isolate the tolling analysis in a separate chapter, but rather to include those impacts in Chapter 5 in the discussion of the likely environmental effects of the proposed action on all elements of the environment. Further, the chapter itself seems to downplay the environmental effects of tolling. Of Chapter 9's twenty pages, the non-transportation consequences do not receive any attention at all until page 16, and of the five pages discussing non-transportation impacts, three of them are devoted to environmental justice. Finally, separating the tolling discussion from the cumulative impacts analysis (Chapter 7) further obscures the likely real impacts of tolling and extent of extra mitigation that it will require. Even if tolling is for some reason not examined in Chapter 5, we certainly do not understand why the effects of tolling are not considered in Chapter 7.

F-004-003 The approach to tolling leaves many questions unanswered. If tolling is to be part of a financing plan, will another supplemental DEIS be prepared? Will there be any more significant analysis given to, for instance, the consequences to bus traffic or ferry access if tolling diverts an additional 16,000 vehicles per day on streets west of I-5 (p. 209)? When the SDEIS says, "These effects would not be not acceptable as part of a long-term tolling solution. Therefore other scenarios would be evaluated and reasonable optimization measures would be applied and analyzed before tolling would be implemented" (pp. 214, 215), in what context would that evaluation of other scenarios take place? FTA hopes that the FEIS can better illustrate what effects to the environment will be caused by tolling and whether they can be mitigated, as called for by NEPA, or that the project proponents agree to a future environmental document that will adequately analyze tolling effects.

F-004-004 Confusing presentation of cumulative effects. FTA found the detailed presentation of the cumulative effects "with the Program as compared to the Project," which comprised more than half of Chapter 7, to be confusing and to impair the assessment of overall cumulative effects – that is, the Project's effects

F-004-002

In response to comments, the Final EIS does not isolate the discussion of tolling in a separate chapter, as was done in the 2010 Supplemental Draft EIS. The effects of tolling are considered throughout the document and its appendices.

F-004-003

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown.

F-004-004 added to the effects of other reasonably foreseeable actions. In addition, we agree with EPA cumulative effects guidance that generally "the information presented [should be] commensurate with the impacts of the project, i.e., a greater degree of detail is needed for more potentially serious impacts."[1] Given the scale of the Project and the other reasonably foreseeable actions, and especially the likely scale and duration of the construction impacts, we expected less detail about other Program elements and more detail about overall effects.

Specific comments related to potential transit impacts

F-004-005 We appreciate the work that went into the transit analysis. It appears to be advanced quite a bit from the previous SDEIS (e.g., assessing impacts to transit travel times). However, in the broadest sense, FTA remains disappointed that the Project's impacts on public transportation are, from our perspective, adverse, even with mitigation. In the short term, "Daily ridership growth between 2005 and 2015 with the 2015 Project would generally be similar to or slightly lower than ridership growth in the 2015 Existing Viaduct, depending on the screenline" (Appendix C, p. 222). Looking slightly farther out, transit share would grow between 2015 and 2030 due to "expanded bus and rail service, particularly Link LRT service in place by 2030, [and] higher automobile operating costs and higher parking costs." Appendix C, p. 224. That is, transit share increases, but not because of the Project or its mitigation. Finally, with tolling in place, transit ridership actually decreases by 2030 (SDEIS, p. 215). The SDEIS ambiguously states that this decrease is both negligible and unacceptable (id.). FTA concurs that any project element that decreases transit ridership is not acceptable.

F-004-006 Long-term transit impacts. FTA is concerned that the SDEIS analysis does not adequately assess the long-term operational impacts on transit of the Bored Tunnel Alternative. For example, the document properly acknowledges that the removal of the Columbia/Seneca ramps will lead to longer transit trips from West Seattle because "vehicles would need to pass through more intersections,"[2] but concludes without elaboration that the level of delay "would not likely require added resources in terms of more buses on the affected routes" (p. 110). This statement appears not to recognize that the added delay for the specific West Seattle routes is merely indicative of similar added delays on scores of routes, and that the bus delays compound general purpose traffic delays. In addition, we were unable to determine from Appendix C whether the long-term traffic forecasting took into account that the Metro buses will eventually be using surface streets rather than the Downtown Seattle Transit Tunnel, when the DSTT is converted to an all-light-rail facility.

F-004-007 Post-construction mitigation. The SDEIS observes a number of times that the removal of the Columbia/Seneca and Elliott/Western ramps is a major difference between the Bored Tunnel alternative and the other alternatives. It notes that the ramp removal is the primary reason for increased VHD (Vehicle Hours of Delay) of 7 percent in the 2015 Bored Tunnel Alternative compared to the 2015 existing viaduct. As a result, "more traffic is expected to use city streets for a longer portion of their trip than they would using the existing viaduct" (p. 15). Yet Appendix C states, "Long-term (post-

[1] "Consideration Of Cumulative Impacts In EPA Review of NEPA Documents," U.S. Environmental Protection Agency, Office of Federal Activities (2252A) (EPA 315-R-99-002/May 1999) http://www.epa.gov/compliance/resources/policies/nepa/cumulative.pdf

[2] The loss of the midtown ramps in the 2015 Project requires buses to travel through nine additional signalized intersections in the southbound direction and 17 additional signals in the northbound direction between the south portal on- and off-ramps and central downtown. Appendix C, p. 227.

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The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

F-004-004

Comment noted. In the Final EIS, Chapter 7 discusses project cumulative effects. The cumulative effects analysis provided in Chapter 7 has less detail on the program elements than was provided in the 2010 Supplemental Draft EIS (although the details have been retained in Appendix C, Transportation Discipline Report) consistent with your comment. Chapter 7 contains more detail about overall project cumulative effects.

F-004-005

The discussion of transit conditions has been updated to in Chapter 5 of the Final EIS to reflect the modeled conditions for the year 2030. The Viaduct Closed (No Build Alternative) is expected to carry the fewest number of transit riders of any of the alternatives considered. Tolling any of the build alternatives is expected to change transit ridership by up to 1 percent compared to non-tolled conditions.

Chapter 7 of the Final EIS Appendix C, Transportation Discipline Report, also provides information on transit service and indicates the tolling

F-004-007 construction) transportation mitigation measures are not anticipated for the project." The ramp removals are certainly long-term and their impacts on travel time and transit service are long-term. Would not some of the transit improvements and enhancements that the Project will support include permanent elements? Would the Project exclude post-construction transportation mitigation measures even under a tolling scenario, which further degrades surface street conditions?

F-004-008 Tolling impacts. The SDEIS states that tolling could divert 40,000 to 45,000 vehicles per day on to city streets and I-5 from the Tunnel (p. 39). We believe that this is inclusive of the 30,000 or so vehicles otherwise diverted onto city streets due to access issues, but it is unclear. The same question arises as to the additional 7000 vehicles diverted onto Alaskan Way due to tolling (p. 39). In addition, is it even possible that I-5 will be able to absorb 15,000 more vehicles per day, as suggested on p. 39? "In the Center City area, I-5 experiences restricted movement or congestion throughout most of the day, from 6:00 a.m. to 7:00 p.m. in both directions" (Appendix C, p. 58). Adding several thousand peak-hour vehicles into the mix does not seem possible without further impacting transit service and reliability. And again, it raises the question of whether the Project does not intend to provide post-construction transportation mitigation measures, given impacts of this magnitude.

F-004-009 The SDEIS states that "Since transit routes are designed to serve trips to downtown, while the tunnel is designed to serve trips through downtown, the impact of tolls on transit is negligible" (p. 215). This is simplistic and inaccurate. First, much transit does indeed serve trips through downtown both by design and necessity, sometimes directly and sometimes through connections. Second, to the extent tolling affects the ability of transit to operate effectively – that is, if tolling affects access, reliability, or travel time – it obviously affects ridership. (The SDEIS correctly makes this connection in the Environmental Justice discussion when it observes that transit service would be affected by increased traffic on Second and Fourth Avenues.)

The SDEIS finds the impact of tolling on transit ridership to be "negligible" (p. 215). However, FTA believes the assessment of the effectiveness of priority treatments to be optimistic. More realistic is the depiction of dramatically increased travel times on Second and Fourth Avenues (Exh. 9-15). At a time when the downtown core will see a huge need to boost transit mode share, we agree that "such effects would not be acceptable as part of a long-term tolling solution" (p. 215). The Project should be ensuring that even the most conservative assumptions show increasing transit use and only minimally disrupted performance, even if getting to that point requires more mitigation funding than the Project has anticipated.

F-004-010 In addition, we were unable to determine from Appendix C whether the long-term traffic forecasting took into account that the Metro buses will eventually be using surface streets rather than the Downtown Seattle Transit Tunnel, when the DSTT is converted to an all-light-rail facility. FTA believes this would further degrade the modeled conditions.

F-004-011 North Portal transit-only lanes. FTA appreciates the inclusion of transit-only ramps at both portals. Perhaps the FEIS could include a clearer diagram showing the configuration and operations of the transit-only lanes at the North Portal.

F-004-012 Stadium area connections. Good connections between the Stadium ramps and the transit spines are vital if transit is going to continue to offer reliable service. Has King County Metro validated the assumptions

3

scenarios would not have major effects on transit travel times or transit mode shares at selected screenlines. Transit demand and travel mode shares would generally be the same under both the non-tolled and tolled conditions.

F-004-006

The travel forecasting analysis for 2030 conditions assumed that the Downtown Seattle Transit Tunnel would be used exclusively by Sound Transit LRT vehicles. Under the Viaduct Closed (No Build Alternative) severe back-ups are expected to form at the transition points along SR 99 in the south and north, affecting transit speed and reliabitly. The lack of throughput through the central business district would result in substantially more traffic and resulting delays, for general purpose and transit vehicles.

The Final EIS identifies similar travel times across all three build alternatives for transit routes on Elliott Avenue, Aurora Avenue, and Second and Fourth Avenues. Transit times from West Seattle to downtown are expected to be slightly higher under the Bored Tunnel compared with the Cut-and-Cover Tunnel and higher than Elevated Structure. Although the Bored Tunnel Alternative would increase travel time for transit traffic destined to the central business district, buses would be able to access locations in the south area more directly.

F-004-007

The mitigation program to address construction-related impacts would include transit speed and reliability improvements. These improvements will be permanent and would help mitigate transit-related impacts after project completion. An example of such an improvement is upgrading traffic signals to support transit and traffic flow. In addition, WSDOT is seeking an acceptable long-term solution to minimize the amount of diverted traffic anticipated to result from tolling the facility. Please see

F-004-012 regarding the effectiveness of these connections? More generally, has Metro validated the effectiveness of each of the transit priority measures used in the project's modeling?

F-004-013 Cumulative impacts. FTA finds the discussion of cumulative impacts due to the Central Waterfront Project, Elliott Bay Seawall Project, and Alaskan Way Surface Street Improvements (p. 170) extremely optimistic. It finds the discussion of cumulative impacts due to additional, "non-Program" projects (p. 170-175) perhaps even more optimistic. And as suggested above, the effects of tolling should be folded into the cumulative effects analysis.

F-004-014 Public review of detailed mitigation plan. Given the length of the construction period and the intensity of construction-related impacts, FTA would have preferred to see a detailed mitigation plan released concurrent with the SDEIS. It obviously complicates any attempt to assess the adequacy of the measures. It also obscures the likely or potential costs of mitigation, and consequently the likelihood of actually implementing the identified mitigation. We understand that strategies are being currently being devised and that detailed plans will be included in the FEIS, and we look forward to seeing them. FTA recommends that the Record of Decision (ROD) respond to comments on the mitigation measures presented in the FEIS. Please see below for additional comments related to construction mitigation.

F-004-015 Construction impacts to transit. The brief discussion of how construction would impact transit (p. 140) seems cursory. Increased traffic on First and Fourth Avenues would definitely affect transit operations; the restrictions around the north portal would affect transit operations; congestion around staging sites would affect transit operations; congestion around Colman Dock would ripple outward and affect transit operations; and whenever lane reductions on SR 99 causes increased congestion on alternate routes (as described in the freight section), that would likely affect transit.

F-004-016 South Holgate improvements. Appendix C states, "Transit enhancements and improvements to the street system will play a major role in keeping people and goods moving during construction of the S. Holgate Street to S. King Street Viaduct Replacement Project, starting in 2010. These improvements will remain useful to travelers during construction of the Bored Tunnel Alternative." (p. 308) FTA believes that the transit enhancements related to the South Holgate project are unfunded as of 2014. Do the project proponents intend to fund their continuation through Project construction?

F-004-017 Cost of mitigation measures. Will the project proponents will pay for whatever mitigation measures are adopted? Or are the measures in the SDEIS available for consideration but contingent upon funding? The document is confusing on this point. For example, the SDEIS states, "A variety of transit enhancements would be provided to support planned transportation improvements associated with the Alaskan Way Viaduct and Seawall Replacement Program" (p. 7). It goes on to list the Delridge Rapid Ride and increased South Lake Union peak-hour service, neither of which, to our knowledge, is yet funded. Similarly, on p. 3, most readers would incorrectly infer that the 2009 agreement to proceed with a tunnel includes funding for a First Avenue Streetcar. FTA's understanding is that the transit enhancements agreed to by Governor Gregoire, County Executive Sims, and Mayor Nickels assumed revenue from an excise tax that has not been secured, leaving in doubt the status of these and other transit enhancements/mitigation. Again, on page 163, the SDEIS refers to transit enhancements being "phased in . . . well before 2030." Are these the enhancements that currently lack funding?

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Chapter 8 of the Final EIS for discussion of the transportation mitigation proposed for this project.

F-004-008

A detailed tolling analysis has been conducted for all alternatives, so there are updated estimates for the number of vehicles diverted per day. These estimates are presented in Chapter 7 of the Final EIS Appendix C, Transportation Discipline Report. Substantial volumes of general-purpose traffic are expected to divert as a result of tolling. However, the availability of bus-only lane on new Aurora Avenue surface street, under the Bored Tunnel Alternative, and the bus-only exit lane on SR 99 between S. Holgate Street and S. Royal Brougham Way, would help reduce the added transit travel associated with tolled conditions. Additionally, with the availability of bus-only lanes on Second and Fourth Avenue, under all alternatives, travel time variations for transit between tolled and non-tolled conditions would not be substantial.

Chapter 5 of the Final EIS summarizes the permanent transportation effects, while Appendix C contains the detail of the analysis. WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City of Seattle's Complete Street goals and includes treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental

F-004-018 Construction haul routes. Construction haul routes need definition in the FEIS. The removal of some 1.5 million cubic yards of spoils (pp. 134-45) could itself contribute noticeably to congestion. Disposal sites may become an issue and require the use of different routes if AWV construction overlaps with Sound Transit (North Link), SR 520, I-405 and I-5 work. Are barge and rail hauling possible?

F-004-019 Additional buses as mitigation. FTA recommends that the final Construction Transportation Management Plan include a procurement plan for purchasing buses, identifying the numbers, types, sizes, fuel sources, vendor, and needed-by dates (bearing in mind that multi-year lead times may be required). In addition, FTA notes that local transit agencies presently have a very limited amount of extra maintenance capacity. Depending on the number of buses required as mitigation, additional maintenance facilities may be required and should be analyzed in the FEIS.

F-004-020 Remote parking for construction workers. Requiring transit and/or remote parking (possibly with shuttle buses) for construction workers would ameliorate adverse impacts to traffic and air quality as well as parking. Given these benefits, FTA strongly urges that any final construction mitigation plan include this measure.

F-004-021 Prioritization of mitigation strategies. FTA recommends that the mitigation measures identified in the FEIS, be prioritized, at least those related to transit. The priorities might be different for different areas of the city, and for different phases of construction. This would be particularly helpful if, as it appears, funding has not been identified for many of the transit-related measures.

F-004-022 Other mitigation concerns that FTA hopes to see clearly addressed in the mitigation plan include safe pedestrian access to Colman Dock when the Marion Street pedestrian crossing is removed (without further hindering vehicular access to ferries); vehicular access to and from Colman Dock for Washington State Ferries; maximizing the utility of the Rapid Ride buses and other buses when SR 99 is restricted and/or subject to detours (i.e., "during the first 4.5 years of construction" (p. 29); funding for the transit-related mitigation measures, as noted above; a plan to provide adequate transit service during Stadium events on weekdays (at about South King Street, the 2015 Bored Tunnel is expected to shift about 29,000 daily trips from SR 99 to city streets (p. 19)). Some of these are elaborated upon below.

F-004-023 Colman Dock intersection analysis. The SDEIS concludes that with the Bored Tunnel Alternative, Colman Dock traffic operations (at Alaskan Way's intersections with Yesler and Marion) will be "comparable" to current conditions (p.110). However, "LOS and delay at these locations may be somewhat understated" because "the traffic models used to assess intersection conditions for this EIS do not specifically model the back-and-forth preemption cycles, and instead reflect an estimated 'average' condition during the peak hour" (Appendix C, p. 119). How understated? Any understatement could be significant given that the facility serves nearly 2.7 million vehicles and 8.5 million riders each year, not to mention the anticipated addition of 28,000 cars/day displaced to surface streets in the vicinity – perhaps, with tolling, considerably more than 28,000 – and a notable amount of freight traffic (the new Alaskan Way will be a regional truck route for freight (SDEIS, p. 7)). We note that WSF must get vehicles off the

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transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

F-004-009

A detailed tolling analysis has been conducted and is described in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements, including impacts to transit and transit travel times. Transit travel times on Second Avenue and Fourth Avenues would benefit from bus-only lanes, as well as limited skip-stop access to bus zones along each avenue. Therefore, estimated added travel time under tolling scenarios would likely be less for buses than for general-purpose travel.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City of Seattle's Complete Street goals and includes treatments for pedestrians, bicycles, freight, and adjacent land uses.

The tolling analysis discussed in Appendix C of the Final EIS shows the relative variability of each build alternative in terms of tolling, as measured by the standard transportation metrics in the project area. Given the different physical configurations for the alternatives (i.e., whether or not midtown ramps or Elliott/Western ramps would be provided), the appropriate tolling scenario for each of the build alternatives would likely be different. In order to provide some level of consistency between the environmental analyses for the three alternatives, one fairly conservative tolling scenario was used as the

F-004-023 dock promptly so it can fill up the holding lanes and set sail again.[3] If traffic does not flow, WSF sailing schedules will be impacted due to the backup of vehicles attempting to depart from the dock.

F-004-024 Colman Dock connectivity. In addition to Washington State Ferries, King County Ferry District operates two other passenger-only routes, one at Colman Dock and the other at pier 50. Have both ferry operators validated the SDEIS's conclusion that the Project will improve passenger connectivity to Colman Dock? Will King County Metro be able to provide adequate connections for the additional passenger-only ferry traffic that one can expect in light of congested downtown streets? FTA suggests that the Project consider mitigation in the form of additional transit connections to help move these walk-ons (from WSF as well as the King County ferries). Will the mitigation measures that will be proposed in the FEIS be validated by WSF as to their ability to assure safe and efficient operations during construction? Also, the Colman Dock analysis mentions in passing that the Marion Street pedestrian bridge will be removed as part of AWV demolition (p. 141). While unavoidable, this is more than a minor inconvenience for thousands of people; further, combined with already serious pedestrian-auto conflicts on Alaskan Way (Appendix C, p. 119-20), both safety and efficiency require an expedited replacement for this overpass.

F-004-025 Ferry queuing on Alaskan Way. During peak hours, WSF must "store" about 200 cars on Alaskan Way (between Yesler and Royal Brougham) because the dock lacks room for these vehicles when boats are discharging. With a reconfiguration as part of the proposed project, the dock may be able to absorb at most 100 of these cars. The SDEIS states at page 110 that this situation "may" affect northbound through traffic on Alaskan Way. Indeed, even without adding thousands of vehicles per day to Alaskan Way due to tunnel displacement (and tens of thousands more (compared to current conditions) in the general vicinity), this would unquestionably affect northbound through traffic. Will the Final EIS assess the severity of this impact and attempt to mitigate it? The SDEIS mentions briefly that Alaskan Way between S. Jackson and S. King Streets will serve as a staging area for "soil improvements." Does that worsen the ferry queuing problem?

F-004-026 Ripple effects from Colman Dock. The SDEIS provides a good qualitative summary of how construction will temporarily interfere with how passengers can access Colman Dock (p. 30). Given the number of vehicles using Colman Dock each day, we are concerned that the SDEIS has not looked at how these consequences themselves ripple out to further undermine transit service – for instance, when vehicles "exiting the Ferry Terminal would also need to connect to First Avenue S. or other north-south streets north of S. King Street to travel southbound," does the traffic model include those effects on the affected intersections' LOS? Travel times? Transit times?

F-004-027 Vanpools for ferry riders. Additional ferry-landing-based vanpools and ride-sharing have in the past been proposed as likely mitigation during construction. FTA encourages the project proponents to work with WSF to explore the feasibility of this measure.

F-004-028 Format. Finally, FTA appreciates the improvements to the format since the 2006 environmental document. The inclusion of the CD-ROMS with the Supplement was helpful. Still, the SDEIS remains difficult to review from an agency's perspective. The approach is "reader-friendly" but conclusory, so that the reviewer must frequently turn to the technical appendices for assumptions, data and analysis that

[3] When both Bainbridge and Bremerton boats are unloading at once, which occurs about 10 times each day, about 350 vehicles are exiting the dock.

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basis for all the tolling analyses presented in this chapter (Toll Scenario C from the *Updated Cost and Tolling Summary Report* to the Washington State Legislature, 2010).

F-004-010

The model assumptions are stated in Section 2.3.1 of the Final EIS Appendix C, Transportation Discipline Report. Metro buses currently operating in the Downtown Seattle Transit Tunnel are assumed to operate on surface streets upon completion of University Link.

F-004-011

The Final EIS includes an expanded description of the transit facilities and operations in the north area, but it does not provide a detailed exhibit depicting them. Please refer to the Final EIS Appendix C, Transportation Discipline Report.

F-004-012

King County Metro staff and representatives of the City of Seattle provided input on various transit priority treatments. These included transit speed and reliability improvements in the south area to address construction-related impacts, as well as bus-only lanes in the north area.

F-004-013

The cumulative effects analysis in Chapter 7 of this Final EIS has been revised and now includes tolling. The analysis for impacts due to the Central Waterfront Project, Elliott Bay Seawall Project, and Alaskan Way Surface Street Improvements and non-Program elements reflects information provided by the agencies leading these projects.

F-004-014

This Final EIS provides current information on construction impacts and mitigation. These are described by subject and will be carried forward as

F-004-028 support these conclusions. Further, due to the question-and-answer format, it is often hard to find answers if the reviewer has a question that was not asked in the document. And the amount of material is enormous (exemplified by a 500-page technical appendix on transportation). Most members of the public will likely find such a vast sea of material overwhelming. We understand that agencies, decision makers, and the public clamor simultaneously for more information on specific topics but less information overall, but feel compelled to comment. We hope WSDOT can continue to work towards "right-sizing" its environmental documents.

Thank you for considering our comments.

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appropriate into the Record of Decision (ROD) as either measures to minimize harm or commitments. Per FHWA's NEPA requirements, the ROD will respond to any comments received on the Final EIS.

F-004-015

Project construction will affect transit, and the extent of the effects will vary with each build alternative and traffic stage during construction. Chapter 6 of the Final EIS summarizes the construction effects to transit for each build alternative. Appendix C, Transportation Discipline Report, contains all the detailed information.

F-004-016

Transit enhancements were part of the package of Moving Forward Projects identified by WSDOT and King County in 2008. These enhancements included both capital improvements and additional service hours to help manage the impacts of all the Moving Forward Projects, not just the S. Holgate Street to S. King Street Viaduct Replacement Project. The capital improvements have been completed. Currently, WSDOT is providing funding to King County on the S. Holgate Street to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction, but funding for this transit enhancement has not been secured yet for the duration of construction for the Alaskan Way Viaduct Replacement Project. However, WSDOT is working closely with King County to implement the additional service hours in the most effective manner. Since this is an ongoing program with potential flexibility in the timing of the service hour implementation and funding, the end date is also potentially flexible while still fitting within the agreed funding limit.

F-004-017

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary

projects for replacing the Alaskan Way Viaduct and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes that the funding anticipated in the agreement has not been realized yet, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently, WSDOT is providing funding for King County on the S. Holgate Street to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is ongoing and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system. WSDOT will also work with the County to identify funding sources for the service originally contemplated in the January 2009 agreement.

F-004-018

The discussion of construction haul routes has been updated in Chapter 6 of the Final EIS. The project is planning to barge clean spoils and is unlikely to use the BNSF tracks to haul most of the spoils. Materials from the north portal area and those requiring special handling will likely move by truck. The number of trips is expected to be small in proportion to normal traffic volumes and is not anticipated to have a noticeable effect.

F-004-019

In cooperation with WSDOT, King County Metro has prepared a procurement plan associated with construction mitigation. The added buses would be supported by the construction mitigation program. No additional bus operations and maintenance capacity would be necessary to support the added vehicles.

F-004-020

The transportation planning process for construction encourages construction workers to use alternatives to single-occupant vehicles to access the job site, so that their potential contribution to traffic congestion is minimized during peak travel periods. The Transportation Discipline Report (Appendix C of the Final EIS) includes strategies targeted specifically to construction workers. Construction transportation management strategies will continue to evolve as the project construction plans become more definite.

F-004-021

The Bored Tunnel includes several design features, such as peak hour transit only lanes, that will benefit transit service. These are described in Chapter 3 of this Final EIS as integral parts of the project. Potential mitigation measures for or involving transit are discussed in Chapter 8 of the Final EIS and in Appendix C, Transportation Discipline Report. These measures are not prioritized as suggested in this comment because they are all being considered equally at this time. These strategies will be refined and considered further during final design.

F-004-022

Pedestrian access to the ferry dock will be maintained throughout construction and demolition activities. A discussion of the mitigation plans for the project is provided in Chapter 6 of the Transportation Discipline Report (Appendix C, Final EIS) and Chapter 8 (Mitigation) of

the Final EIS. The mitigation elements are designed to increase transit options, shift traffic away from construction areas, and provide drivers with the information they need to choose less congested routes.

F-004-023

Level of Service (LOS) calculations using Highway Capacity Manual procedures do not include methodologies to directly assess the intermittent nature of traffic flow and changing signal parameters that occur at Colman Dock. As such, two conditions were modeled independently (conditions while ferries unload, and conditions while they do not), and an average LOS was calculated.

Subsequent to the 2010 Supplemental Draft EIS analysis, the project team developed traffic simulation models that are capable of specifically assessing the unique traffic operations at Colman Dock, including the effects of transitions between the various traffic flows and signal system states. Working in consultation with Washington State Ferries, this analysis demonstrated that traffic operation schemes could accommodate the forecasted traffic flows from Colman Dock in conjunction with traffic volumes expected on Alaskan Way. It should be noted, however, that traffic operating conditions at Colman Dock are highly dependent on how the traffic signal system is operated, the final design of the surface street and how Washington State Ferries operates the dock.

F-004-024

Representatives from King County Metro Transit and Washington State Ferries participated in the review of access at ferry terminals. While additional passenger ferries would result in higher passenger demand, access would involve a variety of modes including walking and public transit. Transit-related demand would not likely require added bus capacity. As part of the Central Waterfront planning process being led by the City of Seattle, transit service will be reviewed, including access to

Colman Dock and Pier 50. The existing Marion Street pedestrian bridge from First Avenue to the Seattle Ferry Terminal would be demolished and replaced as part of all build alternatives.

F-004-025

The Final EIS Appendix C, Transportation Discipline Report, included ferry queuing in the evaluation of transportation impacts on Alaskan Way due to operations at Colman Dock. Chapter 6, Construction Effects, of the Final EIS for discussion of the effects during construction of the build alternatives and Chapter 8 presents the proposed mitigation measures.

F-004-026

Chapter 6 of Final EIS Appendix C, Transportation Discipline Report, details major construction activities and their associated transportation effects. The construction stage that most disrupts transportation (i.e. substantial sustained effects) was evaluated for each of the three build alternatives. This analysis included intersection LOS, travel times and impacts to transit. The effects of Colman Dock traffic was included in the modeling of construction traffic impacts for all build alternatives. Please see Appendix C for updated transportation analysis.

F-004-027

WSDOT, King County, and the City of Seattle have developed Transportation Improvements to Minimize Traffic Effects During Construction to keep people and goods moving during construction of the Program. The plan includes information about travel alternatives and incentives to encourage use of transit, carpool, and vanpool programs.

In addition, preparation of a traffic management plan, to be accepted by the City of Seattle, will be required to ensure that construction effects on local streets, property owners, and businesses are minimized. The traffic management plan will include procedures to identify and incorporate the

needs of ferry traffic in the project area.

Please see the Final EIS and Appendix C (Transportation Discipline Report) for more information.

F-004-028

We acknowledge that the 2010 Supplemental Draft EIS contains a great deal of information, which is why it relies on the included technical appendices for supporting information. This approach is consistent with CEQ regulations and guidance (see "Forty Most Asked Questions Concerning CEQ's NEPA Regulations," No. 25a). We have provided direction in sidebars to show readers where additional information can be found. We also provide a technical index (pages 256-257) that helps readers find where specific subjects are addressed. Overall, we agree with your observation that readers of all types make contradictory demands for both more and less information. We may never achieve a perfectly sized document for all individual stakeholders, but we believe that striving for that goal is a worthy effort that will bring many benefits.

United States Department of the Interior

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WASHINGTON, D.C. 20240

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Ms. Angela Freudenstein
Environmental Manager
Washington State Department of Transportation
Alaskan Way Viaduct Replacement Project SDEIS
999 Third Avenue, Suite 2424
Seattle, WA 98104-4109

Dear Ms. Freudenstein:

The U.S. Department of the Interior (Department) has reviewed the Federal Highway Administration's (FHWA) State Route 99 Alaskan Way Viaduct Replacement Project, Second Supplemental Draft Environmental Impact Statement (SDEIS) and Section 4(f) Evaluation, and offers the following comments.

The Department agrees that the existing Alaskan Way Viaduct State Route 99 was damaged in the 2001 Nisqually earthquake and needs to be replaced. The SDEIS analyzes the bored tunnel replacement alternative and compares its effects to the cut-and-cover tunnel and elevated structure alternatives evaluated in a 2006 SDEIS. According to the SDEIS, each of the proposed alternatives would require the use of Section 4(f) resources. The bored tunnel alternative has been identified as the preferred alternative.

F-005-001

Section 4(f) of the Department of Transportation Act

Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits the use of land from publicly owned parks, recreation areas, wildlife or waterfowl refuges, or historic sites for any federally funded transportation program, unless it is determined that there is no feasible and prudent alternative to using such land and the project includes all possible planning to minimize harm to the land resulting from its use. In this instance, no wildlife or waterfowl refuges will be impacted. However, a number of publically owned parks, recreation areas, and historic sites will be impacted by the project. The Department agrees there is no prudent and feasible way to avoid the "use" of Section 4(f) resources with any of the proposed alternatives. Because of this, the Department offers several comments and suggestions for consideration.

- Public Parks and Recreation Lands

  The Department agrees that the bored tunnel alternative will benefit parks and recreational resources by removing the existing viaduct, improving connections between elements of the Seattle's park and recreation system, and creating a new trail for pedestrians and bicyclists to enjoy. However, the Department realizes that the construction and demolition activities outlined in the SDEIS will likely result in increased

F-005-001

The letter from FHWA responding to this comment letter can be found in Appendix U, Correspondence.

F-005-001

noise and vibration, reductions in visual quality, and access restrictions to public parks and recreation lands at various times during the project. Therefore, we request plans and measures be developed to minimize these impacts before the project begins.

- Historic Sites

In addition to the protections for historic properties found in Section 4(f), Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties. Historic properties in this instance include both standing structures and archaeological resources. The Department defers to the Washington State Department of Transportation (WSDOT), FHWA, Department of Archeology and Historic Preservation, Advisory Council on Historic Preservation, affected tribes, the city of Seattle, and other interested parties (such as the Pioneer Square Preservation Board and the Seattle Landmarks Preservation Board), to develop the Memorandum of Agreement (MOA) and any requirements contained therein related to the Viaduct.

The Department recommends the MOA be completed and attached to the Final Environmental Impact Statement when it is released for comment. We ask that special consideration be given to the National Historic Landmarks (NHL) within the project area. Section 110(f) of the NHPA requires Federal agencies, "to the maximum extent possible," develop plans and actions to minimize harm to NHL's prior to any undertaking. The Pioneer Building, the Iron Pergola, and the Totem pole located on 1st Avenue and Yesler Way, are considered NHL's, and the Department requests every effort be made to preserve the historic character of these landmarks.

Additionally, the SDEIS states that construction of the bored tunnel is anticipated to cause a severe adverse effect to the Western Building to the extent the building may need to be demolished. The Polson Building may also experience extensive structural damage during construction. Both buildings are contributing buildings to the Pioneer Square National Historic District, and thus every effort should be made prior to and during construction to avoid structural damage to these, and the other twelve buildings within the Pioneer Square Historic District listed in the SDEIS.

Section 6(f) of the Land and Water Conservation Fund Act

The Department has identified two parks in the project area that are protected by Section 6(f) of the Land and Water Conservation Fund Act – Blake Island State Park and Elliot Bay Park. It appears as if there will not be impacts on the Blake Island State Park sufficient to result in a 6(f) conversion. However, it does appear that there may be temporary and/or access impacts to the Elliot Bay Park that could result in a 6(f) conversion. Because impacts do not have to be direct or permanent to result in a conversion of an outdoor recreation resource, we would like the potential impacts to Elliot Bay Park to be assessed. We encourage WSDOT to work closely with

F-005-001 the Washington State Recreation and Conservation Office and the Department as the project develops. (Note: The 6(f) protected section of Elliot Bay Park is owned by the Washington Department of Natural Resources, and not the Port of Seattle, as indicated on WSDOT's chart.)

Thank you for the opportunity to provide comments. For questions concerning Section 4(f), please contact Sharon Powell, NPS, at 206-220-4090, sharon_powell@partner.nps.gov. For questions concerning Section 6(f), please contact Heather Ramsay, Project Manager, at 206-220-4123, heather_ramsay@nps.gov.

Sincerely,

Willie R. Taylor, Director
Office of Environmental Policy
and Compliance

DEPARTMENT OF ECOLOGY

ALASKAN WAY VIADUCT SDEIS COMMENTS – DECEMBER 13, 2010

Air Quality (Mike Boyer)

S-001-001

1. The analysis for both the bored tunnel alternative and the surface street improvement projects meet the State and Federal transportation conformity requirements. The report is very thorough and well done. There may be a typo on page 44, Section 7.1, "Air Quality Trends", paragraph 2, sentence 2, greenhouse gas discussion: CO should be CO2.

Shorelines (Joe Burcar)

S-001-002

1. *Appendix D – Visual Quality, Appendix G – Land-Use*, and *Appendix N – Wildlife, Fish and Vegetation*. Generally, it appears that the main issues related to SMA are water quality and construction BMP related. Waterfront access will be affected by noise and temporary closures, but it appears that WSDOT has adequately acknowledged these issues and will avoid and or minimize these construction related impacts to the extent possible.

S-001-003

2. Finally, not directly relevant to this Supplemental (focused on the Bored Tunnel Alternative), the Land-use discipline report incorrectly references "LU241" as part of the SMP. LU241 is an amendment that was never approved by Ecology and is therefore not part of the City's current SMP. The amendment essentially prohibits aerial viaduct(s) within the City's shoreline area.

Hazardous Waste (Byung Maeng)

Appendix Q Hazardous Material Discipline Report

S-001-004

1. On page 21, 3.2.1 Federal Databases: There is a typo on the third line: CERLIS à CERCLIS

S-001-005

2. On page 151, second full paragraph: "Contained-in" designation is not quite related to the landfill leaching scenario. A contained-in designation means that tetrachloroethylene concentration in contaminated soils doesn't exceed the risk-based MTCA Method B soil cleanup level. Therefore, the soils are not required to be managed as dangerous wastes.

Environmental Justice (Millie Piazza, Ph.D.)

Choose a topic
☑ Overall Project
☑ All of the Alternatives
☑ Tolling Option

S-001-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. The typo has been corrected in the Final EIS.

S-001-002

FHWA, WSDOT, and the City will continue to work to avoid or minimize effects throughout the construction period. Chapter 8, Mitigation, of the Final EIS contain updated information on mitigation measures.

S-001-003

Appendix G, Land Use Discipline Report, of the Final EIS describes LU241 as part of the relevant shoreline goals and policies in the Land Use element of Seattle's Comprehensive Plan.

S-001-004

This typo has been corrected in the Final EIS Appendix Q, Hazardous Materials Discipline Report.

S-001-005

The text has been modified so that MTCA Method B criteria are identified as the threshold values for "contained-out" waste.

☑ Construction Impacts & Mitigation
☑ Traffic Impacts & Mitigation
☑ Other Environmental Justice

Chapter 2 - Summary:

S-001-006

1) The report states that "*tolls would be appreciably more severe for low-income users* (p. 41)," but that "*other studies on tolling*" reporting the benefits of a tolled road "*offset the burden of the tolls, or because there are viable options to avoiding the toll.*"

Comments:

A. It is unclear if the "*other studies on tolling*" were studies conducted for the purpose of assessing impacts from the Alaskan Way Viaduct Replacement Project, or studies unrelated to this Project. Relying on results from "*other studies on tolling*" might not be valid, as "other studies" also report numerous disparate impacts (e.g., traffic through neighborhoods, decreased access to businesses and services, limited walking and biking mobility, higher safety risks on alternative routes, etc).

B. It is unclear if the "*other studies on tolling*" analyzed the toll burden specifically related to impacts on low-income users or the general population. The statement suggests that low-income respondents felt the toll impact could be reasonably offset from benefits or alternative routes ***that they themselves would experience***. Is this accurate?

2) The report states that the "*low-income population would have to pay a higher portion of their income to use the tolled facility*. (p. 41)"

Comments:

A. It would be helpful if the report clarified how the project will mitigate the financial burden of tolling on low-income residents. And, if no mitigation is proposed, the report should clarify why mitigation options are not being pursued (e.g., toll exemptions, toll subsidies, etc).

Chapter 9 - Tolling:

1) The report states that "*Other studies of tolling have concluded that effects upon low-income populations would not be disproportionately high and adverse because tolling often results in improved trip reliability and higher speeds, which are benefits that offset the burden of the tolls*. (p. 219)"

Comments:

A. Clarification should be made which "*other studies of tolling*" are being referenced.

B. The *SR 520 SDEIS* included a study finding that 64% of low-income respondents said they would avoid the toll and use a non-tolled route (p. 79 / L. 24-25). Therefore, this local study on tolling concluded that the majority of low-income respondents would not

S-001-006

The Final EIS discusses tolling effects for all the build alternatives. Tolling the build alternatives would not result in disproportionately high and adverse effects to low-income or minority populations. However, WSDOT would implement measures to improve the accessibility of transponders to low-income and minority populations.

The "other studies on tolling" as referenced by this comment are the tolling studies conducted for the SR 520, I-5 to Medina: Bridge Replacement and HOV Project and the Columbia River Crossing Project. WSDOT presented the SR 99 Alaskan Way Viaduct Replacement: Updated Cost and Tolling Summary Report to the Washington Legislature in January 2010.

S-001-006

use the tolled route and so the tolling benefits would not offset the burdens for low-income populations. Please provide any study findings related to the Alaska Way Viaduct Replacement Project that demonstrate that the majority of the low-income drivers would use a tolled route thus supporting the conclusion that the benefits of a toll road offset the burden.

Social Discipline Report

S-001-007

1) The report states that, "*environmental justice refers to the process of identifying and addressing, as appropriate, disproportionately high and adverse human health and/or environmental effects on minority and/or low-income populations*, (p. vii)"

Comments:

A. This SDEIS does not contain an analysis or evaluation of potential adverse health effects related to the Project. Given the significant association of premature death with long-term exposure to fine airborne particulate matter (EPA Final Rule - 70 FR 943), health effects should be addressed in the SDEIS. In the Seattle area, there is particular concern about the impact of transportation related air pollution in communities with environmental justice concerns.

For this reason, the SDEIS should address air quality concerns for impacted and vulnerable communities. Specifically, the Social Discipline Report and the Air Discipline Report should provide a general assessment of potential adverse health effects resulting from the Project (e.g., how the Project could potentially impact the health of people where they live and work, and whether low-income, minority, or LEP residents are disproportionately impacted.)

B. Of particular concern, are the potential health effects from the temporary worsening air quality during the construction phase of the Project. As identified in the SDEIS, there are a higher percentage of low-income residents and certain minority group members living in close proximity to the Project site. Health effects may be disproportionately felt by these residents given additional socio-economic vulnerabilities and cumulative impacts. Low-income, minority, and LEP residents of neighborhoods in the project study area may be more severely burdened by impacts because these residents may have fewer resources to mitigate the impacts of construction related effects.

The EJ analysis in this report would be strengthened by project-related air quality analysis, particularly for potential health effects from air toxics, diesel exhaust, and particulate matter near construction areas, truck haul routes, and alternative transportation routes (including toll-avoidance routes).

S-001-007

Currently available technical tools do not allow a prediction of the project-specific health effects that would result from the potential emission changes associated with a project. Details of these limitations are described in this Final EIS. However, regional MSAT emissions are not expected to increase and exceedances of the NAAQS also are not expected. Therefore, no significant adverse air quality effects are expected to result from the build alternatives. For construction-related effects, a Memorandum of Understanding between WSDOT and PSCAA is in place to help eliminate, confine, or reduce construction-related emissions for this project.

Please refer to Appendix M, Air Quality Discipline Report, for additional details.

State of Washington
Department of Fish and Wildlife
Mailing Address: 1775 12th Avenue NW Suite 201, Issaquah, WA 98027
Main Office Location: Department of Fish and Wildlife, 16018 Mill Creek Blvd, Mill Creek, WA 98012

December 15, 2010

Angela Freudenstein
Washington State Department of Transportation
Alaskan Way Viaduct Replacement Project SDEIS
99 Third Ave, Suite 2424
Seattle, WA 98104

Dear Mrs. Angela Freudenstein,

SUBJECT: WDFW Comment Letter on the Alaskan Way Viaduct Replacement Project SDEIS

S-002-001 After reviewing the Alaskan Way Viaduct Replacement Project materials it is the understanding of the Washington Department of Fish and Wildlife all work that will require a Hydraulic Project Approval Permit (HPA), like the seawall and outfall work, will be permitted under the Seawall Project. Further this would be true even if the Cut and Cover or Elevated Structure options are chosen. Based upon this understanding the WDFW has no comments on this DEIS.

Thank you for your time.

Stewart G. Reinbold
425-313-5660
Habitat Program

S-002-001

FHWA, WSDOT, and the City of Seattle appreciate your participation in the environmental process.

Port of Seattle

December 13, 2010

Ms. Paula Hammond
Secretary of Transportation
State of Washington
Transportation Building
PO Box 47316
Olympia, WA 98504-7316

The Honorable Richard Conlin
Council President
City of Seattle
Seattle City Hall
600 Fourth Avenue, 2nd Floor
Seattle, WA 98104

Re: Port of Seattle—Alaskan Way Viaduct Replacement Project SDEIS Comments

Dear Secretary Hammond and Councilmember Conlin:

Thank you for the opportunity to comment on the Supplemental Draft Environmental Impact Statement (SDEIS) for the Alaskan Way Viaduct Replacement Project. This project is vital to the Port of Seattle's and the region's future. We are pleased to work in partnership with the Washington State, the City of Seattle (City) and King County, to advance that future.

The Port of Seattle (the Port) has actively participated in the public process to evaluate replacement options for the Alaskan Way Viaduct (Viaduct) over the past decade. On April 12, 2010, the President of the Port Commission and the Chief Executive Officer signed a Memorandum of Agreement (MOA) with Washington State (State) signifying the Port's commitment to a replacement alternative which affords essential transportation capacity and significant environmental benefits, and minimizes construction-related disruption on the waterfront. The MOA recognizes the economic importance of an efficient SR99 roadway network with complementary system improvements for the effective movement of freight and goods locally, nationally and internationally.

L-001-001

I. The Port supports the bored tunnel as the Preferred Alternative.

As described in the SDEIS, we believe that the Bored Tunnel (Tunnel) Alternative, especially combined with the complementary Program elements, represents a significant advantage over the other alternatives. The Tunnel Alternative is most consistent with our goals of:

- providing economic benefits that exceed capital costs over the lifetime of the structure;
- ensuring safe and efficient access to the working waterfront in the final configuration;
- providing an efficient connection for freight between the Duwamish and Ballard/Interbay, Seattle's two Manufacturing Industrial Centers;
- minimizing impacts to working waterfront access during construction;
- enhancing the waterfront environment for people and goods, commercial vitality, and movement of freight and goods; and,
- providing replacement capacity for long-term regional growth.

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L-001-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

L-001-001

The Port places a particular premium on the Bored Tunnel solution because it ensures continuous use of the Viaduct while the tunnel is under construction. The continued flow of people and goods during the next five years is an essential aspect of the Governor's Export Initiative, which calls for ports to help companies increase their export volumes by 33 percent over current levels by 2015. As the State's largest port facility for both exports and imports, our companies need to have assurance of access to Port facilities through this period of unprecedented public infrastructure construction.

The Duwamish and Interbay industrial areas in Seattle are served by the SR 99 corridor and constitute a significant portion of Seattle's maritime and industrial sector which accounts for more than 120,000 jobs and an estimated $28.5 billion in annual revenue City-wide.

The Port's international trade, economic development, tourism and passenger terminal activities are vital to the economic growth of the region and the state, supporting nearly 194,000 jobs in the region, and the preferred alternative provides infrastructure improvements necessary to achieve growth in trade and jobs and increase our region's competitiveness around the world. The Port is a key gateway for Washington State producers and manufacturers to reach global markets.

The Alaskan Way Viaduct is crucial to the region's freight mobility because it provides for 1.5 million freight trips annually by grade-separation of through traffic, rail lines and industrial corridors near the Port's marine terminals, which support the movement of $30 billion in international and domestic cargo through the Port each year. The economic vitality of the region depends on a robust and efficient transportation system in the industrial area. Failure to replace the transportation capacity will jeopardize those jobs and economic activity.

The Bored Tunnel Alternative best meets the needs of transportation capacity, causes the least overall harm with environmental mitigation and minimizes construction disruptions. The current design provides a creative approach to replacement of this facility, which in a "No Build Alternative" would face closure at an unknown and uncertain future date due to seismic risk and gradual deterioration due to the structure's service life.

L-001-002

II. We concur that the revised Purpose and Need statement more appropriately addresses the project purpose and needs.

As the Port commented in 2008, we believe it is imperative that the project provide a replacement facility that meets each of the purposes identified: "reduce seismic vulnerability, improve traffic safety, provide capacity to move people and goods, provide transportation system linkages, avoid major disruption of traffic patterns and protect the integrity and viability of adjacent activities." The Port, the region, and the state, cannot afford the congestion and related economic impact that viaduct failure or closure would cause.

L-001-003

III. Complementary system upgrades are critical. We will continue working with our partners to advance the remaining Program elements and related projects.

The reader of the SDEIS must review critically to distinguish between transportation analyses which include only the project itself and those including the whole Program and other cumulative impacts. As we noted throughout the process to date, we must consider the function of the Viaduct in the context of the entire system and develop and implement a plan that maximizes that system. The Bored Tunnel, as an independent project, is complemented by several of the projects in the Viaduct Replacement Program, which we believe are needed to maximize the capacity and functionality of the entire system.

L-001-002

Thank you for your comment.

L-001-003

We appreciate your detailed comments on these projects. All of these projects (except for S. Holgate Street to S. King Street Viaduct Replacement, which is under construction) are being led by the City of Seattle and are considered as part of the cumulative effects analysis for this project. This analysis is provided in Chapter 7 of this Final EIS.

L-001-003

They also provide the best mitigation of some impacts of the Bored Tunnel—for example, the loss of the downtown ramps is mitigated by increased transit service, making that mode of transportation a more viable alternative for trips to downtown, where it can be provided cost-effectively.

Alaskan Way Surface Street and the **Elliott/Western Connector:** were conceived to replace an important route for freight between the Ballard-Interbay and the Duwamish Manufacturing-Industrial Centers (MICs), in the absence of the existing SR99 Elliott/Western Avenue ramps. As the City moves into designing that route post Viaduct demolition, this functionality must be provided as it is essential for moving freight between the City's two MICs. There are implications for traffic, noise and potentially air quality at the northern end of Surface Alaskan Way (near Broad, Wall and Bell Streets, and Piers 66 and 69 and the Bell Street Parking Garage) if the Elliott/Western Avenue Connector were not built. Traffic would use this northern end of Alaskan Way which includes several at-grade rail crossings.

Additionally, the design and construction of this connector must facilitate mobility for vehicles, particularly freight trucks. The design should include grades appropriate for loaded trucks and should minimize conflicts with pedestrians at Lenora Street by maintaining the Lenora pedestrian overpass (or grade separation). In addition to providing critical connectivity to replace the Viaduct's downtown-access ramps, these two corridors will become the only legal route for trucks transporting hazardous materials into and out of the City to service all customers in our city and Port, as they will be prohibited from using the tunnel.

Mercer Corridor is proposed to provide two-way access to and from northwest Seattle and SR-99 and Interstate 5, again providing critical access for freight from the two MICs. As the City constructs Mercer East and designs and constructs Mercer West, the functionality must provide sufficient capacity to meet the forecasted volumes along the route, especially when passing under SR99 and up the hill at West Mercer Place. We support a six-lane roadway with turn lanes and improved non-motorized facilities on Mercer Street between Dexter and Fifth Avenues North. The design and construction sequencing of these new components must provide for a viable freight route between Terminal 91 and the regional highway system. This connectivity is also essential for transporting cruise ship passengers between the Smith Cove terminal and Sea-Tac Airport.

Alaskan Way Seawall replacement is no longer an integral part of this project. However, Seawall replacement continues to be vital to the City and to waterfront properties for numerous reasons. Failure of the central or the northern portion of the seawall may contribute to related loss of service on main rail lines and the Alaskan Way transportation corridor and would have severe impacts on the Port and the economy of the region. We cannot lose sight of this critical infrastructure. The City must develop a specific funding and implementation plan for the entire seawall that ensures it will be replaced within a reasonable timeframe. The Port will pursue opportunities for City and Port collaboration to attract additional funding, as demonstrated in the recent King County flood district request. The timing of construction of the Seawall will require close coordination to minimize cumulative disruption of service and potential negative effects with construction of the bored tunnel, removal of the existing Viaduct, and related transportation projects.

South Holgate to King: We appreciate the efforts of staff to develop various components of this important Program element. We look forward to a new grade separation of the tailtrack serving the Seattle International Gateway (SIG) Rail Yard at South Atlantic Street. This early implementation project, and its provisions for the movement of trucks, will enhance the viability of Seattle as a gateway

L-001-003 well into the future. Construction is underway with close coordination among area property owners and users; this excellent communication must continue in order to not disrupt connectivity between the container terminals and the rail yards and regional highway system.

L-001-004 **IV. The Port will continue work with the Project Team to identify, resolve and mitigate construction impacts, especially on Port facilities, as the design and construction progresses.**

Port facilities, including Terminal 5, Terminal 18, Terminal 25, Terminal 30, Terminal 46, Pier 66/Bell Street Harbor Complex and parking structure, Pier 69, and Terminal 106 may be directly affected by construction. Access to outlying facilities such as Terminal 91, Fishermen's Terminal and Sea-Tac Airport may be impacted by construction traffic closures or detours. Additionally, we must resolve and mitigate cumulative construction impacts from related projects (see Comment III above). Note our early collaborative successes to mitigation construction impacts: shared funding and construction of SR519, Spokane Street Viaduct widening, East Marginal Way Grade Separation, and Duwamish Intelligent Transportation System installation.

We will continue to work with the project team and the design/build contractor to develop a final design and construction management approach that meets the freight needs for both the region and the Port's cargo and marine facility operational requirements. Final design and implementation/construction plans and specifications must maintain the functionality and capacity of both our container terminals and drayage routes, including critical needs at Pier 66 complex and Pier 69 relating to cruise passengers access, cruise vessel provisioning, maritime passenger vessel provisioning and passenger access, international conference center operations, parking and adjacent administrative/office uses.

Specific recommendations we will pursue include:

- Evaluating construction methods and scheduling to minimize time period when Broad Street is closed and Mercer Street has capacity restrictions.
- Scheduling the SR99 3 week closure outside of high-activity summer months, with a preference for scheduling early in the year, for example February or March timeframe to minimize conflicts with cargo and cruise activities.
- Maintaining a long merge lane from the south-bound Elliott Avenue on-ramp when the Alaskan Way Viaduct is reduced to two lanes further to the South.
- Working to minimize transportation, noise and vibration, and cultural/archeological impacts at Terminal 46, Pier 66 complex and the World Trade Center.
- Minimizing stormwater, earth, or cultural/archeological impacts at Terminal 46 related to tie-backs and soil modification.

L-001-005 **V. Tolling**

Tolling can have a major impact on the transportation system as a whole. It will be critical to optimize the toll rates through the tunnel to minimize traffic diversions and related congestion on the remainder of the system. Further, the Port would oppose any tolling of SR 99 south of the tunnel, which could divert substantial traffic to surface streets in South Downtown and the Duwamish MIC.

L-001-006 **VI. Land uses are subject to change but must be compatible.**

The SDEIS suggests that there may be land use changes in the area of the South Portal due the increased desirability of the location after completion of the Tunnel. We would emphasize the importance of planning and zoning for those uses to maintain compatibility with existing container terminal operations.

L-001-004

FHWA, WSDOT, and the City are also committed to continuing to work with the Port of Seattle as the design and construction progresses. The construction activities and schedule have been updated in Chapter 3 of the Final EIS.

L-001-005

With the potential to adjust toll rates in small increments during multiple time periods and in either direction, it is not possible at the EIS stage to select the final toll rates that would ultimately be implemented for the project. In fact, if tolling is implemented on the project, a series of tolling analyses would be conducted to finalize the rates and specific implementation strategies.

Charging tolls for drivers using segments of SR 99 located south of the bored tunnel is no longer being considered. The possible effects of tolling are further analyzed in this Final EIS. Please see Chapter 5 and Appendix C, Transportation Discipline Report.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will monitor and provide input to this analytical and decision-making process through a Tolling Advisory Committee. The advisory committee's responsibilities will include identification of strategies for alleviating diversion impacts.

L-001-006

As stated in Appendix G, Land Use Discipline Report, of the Final EIS,

L-001-007 As a separate issue, as described in the SDEIS, we are working with the project team on potential use of Port properties for construction activities and we will continue to find areas to cooperate and to avoid and minimize potential effects on Port operations and other Duwamish MIC uses and activities by making close-in properties available.

Thank you for the opportunity to comment. We are also sending a more detailed, technical set of comments to WSDOT's AWV Environmental Manager, Angela Freudenstein. We look forward to continuing work with your program team to define and fund a project that will replace the SR99 Viaduct.

The construction of the Bored Tunnel is a once-in-a-lifetime undertaking to modernize our public infrastructure for the 21st century. Construction will create hardships, but we anticipate those can be mitigated more easily than other replacement alternatives. We encourage all team members to work closely together to identify and mitigate construction impacts that adversely affect Port properties and tenants, as well as City properties, operations and tenants. We will work with you to make this happen.

In closing, we echo our consistent message throughout the public process, it is time to move the project forward with these issues resolved. The risks of not doing so, both to the safety of our people and to our broader economic recovery, are too great.

Sincerely,

Bill Bryant
Commission President

Tay Yoshitani
Chief Executive Officer

cc: Angela Freudenstein, WSDOT
Port of Seattle Commission

new blocks of property in the south portal area would be available for development under the City's Industrial Commercial land use zone. Any future development of this property will be required to comply with City land use plans and policies, and is not expected to influence development activity or trends in the Pioneer Square or Greater Duwamish MIC neighborhoods.

L-001-007

Thank you for working with the project team to coordinate use of Port properties and helping to determine ways to avoid and minimize effects during construction.

Port of Seattle

December 13, 2010

Ms. Angela Freudenstein, AWV Environmental Manager
AWV Project Office
999 Third Avenue, Suite 2424
Seattle, WA 98104-4019

Re: Port of Seattle - Alaskan Way Viaduct Replacement Project SDEIS Technical Comments

Dear Ms. Freudenstein:

Thank you for the opportunity to comment on the 2010 Supplemental Draft Environmental Impact Statement (SDEIS) for the Alaskan Way Viaduct Replacement Project. We very much appreciate the team's effort, and our partnership providing the opportunity for the Port to participate in the process. We look forward to continuing work with the project team to address these comments and other, as yet unidentified, issues.

Our policy letter from Commissioner Bryant and CEO Yoshitani outlines the Port's major concerns regarding the SDEIS. For your ease of use, this letter repeats—and expands on—the points made in the policy-level letter.

I. The Port supports the Bored Tunnel as the Preferred Alternative.
II. We concur that the revised Purpose and Need statement more appropriately addresses the project purpose and needs.
III. Complementary system upgrades are critical. We will continue working with our partners to advance the remaining Program elements and related projects.
    - Alaskan Way Surface Street and the Elliott/Western Connector
    - Mercer Corridor
    - Alaskan Way Seawall
    - South Holgate to King
IV. The Port will continue working with the Project Team to identify, resolve & mitigate construction impacts, especially on Port facilities, as design and construction progress.
V. Tolling rates must be set to optimize system efficiencies.
VI. Land uses are subject to change but must be compatible with nearby Port uses.

In addition, the Port has submitted comment letters on the 2004 DEIS and 2006 SDEIS. While much has changed with regard to the project envisioned in those documents, these comments are additive to those comments which are still applicable to the current project. Our additional comments here address (A) the project, (B) its construction impacts, and (C) cumulative impacts. Our comments below focus on the SDEIS document itself. However, some of these issues are a carry-over from one or more Discipline Reports, and should be addressed in multiple locations as appropriate.

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A. Project

L-002-001

The Bored Tunnel alternative, combined with the complementary Program elements, bears a significant advantage over the other alternatives. It will be critical for the project team to communicate with our tenants as final design decisions are made to ensure that the currently expected benefits carry through.

1. South Portal

L-002-002

The close collaboration with the Port demonstrated during design and construction for Holgate to King, must be repeated with the South Portal. Discussion in specific elements of the environment (below) identify the importance of working together to replace the Viaduct and maintain operations at the state's largest port facility for both imports and exports. The South Portal design must minimize impacts to Port facilities such as Terminal 46 and Terminal 25/30, as well as Terminals 5 and 18. We will continue to work with the project team to minimize and/or mitigate impacts.

Please correct the rail yard description on page 76. The tail track links to Main SIG and not the North SIG rail yard.

2. North Portal

L-002-003

We support six lanes on two-way Mercer under SR99 and the curved Sixth Avenue, combined with the concept of reconnecting the street grid at Thomas, John and Harrison. The design and construction sequencing of these new components must provide for a viable truck corridor between Terminal 91 and both Interstate 5 and SR-99. The impacts of not widening Mercer under Aurora have not been addressed in the document, and we expect that this means there will be six lanes.

3. Central Waterfront : Project only traffic analysis

L-002-004

Traffic analysis for the Project Only scenarios shows the unmitigated impacts of this design without the related project, the Elliott/Western Connector, which is a vital component of the overall Program, and part of the Port's Agreement with WSDOT. Without it, vehicles would need to cross the BNSF mainline tracks in the vicinity of Broad Street. Train crossings in that area can substantially increase vehicle travel times in that corridor, cause congestion along the waterfront, and affect the reliability of this important freight route.

Additionally, high traffic volumes along Alaskan Way and at-grade rail crossings along the North Waterfront, would likely impact access to our facilities on the north waterfront, requiring mitigation:

Pier 66 complex: The cruise ships home-porting at P-66 rely on landside access from Alaskan Way. Cruise traffic includes provisioning trucks, charter buses and other commercial vehicles, as well as private vehicles. A street use permit provides for use of some of the four lanes on Alaskan Way on days when cruise ships are in port. Our concern is further congestion affecting provisioning and passenger access in the cruise ship area at P-66 due to additional general purpose traffic. Our cruise terminals operate from May to October. Cruise ship port calls can generate over 1,200 passenger vehicle trips.

L-002-001

We will work closely with Port of Seattle staff to ensure your tenants are involved in design decisions as appropriate.

L-002-002

The project team is also committed to continuing to work closely with the Port of Seattle during the design and construction of the south portal. We have corrected the sentence in the Final EIS.

L-002-003

For the Final EIS, Mercer Street is assumed to be a six-lane cross-section with three lanes in each direction under Aurora Avenue. The preferred Bored Tunnel Alternative includes the curved Sixth Avenue configuration.

Please see the Final EIS Appendix C, Transportation Discipline Report, for discussions regarding freight routes during construction and final design of the build alternatives, including the Bored Tunnel (Preferred Alternative), as well as the Cut-and-Cover Tunnel Alternative and the Elevated Structure Alternative. Appendix C describes transportation condition associated with the SR 99 corridor through downtown Seattle and predicts the transportation performance and effects of the project and larger Program.

L-002-004

Travel times along the routes between Ballard and S. Spokane Street can be found in Chapter 5 of the Final EIS Appendix C, Transportation Discipline Report. These travel times are for an average of all vehicles including general purpose and freight traffic. The traffic analysis results represent an average of all vehicles including general purpose and freight traffic. A separate detailed traffic analysis for freight was not performed. Refer to Chapter 8 of the Final EIS Appendix C,

L-002-004

In addition, Pier 66 is home to the Bell Harbor International Conference Center, a restaurant complex, a maritime museum, market and sandwich shop, and several public access viewpoints. Our World Trade Center (WTC) is located on the east side of Alaskan Way surface, along with the Bell St. Pier parking garage. Most of these businesses rely on access along Alaskan Way surface for both pedestrian and vehicular access.

Pier 69: Serving as the Port's headquarters, it is also home to Clipper Navigation operating a passenger vessel terminal, and Arctic Storm offices. Clipper Navigation operates passenger vessel operations with significant passenger pick-up and drop-off activity as well as fleet provisioning. Arctic Storm requires occasional access to our northern apron by large trucks. Landside access to the P-69 sidewalk is critical for passengers and employees. Access to the north apron of Pier 69 is also critical for Clipper provisioning, taxi queuing, and ADA parking, such that high traffic volumes on Alaskan Way may interfere with the passenger access and northbound left turns accessing the pier.

4. Tolling

L-002-005

WSDOT should optimize the tolls through the tunnel to minimize traffic diversions. The Port would oppose any tolling of SR99 south of the tunnel, which could divert substantial traffic to surface streets in South Downtown, affecting access to our container terminals.

5. Elements of the environment

L-002-006

a. Noise and vibration: No baseline sound/vibration information is presented for Terminal 46 (T-46), Pier 66 (P-66), the WTC and Pier 69 (P-69). SDEIS materials describe more than 5 dBA increase for the P-66/WTC area, and increases of lesser magnitude at T-46 and P-69. Increased noise at these locations should be noted in light of present and future land uses and activities. There are potential business effects from increased noise such that future uses at P-66/WTC and P-69 may be adversely affected. Foreclosed re-development potential due to changes in noise environment at P-66/WTC may result in additional costs for noise mitigation.

It is our understanding that the north end Alaskan Way noise increases are due to assumptions of the Project Only construction, which assumes the Surface Alaskan Way/Elliott Western Connector is not yet constructed. This noise/vibration impact would be eliminated by completing this project, and future noise levels would be below today's levels.

L-002-007

b. Land Use: Please provide further information on: land use changes in the area of the South Portal which may have adverse affects on continuing and future marine cargo uses and activities; and project effects and plans for the Lenora Street pedestrian bridge in light of viaduct demolition. Land use changes in areas adjacent to T-46 may impede long-term use of the facility and lead to higher costs due to traffic and access management.

L-002-008

c. Social: The document describes potential changes in activity in the South Portal area while characterizing the area as light industrial, without acknowledging existing marine industrial uses and activities. Social/economic changes in the areas adjacent

Transportation Discipline Report for cumulative effects, including the proposed Elliott/Western Connector and two-way Mercer West Project.

Under the Bored Tunnel Alternative, trucks could potentially experience longer delays at Broad Street due to increased traffic as well as regular train crossings. However, the project assumes that all the Program elements, including the Elliott/Western Connector and Alaskan Way surface street improvements would be in place by the design year 2030. The Program elements are expected to improve freight mobility and access to Alaskan Way businesses as discussed in Chapter 8 of the Final EIS Appendix C, Transportation Discipline Report.

L-002-005

With the potential to adjust toll rates in small increments during multiple time periods and in either direction, it is not possible at the EIS stage to select the final toll rates that would ultimately be implemented for the project. In fact, if tolling is implemented on the project, a series of tolling analyses would be conducted to finalize the rates and specific implementation strategies. The possible effects of tolling are further analyzed in this Final EIS. Please see Chapter 5 and Appendix C, Transportation Discipline Report. SR 99 south of the tunnel, including access to the interchange in the stadium areas, is not being considered for tolling.

L-002-006

Operational noise and vibration effects are described in Chapter 5 and mitigation measures are described in Chapter 8 of the Final EIS. Effects are evaluated for existing land uses only, future land uses are not evaluated. Chapter 7 of the Final EIS discusses cumulative effects; cumulative noise effects that would result from the completion of this project and other foreseeable, future projects are discussed there.

Noise impacts were not evaluated for industrial zone areas (such as

L-002-008

to T-46 may impede long-term use of the facility, or require increased costs for operation and improvement.

L-002-009

d. Parks and recreation: Please discuss effects of viaduct demolition on the Lenora Street pedestrian bridge and overlook, and responsibilities for replacement. This facility is owned and maintained by the Port. It is subject to a pedestrian easement that was required as part of a street vacation agreement with the City of Seattle. We anticipate replacement will include the public seating and waterfront viewing area at the top of the elevator/stairway tower as designed.

The SDEIS indicates that the Portside Pedestrian/Bike Trail would be maintained through construction, but our analysis indicates that that may not be feasible. Please discuss the potential for closure of the Portside Pedestrian/Bike Trail during tunnel construction, and related mitigation measures. (This is also a concern in various Discipline Reports.)

L-002-010

e. Visual Quality: Please review the accuracy of the description of the width of the planned portside path (p. 4) and delete reference to Terminal 37 (p. 33), which is now included at T-46. (This is also a concern in various Discipline Reports.)

B. Construction Impacts

Construction staging and detours will have a major impact on many of our tenants. We have attempted to address their concerns in our partnership process and will continue to do so throughout the design and construction. Given the limited amount of information available at this point on construction impacts, we have the following comments:

1. South

L-002-011

Staging areas and detours must be designed to maintain both functionality and unimpeded access to all Port container terminals, in particular T-46 and T-25/30. Drayage routes must be maintained, and any constraints on these routes will need to continue to be discussed and mitigated to the extent reasonably possible with our staff and terminal operators. Our staff will continue to work with the project team to ensure that port-related drayage movement can flow between all our terminals, both the north and the main gates of the SIG rail yard and the freeway system as needed.

Please address the project proposal to reconfigure activities at T-46 to enable five acres to be used by the tunnel contractor. The Port is working with the project team to accommodate construction without unmitigated impacts to current Port activities. (Ref. SDEIS, p. 136 and App. B, p. 27).

Please provide information on south portal construction location (App B, p 39, last paragraph). As opposed to WOSCA, it appears that the construction approach that offers the least disruption to the Pioneer Square and stadium area is the Bored Tunnel alignment that allows most of the construction to occur to the west in Alaskan Way.

2. North

L-002-012

The loss of the Western and Elliott Avenue ramps during Viaduct demolition (and continuing in the project only scenario), forces traffic into the Bored Tunnel (and across Mercer) or onto Alaskan Way. This is of particular concern for access to Terminal 91, for the industrial activities, the cruise ship terminal and for access from

Terminal 46). Noise levels were evaluated at Pier 69 and noise levels at Pier 66 would be similar to those modeled at Pier 69. Noise levels at Pier 69 would be similar to existing conditions. Mitigation measures, such as noise walls, were evaluated in the Noise Discipline Report. For all three build alternatives, there are no feasible mitigation measures to reduce further traffic noise levels because the surface streets provide local access to downtown and the waterfront throughout the central waterfront. To be effective, noise barriers would have to block access to the surface streets. Please refer to Appendix F, Noise Discipline Report, of the Final EIS for additional details.

Other Program elements, such as the Surface Alaskan Way/Elliott Western Connector, would go through an enviromental evaluation, and would be evaluated for mitigation measures.

L-002-007

Land use changes in the South portal area would primarily consist of relatively small property acquisitions that would be for transportation use. Proposed land use changes south of Downtown are discussed in section 4.3 of Appendix G, Land Use Discipline Report. Overall, the south portal area would experience substantial improvement that would benefit motorists and pedestrians, as well as providing improved accessibility to land uses.

L-002-008

Appendix G, Land Use Discipline Report, of the Final EIS describes land uses in the south to include retail, office, terminal/warehouse, residential, parking and recreational/entertainment in the Pioneer Square portion; and waterfront terminal/warehouse, and recreational/entertainment uses in the Greater Duwamish MIC portion. The analysis of potential changes in land use considers that that the Port of Seattle's Terminal 46 shipping container terminal would be affected during construction. Operational benefits would include increased east-west connectivity between the

L-002-012

the Duwamish for fuel and provisioning trucks for the fishing fleet at Fishermen's Terminal and Terminal 91.

Please provide evaluation of the need for Mercer West capacity at the West end, where it connects with Elliott Avenue, especially during the period during demolition of the Viaduct and before construction of the related Elliott/Western Connector project (App B, p 10 and p. 21).

3. North Waterfront

Access needs to the Port's north waterfront properties includes Pier 66, the WTC Complex and parking garage, and Pier 69.

L-002-013

Garage access on Elliott and Wall Streets: Parking in the project area will be severely constricted during construction, making it essential to ensure that existing parking facilities can fulfill their function. The Port owns a large parking structure with two entries/exits on Elliott Avenue and one on Wall Street. Construction staging and detour routes should ensure access/egress to/from all three gates throughout all construction stages.

L-002-014

Elliott On-ramp merge: When the Viaduct will be restricted to two lanes in each direction, the team should maintain a long southbound merge lane from the Elliott Avenue on-ramp to avoid excessive backups.

L-002-015

Capacity and functionality of rail operations: Please address whether train traffic along the mainline north of the north tunnel portal could be affected and interrupted by construction activities to demolish the existing Viaduct. The northern mainline is a critical freight and passenger corridor. Please describe the potential impacts to rail operations, and the mitigation to minimize these impacts.

L-002-016

Loss of existing Elliott and Western Viaduct ramps, forcing detour to northern Alaskan Way. The Elliott and Western Avenue ramps will be demolished at the final construction phase of this project. Our concerns are related to facility access for uses described in section A.3 above. How will potential effects on Port facilities along northern Alaskan Way be mitigated during this final phase of construction? What are the options to detour general purpose traffic to other routes that are not impacted by rail crossing blockages?

4. Elements of the Environment

L-002-017

a. **Transportation**: During construction, designation of a truck route through the corridor is imperative. Additionally, will a designated route be maintained throughout construction for over-legal truck movement?

L-002-018

Final tunnel connection will require a three-week closure of SR 99 before the Tunnel is in use. The team should consider scheduling this during February or March when activity along the waterfront is lowest and there would be no conflicts with cruise operations on Alaskan Way.

L-002-019

b. **Air, Noise, vibration and construction dust**: We will work with the project team to mitigate any impacts of construction on air quality and noise levels at Terminal 46, Pier 66 and the WTC, and Pier 69. Should construction activities impact existing uses at these or other facilities owned by Port, the project would need to provide mitigation.

historic Pioneer Square and Greater Duwamish MIC neighborhoods, and enhance the accessibility to existing land uses, such as waterfront businesses.

L-002-009

The Lenora Street pedestrian bridge would not be removed and is expected to remain in operation during most of the viaduct demolition duration. Access to the bridge would be temporarily disrupted during the demolition activities in that area. See Chapter 6 of the Final EIS for more discussion of construction effects on recreational resources.

Final EIS Appendix H, Social Resources, also acknowledges that bicycle and pedestrian facilities in the vicinity of the port may be obstructed during construction.

L-002-010

The description of the Port Side pedestrian/bike trail in Appendix D, Visual Quality has been updated in this Final EIS. References to Terminal 37 have been deleted.

L-002-011

The lead agencies have coordinated continuously over the last several years, and will continue to work with the Port of Seattle as design and construction progresses. Please see the Final EIS Appendix B, Alternatives Description and Construction Methods. Section 3.1.1 of Appendix B details the construction staging sites, and the proposed activities on the construction staging activities on the Port of Seattle's facilities, including Terminals 106, 25, and 46. Chapter 6 of the Final EIS also gives updated information on construction staging sites and construction activities for the south portal of the Bored Tunnel Alternative.

L-002-020

c. **Land Use:** Please provide more detailed, actionable information concerning construction impacts: particularly materials and spoils transshipment at T-46; construction effects on the Lenora Street pedestrian bridge in light of Viaduct demolition (including replacement cost/responsibility); and a description of potential disruption of access to T-46 administration building due to need for tie-back installation.

L-002-021

Under Cumulative Impact Analysis, please provide information regarding effects due to Western and Elliott Connector construction, particularly for WTC and other adjacent Port-owned structures.

L-002-022

d. **Social**: Please provide discussion of the fate of the Lenora Street pedestrian bridge as a community asset due to Viaduct demolition. Replacement responsibility for the bridge is undetermined, but should not fall on the Port.

L-002-023

e. **Historical, Cultural, Archaeological**: Potential tie-back construction at the east margin of T-46 may result in increased costs and limitations, if cultural materials are discovered. Project could impede T-46 uses and activities.

L-002-024

f. **Surface Water**: Please discuss effects of the use of port facilities for transfer of large volumes of construction spoils over extended periods, including de-watering, which may require wastewater discharge permit review. Construction mitigation measures may require review, potentially requiring construction NPDES permits. Monitoring and compliance will be required for transfer actions at Port facilities. Project-related activities will require Port oversight at T-46, T-25, and T-106. Stormwater systems at these sites could require modification. There are potential port costs for modification and oversight.

L-002-025

g. **Fisheries, wildlife, and habitat**: Please discuss effects of the use of Port facilities, in particular T-46, for transfer of construction spoils which may involve the port in aquatic habitat matters, including spills and surface water control of high PH, high turbidity materials. Please discuss the potential need for alteration of existing dock and pier facilities, and associated aquatic habitat considerations for transshipment of project materials. Materials transfer needs due to the project could involve the port in changes to existing facilities. Existing and future T-46 uses and activities may be impeded. What mitigation measures are proposed, and what approach will be taken to hold the Port harmless in case of an incident?

L-002-026

h. **Earth**: Please provide discussion of: (1) bulk construction materials and spoil transfer at Port facilities as it entails dewatering and handling of potentially high pH materials and (2) tie-back or soil modification at the east margin of T-46. What are the plans for mitigation of effects and potential costs due to disruptions of T-46 operations.

The SDEIS Appendix P (p. 65) suggests that manmade fill with debris and potential contaminants cannot be reused as fill. However, please address if some moderately contaminated soils may be allowed to be used as backfill, consistent with regulatory requirements.

L-002-027

i. **Hazardous Materials**: As discussed above, use of Port facilities for handling and shipment of potentially hazardous or controlled construction materials and spoils will require attention to liability and compliance matters. Please address

Construction activities could be managed to avoid and minimize impediments to vehicle access to the marine cargo area of Terminal 46.

Increased truck traffic along the E. Marginal Way S. haul route could result in travel delays for north-south traffic and could result in traffic congestion at the points of vehicle access to the marine cargo area of Terminal 46 and Colman Dock. Use of E. Marginal Way S. as a haul route also could affect other marine, industrial, and water-dependent uses west of E. Marginal Way S., including Terminals 25 and 30. In addition, access to the U.S. Coast Guard facility at Pier 36 and existing business locations between Pier 36 and Terminal 30 could be affected. Please refer to Final EIS Appendix C, Transportation Discipline Report, for additional discussion of detours and potential traffic impacts.

L-002-012

Mitigation measures will be in place to help keep traffic moving during construction as describe in Chapter 8 of the Final EIS and in Appendix C, Transportation Discipline Report. With the preferred Bored Tunnel Alternative, access to and from SR 99 in the north end will be provided near Harrison and Republican Streets. The City of Seattle is leading the Mercer West Project that will provide improvements between Elliott Avenue W. and Fifth Avenue N. The Mercer West Project is expected to be completed before the bored tunnel opens and the Elliott and Western Avenue ramps are demolished.

L-002-013

Access to businesses will be maintained throughout construction. Temporary access limitations and any required changes to access during construction will be mitigated to the extent practicable and in conjunction with the affected businesses and residents. Access during construction for businesses and residences will continue to be addressed through on-going evaluation of effects during construction. The project will continue coordination and mitigation activities with

L-002-027

the approach to holding the Port harmless from impacts due to hazardous construction material or spoils.

C. Cumulative Impacts

L-002-028

Complementary system upgrades are critical. We will continue working with our partners to advance the remaining Program elements and related projects. Our policy letter highlights the need and issues surrounding the four projects below:

1. Alaskan Way Surface Street and the Elliott/Western Connector
2. Mercer Corridor
3. Alaskan Way Seawall
4. South Holgate to King

For some of these projects, construction could overlap with the Bored Tunnel alternative construction/viaduct demolition. We will continue to work with the responsible agencies to identify, avoid and minimize cumulative impacts. Local development projects should be required to address the cumulative impacts of street closures due to construction activities that occur concurrently with AWV replacement.

1. **Alaskan Way Surface and Elliott Western Connector**: is essential for moving freight between the city's two Manufacturing Industrial Centers (MICs). We appreciate how the programmed new connection to these two streets complements the Bored Tunnel alternative. They also provide access from the airport to the Terminal 91 cruise terminal. These roads must be designed to accommodate the trucks and buses that serve these facilities, including over-legal trucks and trucks carrying flammable materials.
2. **Mercer Corridor**: must provide sufficient capacity to meet the volumes anticipated both to the east and west of the SR99 corridor and provide access to Terminal 91 and other portions of the Ballard/Interbay MICs. This includes both the underpass at SR99 and the yet-to-be-determined roadway configuration on West Mercer and West Mercer Place.

   Please evaluate construction methods and scheduling to minimize the time period when Broad Street is closed and Mercer Street has restricted capacity.
3. **Seawall**: is critical infrastructure which is integral to the transportation system. Its potential failure, and related failures of the main rail line and Alaskan Way surface along the Northern portion, would have severe impacts on international trade, and the economy of the region. We will work with the City for a funding and implementation plan that ensures both the south and north portions be replaced within a reasonable timeframe. The cumulative impacts of construction of the replacement seawall interacting with the viaduct replacement should be identified and appropriate mitigation measures presented.
4. **South Holgate to King:** is already in construction, as discussed in the policy letter, with close coordination among area property owners and users. This excellent communication must continue, and be expanded during the Bored Tunnel construction as well.

business and residential stakeholders, freight/delivery companies, the Port of Seattle, neighborhood groups, and other affected groups. Refer to Chapter 8 of the Final EIS for parking mitigation strategies.

L-002-014

With the Bored Tunnel construction staging, the southbound Elliott Avenue on-ramp would be an add lane forming 3 lanes on SR 99. The third lane would be dropped just north of the Columbia Avenue southbound on-ramp. Please see the Final EIS and Appendix C, Transportation Discipline Report.

L-002-015

WSDOT will be preparing a construction traffic management plan for the selected alternative that includes more localized mitigation measures as construction plans are refined. Impacts to train operations will be minimized. Please see the Final EIS, Chapter 8 Mitigation for additional information on mitigation.

L-002-016

Some streets from S. King Street to Battery Street would experience periodic closures to support the viaduct demolition. Localized mitigation measures will be developed as construction details are refined. A construction traffic management plan will be prepared to ensure that construction effects on local streets, property owners, and businesses are minimized. The traffic management plan will include procedures for identifying and incorporating the needs of those affected by the project, specifically, but not limited to, the Port of Seattle. Please see Chapter 6 of the Final EIS, Appendix C, Transportation Discipline Report as well as the Final EIS, Chapter 8 Mitigation.

L-002-017

Some streets adjacent to the viaduct from S. King Street to Battery

Thank you again for the opportunity to partner on this project and comment on this Supplemental Draft Environmental Impact Statement. The construction of the Bored Tunnel is a mammoth undertaking, which will create hardship, but we anticipate that can be mitigated more easily than with other replacement alternatives. We look forward to continue working closely with the team in identifying and mitigating construction impacts that adversely affect Port properties and Port tenants. Please do not hesitate to contact me if you have any questions.

In closing, we echo our consistent message throughout the public process, it is time to move the project forward with these issues resolved. The risk, both economic and safety, of not doing so, is too great.

Sincerely,

Geraldine H. Poor, AICP
Manager, Regional Transportation
Port of Seattle

cc: Akiyama, Blomberg, Graves, Maruska, Merritt, Porter, Wolf, D. Burke, M. Burke, Gellings, Goodwin, Guthrie, Pulsifer, Sloan, Skaggs

P:\Teams\CorporateStrategicPlanning\Regional Transportation Strategy Team\viaduct\env review\SDEIS 2010\letters\AWV S2DEIS tech letter final.docx

Street would experience periodic closures to support the viaduct demolition. Localized mitigation measures will be developed as construction details are refined. We understand the need to maintain a route for over-legal vehicles and will work with the City of Seattle to ensure one is maintained throughout construction to the extent practicable. A construction traffic management plan will be prepared to ensure that construction effects on local streets, property owners, and businesses are minimized. The traffic management plan will include provisions to provide continuous access to truck routes. Please see Chapter 6 of the Final EIS, Appendix C, Transportation Discipline Report as well as the Final EIS, Chapter 8 Mitigation.

L-002-018

Chapter 6 of the Final EIS Appendix C, Transportation Discipline Report summarizes the construction stage that was assumed for the analysis (Traffic Stage 7). Actual staging will be developed further and revised as construction plans are refined. Timing for the closure of SR 99 to switch traffic from the existing route to the bored tunnel would be determined based on a variety of factors. The lead agencies will continue to coordinate with the Port of Seattle and other stakeholders in the freight community as the project progresses.

L-002-019

Mitigation of construction effects is discussed in Chapter 8, Mitigation of the Final EIS. Please refer to the mitigation sections in Appendix F, Noise Discipline Report, and Appendix M, Air Quality Discipline Report, for additional mitigation details.

L-002-020

Construction activities proposed for Terminal 46 would be related to materials and spoils transshipment and would include erecting and operating a conveyance system for transferring material/spoils onto

barges. Spoils would be removed though the south portal area using conveyors or pipes and transported to a staging area for stockpiling before being transported by truck or barge to the disposal site. The design and construction of the conveyance system will be determined by the Design-Builder. Appendix B, Alternatives Description and Construction Methods Discipline Report, provides more detail on the construction process. The Lenora Street pedestrian bridge would not be removed and is expected to remain in operation during most of the viaduct demolition duration. Access to the bridge would be temporarily disrupted during the demolition activities in that area. Access to the T-46 administration building would also be maintained. Please refer to Appendix L, Economics Discipline Report for a discussion of issues related to business impacts.

L-002-021

Chapter 7 of the Final EIS explains cumulative effects of the Bored Tunnel Alternative when combine with the effects of other Program elements. This includes the Elliot/Western Connector - Pike Street to Battery Street. Long-term, this project would have a positive cumulative effect on land use in Seattle. Appendix C, Transportation Discipline Report, presents additional information on expected trip distributions, levels of service, and traffic conditions during construction. Additional information regarding potential effects on businesses is provided in Appendix L, Economics Discipline Report.

L-002-022

The Lenora Street pedestrian bridge would not be removed and is expected to remain in operation during most of the viaduct demolition duration. Access to the bridge would be temporarily disrupted during the demolition activities in that area. Chapter 6 of the Final EIS contains this information.

L-002-023

Any potential discovery of cultural materials at T-46 is addressed in the Section 106 Memorandum of Agreement and in Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. Investigation of this area at this time would potentially expedite rather than impede the Port's future activities as the cultural resources would have to be addressed at that time.

L-002-024

The Final EIS and Appendix O, Surface Water Discipline Report, have been updated to discuss the potential use of Port of Seattle facilities during construction and the need to coordinate with the Port regarding existing permit conditions.

The lead agencies are aware that a NPDES construction permit(s) from the Washington State Department of Ecology may be required for this project, as discussed in Chapter 8 of the Final EIS. The need for this permit will be determined during the permitting phase of the project (after the build alternative is selected in the Record of Decision).

L-002-025

The effects of land use changes as a result of using existing waterfront facilities for project activities are addressed in the Land Use Discipline Report (Appendix G). As part of agreement with the Port for use of T-46 WSDOT will mitigate for the use of the space on the north section of T-46. It is likely that there are some activities the contractor will be required to do (such as lay a concrete path for hides storage, construct a crane maintenance building, among others). Additionally, it is likely the contractor would demo the north 50 feet of an existing building on T-46 to allow entrance to the terminal and provide a path for the conveyor. Finally, following construction, the contractor will be required to restoresections of the T-46 to its pre-project condition. No in-water work is proposed as part of the project.

It is expected that any environmental permits needed by the contractor, would require the implementation of BMPs to prevent the spillage of excavation material into the water. It is also expected that the BMPs described in the Surface Water Discipline Report (Appendix O) would also be implemented at these waterfront facilities to prevent effects of surface water runoff from entering Elliott Bay and impacting water quality conditions. These permits would also include appropriate mitigation for the effects of process on aquatic habitat or species.

L-002-026

Effects and mitigation measures related to high pH soils are included in Appendix Q, Hazardous Materials Discipline Report, of the Final EIS. Handling of spoils and related sediment transport are discussed in Appendix Q as well as Appendix O, Surface Water Discipline Report, of the Final EIS. Effects and mitigation measures related to use of tiebacks, ground improvement and other features at the east margin of Terminal 46 are discussed in Appendix P, Earth Discipline Report of the Final EIS. The exact locations of potential tiebacks and ground improvement will be determined during final design of the project and therefore cannot be provided in the Final EIS level studies. WSDOT will continue to coordinate with the Port during final design to address Terminal 46 operations during construction. Specific information cannot be provided in the Final EIS.

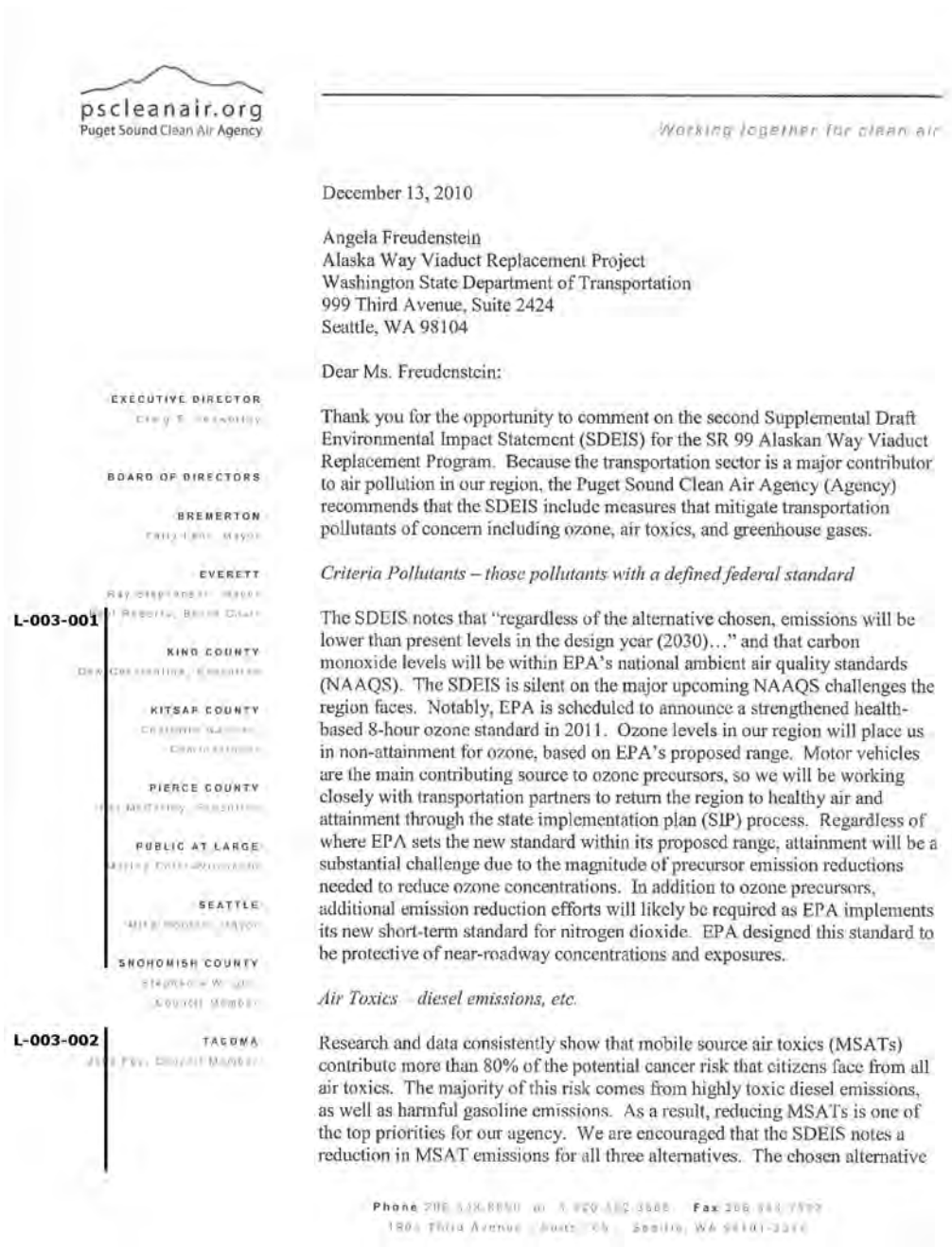
Potentially contaminated soils will likely not be re-used as fill on the project. Most of the soils are not suitable for use as fill because they contain too many fine particles, are too wet, or contain other debris. The use of existing soil as fill will be determined during final design and construction. Most of the spoils would likely require off-site disposal.

L-002-027

Agreements with the Port for WSDOT work done on their property would be developed to identify WSDOT's responsibility for identification, management and disposal of hazardous materials encountered during the construction activities.

L-002-028

We appreciate the comments you have provided on these projects here and in your other comment letter. All of these projects (except for S. Holgate Street to S. King Street Viaduct Replacement, which is under construction) are being led by the City of Seattle and are considered as part of the cumulative effects analysis for this project. This analysis for all of the build alternatives is provided in Chapter 7 of this Final EIS. WSDOT will continue to coordinate with the Port to maintain essential conditions for freight mobility and minimizing construction effects as construction of the S. Holgate to King Street project progresses.



pscleanair.org
Puget Sound Clean Air Agency

Working together for clean air

December 13, 2010

Angela Freudenstein
Alaska Way Viaduct Replacement Project
Washington State Department of Transportation
999 Third Avenue, Suite 2424
Seattle, WA 98104

Dear Ms. Freudenstein:

EXECUTIVE DIRECTOR

BOARD OF DIRECTORS

BREMERTON

EVERETT

KING COUNTY

KITSAP COUNTY

PIERCE COUNTY

PUBLIC AT LARGE

SEATTLE

SNOHOMISH COUNTY

TACOMA

L-003-001

L-003-002

Thank you for the opportunity to comment on the second Supplemental Draft Environmental Impact Statement (SDEIS) for the SR 99 Alaskan Way Viaduct Replacement Program. Because the transportation sector is a major contributor to air pollution in our region, the Puget Sound Clean Air Agency (Agency) recommends that the SDEIS include measures that mitigate transportation pollutants of concern including ozone, air toxics, and greenhouse gases.

Criteria Pollutants – those pollutants with a defined federal standard

The SDEIS notes that "regardless of the alternative chosen, emissions will be lower than present levels in the design year (2030)…" and that carbon monoxide levels will be within EPA's national ambient air quality standards (NAAQS). The SDEIS is silent on the major upcoming NAAQS challenges the region faces. Notably, EPA is scheduled to announce a strengthened health-based 8-hour ozone standard in 2011. Ozone levels in our region will place us in non-attainment for ozone, based on EPA's proposed range. Motor vehicles are the main contributing source to ozone precursors, so we will be working closely with transportation partners to return the region to healthy air and attainment through the state implementation plan (SIP) process. Regardless of where EPA sets the new standard within its proposed range, attainment will be a substantial challenge due to the magnitude of precursor emission reductions needed to reduce ozone concentrations. In addition to ozone precursors, additional emission reduction efforts will likely be required as EPA implements its new short-term standard for nitrogen dioxide. EPA designed this standard to be protective of near-roadway concentrations and exposures.

Air Toxics – diesel emissions, etc.

Research and data consistently show that mobile source air toxics (MSATs) contribute more than 80% of the potential cancer risk that citizens face from all air toxics. The majority of this risk comes from highly toxic diesel emissions, as well as harmful gasoline emissions. As a result, reducing MSATs is one of the top priorities for our agency. We are encouraged that the SDEIS notes a reduction in MSAT emissions for all three alternatives. The chosen alternative

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L-003-001

Air quality effects described in the Final EIS are based on analysis based on current air quality regulations. The project meets the current national ambient air quality standards. As the EPA has not required any actions for possible future standards, future standards are not considered. Any future standards would not apply to this project. This project would be "grandfathered" and exempt from future standards. Please refer to Appendix M, Air Quality Discipline Report, for additional details.

L-003-002

The Final EIS estimates the potential Mobile Source Air Toxic (MSAT) emissions under the build alternatives under both the tolled and non-tolled conditions. MSAT emissions were lower than existing conditions under all build alternatives. The build alternatives had similar MSAT emissions. Please refer to Appendix M, Air Quality Discipline Report, for additional detailed analysis.

L-003-002 should maximize this reduction, minimizing the emissions of and exposure to these harmful pollutants.

Greenhouse Gases

L-003-003 Finally, Washington State and the City of Seattle have set rigorous greenhouse gas emission targets that require substantial reductions from the transportation sector as part of an overall solution to meeting those goals. We strongly support those efforts and encourage the Department to consider and address them throughout this project.

L-003-004 We are encouraged that the SDEIS finds a reduction in criteria pollutants, air toxics, and greenhouse gases for all three alternatives. We recommend that the Department add measures that further strengthen the alternatives to maximize this reduction. These measures can include increased levels of transit service, pricing, bicycle lanes, and pedestrian facilities as well as encouraging low-emission vehicle use. These strategies will help prepare our transportation system and the region for increasingly stringent regulations. In addition, the SDEIS should compare future air emissions to proposed regulations and existing GHG emission targets. The Alaskan Way Viaduct Replacement provides an important opportunity to build more climate and air quality-friendly transportation strategies for the city and the region.

Thank you again for this opportunity to provide comment. We look forward to working with you on improving air quality for all our Puget Sound citizens as the Department works on this and other projects in the coming years

Sincerely,

Craig Kenworthy
Executive Director

jwc

L-003-003

Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Chapter 5 Permanent Effects of the Final EIS and Appendix R, Energy Discipline Report, Section 5.2 Operational Energy Effects Under 2015 Existing Viaduct Conditions and the 2015 and 2030 Bored Tunnel Alternative. All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative).

The study area evaluated includes areas likely to be affected by changes in greenhouse gas emissions as a result of the project. The greenhouse gas effects were estimated for roadways within the city center area, as well as in the region. The city center area is bordered by Prospect Street on the north, 15th Avenue on the east, S. Holgate Street on the south, and Elliott Bay on the west. The region includes all the traffic movements in King, Pierce, Snohomish, and Kitsap Counties.

L-003-004

A detailed cumulative effects analysis has been conducted for all alternatives and is described in this Final EIS. Additional King County Metro transit service will be provided as part of construction mitigation. Information on transit service as well as bicycle and pedestrian facilities can be found in the Final EIS Appendix C, Transportation Discipline Report.

The Final EIS analyzes the alternatives against the required standards.

King County
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December 13, 2010

Angela Freudenstein
Project Environmental Manager
AWV Project Office
99 3rd Avenue S., Suite 2424
Seattle, WA 98104-4019

Dear Ms. Freudenstein:

The King County Department of Transportation (KCDOT) is pleased to submit comments on the Alaskan Way Viaduct Replacement Project Supplemental Draft Environmental Impact Statement (SDEIS). As a program partner, King County has worked closely with the State of Washington, the City of Seattle and the Port since work began to replace the aging and seismically vulnerable viaduct structure, and the bored tunnel program was selected as the preferred alternative.

The SDEIS primarily addresses the highway replacement project component of the overall Viaduct Replacement Program. The highway project will have significant impact to our Metro Transit services both during construction and in the long term. Over two-thirds of all Metro Transit service moves through downtown Seattle on a daily basis. Currently, Metro carries approximately 52,000 people on over 2,200 bus trips every day into or out of the areas that will be directly affected by the construction of the viaduct portals. In addition, Metro carries approximately 100,000 people a day on 4,600 daily bus trips on downtown surface streets that will be further congested during construction. The West Seattle Water Taxi also provides valuable transportation service in this corridor.

The following comments address both the specific highway replacement project and the larger, related Viaduct Replacement Program.

Transit is an essential component of the Viaduct Replacement Program

L-004-001 Transit enhancements are essential to the Viaduct Replacement Program because of transit's central role in providing future mobility. The SDEIS indicates that most of the travel growth in the downtown area by 2030 needs to be carried by transit. While the tunnel will carry the vital trips through downtown, transit will continue to be the workhorse that moves people into and out of downtown.

Construction mitigation for transit service

L-004-002 Transit will also be critical to move as many people as possible during the construction period. Construction work associated with viaduct replacement will impact transit operations throughout

L-004-001

The project agrees that public transit would continue to be an important component of transportation in the project corridor. Several components of the project would be supportive of transit; these include transit speed and reliability improvements that will be available during and after project construction. In the south area, there would be a bus-only lane in the northbound SR 99 off-ramp. In the north area bus-only lanes would be provided on Aurora Avenue that will support transit operations in the South Lake Union area.

L-004-002

The Final EIS Chapter 6 and Appendix C, Transportation Discipline Report (Chapter 6 Construction Effects and Mitigation) identify elements to minimize traffic effects during construction. The mitigation elements are intended to address construction-related effects associated with the project. The project looks forward to working with King County Metro on implementation and monitoring of mitigation elements relating to public transit.

Currently WSDOT is providing funding for King County on the S. Holgate Street to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is ongoing and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

L-004-002 the duration of the project, and these impacts need to be mitigated. The State has signed an agreement with the County to provide funding to mitigate similar construction-related impacts to transit during the Holgate to King project construction. The agreement has two primary goals – off-set the delay to transit caused by construction activity, and fund transit enhancements to reduce congestion caused by project construction. An additional State/County mitigation funding agreement with these same goals is needed to address transit impacts during the bored tunnel construction. Mitigation should also be provided during the city-led demolition of the existing viaduct and the construction of the new surface Alaskan Way. The SDEIS should more clearly identify the needed transit mitigation measures and associated funding.

We look forward to working with the State and City of Seattle to develop a transit mitigation agreement for the central waterfront so we can continue to provide robust transit service and keep people moving throughout the construction of the project.

Transit priority pathways

L-004-003 King County has been working with the State and City to establish transit priority pathways at the north and south tunnel portals. While we are pleased with the results of this successful collaboration to date, there is still more work to be done. In general the identified transit priority pathways connecting SR-99 with the 3rd Avenue transit corridor from the north and south need to be better documented in the SDEIS.

In the south end, the SDEIS accurately describes the transit priority lanes on SR-99 between Spokane and King Streets. However, the document needs to more clearly describe the planned transit pathways between the new south portal ramps to surface Alaskan Way and the 3rd Avenue transit corridor via Main and Washington Streets, or an alternative east-west connection. This description needs to address both the interim period immediately following completion of the bored tunnel while the central waterfront project is still under construction and surface Alaskan Way is not yet open to traffic, as well as the permanent pathway when the project is fully complete. The SDEIS document should note that this permanent transit pathway is part of the bored tunnel project.

At the north portal we have reached agreement with the State and City on new transit priority lanes, but these lanes are not accurately described in the SDEIS. The SDEIS document should include discussion of transit lanes in both directions between Denny Way and Harrison Street to be consistent with current plans for the project. In addition, future transit pathways on SR 99 need to be maintained during the bored tunnel construction and reconstruction of Aurora Avenue surface streets in order to keep transit moving efficiently during construction.

Tolling Considerations

L-004-004 We understand that tolling may be a needed component of the bored tunnel project to close an estimated $400 million budget gap, and KCDOT remains supportive of tolling on the corridor. However, as identified in the SDEIS tolling will lead to significant diversion of tunnel traffic onto downtown streets causing further delay to transit service. Consequently, it is important to include the impacts of tolling as part of the bored tunnel alternative analysis in chapter 5 of the

L-004-003

Chapter 5 of the Transportation Discipline Report, Appendix C of the Final EIS describes traffic features in the project corridor. In the north portal area, these descriptions include the transit lanes on Aurora Avenue connecting to Wall Street and Third Avenue.

At the south portal, location of transit pathways connecting the SR 99 off-ramp with the Third Avenue transit corridor and Alaskan Way are not included in the project components. This pathway would best be determined by King County Metro with consideration given to the planning that will be carried out by the City of Seattle for the central waterfront.

For the north portal, Appendix C of the Final EIS includes a description of the transit lanes on Aurora Avenue between Harrison Street and Denny Way. During construction, transit operations would be maintained on Aurora Avenue; although, as indicated in the Final EIS, some delays would likely be incurred.

L-004-004

A detailed tolling analysis has been conducted for all alternatives and is described in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

L-004-004 SDEIS instead of just a stand alone analysis as it is in chapter 9. In addition, mitigation of these impacts to transit needs to be included in the SDEIS tolling analysis.

L-004-005 King County supports tolling as a transportation demand management tool as well as a revenue source for transportation modes including transit. If tolling is implemented on the corridor we would like transit to be an eligible use of the toll revenue. We look forward to participating in the tolling work group to develop a tolling scenario that optimizes program investments and benefits transit.

KCDOT congratulates WSDOT for advancing the Alaskan Way Viaduct replacement preferred alternative to this stage. We will continue to be an active partner in the project as it moves forward. We hope these comments prove helpful as the SDEIS is finalized. We look forward to participating in the tolling work group and other forums as appropriate to assess project design modifications, transit connections, and to address funding for transit in the corridor as well as other related program elements.

Sincerely,

Laurie Brown for

Harold S. Taniguchi, Director
King County Department of Transportation

Attachments

cc: Chris Arkills, Transportation Policy Advisor, Executive Office
Laurie Brown, Deputy Director, King County Department of Transportation (KCDOT)
Ron Posthuma, Assistant Director, KCDOT
Kevin Desmond, General Manager, Metro Transit Division, KCDOT

L-004-005

Thank you for your comment. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. We look forward to working with King County DOT on tolling implementation.

King County Department of Transportation, Metro Transit Division's Technical Comments on Alaskan Way Viaduct Replacement Project SDEIS Including Appendix C, Transportation Discipline Report and Appendix H, Social Discipline Report

The following comments include suggested corrections, request further clarification or provide data intended to make the document easier to understand and more useful as a decision-making tool.

Comments on SDEIS document

L-005-001	1.	p. 2	A key part of the January 2009 agreement is omitted from the text: the one percent (1%) MVET for transit; It is expected that transit will carry more trips oriented with downtown Seattle, because the bored tunnel alternative provides bypass trips
L-005-002	2.	p. 4	Third column, traffic safety paragraph: alternatively, speed limits could be lowered.
L-005-003	3.	p. 7	Third column, transit enhancements: the Delridge RapidRide and the SLU concepts are not funded. Seattle First Avenue Streetcar is also not funded. The recommendation provided by Governor Gregoire, former Mayor Nickels, and former County Executive Sims estimated $190 million in capital and $15 million in annual operating expenses to be paid for by a countywide 1% Motor Vehicle Excise Tax. As this new transit revenue source was not subsequently approved by the legislature nor has an alternative funding source been provided, the SFEIS needs to disclose this funding gap.
L-005-004	4.	p. 13	Exhibit 2-3: Port side pedestrian/bicycle facilities should be shown in light green like City-Side Trail.
L-005-005	5.	p. 13	As the transit lanes will operate longer than just during the "peak hour" as described, the document should use the more accurate term *peak period*.
L-005-006	6.	p. 15	Increased congestion in Seattle CBD could impact regional transit ridership if it significantly degrades transit travel times in the CBD.
L-005-007	7.	p. 18	Question 10: under heading *South of King St.* This section described the increase of traffic on north/south city streets between Spokane and Atlantic St, Exhibit 2-12 needs to include intersection conditions south of Holgate St. to Spokane St.
L-005-008	8.	p. 19	Exhibits 2-13 & 2-14: Travel time comparison on 2nd and 4th Avenue may not reflect actual conditions. The increase in daily traffic volumes on city streets is estimated at 22,000 or 27 percent more than the 2015 Existing Viaduct.
L-005-009	9.	p. 20	Exhibit 2-12: In the a.m. peak period, why does Denny Way and SR-99 not show as a congested intersection in both 2015 maps; it seems congested today.
L-005-010	10.	p. 24	Should take into account the impacts of increased congestion on minority and low-income populations coming to the study area from outside areas; not just study area residents

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L-005-001

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently WSDOT is providing funding for King County on the S. Holgate Street to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is ongoing and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system.

L-005-002

The Alaskan Way Viaduct and Battery Street Tunnel do not meet current roadway design standards and have deficiencies that need to be improved. Lowering speed limits alone will not address these deficiencies and safety issues.

The proposed build alternatives, evaluated in the Final EIS, has all been designed to meet current roadway design and safety standards. Please

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L-005-011	11.	p. 26	Mitigation for Permanent Effects: As addressed in chapter 9, all of the tolling scenarios that were analyzed would divert large volumes of traffic onto downtown arterials, potentially resulting in delays, reduced reliability of transit, and increase reliance on transit by those who ride the bus to avoid paying tolls or driving through traffic. These impacts need to be adequately mitigated for example by adding transit service and continuous transit priority lanes on arterials with high transit volumes.
L-005-012	12.	p. 30	Middle column, transit: elaborate how transit will be impacted throughout the construction stages in both the south and north portal construction areas.
L-005-013	13.	p. 30	Construction on 1st Avenue S will definitely affect transit operations. This discussion should also address other streets in the vicinity of the project where construction activities will impact transit.
L-005-014	14.	p. 30	Under the heading *How would transit be affected during the construction?*: This section should also address transit impacts in the central downtown area. Any increase in traffic congestion on 2nd and 4th Avenues will also slow down transit operations. A description needs to be added about construction impacts on 1st Ave and Alaskan Way surface street and side streets during the AWV demolition will slow down transit operations.
L-005-015	15.	p. 36	More information is needed on "transit enhancements" – specifically, related to capital improvements
L-005-016	16.	p. 36	Middle column, land use paragraph: since the project will improve bypass trips by general purpose traffic, would it induce additional development outside the downtown core? As noted, bypass trips are improved by wider lanes, shoulders, and reduced traffic frictions leading to greater speed for through trips.
L-005-017	17.	p. 39	Exhibit 2-31: Transit operations will be impacted as general purpose traffic gets congested on 2nd and 4th Avenue. Skip stop operations on those corridors will require transit coaches to merge back and forth through this congestion to the adjacent transit lane. Transit travel time on this exhibit seems underestimated.
L-005-018	18.	p. 9 & 40	Exhibit 2-32: Tolling traffic diversion to I-5 should be noted only for the off-peak period. Travel times on I-5 with and without tolling are about the same because during the peak period I-5 can't absorb more traffic.
L-005-019	19.	p. 39	Please clarify 16,000 to 18,000 additional vehicles per day on city streets with tolling in addition to the increase of 22,000 on city streets with Bored Tunnel? (See comment regarding page 19). Net increase of about 36,000 to 40,000 vehicles per day? That would be almost half of the 81,000 vph 2015 Existing Viaduct condition.
L-005-020	20.	p. 42	Other issues that need to be resolved are lack of funding to pay for the construction impact mitigation to transit service from mid 2014 to 2017 (or project completion) as well as funding for transit enhancements comprising the program. Similarly, program elements including funding of seawall replacement or surface arterials have not been resolved.

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see the Final EIS, Appendix C Transportation Discipline Report, Chapter 5 for more discussion.

L-005-003

The County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. The status of King Counyty's RapidRide program has been included in the Final EIS. Currently WSDOT is working with King County to identify funding for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

L-005-004

This exhibit has been updated in the Final EIS to reflect the current configuration for preferred Bored Tunnel Alternative. Both trails have been through the environmental review process as part of the S. Holgate Street to S. King Street Project. They are not shown in color on the exhibit but are called out so that their location can be identified.

L-005-005

Chapter 3 of the Final EIS provides the updated description of each alternative, including the peak period transit-only lane on the northbound off-ramp to Alaskan Way S.

L-005-006

Any transit travel delays associated with the Bored Tunnel Alternative would not be expected to result in major decreases in transit ridership.

L-005-021	21.	p. 52	Middle column, the last paragraph describing the January 2009 agreement omits the one percent MVET for transit; it should be added.
L-005-022	22.	p. 77	Regarding *How does transit use the viaduct?* This section should address transit service within the project area (Spokane to Roy St) rather than just extracting transit service on the Viaduct. (see KCDOT's May 2010 comments on the draft Transportation Discipline Report) The detail and coverage of this analysis needs to be comparable to pedestrian and parking on page 78 and 79.
L-005-023	23.	p. 92	Due to the need for $400 million in project funding, WSDOT will likely need to toll SR 99 once granted authority to so. As discussed in chapter 9 of this document, tolling-related diversion will significantly alter travel patters and performance characteristics within the study area, consequently, it is important to include the impacts of tolling in chapter 5 of the SFEIS.
L-005-024	24.	p. 96	First column, north portal area (continued): This section should include an explanation of why the proposed configuration that requires buses to weave through general purpose traffic to exit at Harrison St was selected and a summary of the resulting transportation issues including impacts on transit safety, speed, and reliability.
L-005-025	25.	p. 105	Exhibit 5-19: If the text is correct, the greater then/less then arrows are facing the wrong direction.
L-005-026	26.	p. 106	Exhibit 5-24: 2015 a.m. signalized intersections: should not Denny and SR-99 be depicted as congested? (Also on page 20).
L-005-027	27.	p. 109	Exhibit 5-28: Third column, ST2 improvements listed include Link to Federal Way; in 2008, ST had funding to extend only to South 272nd Street, the northern city limits and not the city center at South 320th Street; in August 2010, ST now expects to not have sufficient funding for South Link and will conduct a study to determine optimal project scope.
L-005-028	28.	p. 109	Third column: Northbound transit-only lane would continue north of Denny Way to Harrison Street (not John Street).
L-005-029	29.	p. 110	Exhibit 5-29: First column, the text does not explain the significant difference in 2030 transit ridership with and without the project.
L-005-030	30.	p. 118	#15: repeat of page 36 comment. The land use analysis needs to address both direct and indirect effects.
L-005-031	31.	p. 136	Will the congestion on SR-99 during construction due to loss of one lane in each direction lead to diversion to surface streets? Will transit flow be degraded? Just as tolling may lead to diversion, so would congestion lead to diversion.
L-005-032	32.	p. 139	Transit pathways need to be established between the new south portal ramp to 3rd Avenue transit spine prior to the demolition of Seneca and Columbia Street ramps. If a facility on Alaskan Way surface street is designated an interim pathway immediately following completion of the tunnel but before Central Waterfront construction is completed, east-west connections via

The travel forecasting conducted for the Final EIS indicated relatively small variations in 2015 and 2030 transit demand (measured at screenlines) among project alternatives. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of impacts to transit.

L-005-007

Please see the Final EIS and Appendix C, Transportation Discipline Report, Section 5.3 Traffic Operations at Key Arterial Intersections for the more detailed and updated traffic analysis.

L-005-008

The analysis of travel times along 2nd and 4th Avenues for the 2015 Bored Tunnel Alternative, as presented in Exhibits 2-13 and 2-14 of the 2010 Supplemental Draft EIS, includes the additional 22,000 daily trips expected to shift to city streets. Please see the Final EIS, Appendix C Transportation Discipline report for updated transportation analysis, including travel times.

L-005-009

For the traffic analysis conducted for this project, congested intersections were defined as those where drivers might wait about 1 to 2 minutes to travel through a traffic signal. Results of the analysis for the intersections of Denny Way at southbound and northbound Aurora show less than 1 minute of delay during the AM peak hour for 2015. This relatively good LOS reflects the long green time given to the high volume east-west movement. However, the north and south approaches at these intersections operate at a worse LOS than the overall intersection LOS. Please see the Final EIS, Appendix C Transportation Discipline Report, section 5.3 Traffic Operations at Key Arterial Intersections for updated transportation analysis.

L-005-032			Main/Washington St or other alternatives need to be designated as transit corridors along with intersection improvement at Washington/Main/Alaskan Way.
L-005-033	33.	p. 140	Same as page 30 above - Construction on 1st Ave S will affect transit operations. This analysis should also address other streets in the vicinity of the project where construction activities will impact transit.
L-005-034	34.	p. 166	Exhibit 7-8: Why isn't there a travel time comparison for traffic traveling on downtown surface streets rather than only via I-5 or SR 99?
L-005-035	35.	p. 168	Modeled mode share changes are invalid given lack of funding for the transit enhancements.
L-005-036	36.	p. 171	The cumulative traffic analysis needs to address the impacts on transit of signal timing and lane configuration changes on South Jackson Street resulting from the First Hill streetcar. (See KCDOT's comments on Appendix C to this SDEIS).
L-005-037	37.	p. 174	As the project will not be complete until 2017 or 2018, mitigation funding is needed to address transit impacts during these years of construction following expiration of $32 million of previously allocated mitigation funding for Moving Forward Program impacts. The combined, unfunded cost of additional delays and the need for additional transit capacity from 2013 to 2018 is estimated to total $53.3 million. Since these costs are for construction period impacts resulting from this project, the SFEIS should identify funding commitments to mitigate the state-funded portions of the program. Mitigation is also needed to address diversion-caused congestion. This is because tolls on the bored tunnel will be implemented while the central waterfront segment is still under construction. These tolls are expected to divert traffic to surface streets, resulting in additional transit delays.
L-005-038	38.	p. 200	Exhibit 8-30 and the accompanying text needs to include more information to explain the specifics of what project and program elements are included and/or excluded from the estimated costs of each alternative.
L-005-039	39.	p. 205	Inclusion of an evaluation of the impacts of potential tolling scenarios is a critical component of this analysis. As revealed by chapter 9, tolling could result in significant diversion of traffic onto other routes through downtown Seattle resulting in costly transit delays. It is important to include the impacts of tolling as part of the Bored Tunnel alternative analysis and these impacts need to be adequately mitigated.
L-005-040	40.	p. 214	Traffic diversion onto downtown streets that occurs outside the peak period will have adverse impacts for transit as roughly 50% of all transit boardings occur during off-peak travel times.
L-005-041	41.	p. 214, 215	What does "not acceptable as part of a long-term tolling solution mean?" What "other scenarios" and "reasonable optimization measures" would be evaluated, applied and analyzed? Given transit's relative travel time advantage through downtown, would transit be considered one of the optimization measures?

L-005-010

We agree that the analysis of a regional transportation corridor should assess regional impacts, including those to Environmental Justice populations. The transportation team has identified regional-level impacts and potential traffic delays associated with the different alternatives. For the Environmental Justice analysis, project staff reviewed the contributing TAZs (transportation analysis zones) and collected demographic data for each. This enabled the team to assess the demographic profile of the facility users, most of whom live outside the immediate study area. The NEPA documents also speak to the potential impacts of transit lines that bring people into the study area and/ or through it. This is important as there are national and local indicators of higher rates of transit use among low income populations.

Critical to a good Environmental Justice program, the public involvement efforts have also focused on this and related issues. Social service providers have been asked numerous questions in formal surveys. These surveys have collected data on perceived impacts to service recipients and employees, specific to commuting in from outlying areas.

L-005-011

Chapter 7 of the Transportation Disciple Report, Appendix C of the Final EIS includes information showing relatively small variations in daily transit riders at the three selected screenlines in downtown Seattle. However, the Final EIS goes on to state that as part of a long-term tolling solution, scenarios would be evaluated and reasonable optimization measures would be applied and analyzed before tolling would be implemented.

L-005-012

Your comment was made on the Summary. A more detailed discussion of how transit is affected during construction is contained in Chapter 6,

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L-005-042	39.	p. 215	#11 needs to clarify that modeling assumed one transit lane on 2nd and 4th avenues. Under tolling, transit flow would be slower and less reliable due to traffic diversion.
L-005-043	42.	p. 214, 215	When describing the delay to downtown streets, there are several occasions where the effects are described; "These effects would not be not acceptable as part of a long-term tolling solution." Is this double negative is confusing and appears to be erroneous.
L-005-044	43.	p. 215	Exhibit 9-17: The transit travel times appear to be impacted surprisingly little by the projected travel diversion caused by tolling under some tolling scenarios. For example, if general purpose traffic experiences a 20% increase in traffic volumes and 4-8 minutes of delay, how could there be no delay to transit using the same streets such as southbound on 2nd Avenue in the AM peak direction? Current experience shows that when 2nd and 4th Ave become congested, transit also slows.
L-005-045	44.	p. 215	Exhibit 9-21: Does the daily transit mode split include the transit program elements?
	45.	p. 215	Exhibit 9-21: Why is there no shift in mode share when there is an increase in transit service, an increase in the cost of travel through Seattle and when transit travel time improves significantly compared to general purpose traffic?
L-005-046	46.	p. 215	The statement "Since transit routes are designed to serve trips to downtown, while the tunnel is designed to serve trips through downtown, the impact of tolls on transit share is negligible." may be overstated. Transit networks rely on making connections, especially between high quality transit services. With frequent, reliable services being provided by the Ballard, West Seattle and Aurora Ave RapidRides, transit trips that cross Seattle will be made easier even while driving becomes more expensive.
L-005-047	47.	p. 221	Exhibit 9-26: Has WSDOT considered transit service as a potential mitigation measure for the adverse impacts of tolling on low income populations? Many of the neighborhoods on the top of the exhibit 9-26 have frequent transit services. Those services may become more significant in a tolled environment.
L-005-048	48.	p. 225	4(f)-2: Won't the Battery Street tunnel be filled in the Bored Tunnel alternative? It is listed in this exhibit as only being physically altered. Is that correct?

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Construction Effects, of the Final EIS and Appendix C, Transportation Discipline Report.

L-005-013

Chapter 6 of the Final EIS discusses construction effects on transit. Final EIS Appendix C, Transportation Discipline Report, includes further information on impacts relating to transit in Chapter 6. The reduction in speed and lane capacity during construction would affect bus operations for West Seattle and South King County bus routes serving downtown Seattle. Information developed for the Final EIS indicated that buses using SR 99 would experience slightly longer travel times during construction.

L-005-014

Chapter 6 of the Final EIS discusses effects to transit during construction. Also, Final EIS Appendix C, Transportation Discipline Report, includes information on each area of the project corridor and provides a more detailed discussion. For the central area, peak hour travel volumes are expected to increase along major arterials including Second Avenue. The magnitude of these increases would not result in high levels of congestion for most locations. The traffic management plan would provide further direction on potential approaches for addressing construction effects, including those relating to transit. Chapter 8 of the Final EIS presents the proposed mitigation measures for effects to traffic.

L-005-015

Transit enhancements during construction are further described in Chapter 2 of the Final EIS. Chapter 6 of the Final EIS Appendix C, Transportation Discipline Report, also includes information on transit enhancements.

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Comments on Appendix C, Transportation Discipline Report

L-005-049	1.	p. 20	Section 1.5.6 should discuss flow on 2nd and 4th avenues through downtown Seattle; during construction, there will be traffic diversion away from the congestion of SR-99 reduced to two lanes in each direction. Also, critical intersections on South Jackson Street and at 4th Avenue and Olive Way need to be analyzed.
L-005-050	2.	p. 26	As U Link is scheduled to be implemented in 2016, it should also NOT be included in the 2015 modeling.
L-005-051	3.	p. 30-31	Exhibit 2-2 and 2-3: Some intersections critical to downtown Seattle transit flow are not included in the analysis: 4th Avenue and Olive Way, 5th Avenue South and South Jackson Street, and Stewart Street at 2nd, 3rd, and 4th avenues. The two intersections at South Jackson Street may also be impacted by the First Avenue Streetcar project.
L-005-052	4.	p. 39	Exhibit 2-6: In 2030, The analysis should also evaluate a corridor between Ballard and the South Portal using the future Elliott/Western roadway (variant of the purple line,) because this route may provide competitive travel times with tolling.
L-005-053	5.	p. 43	Section 2.8.1: The 1st Avenue streetcar should be listed under the second set of bullets under transit elements.
	6.	p. 43	Section 2.8.2: The First Hill Streetcar, if implemented as planned could affect transit flow on and through South Jackson Street. The impact of the streetcar should be addressed under section 2.8.2 "Other Projects".
L-005-054	7.	p. 52	The *Alaskan Way Viaduct Partnership Scenario Development Documentation Portfolio 4.3: Rapid Trolley Network* should also be included as this which was developed by Metro as part of the Alaskan Way Viaduct Partnership. http://globaltelematics.com/pitf/KingCountyMetroRapidTrolleyNetworkPortfolio4-3.pdf
L-005-055	8.	p. 53	In fall 2009, the Metropolitan King County Council shifted most of the ferry district property tax to Metro Transit.
L-005-056	9.	p. 67-69	Exhibit 4-13: In spring 2010, the trip level data on SR-99 routes 5, 5X, 26X, 28X, and 358X sum to 12,100, more than the 11,900 of the text. Before the recession in fall 2008, the north portal routes attracted weekday loads of 13,200.
L-005-057	10.	p. 80	Exhibit 4-20: Note LOS F for southbound SR-99. This will be relevant for construction period when SR-99 will be reduced by one lane in each direction and in tolling period when trips will divert to the Denny Way exits.
L-005-058	11.	p. 85	Exhibit 4-29: Table does not include critical intersections for transit flow listed above in page 30 comment: 4th Avenue and Olive Way, South Jackson Street and 2nd Avenue Extension South, 4th Avenue South, and 5th Avenue South, and Stewart Street at 2nd, 3rd, and 4th avenues.
L-005-059	12.	p. 118	Passenger service between Kingston and downtown Seattle began in summer 2010.

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L-005-016

As stated in section 5.2.1 of Appendix G, Land Use Discipline Report, of the Final EIS, the Bored Tunnel Alternative would represent only one of numerous ongoing improvements occurring in Seattle. Overall, many factors influence land use decisions, including economic conditions, zoning, and land supply. Because the Bored Tunnel Alternative would replace an existing facility to meet safety requirements and the projected growth in traffic demand it is not likely to have large, if any, influences on these factors. The potential to induce growth would be minor.

L-005-017

Chapter 7 of the the Final EIS Appendix C, Transportation Discipline Report includes information on estimated travel times on Second and Fourth Avenues for tolled and non-tolled options. With the tolled options, higher travel times are identified for general-purpose traffic travel. The Final EIS states that as part of a long-term tolling solution, scenarios would be evaluated and reasonable optimization measures would be applied and analyzed before tolling would be implemented.

L-005-018

The analysis in the 2010 Supplemental Draft EIS aimed to examine conservative scenarios. Therefore the conditions during the AM and PM peak hour are reported, when traffic volumes on area roadways are typically more congested.

Please see this Final EIS and specifically Appendix C, Transportation Discipline Report, for more information regarding estimated traffic diversion due to tolling by various time periods throughout the day.

L-005-019

Tolling would cause vehicles to divert from SR 99 to other nearby roadways. The extent of the diversion and the travel patterns associated

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L-005-060	13.	p. 132	Event traffic at the Seattle Center often disrupts bus routes 3, 4, and 16 on 5th Avenue North and routes 1, 2, 13, 15, 18, 8, and 30 on 1st Avenue North.
L-005-061	14.	p. 185	Exhibit 5-29: Note low LOS for South Jackson Street intersections at 2nd Avenue Extension South and 4th Avenue South that would be degraded by the proposed First Hill Streetcar (F and D, respectively in 2030).
L-005-062	15.	p. 186	Exhibit 5-31: Note that 4th Avenue and Olive Way intersection is not analyzed and it is critical to the transit capacity of downtown Seattle, especially before 2021 when Link is expected to reach Northgate.
L-005-063	16.	p. 210	The path between Holman and SODO via the new Elliott/Western avenues connector is not analyzed.
L-005-064	17.	p. 220	Key findings could be expanded to mention the impact of traffic imposed on routes 5, 5X, 26X, 28X, and 358X (E Line) by the project.
L-005-065	18.	p. 221	The weaving required by transit is less impactful under existing conditions.
L-005-066	19.	p. 222	Exhibit 5-39: Link to UW stadium station and Capitol Hill will not be implemented until 2016, therefore after 2015. In addition, the extent of transit restructure for the 2016 UW station is unknown.
L-005-067	20.	p. 221, 224	5 year-old data is no longer "existing" and if possible, should be replaced with more current information. Also, data between September 2005 and September 2007 was anomalous because the DSTT was closed during this time for retrofit for joint bus/light rail operation. This change degraded transit and traffic performance.
L-005-068	21.	p. 226	Exhibit 5-41: This needs to explain why transit travel time is faster from West Seattle to CBD in the outbound direction in the pm peak hour.
L-005-069	22.	p. 259	The impacts of traffic diversion caused by tolling needs to be evaluated by Appendix C because tolling is consistent with the state's financing assumptions for the project. As discussed in chapter 9 of the SDEIS, tolling would result in up to 45,000 daily trips being diverted from the tunnel onto city streets and I-5. This is significant but without analyzing the impacts of tolling, the utility of the entire transportation analysis is compromised.
L-005-070	23.	p. 295, 296	Exhibits 6-12, 13: Impacts to bus layover in these areas should be addressed.
L-005-071	24.	p. 311	The First Hill Streetcar's impacts to South Jackson Street and its intersections with 2nd Avenue Extension South and 4th and 5th avenues South should be analyzed as part of the Cumulative Effects section. The project may take lanes and change signal timing.
L-005-072	25.	p. 338	Exhibits 7-17, 18: Note relatively poor LOS. Could be made worse at Denny Way by tolling and impact transit flow.
L-005-073	26.	p. 355	Exhibits 7-26, 27: Does 2015 transit ridership estimates include U Link to be implemented in 2016?

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with the diversions would be sensitive to the configuration of the facility, the available capacity on alternative routes, and the tolling implementation strategy.

With tolling, the Bored Tunnel Alternative is expected to result in a daily diversion rate of about 40 percent for all vehicle classes.

Because of their different physical configurations, the Cut-and-Cover Tunnel and the Elevated Structure Alternatives are expected to result in different diversion patterns when analyzed with tolling. The daily diversion rate for all vehicle classes for these two alternatives would be about 50 percent and 65 percent, respectively.

The Final EIS evaluates all the build alternatives with and without tolling. See Chapter 5 for current information about the project's permanent effects, including diversion.

L-005-020

Project cost estimates include provisions for construction impact mitigation. Chapter 8 of this Final EIS describes the mitigation under consideration or identified as a project commitment. The amount and type of funding for transit service as part of construction impact mitigation is currently being discussed with King County. Funding for other program elements, such as replacing the Elliott Bay Seawall, is being developed by the City of Seattle.

L-005-021

The MVET for transit has been added to the description of the agreement in the Final EIS.

L-005-022

The Chapter 4 of the Final EIS Appendix C, Transportation Discipline

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Comments on Appendix H, Social Discipline Report

L-005-074	1.	p. 81, 88	Pg 81 cites increases in local congestion, and potential for increases in transit travel times. This seems to conflict with page 88 and elsewhere where the report says "transit service would improve for areas in south downtown..."
L-005-075	2.	p. 91	Operational mitigation should discuss how to mitigate longer transit travel times for transit-dependent persons, or at least reference the transportation discipline report. All mitigation is focused on property acquisition.
L-005-076	3.	p. 132	Refers to transit enhancements that are not funded, specifically items 1, 3, and 6 in the 2nd paragraph.

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Report presents further information on transit services and facilities in the project corridor.

L-005-023

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

L-005-024

While the weaving motions would occur in the in the north area under the Bored Tunnel Alternative, they also would occur under the 2015 Existing Viaduct scenario. Additional information can be found in Final EIS Appendix C, Transportation Discipline Report.

L-005-025

The text is correct, Exhibit 5-19 in the 2010 Supplemental Draft EIS was indicating that there is less than a 1% increase.

L-005-026

For the traffic analysis conducted for this project, congested intersections were defined as those where drivers might wait about 1 to 2 minutes to travel through a traffic signal. Results of the analysis for the intersections of Denny Way at southbound and northbound Aurora show less than 1 minute of delay during the AM peak hour for 2015. This relatively good LOS reflects the long green time given to the high volume east-west movement. However, the north and south approaches at these intersections operate at a worse LOS than the overall intersection LOS.

Please see the Final EIS, Appendix C Transportation Discipline Report for updated transportation analysis.

L-005-027

The terminus of a potential Link extension would be in the vicinity of the Redondo Heights park-and-ride lot. This location is within the Federal Way city limits. ST2 still shows the Federal Way Link extension as a funded element.

L-005-028

The northbound transit only lane has been revised in the Final EIS Appendix C, Transportation Discipline Report, to extend to Harrison Street.

L-005-029

We are not sure what significant difference you are referring to. As shown in Exhibit 5-29 on pages 110 of the 2010 Supplemental Draft EIS, transit mode share to and from Seattle's City Center is expected to be similar between the 2030 Viaduct Closed (No Build) and the 2030 Bored Tunnel:

- Commute Trips = 39.6% for 2030 Viaduct Closed versus 40.5% for the Bored Tunnel
- Non-Commute Trips = 9.8% for 2030 Viaduct Closed versus 10.1% for the bored Tunnel

For commute trips the difference is less than 1% and for non-commute trips the difference is .03%. In the case of mode share and transit ridership in Seattle, the lead agencies do not agree that a difference of less than one percent represents a significant difference.

L-005-030

The land use effects of all the build alternatives are discussed in Chapters 5 and 6 of the Final EIS. The direct and indirect effects of the Bored Tunnel Alternative are discussed in section 5.2 of Appendix G, Land Use Discipline report, of the Final EIS.

L-005-031

Yes, reduction of capacity on SR 99 during construction could lead to some diversion to surface streets. Effects to transit would likely vary on a street-by-street basis depending on the level of diversion and the presence of transit-only lanes on that street.

L-005-032

The routings for buses in the south area between the SR 99 off-ramps and the Third Avenue transit spine would best be determined by King County Metro. Some direction for a connecting transit pathway could be in part determined by the central waterfront planning effort being led by the City of Seattle.

L-005-033

Chapter 6 of the Final EIS and Chapter 6 in the Final EIS Appendix C, Transportation Discipline Report, present information on travel times along major transit corridors. This information is provided for corridors evaluated in traffic models used for the Final EIS. In 2015, construction is expected to affect transit travel times with the added times of between 1 and 3 minutes in each corridor as compared to 2015 Existing Viaduct.

L-005-034

Travel times on 2nd and 4th Avenues were not provided for the cumulative effects discussion because it is not needed in order to discuss possible cumulative effects.

Expected travel times for drivers traveling on city streets - specifically 2nd and 4th Avenues were provided in the 2010 Supplemental Draft EIS and are provided in the Final EIS. Chapter 5 of the Final EIS discusses travel times during operation of the project and Chapter 6 discussed travel times during construction of the project.

L-005-035

Please refer to the introduction of the Cumulative Effects chapter of the Final EIS. The Program elements, including transit enhancements, consist of the Moving Forward projects identified in 2007 as well as improvements recommended as part of the Partnership Process. Studying the combined effects of the Project and the Program helps the public and decision-makers understand how our transportation system would function in the future when the planned improvements are completed. The traffic modeling methodology and assumptions are discussed Appendix C, Transportation Discipline Report.

L-005-036

The Final EIS Appendix C, Transportation Discipline Report, specifically the Chapter 8 discussion of cumulative effects, contains the discussion this comment requests.

L-005-037

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the

agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently WSDOT is providing funding for King County on the S. Holgate Street to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is ongoing and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system.

L-005-038

Costs are not an environmental issue per se and so are not discussed in detail in this document. Chapter 3 of this Final EIS describes the alternatives and program elements.

L-005-039

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other

agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

L-005-040

The distribution of traffic diversion over the course of the day is expected to vary greatly, even with reduced toll rates during off-peak periods. Diversion rates are expected to be greater during off-peak periods. However overall traffic volumes are expected to be less during these off-peak periods as well.

A detailed tolling analysis has been conducted for all alternatives and is described in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements. Also, please the Final EIS Chapter 8 for information regarding mitigation.

L-005-041

A detailed tolling analysis has been conducted and is described in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements, including impacts to transit and transit travel times. Results of the analysis indicate that transit travel times on Second Avenue and Fourth Avenues would benefit from bus-only lanes, as well as limited skip-stop access to bus zones along each avenue. Therefore, estimated added travel time under tolling scenarios would likely be less for buses than for general-purpose travel.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion due to tolling. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the city's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

Please see the Final EIS, Chapter 8 Mitigation, for more details regarding potential mitigation for tolling impacts.

L-005-042

The modeling includes transit lanes on Second and Fourth Avenue. A

detailed tolling analysis has been conducted and is described in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

L-005-043

The second "not" was a typo. Sentence should read: These effects would not be acceptable as part of a long-term tolling solution.

L-005-044

Modeling for the Supplemental Draft EIS indicates that increased congestion Second and Fourth Avenues would result in transit trip increases of 1 to 2 minutes. However, modeling results also indicate that transit priority treatments on Second and Fourth Avenue and peak period restrictions on Third Avenue for traffic in general purpose lanes would minimize transit travel time increases from expected diverted traffic. Please see the Final EIS and Appendix C, Transportation Discipline Report, for updated tolling analysis.

L-005-045

Transit service levels would be the same for the Bored Tunnel Alternative under tolled or non-tolled conditions. While some shifts to transit could occur as a result of tolling, many trips in the tunnel travel through downtown Seattle. Transit serves demand to and from downtown.

L-005-046

The Aurora, Ballard, and West Seattle RapidRide service cross downtown Seattle but downtown Seattle is a major market for these routes and are key parts of their service area. The service market and alignments contrast to general-purpose routes that have both start and end points outside of downtown Seattle.

L-005-047

Transit as an alternative to SR 99 with tolls is an important part of our evaluation of effects on low-income populations. This is discussed in Chapter 5 of the Final EIS and Appendix H, Social Discipline Report.

L-005-048

The Battery Street Tunnel would be decommissioned and sealed under the Bored Tunnel Alternative, which constitutes a use under Section 4(f), as noted in the Final EIS.

L-005-049

The major intersections chosen for analysis were selected based on several factors: proximity to the SR 99 corridor, location near or on SR 99 access routes, forecasted traffic volumes and existing LOS, and inclusion in previous analysis for this project. All signalized intersections along Second and Fourth Avenues, between Battery Street and S. Royal Brougham Way, were included in the travel time analysis for the build alternatives. The intersection of S. Jackson and 4th Avenue S. is included in the intersection operations section.

Specific technical data are not provided for the various construction stages, although conclusions draw from the results of preliminary analysis highlight areas where potential congestion issues may occur. Travel times on two typical routes that use the SR 99 corridor: between Woodland Park and S. Spokane Street and between Ballard and S. Spokane Street were analyzed during construction. These routes were deemed sufficient for describing the effects of construction activity on regional travel in the SR 99 corridor.

Please see the Final EIS Appendix C, Transportation Discipline Report, for updated transportation analysis.

L-005-050

The University Link project is included in the 2008 Partnership Process analysis for analysis year 2015 and was included for consistency purposes. Additionally, the inclusion of University Link better represents the transportation network for the general time period after the bored tunnel would open.

L-005-051

The major intersections chosen for analysis were selected based on several factors: proximity to the SR 99 corridor, location near or on SR 99 access routes, forecasted traffic volumes and existing LOS, and inclusion in previous analysis for this project. All signalized intersections along Second and Fourth Avenues, between Battery Street and S Royal Brougham Way, were included in the travel time analysis.

Additionally, the intersection operations on S. Jackson Street at Second Avenue and S. Jackson Street at Fourth Avenue are reported in the Final EIS. Please see the Final EIS Appendix C, Transportation Discipline Report for updated transportation analysis.

L-005-052

The new Elliott/Western Connector would be an independent project led by the City of Seattle. It is not a component of the Bored Tunnel Alternative, so the effects analysis does not assume it is in place. It is for this reason that it is not listed as a travel time route. The travel time route for the Bored Tunnel Alternative evaluation uses Alaskan Way in this section.

The Elliott/Western Connector Project is considered in Chapter 7, Cumulative Effects, of the Final EIS.

L-005-053

The Final EIS Appendix C, Transportation Discipline Report has been revised to clarify the references to services and facilities.

L-005-054

The documentation identified in the comment has been included in the Final EIS Appendix C, Transportation Discipline Report.

L-005-055

The reference in the Transportation Discipline Report involves planning efforts relating to passenger-only ferry service.

L-005-056

The numbers provided in the exhibit were derived from the travel demand model. Although several steps are taken to align forecasts with observed data, discrepancies will still be evident. Furthermore, the model estimated transit ridership of 11,900 on SR 99 was for the year 2005, as stated in the exhibit title. The numbers provided by King County Metro for comparison are for different years: 12,100 for spring 2010 and 13,200 before the recession in autumn 2008. Thus, the numbers are not directly comparable, as it is expected that transit ridership would increase over time, especially during the summer of 2008 when gas prices rose dramatically. Nevertheless, the exhibit which referenced SR 99 transit ridership has been removed from the Final EIS, since it was decided that transit ridership forecasts are better presented at the screenline level.

L-005-057

Updated analysis has been included in the Final EIS and uses 2015 Existing Viaduct as the baseline scenario. The southbound SR 99 section north of the Battery Street Tunnel under 2015 Existing Viaduct would operate at a LOS F. For the Bored Tunnel Alternative construction stage 5 traffic analysis, refer to Chapter 6 of the Final EIS

Appendix C, Transportation Discipline Report. Slower speeds north of Aloha Street than under 2015 Existing Viaduct conditions are discussed. Chapter 7 of the Final EIS Appendix C, Transportation Discipline Report also discusses that southbound SR 99 would operate at a LOS F north of the Bored Tunnel for the AM peak hour Tolled Bored Tunnel Alternative,

L-005-058

The major intersections chosen for analysis were selected based on several factors: proximity to the SR 99 corridor, location near or on SR 99 access routes, forecasted traffic volumes and existing LOS, and inclusion in previous analysis for this project. All signalized intersections along Second and Fourth Avenues, between Battery Street and S. Royal Brougham Way, were included in the travel time analysis.

Please see the Final EIS, Appendix C Transportation Discipline Report for updated transportation analysis.

L-005-059

The Port of Kingston passenger-only service is included in this Final EIS.

L-005-060

The effects of event traffic on transit performance near Seattle Center were not explicitly investigated as part of the traffic analysis and planning effort. However, it is recognized that the high concentrations of traffic that typically develop before and after Seattle Center events will likely continue to impact traffic flow and slow down transit vehicles. As such, appropriate traffic control measures will be needed to ensure that all travel markets and modes are accommodated during event periods. The project improvements in the north end of the study area would provide greater options for access to/from Seattle Center with new crossings of SR 99 between Denny Way and Mercer Street.

L-005-061

Impacts directly associated with the City of Seattle's First Avenue Streetcar project are documented in that project's Environmental Checklist: http://seattlestreetcar.com/firsthill.asp.

L-005-062

The major intersections chosen for analysis were selected based on several factors: proximity to the SR 99 corridor, location near or on SR 99 access routes, forecasted traffic volumes and existing LOS, and inclusion in previous analysis for this project. All signalized intersections along Second and Fourth Avenues, between Battery Street and S. Royal Brougham Way, were included in the travel time analysis.

L-005-063

The new Elliott/Western Connector would be an independent project led by the City of Seattle. It is not a component of the Bored Tunnel Alternative, so the permanent effects analysis does not assume it is in place. It is for this reason that it is not listed as a travel time route. The travel time route for the Bored Tunnel Alternative evaluation uses Alaskan Way in this section.

The Elliott/Western Connector Project is considered in Chapter 7, Cumulative Effects, of the Final EIS.

L-005-064

Several bulleted items in the summary refer to potential effects on bus routes serving the north area of the project corridor.

L-005-065

The text in the Final EIS has been revised.

L-005-066

The University Link project is included in the 2008 Partnership Process analysis for analysis year 2015 and was included for consistency purposes. Additionally, the inclusion of University Link better represents the transportation network for the general time period after the bored tunnel would open.

While the transit restructure for University Link is not currently defined, some assumptions were made for how existing transit services would integrate with LRT. Assumed bus routing changes and truncations were consistent with other recent planning- and environmental-level studies, including the Sound Transit 2 Plan and the cumulative effects analysis in the Supplemental Draft EIS for the SR 520, I-5 to Medina: Bridge Replacement and HOV Project.

L-005-067

The 2005 existing conditions analysis was updated for the Final EIS to reflect a base condition of the 2015 existing viaduct. Refer to Chapter 4 Affected Environment in the Final EIS Appendix C, Transportation Discipline Report.

L-005-068

In the 2010 Supplemental Draft EIS, travel times in the PM peak period would be less for the 2015 Project as compared to the 2015 Existing Viaduct because traffic would no longer be using congested westbound Columbia Street to access SR 99. Also, having buses use the new stadium area ramps would increase transit service and coverage in the area south of downtown Seattle. Travel times would likely be the same for both the 2015 Existing Viaduct and the 2015 Project if buses exit via S. King Street. However, with the 2015 Project, some time savings over general-purpose travel is expected to occur for transit vehicles with the northbound bus-only shoulder lane between S. Holgate Street and the S. Royal Brougham Way off-ramp. For this segment, transit travel times are

reflected, whereas general-purpose travel times are reflected for the rest of the West Seattle/downtown Seattle corridor. Please refer to the Final EIS Appendix C, Transportation Discipline Report, for updated information and additional detailed analysis of transit travel times.

L-005-069

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

L-005-070

Any affected bus layover spaces would be addressed by the construction traffic management plan which would include procedures to identify and incorporate the needs of transit operators. WSDOT will be preparing the construction traffic management plan for the selected alternative as construction plans are refined.

L-005-071

The intersection operations on S. Jackson Street at Second Avenue and S. Jackson Street at Fourth Avenue are reported in the Final EIS. Please see the Final EIS Appendix C, Transportation Discipline Report, for the updated transportation analysis.

L-005-072

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to

Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

L-005-073

Transit person-trip volumes for 2015 include University Link.

L-005-074

Thank you for your comment about transit travel times. Appendix H, the Social Discipline Report for the Final Environmental Impact Statement, has been reviewed for these types of inconsistencies and rectified as appropriate.

L-005-075

Thank you for your comment about operational mitigation for longer transit travel times for transit-dependant persons. A reference has been added to Appendix C, the Transportation Discipline Report, within Appendix H, the Social Discipline Report.

L-005-076

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

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December 13,, 2010

Angela Freudenstein
Washington State Department of Transportation (WSDOT)
Alaskan Way Viaduct Replacement Project SDEIS
999 Third Avenue, Suite 2424
Seattle, WA 98104

Email address: awv2010SDEIScomments@wsdot.wa.gov

Re: Comments on the Second Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project

Dear Ms.Freudenstein:

The Washington State Major League Baseball Stadium Public Facilities District (PFD) appreciates the opportunity to review and comment on the SR 99 Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft Environmental Impact Statement (2010 SDEIS). We commented on the scope of this 2010 SDEIS in July 2009. We also commented on all of the prior environmental review documents for the project, including the original draft EIS (June 8, 2004) and first supplemental draft EIS (September 22, 2006). We look forward to seeing responses to all of our comments in the final EIS.

The Washington State Major League Baseball Stadium Public Facilities District (PFD) is the public entity that developed and owns the ballpark known as Safeco Field. The PFD is responsible for overseeing this public asset and for ensuring that the public's investment in the ballpark is not compromised.

Safeco Field is located just to the east of the Viaduct project. The project's south portal for the deep bore tunnel is located just blocks from the main entrances to the ballpark. As we noted in our previous comment letters, Safeco Field and our tenant the Seattle Mariners will be directly affected by the proposed construction activities, including road closures, detours, traffic congestion, and loss of daily parking and event parking.

The PFD continues to be concerned that project construction could have significant adverse impacts on our facility and our operations if appropriate mitigation measures are not implemented. In addition to the comments we made previously, we would like to highlight the following items for response in the final EIS:

L-006-001

Automobile ingress and egress: As a spectator sports facility, the continued success of Safeco Field turns in large part on our baseball fans and patron's ability to access our facility. While we understand that facility access will be affected during the period of project construction, we would like to continue to work with WSDOT and the City on appropriate mitigation planning, especially during events. We have had a productive relationship in working together during the SR 519 construction (phases 1 and 2), and we look forward to continuing that kind of close coordination.

L-006-002

Pedestrian Access and Fan Safety: Safeco Field is a major pedestrian venue, especially on game days and major event days. Many fans and patrons use Alaskan Way and First Avenue S. for commuting from the ferry terminal and other waterfront locations. The final EIS should include detailed mitigation plans for ensuring continued safe pedestrian access to Safeco Field during the period of construction.

L-006-003

Parking Mitigation: The SDEIS describes the significant loss of 360 parking spaces in the South Portal area, including the loss of 200 off-street parking spaces on the WOSCA property. As described in the Seattle Mariners' comment letter, this parking loss is especially significant on event days. Combined with the Holgate to King Street Viaduct Replacement project, parking losses in the South Downtown area resulting from the viaduct replacement total hundreds of stalls. This loss of parking is both concentrated and substantial. Moreover, the SDEIS misstates the number of replacement stalls that are available in the area. Recent construction at the former Home Plate parking lot has resulted in the loss of approximately 300 additional stalls.

The mitigation identified in the SDEIS—"publicity and signage directing drivers . . . . to appropriate parking locations"—is insufficient. Given the potential significance of the impact, the final EIS should identify as a potential mitigation measure the full replacement of this lost parking in the south downtown area. Following completion of the project, the WOSCA property may provide a potential location for relocating this lost parking, perhaps in an elevated parking structure. The 2010 SDEIS does identify a $30M mitigation fund that could be dedicated to this purpose, but that amount is likely to be insufficient to mitigate this and all of the other project impacts.

L-006-004

Alternative Transportation Modes:
Responding to the loss of transportation capacity caused by the viaduct replacement will require the use of a variety of different transportation modes. The 2010 SDEIS describes a number of 'independent' projects that 'complement' the bored tunnel alternative. Included among these is the First Avenue Streetcar evaluation, which was recommended by the Partnership Process described in the 2010 SDEIS. We believe that this project has merit and should be evaluated as a potential mitigation measure to help address the loss of traffic and pedestrian access that will be caused by project construction and the long-term decrease in roadway capacity with the tunnel alternative.

L-006-001

As an on-going task for the overall planning and design effort, the project team will continue to communicate and coordinate with the Mariners and Seahawks organizations as well as the affected SODO businesses to ensure that reasonable measures are in place to accommodate trips during large sporting events. The proposed Stadium Area ramp connections to/from the north essentially relocate the existing First Avenue S. ramp connections to the frontage road at S. Royal Brougham Way. Therefore, traffic volumes on S. Atlantic Street or S. Royal Brougham Way east of First Avenue S. are not expected to substantially change, even for larger sporting events at Qwest Field or Safeco Field. However, it recognized that the revised SR 99 connections to/from the north and new SR 99 connections to/from the south would result in changes in travel patterns, redirecting some traffic from First Avenue S. to the frontage road and sections of S. Atlantic Street and S. Royal Brougham Way west of First Avenue S. It is also recognized that the removal of downtown ramps for the Bored Tunnel Alternative (preferred alternative) would add traffic to the SODO area. WSDOT will be preparing a construction traffic management plan for the selected alternative as construction plans are refined.

L-006-002

Pedestrian access will be maintained throughout construction. Temporary access limitations and any required changes to access during construction will be mitigated to the extent practicable and in conjunction with the affected businesses and residents. Pedestrian access during construction will continue to be addressed in the on-going construction impacts evaluation and through on-going work by project staff. In addition, WSDOT will be preparing a construction traffic management plan for the selected alternative as construction plans are refined.

L-006-005

South Portal Options: The PFD has reviewed the two options for the South Portal, and we support the preferred alternative with the single Dearborn Intersection.

L-006-006

We would like to close by renewing our commitment to work with WSDOT, the City, and all of the project partners regarding mitigation planning for implementing this major project. We believe that if we work together on mitigation planning, the impacts of construction and long-term operations can be reduced. Thank you for your consideration.

We also note that our tenant, the Seattle Mariners, has submitted a separate comment letter. The PFD has reviewed that comment letter and joins in the concerns and issues raised by the team.

Again, we appreciate the opportunity to comment, and we look forward to working with WSDOT, the City of Seattle and the consultant team as this important project proceeds. If you have any questions, please give our Executive Director, Kevin Callan, a call at (206) 664-3076 or (206) 767-7800.

Sincerely,

Dale R. Sperling, Board Chair

Cc: PFD Board Members
Kevin Callan, Executive Director
Tom Backer, Legal Counsel
Bart Waldman, Seattle Mariners
Susan Ranf, Seattle Mariners

L-006-003

The spaces already removed and accounted for in the S. Holgate Street to S. King Street Viaduct Replacement Project environmental documentation are considered, by definition, an existing condition for the purposes of the analysis conducted for the Final EIS. However, the parking spaces that could have been replaced after S. Holgate Street to S. King Street Viaduct Replacement Project completion were accounted for in the Supplemental Draft EIS and continue to be reflected in the Final EIS. The S. Holgate Street to S. King Street Viaduct Replacement Project Environmental Assessment showed about 800 parking spaces on the WOSCA site that were affected by that project. Several hundred more spaces were identified on the parcels to the south of WOSCA. Approximately 200 parking spaces could have been replaced on WOSCA but are precluded by the Bored Tunnel Alternative so have been counted as a parking loss for the Bored Tunnel Alternative.

The Home Plate Development was acknowledged in the Supplemental Draft EIS and continues to be reflected in the Final EIS to be associated with a loss of approximately 300 parking stalls in the stadium area while construction of that development is underway.

Specific parking mitigation strategies have not yet been determined, but the project has allocated $30 million for parking mitigation. The parking mitigation strategies will continue to evolve in coordination with the project and community partners. Parking measures under consideration are listed in Chapter 6 of the Final EIS Appendix C, Transportation Discipline Report.

L-006-004

The City of Seattle is leading planning for its streetcar system, including a potential route on First Avenue. Your support of this route has been brought to their attention.

L-006-005

Thank you for your support, the preferred Bored Tunnel Alternative includes the new intersection at S. Dearborn Street and Alaskan Way S.

L-006-006

Thank you for your continued commitment and coordination with the program team. Mitigation, like project plans, evolve and are refined though the development process. Continuing analysis and working with affected parties, like the Public Facilities District, helps to further develop mitigation measures. Chapter 8 of the Final EIS discusses the current mitigation measures for the project. The lead agencies will continue to refine, or identify new, mitigation measures and work with affected businesses and residents throughout the project's design and construction process.

City of Seattle

Seattle Department of Transportation — Peter Hahn, Director

December 13, 2010

Paula J. Hammond
Secretary of Transportation
Washington State Department of Transportation
P.O. Box 47316
Olympia, WA 98504-7316

Re: Additional Alaskan Way Viaduct Replacement Project Supplemental Draft Environmental Impact Statement Review

Dear Secretary Hammond:

L-007-001 The public comment period for the Alaskan Way Viaduct Replacement Project (AWVRP) Supplemental Draft Environmental Impact Statement (SDEIS) review ends on December 13, 2010. As you are well aware, the primary purpose of this SDEIS is to bring the Bored Tunnel Alternative to a level of analysis comparable to the other alternatives studied in the DEIS in 2004 and first supplemental in 2006. As a co-lead with the Washington State Department of Transportation (WSDOT) for the SDEIS, the City has commented on the methodology used in the SDEIS analysis and on the preliminary draft document as it has been developed. In addition to this early and frequent involvement, City departments have summarized the impacts to the City of the Bored Tunnel Alternative again.

City departments have identified eight primary concerns with the SDEIS that should be addressed in the Final Environmental Impact Statement (FEIS), below. Additional detailed comments from each department are attached.

Impacts Related to Tolling

L-007-002 The State's budget assumes that $400 million will be derived from tolling the Bored Tunnel Alternative. Analysis of tolling to date indicates that a significant amount of traffic will divert to City streets in the vicinity of the portals, on Alaskan Way along the redeveloped Central Waterfront and throughout the downtown. Additional analysis of tolls is needed in the FEIS, including analysis for both 2015 and 2030, as well as with the full Alaskan Way Viaduct Replacement Program. This analysis needs to identify measures to mitigate the effects of diversion and the funding needed for mitigation.

Impacts Related to Settlement

L-007-003 Settlement near the surface along the bored tunnel alignment could cause damage to private buildings, utilities, City streets and other public infrastructure. The FEIS should more carefully catalogue both the primary and secondary impacts of settlement to the City. In addition, the City and WSDOT have agreed

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L-007-001

As noted, City of Seattle staff have been directly involved in helping develop the substantive basis for this Final EIS. The staff have provided extensive reviews and been very helpful in developing a complete and robust analysis. In that regard, the analysis provided in this letter is essentially the same as the comments already received and incorporated in the technical analysis reported in the Final EIS. They are included here to insure the public and decision makers (including the City of Seattle) has a complete record.

L-007-002

A detailed tolling analysis has been conducted for all alternatives and is described in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements. These analyses have been prepared in close coordination with staff from the Seattle Department of Transportation. The potential effects resulting from these preliminary analyses represent the conservative end of implementing tolls on SR 99. We anticipate that any effects due to applying tolls to the Bored Tunnel Alternative will be notably less than those described in the Final EIS analysis.

As part of the Bored Tunnel Alternative and related projects in the program, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

WSDOT funded Intelligent Transportation System (ITS) investments provide improved signal operations and travel time information on SR 99

L-007-003 to mitigation measures in the pending project MOAs between SCL, SPU, SDOT and WSDOT. Those mitigation measures should be incorporated into the FEIS.

Impacts Related to Ground Stabilization Measures

Soil improvements and stabilizing measures may be needed along the bored tunnel alignment to protect existing structures and utilities from settlement and to strengthen existing soil. WSDOT should include a more detailed evaluation in the FEIS of the cumulative effects of groundwater mounding due to these potential soil improvements and cut-and-cover tunnel sections. This evaluation should include analysis of the potential for any structures to be permanently impacted by the change in water flow so that pumping, addition of deep foundations to resist uplift, or other permanent measures might be needed.

Impacts to Traffic During Construction

L-007-004 Bored Tunnel Alternative construction is projected to limit access, including transit access, to downtown at the north and south portal areas and across Aurora Avenue N in the north portal area, as well limit travel through downtown on SR 99 because of temporary lane reductions. These changes in traffic patterns are projected to have a particular impact during events and peak travel periods. The FEIS should identify mitigation measures to help keep traffic moving during construction such as expand Intelligent Transportation System and traveler information programs to manage event and other traffic.

Greenhouse Gas Emission-Reduction Targets

L-007-005 Because the State and City have adopted or are considering adopting emissions reduction goals, rather than strictly regulated targets, the environmental review of the project is not technically required to take them into account. However, the AWVRP is one of only a few major transportation projects that have the potential to help the City and State reach these emissions reduction goals. The SDEIS analysis concludes that the Bored Tunnel Alternative will not help us move toward the State's or the City's goals for carbon-neutrality.

Climate Change Adaptation

L-007-006 The potential impacts of climate change do not appear to have been considered in the SDEIS. These future impacts include sea level rise, precipitation and stormwater changes, and temperature increases. Any long-term infrastructure project should carefully consider scientific models for potential impacts of climate change in Seattle and the project should be designed to adapt to those impacts.

Project Funding

L-007-007 The State capped its contribution to the AWVRP at $2.8 billion dollars. The Port of Seattle has pledged to contribute $300 million for a total of $3.1 billion. The contingencies set aside in this budget may be too low, and there is little included in the budget for mitigation. The potential impacts of the project running over budget or the Port of Seattle not providing the $300 million needed for the project are not addressed. This is a significant concern to the City of Seattle, as we can only assume that elements

and city streets such as 15th Avenue NW that are likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management have also been implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the bored tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to monitor and provide input to this analytical and decision-making process, including identification of strategies considered for alleviating diversion impacts.

L-007-003

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. Potential settlement issues are discussed in the 2010 Supplemental Draft EIS and this Final EIS. Chapter 6 of both documents discusses the soil improvements and stabilization measures that are necessary along the bored tunnel alignment to protect existing structures and utilities from settlement and to strengthen existing soil so that it can better accommodate tunnel construction.

The potential for groundwater mounding is being considered through monitoring. Design elements, such as providing a path for groundwater

L-007-007 important to the City, such as the street grid connections at the tunnel portals or the new Alaskan Way surface street, would be the first to be eliminated from the project. We believe that the EIS should identify and examine the potential impacts of the project if significant elements are underfunded. In addition, we remain concerned about the legislature's stated intent that all costs over the $2.8 allocated by the State and $300 million, if provided by the Port of Seattle, would be borne by Seattle-area property owners.

Alternatives to the Bored Tunnel

L-007-008 Finally, while most of the stakeholder advisory committee members participating in the 2008 collaborative process supported a recommendation to move forward with the bored tunnel, many of them also recommended that the I-5, Surface, and Transit option be analyzed further as either their first or second choice. Unfortunately, the I-5, Surface, and Transit Alternative was eliminated from further consideration in the SDEIS. As a result, there is no affordable viaduct replacement alternative if the bored tunnel is abandoned due to cost overruns or other construction-related problems.

I look forward to the coordination of your staff at WSDOT with SDOT and other City departments to ensure that these concerns, and the more detailed comments attached, are addressed in the development and review of the FEIS.

Sincerely,

Peter Hahn, Director
Seattle Department of Transportation

Cc: Ron Paananen, Alaskan Way Viaduct Replacement Program Administrator
Robert Powers, Deputy Director, Seattle Department of Transportation
Seattle City Councilmembers

through the retaining walls or ground improvement zones, will be incorporated into the project to avoid this effect, if determined necessary during final design.

L-007-004

Overall construction effects of each of the alternatives are described in this Final EIS and in Appendix C, Transportation Discipline Report. For environmental documentation purposes, the stage of construction with the greatest combination of traffic restriction and duration was analyzed quantitatively while the overall construction activities were described qualitatively. During construction standard maintenance of traffic during construction plans will be developed, communicated with the general public, and implemented during project construction.

Compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, the preferred Bored Tunnel Alternative avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a comparison of trade-offs for the three alternatives.

As part of the Bored Tunnel Alternative and related projects, WSDOT and partner agencies have or will implement several strategies to keep traffic moving during construction. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the city's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

Because operational effects of the built alternative would be substantially better than the Viaduct Closed (No Build Alternative), long-term

transportation mitigation measures are not anticipated. However, a number of mitigation measures in place during construction could have benefits over the longer term. Refer to Chapter 8 Mitigation in the Final EIS for details.

L-007-005

The law setting the VMT benchmarks directs WSDOT to “adopt broad statewide goals to reduce annual per capita vehicle miles traveled by 2050 consistent with the stated goals of Executive Order 07-02.” The state law does not require individual projects to set VMT reductions. WSDOT is working statewide on the requirements in Executive Order 09-05 in conjunction with a working group established for this purpose because the cumulative greenhouse gas impacts of transportation projects are best addressed at a system-wide level where multiple projects can be analyzed in aggregate, such as in regional transportation plans. This project is included in PSRC’s Regional Transportation Plan, Transportation 2040, which considered greenhouse gas emissions along with other transportation objectives.

Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Discipline Report. Differences among the build alternatives are negligible. All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative).

L-007-006

Project engineers have studied current data on climate change, global warming and possible sea level rise and concluded that the seawall provides enough room to protect the bored or cut-and-cover tunnel from rising sea levels. The Final EIS contains updated information on climate change projections for the region and how they were considered. This is described in Chapter 7 of this Final EIS. Existing conditions are included

City of Seattle

Seattle Department of Transportation — Peter Hahn, Director

MEMORANDUM

DATE: December 8, 2010

TO: Peter Hahn, Director, Seattle Department of Transportation

FROM: Robert Powers, Deputy Director, Seattle Department of Transportation

SUBJECT: **Alaskan Way Viaduct Supplemental Draft Environmental Impact Statement**

I. Introduction

L-007-009

On October 29, 2010, the Second Supplemental Environmental Impact Statement (SDEIS) for the SR 99 Alaskan Way Viaduct Replacement Project was released for a 45-day public review and comment period ending December 13. The SDEIS names the Bored Tunnel Alternative as the preferred replacement alternative. In response to a request of November 8 from SDOT Director Peter Hahn (subsequently modified on November 17), this memo has been developed to provide the City of Seattle executive branch with analysis of the Bored Tunnel Preferred Alternative on which to base potential future requests for mitigation commitments in the Final Environmental Impact Statement (FEIS). The FEIS is scheduled to be released in June of 2011.

In order, this memo addresses the following topics:

a. A catalogue of impacts of the Bored Tunnel Alternative to the City of Seattle including both impacts of the tunnel to the transportation network and those impacts related to settlement during tunnel construction and accompanying potential mitigation measures for all impacts,
b. Cost estimates for the suggested mitigation measures, along with an initial analysis of the availability of funds to implement the measures, (all cost estimates provided are highly preliminary, as these projects have not gone through a formal project scoping process),
c. A summary of the Bored Tunnel Alternative project components and costs ($3.1 billion) with a detailed description of those project components of most interest to the City, such as reconnecting the street grid at the north and south portals and constructing a new Alaskan Way surface street,
d. A description of the remaining high-level policy issues related to the SDEIS and Preferred Alternative, and
e. A preliminary synopsis of public comments received at the SDEIS public hearings (November 16-18, 2010) and official comments submitted in writing.

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in Chapter 4 of the Final EIS.

The project has taken into account current information on climate change and what is reasonably expected to occur for the life of the project. The engineers also considered the possible threat of tsunamis during the design process. The environmental documentation for the project has been prepared in compliance with the National Environmental Policy Act (NEPA)(42 U.S.C. 4322(2)(c), the State Environmental Policy Act (SEPA)(Ch. 43.21 C RCW), and is consistent with WSDOT guidance. WSDOT's guidance, which was issued in 2009 and revised in October 2010, is posted online at: http://www.wsdot.wa.gov/Environment/Air/Energy.htm.

L-007-007

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 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.

Although costs are an important part of project planning and decision-making, they are purposely not a major part of the environmental review

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December 8, 2010

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II. Impacts to the Transportation Network

Table 1 (attached) lists the transportation-related impacts associated with the bored tunnel alternative for the AWVRP and accompanying potential mitigation measures for each impact. As noted above, the costs for implementing the mitigation measures are highly preliminary, as these projects have not gone through a formal project scoping process.

III. Impacts Related to Settlement

Soil improvements and stabilizing measures may be needed along the bored tunnel alignment to protect existing structures and utilities from settlement and to strengthen existing soil so that it can better accommodate tunnel construction. WSDOT has estimated settlement amounts near the surface along the proposed tunnel alignment to range between 0 to 3 inches with maximum settlement predicted to occur within the southernmost 1,300 feet of the tunnel bore alignment. WSDOT's anticipated design-build contract will require the contractor to make its own estimate of settlement and assess risks to utilities, buildings and other structures.

Potential Damage Due to Settlement and Required Mitigation

The following monitoring and construction practices are anticipated to broadly mitigate tunnel settlement impacts to utilities, buildings and other structures, and WSDOT's design-build contract requires these measures as project mitigation:

- Pre- and post construction surveys of the conditions of utilities, buildings and roadway structures.
- Analysis of the predicted ground deformation and consequential displacement of structures.
- Project-wide, comprehensive ground deformation instrumentation and monitoring.
- Executive oversight of tunneling performance and mitigation of settlement impacts.

Table 2, below, describes facility-specific settlement impacts and the corresponding mitigation tools that could meet the performance levels that WSDOT's design-build contract also currently requires.

Item	Facility or Facility Type	Mitigation
1	Private buildings that based on their condition and exposure to settlement require mitigation before construction.	• Permeation and jet grouting • Preemptive building modifications • Traditional building underpinning
2	Private buildings that based on their condition and exposure to settlement require mitigation	• Compensation grouting • Compaction grouting • Contact grouting under foundation slabs

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process. As provided in 40 CFR 1502.23 "For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations." Overall project costs are included with the project description and are used for the analysis of economic impacts.

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

L-007-008

The Final EIS Chapter 2, Alternatives Development, describes the history of the project, including development of the Purpose and Need and alternatives. This chapter also addresses development of the I-5,

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Item	Facility or Facility Type	Mitigation
	during construction.	• Expedited building repairs
3	Utilities that require mitigation prior to construction. Examples: cast iron watermains within areas predicted to exhibit high rates of settlement.	• Utility retrofit or replacement on existing alignment • Structural improvements to vaults and manholes
4	Utilities that require mitigation during construction.	• Operate certain pressurized utilities at reduced flow as the tunnel boring machine approaches, passes beneath, and until monitoring shows continued settlement is approaching zero. • Contingency planning: assemble troubleshooting teams and equipment, and stockpile materials to accommodate expedited repairs to damaged utilities
5	Public infrastructure that require mitigation before construction. Examples: Alaskan Way Viaduct, King County's EBI Tunnel	• Structural underpinning • Structure retrofits • Jet grouting
6	Public infrastructure that require mitigation during construction. Examples: Elliot Bay Seawall, SR 99 Columbia Street On-ramp, Seattle Monorail	• Ground freezing • Jet grouting • Compensation grouting • Compaction grouting
7	City streets	• Expeditious repair of damaged pavement • Regrading and replacement of street pavement that has settled sufficiently to hinder proper drainage. • Reinstall street lights, trolley poles and signal poles that have deflected due to surface settlement.

Assignment of Settlement Risk: City/WSDOT Relationship

The City has negotiated several risk management measures related to the potential impacts of tunnel-induced settlement, including assigning State responsibility for remedying damage and placing limits on

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Surface, and Transit Hybrid. After the purpose and need statement was updated in 2009, design concepts were reevaluated and screened to determine the alternatives to be evaluated in the 2010 Supplemental Draft EIS. The Surface and Transit Hybrid concept was screened out because the lead agencies determined it did not meet the project's purpose and need because it reduced mobility for trips heading to and through downtown and it reduced north-south capacity. The evaluation of the Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS.

L-007-009

This introductory information was provided by Robert Powers to Peter Hahn. Policy issues are addressed in the subsequent comments.

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City liability. These measures are included in the pending Memoranda of Agreement with the State to try to avoid settlement impacts. These MoA provisions establish the State's responsibilities to minimize and remedy settlement impacts to City facilities and third party property, as summarized by the following:

- "The STATE is responsible for taking measures to minimize, limit, and mitigate damage to private property and CITY Facilities including CITY streets, CITY telecommunications facilities and UTILITY Facilities that may result from the PROJECT construction, including damage that may result from tunnel-induced Deformation. The STATE is responsible for remedying such damage should it occur." [Draft SDOT-State MoA, Section 2.9]
- The State is responsible for identifying public and private property that is vulnerable to damage due to settlement, and preparing a plan for minimizing settlement in the vicinity of such property.
- The State shall design and implement a comprehensive monitoring program including pre- and post-construction surveys.
- The State must implement a settlement monitoring Task Force empowered to make rapid changes to tunneling and other construction activities with the purpose of mitigating the impacts of settlement.
- The State's settlement monitoring shall extend beyond the completion of tunnel construction.
- The SPU-State MoA establishes maximum thresholds for watermain displacement due to settlement.
- The MoAs include general and specific limits of liability for the City including the following:
  - No City liability for technical and regulatory assistance with the project.
  - No City liability for delay
  - Specified general indemnification

Assignment of Settlement Risk: WSDOT/Design-Builder Relationship

Another mechanism WSDOT has used to limit potential impacts to the City of tunnel-induced settlement is the risk allocation terms in WSDOT's contract with the design-build contractor.

WSDOT has incorporated a risk sharing mechanism in the tunnel design-build contract, as well as contractor incentives intended to promote practices that minimize settlement and damage due to settlement. The contract contains allowable maximum ground deformation limits (maximum settlement) for various facility types.

Where a facility is damaged due to settlement within the deformation tolerances, WSDOT will direct the contractor to repair the damage and assumes the cost of the repairs. WSDOT has reserved the right to

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alternatively employ other resources to remedy damage, or otherwise compensate an owner for damage.

Where a facility is damaged due to settlement exceeding the deformation tolerances, WSDOT will direct the contractor to repair the damage at the contractor's sole expense. WSDOT has reserved the right to alternatively employ other resources to remedy damage, or otherwise compensate an owner for damage.

Sufficiency of Funding for Settlement Mitigation Activities

The tunnel contract includes a Deformation Mitigation and Repair Fund of $20 million in addition to the funds the contractors have included in their bids to address settlement mitigation. SDOT does not know the amount set aside in the sealed bids. As an incentive to the contractor, the contract will establish that WSDOT and the contractor split any unused portion of this Fund with the contractor receiving 75% of the remaining fund amount. This Fund can be used for pre-emptive, preparatory measures, as well as repair of public and private damaged by ground movement.

Because SDOT does not know the amount set aside for settlement mitigation or the contractor's proposed approaches to minimize settlement risk we are not currently able to analyze the sufficiency or availability of funding for this $20 million set-aside. As noted below, there are remaining concerns regarding the availability of funds for the bored tunnel project as a whole.

IV. Summary of Project Components and Costs

L-007-009 The current WSDOT estimate for the Bored Tunnel Alternative is $3.1 billion. The components and cost estimates for the tunnel are shown in the table below.

Bored Tunnel Alternative Costs	
SR 99 Bored Tunnel Alternative Costs (in millions)	
Design Build Contract Price Limit	$1,090
Allocated for Inflation*	$110
Allocated for Bonding and Insurance*	$100
Transfer of Scope from South Access Contract	$50
SUBTOTAL	**$1,350**
WSDOT Controlled Risk*	$205
TOTAL AVAILABLE FOR TUNNEL CONTRACT	**$1,555**
Engineering, Right-of-Way, North and South Access Contracts	$455
SUBTOTAL	$2,010
City Reimbursement for Utility Relocation in Design-Build Contract	-$50
TOTAL CENTRAL WATERFRONT VIADUCT REPLACEMENT	**$1,960**
Holgate to King Project	$470
Other Moving Forward and Prior Expenditures	$351
Viaduct Demo and Alaskan Way Surface Street	$290
Construction Mitigation	$30
TOTAL STATE RESPONSIBILITY	**$3,108**

*Total of $415 million risk allocation fund.

As part of the full $3.1 billion estimate the State has committed $290 million to improvements of particular importance to the City. The $290 million estimate has not been updated since January 2009, when the agreement between Governor Gregoire, former Mayor Nickels and former County Executive Sims was reached to pursue the Bored Tunnel Alternative. It was developed using parametric methods,

L-007-009

and the design has not been significantly advanced since that time. The scope of improvements included in the $290 million includes:

- Alaskan Way from South King to Pine Streets
- New street connection from Pike to Battery Streets, including street connections at Elliott and Western Avenues via surface intersections.
- Demolition of the existing viaduct from South King Street to the Battery Street Tunnel.
- Demolition of the on and off ramps to the existing viaduct at Columbia and Seneca Streets and reconstruction of Columbia and Seneca between Alaskan Way and First Ave.
- Decommissioning of the Battery Street Tunnel, including the roadway on retained fill from Western to First Avenue.
- The Marion Street pedestrian bridge replacement.

Potential Project Cost Overrun Impacts

The State has capped its contribution to the AWVRP at $2.8 billion dollars with a $300 million contribution from the Port of Seattle for a total responsibility of $3.1 billion. However, the unprecedented nature of the bored tunnel as the largest of its kind in the world means that there are no peer projects against which to compare risk and contingency rates in the project cost estimate and confirm that $3.1 billion is sufficient. Despite this fact, WSDOT has already allocated approximately 50% of the $415 million risk allocation fund originally set aside for emergencies and unanticipated conditions on the project. The lack of comparable projects globally leaves uncertainty as to whether this $205 million reserve is sufficient. In addition, no allowance for additional mitigation beyond that identified in the SDEIS or as part of the Moving Forward projects is included in the $3.1 billion. Should additional mitigation be needed, such as mitigation for diversion due to tolling, WSDOT has no project funding with which to provide it.

Potential impacts to Seattle of the project running over budget include leaving portions of the AWVSR Program incomplete, particularly connections to the Seattle street grid at the tunnel portals or the new Alaskan Way surface street as both those scope items occur near the end of the Bored Tunnel Alternative proposed construction schedule. An additional potential impact of the project costs going over budget is, of course, the Washington State Legislature requiring Seattle area property owners to pay for cost overruns per ESSB 5768.

V. Policy Issues

In contrast to the sections above which assume that the Bored Tunnel Alternative is the preferred alternative, this section re-emphasizes ongoing Executive Branch concerns about the general approach to the SDEIS and Alternative development.

I-5, Surface and Transit Alternative

L-007-010 The State will need to make major investments in I-5 in the near future to replace aging pavement. This investment could also provide an opportunity to make operational improvements to move people and goods through Seattle more efficiently on I-5, and those improvements could be part of a system approach to replacing the Alaskan Way Viaduct.

In 2008, as part of the collaborative process led by the City, WSDOT and King County, three alternatives were identified as potential candidates to replace the Alaskan Way Viaduct: the bored tunnel, an elevated highway on the waterfront, and an I-5, surface and transit option. While most of the stakeholder advisory committee members supported a recommendation to proceed with the bored tunnel, many of them also recommended that the I-5, Surface, and Transit option be analyzed further as either their first or second choice. However, the SDEIS eliminated the I-5, Surface, and Transit Alternative from further consideration. As a result, there is no acceptable viaduct replacement alternative if the bored tunnel is abandoned due to cost overruns or other construction-related problems.

Traffic Modeling Approach and Assumptions

L-007-011 The typical approach to traffic modeling applied in the SDEIS may understate the performance of the I-5, Surface and Transit scenario. The FEIS analysis should include a more comprehensive modeling approach where the outcome of the future is not dependent on modeling assumptions and algorithms based on past performance. We know that our decisions regarding transportation affect land use patterns, and land use decisions affect transportation. However, the land use patterns, or allocation of growth, are fixed in the SDEIS analysis. It assumes that the next 20 years of growth will occur with an SR 99 freeway through downtown Seattle, rather than projecting how the City and region might grow over the next 20 years with a different viaduct replacement solution.

The Puget Sound Regional Council has been developing and testing a land use model that interacts with the travel demand model to predict growth patterns at the parcel level. This model should be applied to all alternatives, including the I-5, Surface, and Transit scenario, to better understand the effects of the transportation alternatives on future land use patterns and how the resulting land use patterns ultimately affect performance of the transportation system.

Another concern with the traffic modeling approach is the disconnect between the travel demand model and the operational model. The travel demand model estimates traffic volumes on arterial streets and highways based on generalized estimates of travel times, applying traffic demand to estimated street/highway capacity through an iterative process. The traffic demand is then input to the operational model, which simulates traffic operations at an intersection-level and estimates delays and

L-007-010

The purpose and need of the project have been clearly articulated, and if for some reason the bored tunnel is not constructed, one of the other build alternatives (Cut-and-Cover Tunnel or Elevated Structure) could be implemented. The Surface and Transit option would still fail to meet the stated purpose and need; see the Surface and Transit Scenario Year 2030 Analysis Results included in Appendix W, Screening Reports, of the Final EIS. Responses to other comments in this letter address cost overruns and potential construction problems.

L-007-011

The traffic modeling methodology and assumptions are discussed the Final EIS Appendix C, Transportation Discipline Report. Chapter 2, Alternatives Development, of the Final EIS describes the history of the project, including development of the Purpose and Need, and how the alternatives have been developed, including the the I-5, Surface, and Transit Hybrid. The evaluation of the Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS.

Regarding alternative methods of evaluating transportation and land use effects, as noted in this comment this approach is under development by PSRC and is not ready for application. The City of Seattle was instrumental in identifying and refining the transportation model used for this project.

Chapter 2 also describes additional traffic analysis completed for the surface and transit hybrid concept. The traffic analysis supports the reasons for dropping this concept from further consideration in the 2010 Supplemental Draft EIS. This concept was screened out because it lacked the capacity to serve the long-term needs of the region and does not meet the project's purpose and need to provide capacity to and through downtown Seattle; the City of Seattle was a partner in this

L-007-011 travel times. Often, in an urban setting with a grid of signalized intersections, the travel demand model under-estimates travel times. This results in over-estimation of traffic demand, which can lead to over-estimation of traffic delays in the operational model. In addition, the lower-than-expected travel times for auto trips in the travel demand model can lead to an under-estimation of the potential shift to transit.

Greenhouse Gas Emissions and Air Quality Analysis

L-007-012 As noted above, the land use assumptions used with the travel demand model were fixed in the SDEIS analysis. Along with impacting the model's projected mode split, travel times and vehicle miles traveled (VMT), fixing land use changes also impacts projected greenhouse gas emissions insofar as they are associated with VMT. Unless land use changes are also modeled, it is not possible to gain an accurate understanding of emissions associated with different transportation scenarios.

In addition, the air quality analysis that was used in the SDEIS relied on a "speed bin" analysis where vehicles moving at lower speeds are assumed to emit higher levels of pollutants. Uniform fuel efficiency for the regional vehicle fleet is assumed. However, speed bin analysis may lose relevancy as vehicle technology changes and increasing numbers of hybrid or electric vehicles permeate the regional vehicle fleet.

City and State goals for Carbon Neutrality

L-007-013 The State legislature established goals to reduce per capita vehicle miles traveled (VMT) to 18% below baseline by 2020, 35% by 2035, and 50% by 2050. The Seattle City Council is considering adoption of the State's VMT reduction goals as a Comprehensive Plan amendment in 2010. This amendment will be followed by a more rigorous analysis of future VMT reduction goals through the City's Climate Plan update.

The Alaskan Way Viaduct Replacement Project is one of only a few major transportation projects that have the potential to help the City and State reach these VMT reduction goals. However, the SDEIS analysis indicates that the bored tunnel will not help us move toward the State's goals nor the City's goals for carbon-neutrality.

Transit Funding

L-007-014 The transit funding identified when the proposed bored tunnel alternative was identified by the Governor, the County and the City was intended to provide additional service in 2016 when the tunnel is projected to be operational. The funding identified was $190M in initial capital costs and $15M in annual operating costs.

process. Please see Chapter 2 of the Final EIS for the full discussion related to how this concept was considered.

L-007-012

The law setting the VMT benchmarks directs WSDOT to "adopt broad statewide goals to reduce annual per capita vehicle miles traveled by 2050 consistent with the stated goals of Executive Order 07-02." The state law does not require individual projects to set VMT reductions. WSDOT is working on this task and related tasks in Executive Order 09-05 in conjunction with a working group established for this purpose because the cumulative greenhouse gas impacts of transportation projects are best addressed at a system-wide level where multiple projects can be analyzed in aggregate, such as in regional transportation plans. This project is included in PSRC's Regional Transportation Plan, Transportation 2040, which considered greenhouse gas emissions along with other transportation objectives.

Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Discipline Report. Air Quality Impacts are assessed in Appendix M, Air Quality Discipline Report. All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative). However, greenhouse gas emissions are predicted to increase by 2030 for all build alternatives because of the increases in future vehicular volumes.

L-007-013

The 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). Climate change is addressed appropriately and consistent with WSDOT guidance. This project is included in PSRC's Regional Transportation Plan, Transportation 2040, which considered

L-007-014 The regional PSRC model assumes steadily increasing growth in the region and in particular increasing employment in Downtown Seattle. For the proposed bored tunnel alternative, the proposed increase in service is primarily intended to provide access to and from Downtown to accommodate the projected increase in employment. All of the scenarios developed as part of the 2008 Stakeholder Advisory Committee process included some level of increased transit service to serve projected growth in Seattle and the region.

The Letter of Agreement between the State, County and City on January 13, 2009 stated that, "The total estimated cost of this work for King County is $190 million in capital and $15 million in annual operating expenses which shall be paid for through a countywide 1% Motor Vehicle Excise Tax imposed by the King County Council for transit services." The State Legislature did not support the recommended funding and no other funding options have been identified for this transit portion. Without this critical program element, the region's ability to handle future growth is compromised.

Tolling

L-007-015 The State's budget assumes that $400 million will be derived from tolling. Analysis of tolling to date indicates that a significant amount of traffic will divert to city streets. No measures have been identified to address this diversion. Additional analysis of tolls is needed, including analysis for both 2015 and 2030, as well as with the full Bored Tunnel Program. This analysis needs to identify measures to mitigate the effects of diversion and the funding needed for mitigation.

In addition to concerns about unmitigated impacts of tolling the deep bored tunnel, SDOT notes that WSDOT's approach to tolling is not consistent with recommendations from Seattle's recently completed tolling study. In contrast to the SDEIS tolling analysis, the Seattle tolling study recommends consideration of other potential goals for tolling, such as improving travel times for people and goods, managing congestion, reducing GHG emissions and improving access to the Center City. This document provides a good overview of Seattle's interests as they related to tolling policy generally and SR 99-related tolling more specifically. It will help inform Seattle's participation in the Tolling Advisory Committee, a group to be set up to guide the tolling scenarios for the tunnel.

For instance, Seattle's tolling study gives recommendations on future analysis of tolling related to the AWV replacement and the Center City, including a systematic approach to tolling; variable tolling; and funding transit. It is anticipated that these measures would result in:

- Less peak period VMT and reduced GHG emissions
- Less auto traffic diversion onto City streets
- Better regional access and mobility

greenhouse gas emissions along with other transportation objectives. As noted in this comment, Seattle has not yet adopted its own goals and analysis of proposals still subject to change would be speculative.

The law setting the VMT benchmarks directs WSDOT to "adopt broad statewide goals to reduce annual per capita vehicle miles traveled by 2050 consistent with the stated goals of Executive Order 07-02." The state law does not require individual projects to set VMT reductions. WSDOT is working on this task and related tasks in Executive Order 09-05 in conjunction with a working group established for this purpose because the cumulative greenhouse gas impacts of transportation projects are best addressed at a system-wide level where multiple projects can be analyzed in aggregate, such as in regional transportation plans. Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Discipline Report. Please refer to the Final EIS for current information.

L-007-014

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently, WSDOT is providing funding for King County on the S.

L-007-015

The projected results above fit with Seattle's long-term goals for tolling. To reduce GHG emissions and slow climate change, the Seattle tolling study states that tolling plans should:

- ***Improve transit and freight reliability.*** By reducing traffic volumes and congestion, tolls can produce better bus reliability, which improves the relative competitiveness of buses compared to cars. Reduced congestion and freight access to tolled lanes reduces costs for freight.
- ***Set variable tolls for different times of day.*** Variable tolls can be dynamic and adjust to congestion levels. Tolls can also be predictably variable, so users know the price when making the decision to drive or use transit.
- ***Generate revenue for transit.*** Transit operations should be considered part of operating the facility, as toll revenue could provide a steady and sustainable revenue source for subsidizing transit, and transit can provide a reliable alternative to driving on the facility. Transit also increases the person capacity of the roadway.
- ***Emphasize and maximize the throughput of people and goods versus the throughput of vehicles.*** Provide dedicated lanes for transit when tolls are fixed rate; meter drive-alone access to HOT lanes to maintain transit, HOV, and freight mobility; and set tolls to maintain reliable transit times and be higher than comparable transit fares.
- ***Be implemented systematically and regionally.*** Broader tolling across a linked regional network can maximize efficiencies and reduce inequitable impacts to communities, such as diversion to untolled facilities.

In addition to those key elements that will reduce greenhouse gas emissions, tolling plans should:

- ***Be equitable and just.*** Tolling plans should provide users with a reasonable alternative to paying the toll. Reasonable alternatives may include improved transit service and increased transit reliability; they may also include toll discounts for certain disadvantaged users.
- ***Maintain or improve the economic vitality of downtown Seattle, the region, the port and the state.*** Variable tolling worldwide has shown improved GDP in charge areas. Reduced congestion can encourage increased investment and increased land values in city centers.

VI. SDEIS Hearing Summary

Holgate Street to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is ongoing and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County. However, WSDOT will work with the County to identify funding sources for the service originally contemplated in the January 2009 agreement.

L-007-015

A detailed tolling analysis has been conducted for all alternatives and is described in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements. The potential effects resulting from these preliminary analyses represent the conservative end of implementing tolls on the SR 99. We anticipate that any effects due to applying tolls to the Bored Tunnel Alternative will be less than those described in the Final EIS analysis. These results of this analysis, described in the Final EIS and Appendix C, Transportation Discipline Report, address the specific points in this comment.

As part of the Bored Tunnel Alternative and related projects in the program, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's

AWV SDEIS
December 8, 2010

L-007-016

On November 16, 17 and 18, three public hearings were held on the SDEIS in West Seattle, Ballard and Downtown. The purpose of the meetings was to introduce analysis on the Bored Tunnel Alternative, answer questions from attendees and collect public comment. Attendees were given the opportunity to provide comment in writing and ask questions with WSDOT and SDOT staff one-on-one. All public comments received by WSDOT by December 13 will be responded to in the Final Environmental Impact Statement. Four SDOT staff members attended the hearings. A summary of the tone of the three meetings, consistent themes and public questions and concerns raised is below. Summaries of the individual hearings are included as **Attachment 1.**

Tone of the Hearings

- The hearings were relaxed and conversational with a focus on conveying information and attendees were generally polite.
- SDOT staff spoke with about 30-40 people.
- Attendees at the downtown hearing were mostly from the consultant community.

Consistent Themes

- Many attendees voiced tunnel opposition and/or concerns about the tunnel. Most of those opposed to the tunnel thought the State should retrofit the existing viaduct or build a replacement structure.
- Some attendees were clearly expecting a public forum where they could voice their concerns in front of a group of people.

Public Questions and Concerns

- Attendees had questions regarding tolling, including why the presentations described conditions with a non-tolled tunnel. Those attendees with questions tended to be concerned that the presentations were not informative, as tolls will be required and general concerns about the cost of tolls.
- Attendees had questions regarding access to downtown and the portal area designs.
- Attendees had questions about other projects such as Spokane Street Viaduct project, the Port of Seattle's East Marginal Way project, traffic operations of Holgate to King, Central Waterfront project and the Mercer West project.

Page 12 of 12

Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

WSDOT funded Intelligent Transportation System (ITS) investments provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that are likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management have also been implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the bored tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to monitor and provide input to this analytical and decision-making process, including identification of strategies considered for alleviating diversion impacts.

L-007-016

Thank you to the SDOT staff who attended the public hearings. Responses to public comments received at these meetings are included in this Final EIS Appendix T, 2010 Supplemental Draft Environmental Impact Statement Comments and Responses.

City of Seattle

Alaskan Way Viaduct Bored Tunnel SDEIS

Department Comments

SEATTLE DEPARTMENT OF PLANNING AND DEVELOPMENT

L-007-017

1) Compare the Draft EIS to the City's SEPA procedures. Determine if the statement of purpose and need, the consideration of alternatives, the disqualification of transit based solutions and the evaluation methods used pass muster under our SEPA standards.

When the purpose and need statement was revised, did that change the analysis or conclusions about mode splits, the number of people moved, or travel time? Please identify these or any other important changes in the technical analysis.

2) Review the preferred alternative against comprehensive plan goals and policies to determine if it supports complete streets, mode split targets, and reduced car dependence.

Complete Streets: This should be reviewed by SDOT, as the City's Complete Streets Ordinance requires SDOT action when capital improvements are made.

Mode splits: Although the Comp Plan has adopted mode splits for urban centers, SDOT will be able to assess more concretely how the project may or may not affect those mode splits. The EIS shows that expected transit usage in and mode splits in the corridor to be essentially the same with either the Viaduct or the tunnel by 2015.

Car dependence: how a project may or may not encourage or discourage the individual behavior or car dependence is not information that is typically produced in an EIS.

3) Determine if the preferred alternative helps or hinders downtown neighborhoods in achieving growth and density targets.

The project has no measurable effect on Comp Plan growth targets. The number of developable property takes is very small and will not affect the ability of neighborhoods to accommodate their targets.

4) Assess how the preferred alternative affects Pioneer Square and SLU/Queen Anne neighborhoods, including effects on their character and ability to achieve neighborhood plan goals.

The project will have little or no practical effect on how neighborhoods will be able to achieve their adopted neighborhood plan goals. DPD asks that WSDOT provide additional details about the various alternatives' traffic impacts on 1st Avenue S. as it passes through Pioneer Square, and any potential adverse impacts on that neighborhood's functioning and character, including through directed traffic patterns resulting from the tolling.

1 |

L-007-017

City of Seattle staff reviewed the revised purpose and need statement and the 2010 Supplemental Draft EIS to ensure it met the City's environmental policies and procedures (Seattle Municipal Code, Chapter 25.05) for implementing SEPA.

The environmental documentation for the project has been prepared in compliance with the National Environmental Policy Act (42 U.S.C. 4322(2)(c) and the State Environmental Policy Act (Ch. 43.21 C RCW). Appendix G, Land Use Discipline Report reviews the Bored Tunnel Alternative's relationship to the many plans and regulations that are applicable to the project. The review includes Seattle's Comprehensive Plan. Please refer to the Final EIS and Appendix G, Land Use Discipline Report, for current information.

Chapter 5, Permanent Effects, of the Final EIS discusses the transportation analysis for both the tolled and non-tolled alternatives as well as effects to historic resources. A Memorandum of Agreement, which is attached to Appendix I in the Final EIS, also addresses effects and specific mitigation measures to historic resources.

L-007-017 **Note that because there is federal funding, the project is subject to Sec. 106 of the National Historic Preservation Act and section 4(f) of federal environmental law. This means WSDOT will need an MOA to cover mitigation of impacts on historic and park properties. The MOA will need to be signed by the City ; WSDOT; the Advisory Commission for Historical Preservation, and possibly invited parties such as the Alliance for Pioneer Square.**

5) The effects of tolling on traffic:

(a) The Tolling Chapter notes that tolling is likely to increase congestion and delay on city streets. To mitigate this, the chapter indicates that "reasonable optimization measures would be applied" prior to implementation of tolling. It is recognized that application of particular measures at specific locations cannot be identified without further analysis, but the chapter should indicate what types of measures might be implemented to reduce the impacts of tolling. In a broad sense, how effective are such measures apt to be?

(b) This chapter also notes that surface streets are more congested during peak periods and, therefore, traffic is less apt to divert from a tolled facility to surface streets during the peak periods, and relatively more apt to divert during the non-peak periods. If the optimization measures mentioned above are implemented, to what extent might this, by reducing peak period congestion, make surface streets relatively more attractive during peak periods and thereby more prone to diverted trips avoiding a toll? How would this affect estimates of vehicle volumes using surface streets (or I-5) and what could be the impacts of these volumes on travel time, travel delay, levels of service on surface streets, etc?

6) Assess how risk of ground settlement or altered ground water flows could affect structural stability of public and private buildings to determine if the City is adequately protected from liability for any damage that may occur.

WSDOT should consider a more detailed evaluation of the cumulative effects of groundwater mounding due to soil improvements, cut-and-cover tunnel sections and the bored tunnel. Will any structures be permanently impacted by the change in water flow so that pumping, addition of deep foundation to resist uplift, or other permanent measures might be needed? Is there a potential for groundwater mounding on the west side of the tunnel (including south portal structures and cut-and-cover section) due to tidal action?

SEATTLE CITY LIGHT

Below are SCL comments, organized by topic descriptions and identifying sections where the SDEIS fails to include sufficient information or provides conclusions that do not appear to be supported by information available to SCL.

L-007-018 I. Limited Access Areas and Impact on Utilities

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L-007-018

Appendix K, Public Services and Utilities Discipline Report reviews potential impacts on utilities. The Bored Tunnel Alternative is being designed to accommodate the utilities currently located in the project areas, where feasible. Relocation would be performed according to agency regulations, utility provider requirements and appropriate best management practices (BMPs). Coordination with utility providers is ongoing to prepare for emergency repair situations and address potential mitigation. Please refer to the Final EIS and Appendix K for current information.

L-007-018 Proposed "Limited Access" areas are being developed and are concentrated near the bored tunnel portals and tunnel control buildings, and these areas may be revised during design of the bored tunnel.

Impacts to electrical (and other) utilities in areas designated as Limited Access are not documented in the SDEIS. Although we understand an effort will be made to avoid relocation of utilities into Limited Access areas, it appears inevitable that some relocated utilities that are moved to accommodate construction, as well as some existing utilities, will end up within the Limited Access areas. The impacts to SCL include the following:

The State could deny, delay or control the times that SCL has access to their electrical facilities, restricting maintenance, inspection and repairs, and possibly electrical reliability.

Appropriate places for these impacts to be described in the SDEIS include:

Page 25-Public Services and Utilities
Currently the SDEIS states "Long-term operations are not expected to restrict utility capacity, disrupt utility service or impair access or maintenance functions. The Bored Tunnel Alternative is being designed to address access and maintenance concerns of various utility providers, and efforts are being made to reduce conflicts wherever possible."

This statement reflects a lack of the substance needed at this stage of review. Documentation of the basis for stating disruptions and other impacts "...are not expected..." and "...efforts are being made to reduce conflicts..." is needed in the SDEIS.

Page 26-Mitigation for Permanent Effects
In the event the above potential impacts cannot be nailed down, there needs to be some provisional mitigation determined that would alleviate significant conflicts that could occur.

Page 123-Question 22: How would public services (such as police and fire) and utilities be affected? Utilities paragraph. The response is a repeat of information on page 25.

Page 128-How would we develop mitigation plans, and what types of mitigation measures could be utilized?
If efforts are being made to reduce utility conflicts (see pg 25) there is no indication that these effects will be avoided or minimized through design.

Page 191-Question 12: How would land use effects compare?
This should include comparison of how Limited Access would vary between the alternatives.

II. Settlement

L-007-019 Generally, bored tunnel-induced settlement is an area of concern to the City. Provisions around settlement are detailed in the pending Project MOAs between SCL, SPU, SDOT and WSDOT.

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L-007-019

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. Potential settlement issues are discussed in the Final EIS. Chapter 3, question 13, discusses the soil improvements and stabilization measures that are necessary along the bored tunnel alignment to protect existing structures and utilities from settlement and to strengthen existing soil so that it can better accommodate tunnel construction.

L-007-019 Anticipated contract provisions governing the design-build contractor's responsibility for settlement are detailed in SDOT's accompanying memo.

Settlement is lightly touched upon throughout the SDEIS usually in reference to buildings. A discussion of how settlement amounts were established and the risk of "unexpected" settlement occurring is needed. Given the significance this impact could have on all structures within the bored tunnel project area, including underground and overhead utilities, it should be directly and thoroughly addressed with mitigation measures clearly identified.

The impacts to electrical utilities due to excessive settlement could include the following:

- Newer, underground facilities could be damaged diminishing their usefulness for future capacity. Cables within these newer facilities would be likely to remain in service, though power outages could occur.
- Older, underground electrical facilities would be vulnerable to failure and power outages could occur.
- Services entering customers' vaults could be stressed resulting in outages.
- Overhead poles could be damaged and compromised.
- Secondary consequences would result if another utility (for ex. a water main) fails near electrical equipment.

Universal mitigation measures for the electrical facilities include; surveying of specific facilities prior to and after tunnel construction, some ground improvements to support the utility (though other ground improvements could have impacts on electrical utilities), supplementing the utility's standard parts inventory so equipment is available in the event of significant failure or damage, and settlement monitoring during boring.

Appropriate places for this (settlement) impact to be identified in the SDEIS are:

Page 34-What other effects would there be during construction? Add Settlement as a topic.

Page 35-Utilities: Expand upon this section. More than just traffic signals may be compromised by settlement.

Page 35-How would construction effects be mitigated? Add mitigation measures to be taken in the event of excessive settlement.

Page 142-Question 18: Would settlement during construction affect surrounding areas? Expand upon the protective measures being taken to protect utilities.

L-007-019 Page 152 Construction Mitigation: Add a complete discussion about settlement mitigation.

Page 197 Question 22: How do other construction effects compare (concerning the alternatives)?
Add a comparison of settlement impacts.

III. Construction Impacts on Access and Response Times affecting Safety

L-007-020 Construction impacts on access and response times during a fire, or other events threatening life and safety, should be addressed. This should include emergency access and response associated with the failure of electrical utilities due to construction or weather.

Appropriate places for this to be identified in the SDEIS are:
Page 30 and page 141; add a question on how response time and access for fire, life and safety are affected by the construction.

IV. Limitation of Electrical System Capacity Improvement Capability

L-007-021 The portal areas where the tunnel would emerge and the cut and cover section after the tunnel emerges have impacts to utilities that are not discussed. The close proximity of the tunnel underground and the lack of ground cover in the cut and cover areas, prohibit the ability of the utility to upgrade or increase capacity of the existing utilities and limit or greatly increase the effort needed to route adjacent utilities needed to increase capacity of the utility in the surrounding areas. Additionally, the close proximity of the North portal to the SCL Broad Street Substation limits the number of feeders exiting the substation

V. Electrical Energy Use during Construction and Operation

L-007-022 The new electrical load requirements for long term operation of the tunnel alternatives are significant, having significant impacts over the life of the project. The electrical requirements occurring during construction for the boring machine would add substantially to electrical requirements for that alternative.

SCL has requested the calculations for electrical energy estimates including ventilation and lighting, and for the boring machine. These calculations have not been provided and this limits our ability to provide meaningful review, or determine what statements are accurate and appropriate for the high level summary contained in the SDEIS.

We want to acknowledge that additional text on methodology has been added to the Final Environmental Impact Statement review draft of the Appendix R Energy Discipline Report, however the calculations that are represented as being contained in Attachment B only leads to a note that the file is too large to include and the calculations are "...available on request." SCL again requests the calculations pertaining to electrical energy.

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L-007-020

Potential construction impacts on access and response times including safety are discussed in Appendix K, Public Services and Utilities Discipline Report. Please refer to the Final EIS and Appendix K for current information.

L-007-021

Appendix K, Public Services and Utilities Discipline Report, of the Final EIS reviews potential impacts on utilities. The Bored Tunnel Alternative is being designed to accommodate the utilities currently located in the project areas, where feasible. Relocation would be performed according to agency regulations, utility provider requirements and appropriate best management practices (BMPs). Coordination with utility providers is ongoing to prepare for emergency repair situations and address potential mitigation. Please refer to the Final EIS for current information.

L-007-022

The energy required for each construction area was estimated based on horsepower requirements, equipment energy usage, equipment load factors, and construction schedule. Appendix R, Energy Discipline Report reviews the energy that would be used during construction and operation of the Bored Tunnel Alternative. Please refer to the Final EIS for current information. The Energy and Greenhouse Gas Calculations attachment to Appendix R was provided to Seattle City Light for the 2010 Supplemental EIS.

L-007-022 Overall, this topic needs more than cursory treatment in the SDEIS. This includes the acknowledgement of substantial and significant electrical needs and possible mitigation including minimizing new electrical load through efficiency improvements and conservation.

VI. Other Comments

L-007-023 Page 8 S. Massachusetts St to Railroad Way S Electrical Line Relocation Project
The statement that the electrical lines needed to be relocated off the viaduct to protect the downtown's power supply in the event of an earthquake needs revision for accuracy. To be accurate, the electrical lines were relocated to accommodate the removal of the southern portion of the viaduct, and so the Holgate to King Project could proceed.

Page 133 Question 5; How would the bored tunnel section be built? Add a bullet that says "Relocate conflicting utilities and structures".

Page 134 Question 6; How would the Bored Tunnel Alternative be built a north portal? Add a bullet that says "Relocate conflicting utilities and structures".

Page 170 Alaskan Way and Central Waterfront Improvements: Acknowledge utility relocations are part of the projects.

SEATTLE PUBLIC UTILITIES

1. **Project assumptions and goals:**
   - No Comment

2. **The range of alternatives being considered:**
   - No Comment

L-007-024 3. **The thoroughness and integrity of analysis for the preferred alternative:**
   - The 2010 SDEIS incorporates previous analysis of past alternatives by reference as well (2004 DEIS and 2006 SDEIS). In general the document does a satisfactory job describing the existing conditions and an adequate job of identifying potential direct impacts to utility infrastructure. However the document is silent on the potential secondary (indirect) environmental impacts (i.e. if a water or sewer main were broken impacts to: surface water quality; habitat or sediment; infrastructure such as foundations, footings, roads; potential public health and safety (illness, injury or death); and historic or cultural resources) which may occur should there be damage to an SPU watermain, wastewater or stormwater pipe/facility. This comment applies to all alternatives analyzed in the environmental documents and is not limited to the preferred alternative of the bored tunnel. While documentation of secondary impacts at this level of detail typically is not included in an environmental review document, the risks of utility failure caused by settlement in this case warrant inclusion of the information.

6 | Page

L-007-023

The statement on pg. 8 of the 2010 Supplemental Draft EIS for the S. Massachusetts Street to Railroad Way S. Electrical Line Relocation Project is correct, but the removal of the lines from the existing viaduct does accommodate planned viaduct replacement, as this comment suggests. This text has been revised in the Final EIS to acknowledge this.

Appendix K, Public Services and Utilities Discipline Report, of the Final EIS reviews potential impacts on utilities. The Bored Tunnel Alternative is being designed to accommodate the utilities currently located in the project areas, where feasible. Relocation would be performed according to agency regulations, utility provider requirements and appropriate best management practices (BMPs). Coordination with utility providers is ongoing to prepare for emergency repair situations and address potential mitigation. Please refer to the Final EIS for current information.

L-007-024

The 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). This includes discussion of indirect effects for all build alternatives, to the extent that they can be determined at this time.

Inadvertent damage to underground utilities could occur during construction; this possibility is disclosed in Chapter 6 of the Final EIS. As stated in that chapter, coordination with utility providers is ongoing to prepare for emergency repair situations and develop the measures necessary to address such a situation. Although such incidents do not occur frequently, they could temporarily affect services to customers of the affected utility while emergency repairs are being made. The project team will prepare a consolidated utility monitoring, protect-in-place, and relocation plan to address existing, temporary, and new locations for

L-007-024

- SPU's previous reviews of the draft Discipline Reports associated with the SDEIS identified issues or comments that were submitted to WSDOT. Our review of the SDEIS itself and the FEIS Discipline Reports are finding that our earlier comments and issues have not been adequately addressed in either the SDEIS or the FEIS Discipline Reports. These include issues such as potential secondary environmental impacts of a broken watermain or wastewater main (see below).

L-007-025

4. **The integrity of description of harms, risk and negative impacts to the public interest within the City of Seattle for the preferred alternative:**
   - The 2010 SDEIS is silent on the potential secondary (indirect) environmental impacts, i.e. surface water quality impacts if a wastewater main is broken; habitat or sediment impacts; impacts to infrastructure such as foundations, footings, roads; potential public health and safety impacts (illness, injury); impacts to historic or cultural resources, which may occur if an SPU watermain, wastewater or stormwater pipe facility were damaged. This comment applies to all alternatives analyzed in the environmental documents and is not limited to the preferred alternative of the bored tunnel.
   - SPU has in the past submitted a number of comments associated with harm, risks and negative impacts to public interests within the City resulting from review of the SDEIS Discipline Reports and because these comments have not been adequately addressed in the SDEIS and the FEIS Discipline Reports, we are continuing to forward detailed comments on these documents to WSDOT through the current review process. We can make these comments available if desired.

L-007-026

5. **The potential impacts and liability to the City for any problems that may emerge at any stage of construction or operation of the preferred alternative:**
   - The recently negotiated, but as-yet unsigned, Memoranda of Agreement (MOA) have established that the State is liable for all costs of utility failures due to tunneling, and of damages associated with such failures.
   - The SDEIS assumes decommissioning of the Battery Street Tunnel without removal of the steel beams that support the lid. This will create a future liability for SPU and other City departments by increasing subsurface construction costs significantly.
   - The 2010 SDEIS identifies many potential direct environmental impacts; however, many potential secondary (indirect) impacts were not satisfactorily identified or analyzed.

L-007-027

6. **The overall ability of the preferred alternative to provide benefit to Seattle, be completed within the state's capped budget, and avoid potential harms to safety, the environment, public assets and historic or cultural resources within Seattle.**
   - See the responses to the other questions.
   - *Benefit to Seattle:* Any of the alternatives, including the preferred alternative, provide benefit to Seattle as described in the 2010 SDEIS, as well as previously published environmental documents referenced in the current SDEIS.
   - *State's Capped Budget:* No comment.

utilities. This plan would need to be reviewed and approved by the affected utility providers before construction. Please refer to Chapter 8 in the Final EIS for the discussion of mitigation during construction.

L-007-025

The 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). This includes discussion of indirect effects for all build alternatives, to the extent that they can be determined at this time.

Inadvertent damage to underground utilities could occur during construction; this possibility is disclosed in Chapter 6 of the Final EIS. As stated in that chapter, coordination with utility providers is ongoing to prepare for emergency repair situations and develop the measures necessary to address such a situation. Although such incidents do not occur frequently, they could temporarily affect services to customers of the affected utility while emergency repairs are being made. The project team will prepare a consolidated utility monitoring, protect-in-place, and relocation plan to address existing, temporary, and new locations for utilities. This plan would need to be reviewed and approved by the affected utility providers before construction. WSDOT and the City held a meeting in December 2010 where the agencies met to resolve thise issue. Please refer to Final EIS Appendix K, Public Services and Utilities for the discussion of mitigation during construction.

L-007-026

The 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). This includes discussion of indirect effects for all build alternatives, to the extent that they can be determined at this time. Viaduct demolition would generate approximately 107,000 cubic yards of

L-007-027

- *Avoid Harm:* The SDEIS identifies some of the potential harm to safety, environment, public assets, and historic or cultural resources, but is silent on potential secondary (indirect) environmental impacts associated with utility damage and potential impacts to safety, environment, public assets, historic or cultural resources.
- *Written Agreement:* Many of the issues in this question are more appropriately addressed in the MOA between the City and State, rather than the SDEIS. The MOA could be considered an important mitigation tool.

L-007-028

7. **Assess risk from possible ground settlement and other ground disruption to all the underground infrastructure including, but not limited to, utility lines and vaults, vulnerable gas and high-voltage transmission lines, pipes for water and sewage.**
   - The 2010 SDEIS provides an assessment of the likely ground settlement associated with the tunneling that is consistent with SPU's consultant's assessment. The proposed mitigation strategy for utilities, including pre and post-construction inspection, targeted pre-emptive replacement or protection, continuous settlement monitoring, leak detection for watermains, and contingency plans, is a reasonable approach, and it considers the varying risk of settlement-related problems along the tunnel alignment. Discussion of potential impacts associated with problems such as over-excavation during tunneling, which could cause excessive localized settlement with a higher risk of severe utility failure including watermain breaks and sewer failures is only discussed briefly, and not in any depth, in the discipline reports (Alternatives Description & Construction Methods Discipline Report, and Earth Discipline Report) and not in the main SDEIS itself. The Final EIS should address the risks of over-excavation in more detail than is included in the SDEIS.
   - SPU acknowledges that failures such as over-excavation are the exception rather than the rule, but recent experience (Sound Transit Beacon Hill Tunnel and King County Brightwater Tunnel) would suggest they ought to be discussed in greater detail. It is our understanding that the monitoring program for the tunneling operation includes all reasonable measures to avoid such problems, and to provide as early warning as possible if problems do arise. SPU anticipates being involved in the proposed monitoring task force. Furthermore, SPU has proposed reducing water flow in the water mains overlying the bored tunnel during the period when settlement is most likely, thus reducing the magnitude and consequences of any watermain failure resulting from tunnel-related settlement. Implementation of such an approach is complex and potentially costly and would require State funding. No agreement has been reached on its implementation.
   - There are various methods of reducing the risks of utility failure such as ensuring extremely tight control over tunneling operations, extending the scope of pre-emptive utility replacement or protection, providing 24/7 standby utility crews throughout tunneling operations to respond quickly to failures. The additional costs to implement such measures may be out of proportion to the value of the reduced risk. Regardless, the SDEIS does not discuss such measures in depth.

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material, primarily broken concrete and reinforcing steel that would need to be hauled away and disposed of. Some of the concrete may be used to fill the Battery Street Tunnel if the Bored Tunnel Alternative is chosen. This option for disposal of material would be further addressed during the final design process.

L-007-027

The 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). This includes discussion of indirect effects for all build alternatives, to the extent that they can be determined at this time. Chapter 6 of the Final EIS discloses the possibility of utility damage during construction. As stated in that chapter, coordination with utility providers is ongoing to prepare for emergency repair situations and to develop the measures necessary to address such a situation.

L-007-028

Several major construction activities could cause temporary disruptions to utility service customers within the project areas; however, to the extent possible these outages would be planned in advance and affected customers would be notified. Coordination with utility providers is ongoing to prepare for emergency repair situations and address potential mitigation. In addition, the lead agencies will continue to coordinate with utility providers as the project progresses. Chapter 6 of the Final EIS discusses the potential effects to utilities, such as disruptions and settlement damage. Chapter 8 of the Final EIS discusses the mitigation measures proposed for effects to utilities.

L-007-028

- The risk of ground settlement is identified in the SDEIS document; however, potential secondary (indirect) environmental, health and safety impacts from a damaged water or sewage pipe is not adequately addressed. The probability of this risk and the potential consequences of this risk are not included in the SDEIS.

L-007-029

8. **Assess risks of hitting undocumented or poorly documented utility lines or vaults during construction, given the absence of or poor quality of as built documents.**
   - Even though SPU's as-built documentation is relatively good, there is a risk of encountering un-documented or poorly-documented SPU facilities as this is a large complex project in areas of very old infrastructure. The primary concerns will be in the vicinity of the north and south portals, and Battery Street Tunnel, generally not above the bored tunnel.
   - The risk of hitting utilities during construction is identified in the SDEIS document; however, potential secondary (indirect) environmental, health and safety impacts from a damaged water or sewage pipe is not adequately addressed. The probability of this risk and the potential consequences of this risk are not included in the SDEIS.

L-007-030

9. **Assess potential flooding risk, especially to the tunnel's south portal, based on scenarios related to climate change – sea level rise, increased storm volatility, and changing coastal drainage challenges.**
   - The potential flooding risks associated with climate change (sea level rise, increased storm volatility and changing coastal drainage challenges) are not explicitly included in the 2010 SDEIS or previous environmental documents.
   - Given the reality of sea level rise, the risk of flooding of the tunnel due to sea level rise obviously must increase over time. Presumably there are reasonable mitigation measures that may be implemented over time. The best response may be to ensure that the project design facilitates adaptation as conditions change over time.
   - Given the anticipated life of, and significant investment being made in, the project, there should be a risk analysis of the possible impacts from sea level rise. Depending upon the results of that analysis, sea level rise projections should be reflected in project design and/or through a project adaptation plan. While we can anticipate that new estimates for sea level rise will be developed going forward, currently sea level rise projections in the Seattle area are documented in the report entitled "Sea Level Rise in the Coastal Waters of Washington State" (Mote et al, 2008). The report includes three scenarios for sea level rise at two time steps: 2050 and 2100. The table below reflects that projections included in the report.

Scenario	Estimate by Year	
	2050	*2100*
Low	3"	6"
Medium	6"	13"
High	22"	50"

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Inadvertent damage to underground utilities could occur during construction. Although such incidents do not occur frequently, they could temporarily affect services to customers of the affected utility while emergency repairs are being made. The project team will prepare a consolidated utility monitoring, protect-in-place, and relocation plan to address existing, temporary, and new locations for utilities. This plan would need to be reviewed and approved by the affected utility providers before construction. Please refer to Final EIS Appendix K, Public Services and Utilities for the discussion of mitigation during construction.

L-007-030

Project engineers have studied current data on climate change, global warming and possible sea level rise and concluded that the seawall provides enough room to protect the bored or cut-and-cover tunnel from rising sea levels. The Final EIS contains updated information on climate change projections for the region and how they were considered. This is described in Chapter 7 of this Final EIS. Existing conditions are included in Chapter 4 of the Final EIS.

The project has taken into account current information on climate change and what is reasonably expected to occur for the life of the project. The engineers also considered the possible threat of tsunamis during the design process. The environmental documentation for the project has been prepared in compliance with the National Environmental Policy Act (NEPA)(42 U.S.C. 4322(2)(c), the State Environmental Policy Act (SEPA)(Ch. 43.21 C RCW), and is consistent with WSDOT guidance. WSDOT's guidance, which was issued in 2009 and revised in October 2010, is posted online at: http://www.wsdot.wa.gov/Environment/Air/Energy.htm.

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These figures could be framed as "chronic" conditions of sea level rise. In addition, there are "episodic" components of sea level rise associated with storm surges and extreme high tides. The highest observed tide level is 38", which occurred in January, 27 1983. One could argue that the 38" figure for the highest tide on record may be affected by climate change due to the occurrence of more extreme storm events, which might merit assuming a higher figure. Thus, planning for and adapting to sea level rise should be based on both the "chronic" and "episodic" components of sea level rise, and reflect a risk management framework that that incorporates project design and/or project operations.

L-007-031

10. For all of above issues, as well as others you identify, please present potential solutions and related costs.
This is a very broad question and is beyond the scope of SPU's review of the 2010 SDEIS.

L-007-032

11. Assess the preferred alternative against the City's Climate Action Plan, which reflects the City's intent to reduce vehicle emissions.

- SDOT and OSE should be the lead city agencies regarding assessing the anticipated emissions associated with the preferred alternative in the context of the City's Climate Action Plan. The draft does indicate that "...greenhouse gas emissions with the Bored Tunnel Alternative in 2030 are predicted to be slightly higher than the 2015 Existing Viaduct conditions." The City's Climate Action Plan has the following greenhouse reduction goals: 7% below 1990 levels by 2012, 30% below 1990 levels by 2024, 80% below 1990 levels by 2050. Road transportation constitutes 40% of the 2008 citywide emissions according to the 2008 Seattle Community Greenhouse Gas Inventory Summary Report.
- The 2010 SDEIS does not fully meet City Council Ordinance 122574, Green House Gas Emissions analysis requirements adopted in December 2007. This ordinance requires all projects proposed in the City of Seattle complete a green house gas analysis as part of the SEPA environmental review. The 2010 SDEIS, Appendix R (Energy), only analyzed the average daily CO2e for operation and construction, but did not perform embodied emissions.
- The 2010 SDEIS Appendix R (Energy), used "...EPA MOVE2009 model to calculate energy consumed by vehicles using a facility is affected by vehicle volumes, vehicle mix, travel speeds and fuel efficiency." Appendix R, page 37, specifically states "At this time, there is no consistent and standardized method for calculating the embodied and lifecycle emissions for transportation projects," resulting in no *embodied* or *lifecycle* greenhouse gas emissions calculations for the AWVSRP Bored Tunnel or any other option. *AWVSRP2010 SDEIS did not calculate embodied or lifecycle greenhouse gas calculation.* SPU did not review Appendix R as part of the previous round of draft disciplinary report reviews.
- The structure of Appendix R (Energy) compares the limited greenhouse gas emissions calculations between the 2015 Bored tunnel, 2030 Bored Tunnel, 2005 Existing Conditions, 2015 Existing Viaduct. There is not a comparison of greenhouse gas emissions between the Bored Tunnel and other alternatives, such as the cut and cover

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Although costs are an important part of project planning and decision-making, they are purposely not a major part of the environmental review process. As provided in 40 CFR 1502.23: "For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations." This includes the cost of possible mitigation measures.

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The Final EIS document examines the project-level effects on GHG emissions. Although not per capita, the Final EIS estimates the potential direct emissions of greenhouse gases under the build alternatives. The study area evaluated includes areas likely to be affected by changes in greenhouse gas emissions as a result of the project. The greenhouse gas effects were estimated for roadways within the city center area, as well as in the region. The city center area is bordered by Prospect Street on the north, 15th Avenue on the east, S. Holgate Street on the south, and Elliott Bay on the west. The region includes all the traffic movements in King, Pierce, Snohomish, and Kitsap Counties. Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Discipline Report. All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative). WSDOT is currently participating in a statewide effort, lead by the Department of Ecology, to draft planning-level guidance at the region, state, and/or national transportation systems level.

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tunnel or no build. There does not appear to be any analysis in Appendix R to compare the bored tunnel with other options and how it meets the stated greenhouse gas reduction levels called out in Seattle Ordinance 122610.

- It is not clear if the estimate of greenhouse gas emissions from construction is based on a life cycle assessment of the materials used in construction, such as the emissions associated with producing the materials used in constructing the deep bore tunnel. The analysis may be basing emissions estimates on the operation of machinery, for instance. An estimate that incorporates aspects of a life cycle assessment for the materials used in construction should be included.

L-007-033

12. **Assess how risk of ground settlement or altered ground water flows could affect the utilities which in turn could affect integrity and use of historic buildings and the areaways under Pioneer Square streets.**
    - The document is silent on the potential secondary (indirect) environmental impacts (i.e. surface water quality impacts if a wastewater main is broken; habitat or sediment impacts; impacts to infrastructure such as foundations, footings, roads; potential public health and safety impacts (illness, injury or death); impacts to historic or cultural resources) which may occur should there be damage to an SPU watermain, wastewater or stormwater pipe facility. This comment applies to all alternatives analyzed in the environmental documents and is not limited to the preferred alternative of the bored tunnel.
    - SPU has in the past submitted a number of comments associated with harm, risks and negative impacts to public interests within the City resulting from review of the SDEIS Discipline Reports and because these comments have not been adequately addressed in the SDEIS and the FEIS Discipline Reports, we are continuing to forward detailed comments on these documents to WSDOT through the current review process. We can make these comments available if desired.
    - See question 7 above for settlement-related utility issues. Per the Earth Discipline Report, the tunnel and portals could lead to changes in groundwater levels. The discipline report suggests a greater risk of direct impacts to adjacent properties rather than secondary impacts through effects on our utilities.
        - SDEIS Earth Discipline Report, Section 5.2.1, *"The water table in the south portal area is about 2 to 12 feet below the ground surface. Groundwater flow could be altered by the presence of the walls supporting the retained cuts and cut-and-cover tunnel and ground improvement areas. The retaining walls would extend about 1,500 feet south of the bored tunnel portal. The walls would essentially block the flow of groundwater and could cause a higher groundwater level to mound up against the wall. Groundwater mounding may occur along the east sides of the walls since groundwater flow is generally westward, toward Elliott Bay. A higher water table would not cause soil settlement; however, utilities and other subsurface structures that were previously above the water table east of the walls could be partially submerged and/or experience uplift forces due to buoyancy if groundwater mounding occurs. Areaways and basements adjacent to*

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Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of the potentially affected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. Monitoring would include manual surveying, tilt meters, crack monitors, and GPS monitors to detect differential settlement as it occurs. Damage caused by the project to historic buildings would be repaired. Chapter 3, question 11 and 13 of the Final EIS discusses the soil improvements and stabilization measures that are necessary along the bored tunnel alignment to protect existing structures and utilities from settlement and to strengthen existing soil so that it can better accommodate tunnel construction. Potential settlement issues during construction are discussed in Chapter 6, question 13 of the Final EIS. The potential effects of groundwater mounding is discussed in Chapter 5, question 33.

The bored tunnel alignment is some distance from Pioneer Square's areaways and no impacts on the areaways are anticipated.

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the alignment could also experience leakage or partial flooding if groundwater mounding occurs."

- SDEIS Earth Discipline Report, Section 5.2.2, *"The water table between S. King Street and Yesler Way is within about 10 feet of the ground surface. In some areas, artesian water conditions are present, as discussed in Section 4.7.2. Groundwater flow may be altered by the presence of the bored tunnel and potential ground improvement between S. King Street and S. Jackson Street. The ground improvement, which may include cement-treated ground, and the bored tunnel could obstruct the groundwater flow and could cause a higher groundwater level to mound up against the east side of the tunnel alignment. A higher water table would not cause soil settlement; however, utilities and other subsurface structures that were previously above the water table could become partially submerged if groundwater mounding occurs. Areaways and basements adjacent to the alignment could also experience leakage or partial flooding if groundwater mounding occurs."*

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13. Assess jet grouting to determine if this technique preserves building integrity without altering ground water flows and potentially flooding Pioneer Square basements.

- SPU submitted a number of comments associated with harms, risks and negative impacts associated with water mounding, jet grouting, and flooding of Pioneer Square areaways and basements however, many of these comments were not addressed in any of the technical disciplinary reports.

SEATTLE DEPARTMENT OF NEIGHBORHOODS

L-007-035

My concern has been and continues to be the fate of the Western Building and how that relates to both the Section 4(f) analysis and the Section 106 mitigation as well as compliance with local preservation statutes.

In my review, the existing document is deficient in that:

- While clearly anticipating the demolition of the Western Building in Chapters 2, 5, and 6, the analysis does not identify the Western Building as a "Parcel Needed for the Bored Tunnel Alternative" (p. 117) and fails to include that analysis in the document.
- In Chapter 6, p. 149, there is a statement that the construction period would not be long enough to threaten the maintenance and preservation of historic buildings. There is no back-up information in the Draft Supplemental EIS to validate that conclusion or to exclude that issue from being considered an "adverse effect" as part of the Section 106 mitigation and subsequent Memorandum of Agreement.
- In Chapter 7, pp. 172-173, the document suggests that the removal of the existing viaduct outweighs the impacts of removing three National Register properties and the possibility of a fourth (the Western Building) as well as the alteration of the Polson Building and an archaeological site. It should be noted that the Pioneer Square Preservation District was listed in the National Register of Historic Places **after** the

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Soil improvement methods and stabilization measures being assessed to protect existing structures include: compaction grouting, compensation grouting, jet grouting, ground freezing, and underpinning. These methods are described in Chapter 3 question 11 of the Final EIS and in Appendix B, Alternatives Description and Construction Methods Discipline Report.

The potential for groundwater mounding is being addressed during final design. Design elements, such as providing a path for groundwater through the retaining walls or ground improvement zones, will be incorporated into the project to avoid this effect, if determined to be necessary during final design. Appendix P, Earth Discipline Report, of the Final EIS discusses groundwater mounding.

The Bored Tunnel alignment is some distance from Pioneer Square's areaways and no impacts on them are anticipated. The areaways are included in the existing monitoring program; instrumentation has already been installed in First Avenue areaways. Any damage would be minimized by careful monitoring to warn of potential settlement as the TBM advances; temporary supports or cribbing would be installed in the unlikely event that the monitoring and building assessment indicate a need. The areaways are discussed in Chapter 6 of the Final EIS and in more detail in Chapters 4 and 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report.

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The Western Building's existing very poor structural condition means that it cannot withstand the settlement as well as other nearby historic buildings. As identified in the Final Section 4(f) Evaluation, the building will be strengthened to endure tunneling effects and this work will be in compliance with the historic district rules and guidelines and approved by the Pioneer Square Preservation Board. The tenants will be relocated

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construction of the Viaduct so that the removal of the Viaduct, itself eligible for listing, should not be viewed as a benefit to the historic district.

- The Section 4(f) draft is deficient in not taking into consideration the requirements of SMC 23.66.115 that pertains to the demolition of historic properties in the Pioneer Square Preservation District and requirements that even when demolition is allowed, certain criteria must be fulfilled before the issuance of a demolition permit including approval by the DON Director of the use and design of a replacement structure, proof of interim and long-term financing, incorporation of the façade of the property into a new building and assurance that the new construction be completed within two years of demolition. That factor is even more important considering the statement on P. 237 that the "Bored Tunnel Alternative would not involve the permanent incorporation of land from these properties, and protection and repair activities would not change the ownership of the land." If that is the case, compliance with SMC 23.66.115 would be even more difficult to achieve.
- The Section 4(f) draft also fails to evaluate all of the proposals using the specific factors that the FHWA must consider when determining which alternative causes the "least overall harm" (23 USC 774.3 (c)(1)) and enumerated on P. 227 of the document.

SEATTLE OFFICE OF SUSTAINABILITY AND ENVIRONMENT

L-007-036

GHGs and VMTs:

None of the alternatives considered significantly reduce VMT or GHGs, which is inconsistent with the State's own climate protection goals. In addition, the alternatives' impact on VMT and GHGs are inconsistent with the climate protection goals in the City's Comprehensive Plan, and the City Council's 2010 priority to adopt a carbon neutral goal and VMT reduction goal for Seattle. If we assume the City and State are successful in meeting their climate protection goals, what does that mean for the vehicle capacity needs of the AWV replacement alternatives?

Because the State and City have adopted or are poised to adopt emissions reduction goals, rather than strictly regulated targets, the environmental review of the project is not technically required to take them into account. However, the goals still provide relevant policy context for the environmental review.

The City and State changed the endorsed project purpose of providing mobility for people and goods that came out of the 2008 Stakeholder Advisory Committee process into the more limited notion of just providing vehicle capacity. However, the best opportunity to support the State and City's emissions and VMT reduction goals with the AWV replacement is to evaluate the alternatives' capacity to move people and goods by all means not just vehicles.

In addition, the SDEIS should evaluate not only air quality and VMT impacts at a specific point in time, but also which alternative has the best ability to improve air quality and reduce VMT over time. For example, the analysis should consider the alternative's ability to reduce future VMT over time by inducing transit and pedestrian oriented land uses.

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and the building vacated during this process.

The Polson Building is not at risk; the surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced. The other buildings mentioned will be monitored before, during and after tunneling, and preventive grouting of the soil may be used if needed. They are not at risk of collapse; they may experience cosmetic cracks that would be repaired as part of the project.

The Bored Tunnel Alternative would include a comprehensive program of protection measures for these buildings. These measures are described in the project's MOA and include a preconstruction protection, a monitoring plan, and an action plan for addressing ground changes or building settlement.

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The law setting the VMT benchmarks directs WSDOT to "adopt broad statewide goals to reduce annual per capita vehicle miles traveled by 2050 consistent with the stated goals of Executive Order 07-02." The state law does not require individual projects to set VMT reductions. WSDOT is working on the tasks in Executive Order 09-05 in conjunction with a working group established for this purpose because the cumulative greenhouse gas impacts of transportation projects are best addressed at a system-wide level where multiple projects can be analyzed in aggregate, such as in regional transportation plans. This project is included in PSRC's Regional Transportation Plan, Transportation 2040, which considered greenhouse gas emissions along with other transportation objectives.

Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Discipline Report. Air Quality Impacts are assessed in Appendix M, Air Quality Discipline report. All of the build alternatives would result

in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative).

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Climate Change Adaptation:

The potential impacts of climate change do not appear to have been considered in the analysis of alternatives. These future impacts include sea level rise, precipitation/stormwater changes, and temperature increases. Environmental review of any long-term infrastructure project should carefully consider best available science to assess the project's vulnerability to the potential impacts of climate change. Without vulnerability analysis, OSE cannot comment on if or how climate change impacts will affect the AWV project. However, if impacts are identified, the project should be designed to adapt to those impacts.

What are the relevant climate protection goals?

State of Washington

In 2008, State has established GHG reduction goals and a VMT reduction goal (RCW 70.235.020 and RCW 47.01.440.)

The GHG emissions reduction goals are:

- By 2020, reduce emission to 1990 levels
- By 2035 reduce emissions to 25% below 1990 levels
- By 2050, reduce emissions to 50% below 1990 levels

The VMT goal is to reduce per capita VMTs below baseline by:

- 18% by 2020
- 30% by 2035
- 50% by 2050

City of Seattle

Comprehensive Plan GHG Emissions Reduction Goal:

- 7% below 1990 by 2012
- 30% below 1990 by 2024
- 80% below 1990 by 2050

Seattle Comprehensive Plan VMT goal:

Earlier this year, City Council expressed its intention to adopt a VMT reduction goal in this year's Comprehensive Plan Update. DPD is proposing an amendment that would adopt the state's VMT reduction goal. Council is expected to adopt the amendment in early 2011.

City Council Carbon Neutral Priority:

In 2010, the City Council announced its intention to adopt the goal of becoming carbon neutral by 2050.

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L-007-037 SEATTLE CENTER

We appreciate your interest and request for comments on whether WSDOT's SDEIS for the Alaskan Way Viaduct replacement project adequately addresses potential impacts and liabilities to Seattle Center and the nearby Bill and Melinda Gates Foundation campus. Specifically, you asked us to: "Review the north tunnel portal entrances, exits and connecting streets for access to Seattle Center, especially in terms of cumulative impacts associated with the opening of the new Gates Foundation buildings."

We believe our best response rests on our planning analysis of the project to date and an overview of the process we have pursued in working in coordination with SDOT and WSDOT these past several years.

Seattle Center completed its Century 21 Master Plan in August 2008. We continue to use this document to frame our future plans and development activities for the next 20 years and beyond. We also completed an Environmental Impact Statement (EIS) for the Century 21 Master Plan in June 2008 that included a thorough traffic analysis of all nearby intersections and roadways to and from our campus. Our EIS built on the Gates Foundation Campus Master Plan and EIS, but focused on the Seattle Center campus master plan, scoping all potential impacts with the development activities outlined therein. We shared this document with both SDOT and WSDOT in late 2008 as they began to scope issues to be addressed in the SDEIS for the Viaduct replacement. Attached also is a letter we sent to WSDOT in July 2009 summarizing our key concerns for their scoping analysis.

Since then, I have actively participated on the North Portal Group and commented at all meetings on the need to mitigate traffic and design impacts from the tunnel portal project that will affect the eastern edge of our campus and all related projects, including the Mercer West underpass widening and overall Mercer corridor improvements and 2-way conversion. Seattle Center staff has also participated in reviews of several Discipline Reports of relevance to Seattle Center that are included in the appendices of the SDEIS. These include: Historical and Cultural Resources, Social Resources, Visual Impacts, Noise, and Transportation. To ensure smooth campus operations during construction, Seattle Center staff has been providing WSDOT and SDOT with campus-wide major event anticipated attendance data since 2009 and has been providing more granular cumulative threshold event data for the campus since 2010.

Additionally, Seattle Center and Seattle Monorail Services staff met with the State's prime engineering consultant, Parsons Brinckerhoff, twice during the last year to analyze potential impacts to the monorail from the construction of the deep bored tunnel. We provided preliminary oral and written comments to WSDOT's consultants on their draft ***Proposed SR 99 Bored Tunnel -- Assessment of Settlement Impacts on Seattle Monorail***, which was issued in April 2010. Analysis of the proposed tunnel as it passes under the Monorail (Columns 25 to 34 between Vine Street and Bell Street along Fifth Avenue) suggests that neither the columns nor the guideways above will be critically impacted because the tunnel is more than 100 feet below the Monorail. To ensure no adverse impacts are incurred to the Monorail, WSDOT has agreed

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Traffic and access

For event traffic, improved access to and from SR 99 near the north portal and added network redundancy across SR 99 would result in reduced congestion before and after Seattle Center events. These roadway changes would likely improve circulation and reduce overall congestion levels at critical intersections near the Seattle Center during large events by providing more direct access to regional facilities such as SR 99 and I-5. A detailed traffic analysis has been conducted for all alternatives and is described in Chapters 5 and 6 in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of impacts to transportation elements, including event traffic.

With the preferred Bored Tunnel Alternative, a new roadway would be built to extend Sixth Avenue N. in a curved formation between Harrison and Mercer Streets to avoid the Gates Foundation campus.

Construction impacts and mitigation

Overall construction effects of each of the alternatives are described in Chapter 6 of the Final EIS and in Final EIS Appendix C, Transportation Discipline Report. For environmental documentation purposes, the stage of construction with the greatest combination of restriction and duration for traffic was analyzed quantitatively while the overall construction activities were described qualitatively. Demolition of the existing Alaskan Way Viaduct would occur as part of the viaduct replacement project. As part of that project, standard maintenance of traffic during construction plans will be developed, communicated with the general public, and implemented during project construction.

L-007-037 to monitor ground movement and settlement during construction at several piers prior to construction of the bored tunnel and for 2 years after the tunnel opens to traffic.

In our review of the SDEIS, we would offer the following directly responsive comments:

- Bored Tunnel Alternative (Chapter 3) – addresses Seattle Center as a key neighbor and puts forward the curved alignment for 6th Avenue North which would curve around the Gates campus as the preferred alternative for the North Portal area. We polled our Seattle Center Resident Directors Group in late July 2010 and they and we support that as the preferred alternative. The North portal itself is now positioned one block closer to Seattle Center than originally anticipated in the SDEIS scoping documents, but we believe the entrances, exits and connecting streets will provide improved access to Seattle Center. The North Portal has been well designed to respect the access needs of the Gates Foundation campus, as well. Both the Seattle Center and Gates campus development projects are acknowledged in the Cumulative Effects analysis (Chapter 7) of the SDEIS.

We also remain concerned about a few key issues and offer our added input on the SDEIS:

- General Impacts to Seattle Center - are acknowledged in the appendices with several specific references to Seattle Center, but only sparely in the main document. Our 74 acre urban park is a major economic engine for the Uptown/SLU area and a regional attraction for the City of Seattle.

- Traffic and Access – Access to Seattle Center, as well as from Seattle Center to the regional transportation system, will be affected by the Mercer West Project and North Portal of the Proposed Tunnel. While the North Portal and Mercer West designs will greatly enhance the connection across Aurora Ave N along with access to and from SR 99, delays at some intersections will increase due to the two-way operation on Mercer Street. The SDEIS includes a summary of travel times on Mercer Street and intersection delays in the vicinity of Seattle Center during the a.m. and p.m. peak periods, but it does not include a quantitative analysis of traffic conditions for the periods during which traffic is headed toward Seattle Center prior to evening events or conditions after evening events. With more than 30 resident organizations on our campus, we must ensure that the perception and real experience of visitors to our campus is one of ease of access for cars, trucks, buses, transit users, and pedestrians.

- Construction – The number of lanes across Aurora will be reduced during construction of the Mercer Underpass and North Portal area, increasing delays for Seattle Center patrons from throughout the region. This impact is acknowledged, but not quantified in the SDEIS.

- Mitigation: Seattle Center is referenced as a key resource and a planned project considered in the Cumulative Effects analysis (Chapter 7, pages 170-171), but we need to see a stronger commitment to minimizing long-term and construction period traffic impacts. These include:

  - Pro-active public information campaign throughout construction
  - Safe pedestrian access during construction

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As part of the Bored Tunnel Alternative and related projects, WSDOT and partner agencies have or will implement several strategies to keep traffic moving during construction. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the city's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

WSDOT will prepare a traffic management plan, which will contain localized traffic mitigation measures. These measures will be developed as construction details are refined. Please see the Final EIS, Appendix C, Chapter 6 of the Transportation Discipline Report as well as the Final EIS Chapter 8, Mitigation.

Because operational effects of the built alternative would be substantially better than the Viaduct Closed (No Build Alternative), long-term transportation mitigation measures are not anticipated. However, a number of mitigation measures in place during construction could have benefits over the longer term. Refer to Chapter 8 Mitigation in the Final EIS for details.

Seattle Monorail

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. Potential settlement issues are discussed in the 2010 Supplemental Draft EIS. Chapter 6, page 131, discusses the soil improvements and stabilization measures that are

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- Police details to manage traffic during construction
- New and improved signage and wayfinding (during construction and long-term)
- Traffic monitoring and real-time travel information for the public
- Pedestrian-friendly street design in the North Portal area

• Seattle Monorail - In spite of our collaborative efforts in 2010, Seattle Center Monorail is not adequately addressed in the SDEIS document. It is rarely mentioned in the main document and is missing altogether from the following sections: Project Area description (Chapter 4), Bored Tunnel Alternative discussion (Chapter 5), Construction of the Tunnel and North Portal (Chapter 6 – pp. 133-134) and DRAFT Section 4(f) Evaluation, including Exhibit 4(f) – 4 List of Resources on p. 239. In Appendix J – Historical Resources, Seattle Alweg Monorail is acknowledged as eligible for the national register of historic places (NRHP). The attached Historic Resource Report for the Seattle Monorail was filed with the WA State Historic Preservation Office by WSDOT's historic resources consultant, Mimi Sheridan, in September, 2009. It acknowledges the Monorail's historic significance. This needs to be consistently acknowledged throughout the report, not just noted in the appendices. Curiously, the Monorail is not acknowledged in Exhibit 4-17 Historic District Boundaries and Buildings in Chapter 4 – and it seems like it should be.

Mitigation for potential impacts to the monorail should include a monitoring program of monorail columns in the vicinity of the bored tunnel prior to, during and after construction. In addition, include a specific plan to mitigate impacts to monorail operation and safety caused by settlement or other construction activities.

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necessary along the bored tunnel alignment to protect existing structures and utilities from settlement and to strengthen existing soil so that it can better accommodate tunnel construction.The project team met with Seattle Center and Seattle Monorail staff twice during the last year to analyze potential impacts to the monorail from construction of the deep bored tunnel. Subsequently, the assessment of potential settlement impacts determined that that the Monorail guideway and columns would not be affected by the tunnel because it would be approximately 100 feet below the Monorail.

PWC
PEOPLE'S WATERFRONT COALITION
CITIZENS FOR A HIGHWAY-FREE SHORE

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November 22, 2010

Dear Ms. Freudenstein, Mr. Paananen and Mr. Hahn,

This letter is to provide comments on draft environmental impact statement for the Alaskan Way Viaduct Replacement Project. The People's Waterfront Coalition is very interested in a sustainable, forward-looking transportation solution that protects the opportunity for Seattle's new waterfront. We have been active participants in this discussion for 6 years, including serving on the 2008 Viaduct Replacement Stakeholder Advisory Committee.

Concerns have been grouped into eleven categories. There are specific requests for action in each category, and a summary of more comprehensive requests for action at the end.

C-001-001

1. Access into downtown is a vital function of the Alaskan Way Viaduct. Solutions must provide good access. The preferred alternative does not.
A primary use of the current viaduct is to access downtown; 42% of trips are coming and going to downtown neighborhoods. Downtown Seattle is a center for jobs and commerce, perhaps the core economic engine for Washington State. Analysis in the 2008 stakeholder process showed that 80% of trips on the viaduct are short trips that start and end within Seattle city limits. This EIS should identify local mobility and access to downtown as a goal, and evaluate alternatives based on their ability to provide this.

The usage of the viaduct has not been described accurately in this DEIS. The importance of the viaduct for local access for people and freight has been understated in the assumptions and criteria, and usage of the viaduct as a through-route has been exaggerated. Consequently the analysis doesn't give decision-makers an accurate portrayal of the challenge.

The DEIS says in Ch 1pg 4 that the viaduct carries 20-25% of traffic traveling through downtown. What is the source for this claim? 90,000 - 110,000 trips a day travel on the viaduct currently, depending on exact location. When compared to a total of 1,670,000 trips to and through Seattle, the viaduct carries less than 7% of traffic. The exaggeration of importance for bypass trips in this DEIS, and the disregard for local access and mobility, misrepresents the basic challenge and creates an inaccurate analysis.

Action: Mobility and access into downtown Seattle should be included as an integral goal and evaluation measure. **Additional transit service at significantly higher levels should be included** as part of the bored tunnel alternative in this DEIS.

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C-001-001

The Final EIS Chapter 1, Introduction, describes the Purpose and Need for the project and one of several purposes is to provide capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle. The Final EIS contains a discussion explaining how the preferred alternative meets the project's purpose and need. The Bored Tunnel Alternative does provide access both through and to and from downtown. Access to downtown from SR 99 and from downtown to SR 99 are provided near S. King Street in the south and near Harrison Street in the north. Appendix C, Transportation Discipline Report, addresses the importance of the viaduct as a transportation corridor. It also covers issues related to capacity, local access, mobility, and transit service and other modes for each build alternative. Please refer to the Final EIS for current information.

The source for the description that SR 99 carries 20 to 25 percent of traffic traveling through downtown is Exhibit 4-10 on page 67 of Appendix C for the 2010 Supplemental Draft EIS. This exhibit has been updated for the Final EIS and can be found in Appendix C for the Final EIS. Exhibit 4-10 indicates that SR 99 carries 91,400 vehicles north of Seneca Street. Total vehicle traffic for Alaskan Way, I-5, city streets west of I-5 at this point total 445,100 vehicles per day at this same screenline north of Seneca. When you divide 91,400 by 445,100 the result indicates that SR 99 carries 20.5 percent of traffic through downtown Seattle. The range provided in the EIS (20 to 25 percent) is a general range that has changed based on various traffic analyses conducted since the project began in 2002. For the Final EIS a single percentage is reported.

C-001-002

2. Traffic impacts to local streets caused by the preferred alternative are unacceptable. Especially for the Pioneer Square Historic District.
Currently, the viaduct offers seven on and off ramps to provide access to downtown Seattle neighborhoods, spread from the stadium area to Belltown. (Ch 4 pg 74) The tunnel alternative reduces this to one highway interchange, located adjacent to the Pioneer Square Historic District. This configuration concentrates all the traffic going between SR-99 and downtown Seattle on only a few streets.

Without tolling, this DEIS states that 50,000 cars a day are expected to use the southern interchange ramps (Ch 5 pg 104). It says that 29,000 of current SR-99 users will shift to City streets (Ch 2 pg 19).

If tolling is implemented (Ch 9), as required by the funding plan for the tunnel alternative, **an *additional* 40,000 to 45,000 cars are expected to divert to city streets.**

The Pioneer Square Historic District is already inundated with car traffic during events at Safeco Field, the Stadium Exhibition Center, and Qwest Field for over one hundred days a year, with a significant number of these happening during the week at rush hour. How will this additional traffic, somewhere between 50,000 and 80,000 trips a day (with tolling), generated by the southern interchange be accommodated on event days?

C-001-003

After analyzing the traffic impacts on surface streets that would result from tolling, the conclusion is that "These effects would not be acceptable as part of a long term tolling solution." (Ch 9, pg 214) No alternative is suggested other than to say another alternative is needed.

After analyzing tolling impacts on transit riders (Ch 9, pg 215) the conclusion again is that "These effects would not be acceptable as part of a long term tolling solution."

C-001-004

The existing street grid in this area is not well connected, and there are not many viable routes for drivers. Some of the streets are narrow, historic, physically fragile, and pedestrian oriented, and not suitable for use as access roads to highway interchange.

Predictions for the waterfront Alaskan Way are also alarming. The SDEIS traffic projections reveal that 35,000 cars a day will use the new Alaskan Way in this area. While it is possible to design a quality street that carries this volume, attracting this volume of new traffic to the new waterfront runs counter to Seattle's vision for this site.

C-001-005

Action: This DEIS must describe in more detail the traffic volumes that are expected on specific streets around the southern interchange for the preferred alternative. How many cars and trucks will use Alaskan Way, First Ave, Second Ave, Fourth Ave? How many more cars would be added to each of the streets if tolling is implemented and 40,000 to 45,000 vehicles from SR-99 choose to avoid the toll?

The DEIS must describe what street revisions WSDOT will implement to make room for all these vehicles, and what are the impacts of these so-called street improvements.

C-001-006

Does WSDOT plan to remove on-street parking, or any of the mature and cherished London Plane trees in the Historic District? Will these changes affect the access to and viability of retail? How will the planned revisions affect the pedestrian character of the streets, and their viability for biking and walking? Are these historic streets, built on fill and supported by 100 year old areaways and retaining walls, physically capable of carrying these increased traffic volumes? Pioneer Square is hoping to reconnect to the new waterfront park, and re-establish its presence as a waterfront neighborhood; how will the proposed widening and increased traffic volumes on the new Alaskan Way affect these hopes?

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C-001-002

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. Updated analysis has been included in the Final EIS. A detailed tolling analysis has been conducted and is described in Chapter 7 of Appendix C, Transportation Discipline Report.

Because traffic in the Pioneer Square Historic District is controlled by signals, it is not anticipated that the increased volume will affect the pedestrian character nor will it make it more difficult to walk to shops or restaurants. Pioneer Square has historically been an active place with a high volume of traffic. For event traffic, improved access to and from SR 99 near the south portal would result in reduced congestion before and after events. Appendix C, Transportation Discipline Report, addresses traffic impacts on the Pioneer Square neighborhood, including event traffic. Please refer to the Final EIS for current information.

The removal of the viaduct will facilitate re-establishing the connection between Pioneer Square and the waterfront. This connection and the widening of Alaska Way will be part of the City's Central Waterfront Project, which will undergo its own environmental review.

C-001-003

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined

C-001-007

What solutions are being considered to avoid burdening Historic District streets and the waterfront with an influx of traffic generated by the interchange? What solutions are offered to reduce congestion for local delivery trucks? For instance, additional transit service to and from downtown, or routing SR-99 bound traffic away from the Historic District, investing in improvements to I-5 to shift through-trips there, relocating the interchange further away from Pioneer Square, and demand management should be analyzed for their usefulness in protecting Pioneer Square from this influx of car traffic.

C-001-008

Note: Concerns about the heavy concentration of traffic on Pioneer Square streets caused by the tunnel's interchange have been raised repeatedly by neighborhood stewards for over a year. Is a viable solution even possible? Either there is a plan for reengineering streets to accommodate these much higher volumes, which should be described in this DEIS, or it is impossible to solve this problem without ruining Pioneer Square streets. Withholding this information from decision-makers obscures what might be the most egregious impacts of the tunnel alternative.

C-001-009

3. **The significant traffic impacts of tolling are ignored**. When tolling is included in the traffic modeling, the preferred alternative loses so many users that it effectively doesn't meet the statement of purpose and need.

The DEIS states (Ch 9 Pg 205) "As currently defined, the Bored Tunnel Alternative does not include tolls." The analysis in the entire document (except for Ch 9), including travel times, traffic volumes, greenhouse gas emissions, and stormwater runoff all assume that there will be no tolling on the project. However, tolling revenue is a necessary part of the basic funding plan, and use of tolling will dramatically affects tunnel usage and impacts.

The non-tolled tunnel sends 29,000 of the viaducts cars and trucks to city streets. The tolled tunnel sends an additional 40,000 to 45,000 vehicles to city streets. **This causes 74,000 new trips outside the tunnel, and 41,000 inside the tunnel. The preferred alternative, at $3.1 billion cost, only serves about 1/3 of the transportation challenge, and offers no solutions for 2/3 of travelers.**

As this preferred alternative is described, the negative impacts to local mobility for people and freight are egregious. When the diversion effects of tolling are included, these negative impacts are intolerable.

Action: Tolling must be included in the modeling and analysis throughout this DEIS to clarify the impacts. Without it, this DEIS creates an inaccurate depiction of the very utility of the tunnel, as well as traffic and environmental impacts of toll diversion. A mitigation plan must be developed to show how WSDOT will prevent, resolve, or mitigate the unacceptable detriments to the functioning of Seattle's local transportation system.

C-001-010

4. **The preferred alternative causes alarming physical risks to Historic Resources – Pioneer Square Historic District and buildings. The viaduct replacement project must guarantee protection from harm.**

Boring a tunnel next to Seattle's historic neighborhood, with its historic buildings, fragile and brittle infrastructure, high water table, and unstable soils, is a steep engineering challenge. This DEIS describes the risks of digging and boring in this location (Ch 5 pg 126), possible damage to 12 historic structures (Ch 2 pg 31), and possible collapse or dramatic damage to two buildings (Ch 6 pg 142) because of difficulty controlling soil loss or preventing over-excavations or sinkholes.

The DEIS says this of the Western and Polson buildings, both 'contributing' buildings in the Pioneer Square Historic District: "Mitigation measures to protect the buildings may not prevent the need for demolition to avoid the possibility of collapse."

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during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental

C-001-010 It says twelve buildings within the Pioneer Square Historic District or listed on the National Register of Historic Places – including the Historic Federal Building -- may be affected by settlement, structures could crack, and utilities may be disrupted or damaged. While the DEIS states measures will be implemented to avoid or minimize damage, it mentions that unavoidable damage might still occur with the preferred alternative.

> **Action: WSDOT must provide more information on how and when damage is likely to occur, and fully describe what they will do to prevent, repair, or mitigate damage.** What damage could soil settlement from tunnel boring cause, specifically? Is WSDOT planning to purchase and demolish any of these buildings? What is the likelihood of unavoidable damage to the fourteen buildings at risk? Will residents and users of those buildings be at risk of harm?

WSDOT will not know if there is an adverse effect to an at-risk building due to their boring activities until they start tunneling under it.

> **Action: To ensure protection of the at-risk buildings cited in the DEIS, WSDOT should do 3-D laser scans before, during and after construction.** This technology represents current best practice in historic preservation, and is being used widely. The before scan will show existing cracks and the tilt of the walls, etc. During-construction scans will monitor the cracks and tilts, and if any significant movement is detected, the project should halt and do something to stop the problem. A post-construction scan would show if any damage occurred so that WSDOT knows to repair. And exterior laser scan should also be done for all buildings along the proposed route.

C-001-011 Will Pioneer Square's unique but delicate areaways and historic underground be put at risk?

> Action: **WSDOT must provide more information on how and when damage is likely to occur, and fully describe what they will do to prevent, repair, or mitigate damage.** What buildings specifically need to have their supporting soil improved with jet grout? What impacts will that have on the use of underground floors? What sidewalks will be closed, what streets will be closed, what basements will be altered, what areaways will be temporarily or permanently affected by implementation of this preventative measure?

C-001-012 Some of the 'solutions' proposed to prevent structural damage actually exacerbate other problems.

Given that water table is quite close to the surface, there is risk that the solidification of soils -- due to tunnel walls, retained cuts at the portals, and the injection of jet grout under buildings -- might alter natural water flows, create a water barrier, and cause water to back up in the Pioneer Square Historic District. (Ch 5 pg 127.)

> Action: **WSDOT must provide more information on how and when damage is likely to occur with the preferred alternative, and fully describe what they will do to prevent damage or safety risk to building users.** What exactly is the risk of potentially submerging subsurface structures? What structures are vulnerable? Will decayed and fragile underground water and sewage infrastructure be at risk of failing if the ground becomes over-saturated due to altered water flows? What is the risk of basements flooding? Many of these basements are occupied, either by active retail or other business uses. Many are part of the historic underground, which is a popular visitor attraction, and occupied at times by hundreds of people. **What will WSDOT do to protect against flooding events and guarantee safety?**

C-001-013 Pioneer Square Historic District is listed in the National Register of Historic Places. Why is it not being protected via Section 4(f)?

> **Action:** This DEIS should provide Pioneer Square Historic District full protection under section 4(f). It should identify and evaluate alternatives that avoid the possible harms to the streetscape, the buildings, and the underground that together comprise the unique quality of this district.

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transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

C-001-004

Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the Stadium area show that vehicles will disperse on to a variety of streets in the area such as Royal Brougham, Alaskan Way, First Avenue, Fourth Avenue, etc. Please see the Final EIS Appendix C, Transportation Discipline Report for transportation analysis. Included within the discipline report are a variety of metrics that looked at roadway and intersection performance. These analyses were performed with analytical tools using data for a range of modes including pedestrians, trucks, transit ferries and automobiles. The ultimate design of Alaskan Way will be determined as part of the City of Seattle's Central Waterfront Project.

C-001-005

Screenline information is used to understand the total volume of traffic that would use the transportation system in the study area. Projected vehicle volumes on specific roadways is provided in the 2010 Supplemental Draft EIS and the Final EIS for SR 99, Alaskan Way, and I-5.

Please see Final EIS Appendix C, Transportation Discipline Report, for detailed analysis of non-tolled and tolled conditions for the Bored Tunnel, Cut-and-Cover Tunnel, and Elevated Structure Alternatives. Mitigation for the project is described in Chapter 8 of the Final EIS.

C-001-006

There are no plans to remove any of London Plane trees. Decisions about parking will be made by SDOT, not WSDOT. SDOT has identified

C-001-014

5. **The Statement of Purpose and Need was recently rewritten with narrower language to exclude viable and cost effective alternatives, and favor the preferred alternative.**

The range of alternatives to be considered flows from the statement of purpose and need. However, in this current draft, the statement of purpose and need was rewritten into a much narrower definition. The **statement of purpose and need** (Ch 1 pg 4) should continue to use the long- established definition for this project, 'mobility for people and freight', not redefine the target as vehicle 'capacity.' The statement of purpose and need from the 2006 SDEIS should be kept: "The project will maintain or improve mobility, accessibility, and traffic safety for people and goods along the existing Alaskan Way Viaduct Corridor."

By using the term capacity instead of mobility, solutions that include **transit, demand management, or available capacity on other facilities are disqualified**. It is not legal under SEPA – or prudent -- to frame the statement so narrowly as to exclude reasonable alternatives.

When the bored tunnel was announced as the preferred alternative in January 2009, the package included $190 million worth of transit investments. Additional transit service was then, and is now, deemed necessary to provide access to and from downtown Seattle, since the bored tunnel alone does not provide any downtown ramps.

The benefits of transit are many. A robust transit system offers an affordable alternative to the high cost of car ownership for many citizens. For some families, this is a big deal: saving roughly $8000 annually by getting by without a second car can mean more education or better housing. Transit is a key part of a larger strategy to reduce green house gas emissions. It reduces congestion for other roadway users, especially freight trips, car-pools, and other travelers who need to drive. A recent survey by T4America shows that 59% of Americans believe we need to increase public transportation to reduce traffic congestion, and make it easier to walk and bike.

Action: WSDOT should change the operative phrase in the statement of purposed and need back to "mobility and access for people and freight."

C-001-015

6. All reasonable alternatives have not been included.
The alternatives analysis is the heart of the Environmental Impact Statement, and state law says all reasonable alternatives must be evaluated. A viable alternative that serves mobility, serves access to Seattle, AND also preserves the opportunity for Seattle's waterfront should be included in this DEIS.

Deep bore tunnels are marvels of engineering but also among the most difficult projects to plan and control financially. This proposed tunnel would be the largest diameter bore ever attempted in the world, in tricky soil and water conditions, under our state's most valuable real estate. Abrasive soils, clay, boulders, uncontrollable water flows, or unexpected utilities could stop the boring machine in its tracks. The delay and cost consequences of the machine getting stuck are very high. Removing a 56' x 400' machine from underneath downtown Seattle streets or buildings would be a nightmare, and huge financial risk.

According to a thorough analysis of 258 massive transportation projects by one of the world's foremost authorities on the subject, Bent Flyvbjerg, a professor at the University of Oxford, 9 out of 10 transportation megaprojects run over their cost estimates. For tunnel and bridge projects, Flyvbjerg found, "actual costs are on average 34 percent higher than estimated costs."

Both tunnel experts hired by the City of Seattle affirmed that costly problems are likely to emerge, despite WSDOT's best intentions. Using WSDOT's own data, these professionals predicted this project is 40% likely to exceed its establish cost cap. Further, David Dye, WSDOT leading project official at that time, said on record at

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a number of strategies to offset the loss of short-term parking. Although specific parking mitigation strategies have not yet been determined, the project has allocated $30 million for parking mitigation. Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse onto several streets such as S. Royal Brougham Way, Alaskan Way, First Avenue, Fourth Avenue, etc. Please see the Final EIS Appendix C, Transportation Discipline Report for the transportation analysis. Because traffic in Pioneer Square is controlled by signals, it is not anticipated that the increased volume will affect the pedestrian character nor will it make it more difficult to walk to shops or restaurants. Pioneer Square has historically been an active place with a high volume of traffic.

Adverse effects to areaways in Pioneer Square are not expected for this project. Please see the Final EIS, Chapter 6, for the discussion of construction effects on historic resources. However, if deemed necessary during the development of the individual historic building monitoring plans, targeted areaways could be monitored during construction. Areaways are also discussed in more detail in Chapters 4 and 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS.

The removal of the viaduct will facilitate re-establishing the connection between Pioneer Square and the waterfront. This connection and the widening of Alaska Way will be part of the City's Central Waterfront Project, which will undergo its own environmental review.

C-001-007

Because operational effects of the built alternative would be substantially better than the Viaduct Closed (No Build Alternative), long-term transportation mitigation measures are not anticipated. However, a number of mitigation measures in place during construction could have

C-001-015 the conclusion of the 2008 stakeholder process, about why they did not select the bored tunnel: "And so it's a cold dose of fiscal reality that I guess I'm the one who has to bring the bucket and pour on this.... But it is out of reach in the current state of affairs to make it happen."

C-001-016 There is a significant uncertainty around the state's ability to fully fund the bored tunnel alternative. It is essential for this DEIS to consider a viable back up plan that meets goals for mobility and access into downtown neighborhoods -- *and* protects the full opportunity of the future waterfront. Neither of the two other alternatives in this DEIS offers this. Further, both these alternatives were soundly rejected by Seattle voters in the 2007 advisory ballot.

C-001-017 At the conclusion of the 2008 stakeholder process, the leaders of the City, County and State Departments of Transportation recommended two alternatives for viaduct replacement: the I-5/ Surface / Transit hybrid, and the Elevated / Transit hybrid. After a year-long evaluation, these two approaches proved best for meeting the agencies six goals for viaduct replacement at an affordable cost. **Each of these two solutions was determined by the City, County and State DOTs as feasible, lower cost, and effective in providing mobility after exhaustive analysis. The I-5/ Surface/ Transit hybrid alternative should be evaluated in this EIS.**

The I-5/ Surface / Transit proposals A and B provide mobility for through-travel and for local access, offer a four lane urban street on the waterfront, and can be achieved at a cost savings of $700 million to $1 billion compared to the tunnel. Like the tunnel, these options offer a calm, four-lane waterfront street, which is central to the City's plans for the new waterfront. To exclude these from the DEIS analysis creates a false choice for waterfront proponents.

Further, the City of Seattle Ordinance 12246 states the City's preference for an alternative to the tunnel: "In the event a tunnel proves to be infeasible, the City recommends the development of a transit and surface street alternative that meets the intent of Resolutions 30664 and 30724." This alternative would offer the City one of the key advantages it seeks – reclaiming the downtown waterfront – at a significant cost savings.

Action: A version of I-5/ Surface / Transit alternative that includes an urban, four-lane waterfront street should be included in this EIS so that decision makers who care about mobility for people and freight AND Seattle's new waterfront have a lower cost, lower risk alternative to consider.

C-001-018 7. **This project should plan for reducing vehicle usage and greenhouse gas emissions, according to by City, County, State and Federal policies and statutory benchmarks.**

The City has policies urging transportation agencies to pursue decreased Vehicle Miles Traveled over time, and increase the viability of other modes, as part of a larger effort to reduce green house gas emissions from vehicles.

- The City recently established a goal for Carbon Neutrality as one of its 16 priorities for 2010, knowing that this will demand dramatic efforts to reduce fossil fuel consumption and driving. A citizens' commission is at work defining specific implementation steps.
- The City's transportation policy as defined by the Comprehensive Plan states: Ensure that transportation decisions, strategies and investments are coordinated with land use goals and support the urban village strategy.
- The City's Climate Action Plan, launched in 2006, says: "The goal of the Seattle Climate Protection Initiative is to reduce greenhouse gases in Seattle by 7% below 1990 levels by 2012, 30% below 1990 levels by 2024, and 80% below 1990 levels by 2050." Reducing VMT is a key strategy to reduce emissions, as 60% of Seattle's emissions come from vehicles.

The County has put addressing climate change at the center of its comprehensive plan, as one of three

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benefits over the longer term. Refer to Chapter 8 Mitigation in the Final EIS for details.

C-001-008

These mitigation measures are described in Chapter 8 of the Final EIS, and Appendix C, Transportation Discipline Report, addresses traffic impacts on the Pioneer Square neighborhood in detail and relevant mitigation measures. Please refer to the Final EIS for current information.

C-001-009

Updated tolling analysis has been conducted for the Final EIS and the effects of tolling are considered for all three build alternatives in Chapter 5. Please refer to Appendix C, Transportation Discipline Report, of the Final EIS for detailed analysis of tolling impacts to transportation elements. Other appendices contain technical supporting details of environmental effects for tolled and non-tolled alternatives for elements such as air quality, environmental justice, etc.

Currently, the Washington State Department of Transportation does not have the authority from the Washington State Legislature to toll State Route 99 (SR 99). As legislative action is required to toll this facility, the evaluation of the non-tolled Bored Tunnel Alternative in the 2010 Supplemental Draft EIS accurately reflects the current status of the project. Possible effects of tolling are not ignored in the 2010 Supplemental Draft EIS, rather they are presented in Chapter 9 and in Appendix C, Transportation Discipline Report.

C-001-010

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building,

C-001-018

framework policies guiding the entire plan. FW-102 states that "King County will be a leader in prevention and mitigation of, and adaptation to, climate change effects." This overarching policy is carried through the rest of the comprehensive plan, including the following policies on Reducing Climate Pollution:

- Recommends that the County collaborate with other local governments to reduce greenhouse gas emissions in the region to 80% below 2007 levels by 2050 (Policy E-216)
- Establishes a goal of reducing County government GHG emissions by 6% below 2000 levels by 2010 (Policy E-204).

The State has established statutory benchmarks and policy urging transportation agencies to pursue decreased Vehicle Miles Traveled over time, and increase the viability of other modes, as part of a larger effort to reduce green house gas emissions from vehicles.

- State law says we shall "By 2035, reduce overall emissions of greenhouse gases in the state to twenty-five percent below 1990 levels, and by fifty percent by 2050." (http://apps.leg.wa.gov/rcw/default.aspx?cite=70.235.020)

State law requires agencies distributing capital funds for infrastructure projects to consider whether the entity (WSDOT) has adopted policies to reduce greenhouse gas emissions. The agencies must consider whether the project is consistent with the state's limits on the emissions of green house gases and statewide goals to reduce annual per capita miles traveled.

The federal government – the DOT, the EPA and House of Representatives -- have shifted policies away from vehicular capacity and congestion relief and toward mobility by other modes in order to reduce greenhouse gas emissions and reduce oil dependence.

At the end of 2009, the U.S. Environmental Protection Agency (EPA) announced that greenhouse gases (GHGs) threaten the public health and welfare of the American people. EPA also announced their finding that GHG emissions from on-road vehicles contribute to that threat.

Ray La Hood, Secretary of the US Department of Transportation, announced in March 2010 a dramatic change from existing policy regarding transportation funding. This "major policy revision" aims to give bicycling and walking the same policy and economic consideration as driving. "Today I want to announce a sea change.... This is the end of favoring motorized transportation at the expense of non-motorized." A major thrust of the DOT's current priorities are to foster livability, sustainable communities, and reduced car dependence. One of their six principles is: "**Provide more transportation choices** to decrease household transportation costs, reduce our dependence on oil, improve air quality and promote public health."

The American Clean Energy and Security Act passed last summer set the goal of reducing greenhouse gas emissions by 17% from 2005 levels by 2020, and 83% by 2050.

To summarize, climate change is the most significant and daunting environmental issue facing this generation. Many agencies at all levels are working to shift how mobility is understood and delivered to achieve reduced pollution, increased choice, and reduced economic dependence on fossil fuels. Countless scientific and policy analyses of how to meet these goals arrives at the same fundamental conclusions: decision makers and agencies must commit to more alternative transportation, and pro-actively plan for reduced Vehicle Miles Traveled, in order to achieve reductions in GHG emissions. The preferred alternative directly violates statutory benchmarks, goals and policies at all levels of government by aiming for and facilitating increased car usage.

Action: In light of City, County, State, and Federal policies aimed to reduce greenhouse gas emissions from vehicles, the EIS should aim for reductions in emissions and VMT. Greenhouse gas emissions should be compared for all the alternatives. The analysis should examine the cumulative use impacts created by the decision in this corridor – not just the trips on the facility, but the area wide effects generated by the decision in this corridor.

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and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural, and Archaeological Discipline Report, of the Final EIS. The construction process includes

C-001-019 Beyond policies, there is practical evidence that calls into question the narrow focus on vehicle capacity in this corridor.

This project uses PSRC forecasts for future travel, which extrapolates past growth rates for driving. However, the empirical data for the Seattle area and this facility make those assumptions dubious. According to the City's annual counts, usage of the Alaskan Way Viaduct has been flat over the past twelve years. Research from Sightline Institute (http://www.sightline.org/publications/reports/braking-news-gas-consumption-goes-into-reverse/) reveals car travel has been declining the past 13 years in our region. A new study by Advertising Age reveals that young people (16-20 years old) are driving 20 to 25% less than their parents' generation. (http://adage.com/digital/article?article_id=144155).

Forty percent of regional trips are less than 2 miles in length, which means it would be viable to serve a significant portion of SOV trips by biking, walking, or transit.

Demographics are changing, societal values are changing, the energy economy is changing, and land use and transportation patterns in Seattle are changing. Actual rates of driving have been flat or declining. This project should plan for serving Seattle's future travel patterns and policies, not the past.

C-001-020 Furthermore, this inaccurate portrayal of "need" for car capacity is worsened in this DEIS by ignoring the fact that travel on the viaduct is expected to decrease by about 1/3 during the 4.5 years of construction. After 4.5 years, travel patterns will have already adjusted to the lower capacity. (Ch 6, pg 139) People and freight will have found other routes, modes and solutions, and our local travel patterns will have shifted. At that point, the 'need' will be different. It is fallacious for this EIS to predict a spontaneous surge in demand in car travel from perhaps 70,000 trips a day before the new tunnel opens to 117,000 trips a day after it opens. It is misleading for this analysis to justify such an expensive facility on predictions of 'need' that are contradicted by empirical evidence.

Action: It would be **more accurate -- and compliant with City and State policy – for this project to plan for a reduced number of car trips**, and increased use of transit, biking, and ride-sharing. Evaluation measure should compare access and mobility for people and freight, and favor solutions that provide viable alternatives to travel by car.

C-001-021 **8. This EIS should carefully consider the public safety risk of delaying viaduct closure from the promised date of 2012 to 2015, 2016, or beyond.**
By default or by design, the Viaduct is severely damaged and will come down. The city and region desperately need interim traffic solutions to be in place before it does. Plans for dealing with the loss of the viaduct have been developed. Many of the elements in these plans are necessary for local access, whatever the final decision for viaduct replacement. These alternative traffic solutions should be implemented now, so the viaduct may be closed earlier if necessary, and public safety is not eroded any further by delaying the promised closure date of 2012.

Linking Viaduct removal to the opening of the deep-bored tunnel idea only delays the inevitable closure and increases the danger. According to many experts in transportation planning and earthquake preparedness policy, it is better to bring the structure down in controlled fashion than to let it pancake during a seismic event. http://seattletimes.nwsource.com/html/opinion/2002837776_viaduct02.html
Furthermore, analysis in the DEIS states that the viaduct is particularly vulnerable to damage from soil settlement during construction, if the bored tunnel is pursued, and may fail before 2016.

Action: Seattle DOT should work with WSDOT to update plans for local access and mobility without the viaduct, based on the Center City Access Strategy and Urban Mobility Plan, and prioritize these investments NOW. A seismic event or further settlement may damage the viaduct at any time, and the

monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

C-001-011

The potentially affected buildings and the monitoring plan are discussed in the Section 106 Memorandum of Agreement, which is an attachment to Appendix I (Historic, Cultural and Archaeological Discipline Report) of the Final EIS, and in Chapter 6 of Appendix I. Buildings,structures (both historic and non-historic), and areaways along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties. While laser scans could identify damage after it occurs, this process will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings or areaways, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

C-001-012

Measures that can be employed to mitigate the risk of groundwater mounding behind tunnel walls or ground improved areas are outlined in the Appendix P, Earth Discipline Report, of the Final EIS. The level of detail provided in the Earth Discipline Report is appropriate for environmental review purposes. The risk of groundwater mounding and associated mitigation will be further evaluated during final design of the project. Design guidelines will provide for mitigation of groundwater

C-001-021 systems needed to provide mobility must be ready to go. . **The project should prepare to provide mobility and access in case the viaduct must be closed sooner than 2016.**

C-001-022 **9. The high cost of tolls, in combination with the significant degradation of transit travel times, is particularly onerous for low-income citizens. This must be evaluated as a social justice impact for the preferred alternative.** This DEIS reveals WSDOT intends to charge tolls of up to $4 each way for a trip through the tunnel. This could add up to hundreds of dollars in additional costs each week for taxi drivers, local freight movers, and any small businesses that provide delivery or site visits as part of their service. Further, the DEIS states that tolling significantly impairs transit service due to increased congestion. After analyzing tolling impacts on transit riders (Ch 9, pg 215) the conclusion is that "These effects would not be acceptable as part of a long term tolling solution."

Action: This DEIS must analyze how the combination of high tolls, the default on the January 2009 promise of additional transit, and impairments to existing transit from congestion affects lower income people. How affordable is this toll for low and average income earners? Does the plan for high tolls and impaired transit support the State's intention of improving mobility for everyone, or just wealthy car owners who can afford the toll?

C-001-023 **10. The public and decision makers have been misled about the finality of a decision for the bored tunnel alternative in advance of comprehensive environmental review of impacts.**

WSDOT has advanced design, development, and contracts for the deep bore tunnel far beyond the other alternatives. SEPA law requires that a final Environmental Impact Statement be completed *before* decisions are made that commit the government to a particular course of action. Until the FEIS is completed, agencies are precluded from making decisions that pre-judge the choice among alternatives.

There are many indications, especially in the State's advocacy efforts and public communications, that the playing field has been tilted and the tunnel is in a substantially favored position already:

- Preparation of, and pressure to sign, MOAs for the tunnel with the City,
- Significant development of the bored tunnel design,
- Preparation of contracts with tunnel construction bidders, with the intention to sign them before the FEIS is issued, and
- Numerous statements by state officials that a "Decision has already been made and would not be revisited," which have deceived and confused the public about the status of environmental review and record of decision.

WSDOT's actions effectively preempt any opportunity for a deliberate and balanced decision-making process after environmental analysis is complete. Giving the tunnel alternative a two-year head start, and investing substantive resources into creating the illusion that it is the only possible solution at this point – before harms and risks and negative impacts are made known to the public – directly violates SEPA. As the public is just now learning, the tunnel alternative comes with a high price tag, many unresolved challenges, and significant impact to the City of Seattle.

C-001-024 To summarize the shortcomings that are finally revealed in this DEIS: The preferred alternative only solves a portion of the transportation challenge. Unless significant investments to local mobility are added to the preferred alternative, it would create havoc on city streets for people and freight. It has a very high price but only benefits a few of the region's travelers. High toll rates render the capacity useless for 2/3 of potential SR-99 users. Construction might do irreparable damage to historic buildings and the Pioneer Square Historic District, and WSDOT may not have sufficient budget to offer protection or mitigation. Funding plans reveal a high risk of cost escalation, meager contingency reserves, and no funding plan for potential cost overruns.

C-001-025
C-001-026

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mounding to within existing tidal fluctuations. Please see the Final EIS, Chapter 8 Mitigation. for current infomration on the mitigation measure that will be implemented.

C-001-013

The Section 4(f) Evaluation in the Final EIS and Appendix J, 4(f) Supplemental Materials, recognize that the Pioneer Square Historic District is a protected 4(f) resource and discuss the effects of the build alternatives on this resource.

C-001-014

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. 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). The Final EIS Chapter 1, Introduction, describes the history of the project, including development of the Purpose and Need and alternatives. Please refer to the Final EIS for current information.

C-001-027

Action: This DEIS should compare current and reasonable alternatives to the tunnel, alternatives that improve access and mobility in Seattle while protecting the opportunity for a new waterfront -- in case its merits do not outweigh the costs and risks.

C-001-028

11. Decision makers and the public deserve complete clarity on the promised project scope, budget, and security of funding.
With the data that exists now, it is practically impossible for decision makers to get a firm fix on full cost of the preferred alternative. It is not clear what elements of the project scope are funded and what might be cut, the full cost of protecting against or mitigating for expected harm is not known, and contingency reserves necessary for potential future problems seem to have been mostly drained.

The funding side is as unclear. There is a firm budget cap of $2.4 billion on the state's resources. That leaves $700 million in unsecured commitments. The Port of Seattle's promised $300 million has not materialized, and may not. This $400 million from future toll revenues may not be realistic. There is significant doubt as to whether the state will be able to float bonds on future tolling revenue because the state is at the limit currently for debt capacity, and both SR-520 and SR-99 projects are dependent on raising $2.4 billion in new bonds. Initiative 1053 also casts doubt on whether WSDOT can impose tolls without action by the legislature, which may not happen. Finally, there is firm resistance from all parties – City, County, and State -- to accept liability for the cost overruns, overruns that are likely to occur with 40% probability.

Action: WSDOT must prepare a table comparing full project costs (including reasonable contingency reserves), and a full funding plan, (including back up plans if the unsecured funds fall through, and willing sources for potential overruns) and present it to the public and decision makers.

Summary

C-001-029

1. The tunnel alternative only answers part of the viaduct replacement challenge. Trips that bypass downtown Seattle neighborhoods are well-served; access into Seattle neighborhoods for vehicles, freight and transit users is not. As the preferred alternative is described, the negative impacts to local streets are egregious. When the diversion effects of tolling are included, these negative impacts are unacceptable – and cast doubt on whether the alternative as it will be used meets the statement of purpose and need.

C-001-030

WSDOT must develop a plan to show how WSDOT will provide good access to downtown Seattle for people and freight, and prevent, resolve, or mitigate the intolerable impacts to the streets of Pioneer Square Historic that are caused by the preferred alternative. Solutions such as additional transit, routing traffic away from Historic District streets, transportation demand management, improvements to I-5, and relocating the interchange elsewhere should be analyzed for their ability to enhance local mobility and access while protecting Historic District streets.

C-001-031

2. **WSDOT must develop a mitigation plan to show how WSDOT will prevent, resolve, or mitigate potential damage to all historic buildings along the tunnel route, and in the Pioneer Square historic district and underground.** This plan should include 3-D laser scans of each building before, during, and after construction. Damage must be arrested as it is occurring, if significant. Laser scans are necessary to identify which buildings must be repaired afterward.

C-001-032

3. A full budget for all alternatives should be developed that identifies the appropriate responsibility and source for each line item. **This is a state project, and the state must show it can cover costs for the preferred alternative, including:**
- The bored tunnel itself,
- Other project components promised as part of the program (lids over the cut and cover sections, improvements to the street grid around the interchanges, reconnecting three streets across SR-99 in

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C-001-015

Chapter 3 in the 2010 Supplemental Draft EIS describes the alternatives development process, whcih includes the range on concepts that were considered and the screening process that led to the identification of the build alternatives evaluated in the 2010 Supplemental Draft EIS and the Final EIS. Environmental documentation for the proposed 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). The lead agencies believe all reasonable alternatives have been considered. The Final EIS Chapters 1 and 2, discuss the project's purpose and need statement and the alternatives development process.

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 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.

C-001-016

The state legislature authorized funding to replace the Alaskan Way

C-001-032

South Lake Union, access to downtown Seattle, urban design and landscaping around the portals, viaduct removal and replacement of Alaskan Way surface street, etc),

- Solutions for local access and improvements to local streets,
- Protection of historic buildings and the Pioneer Square Historic District,
- How WSDOT will cover costs if they escalate from the 60% confidence interval ($1.96 billion) to the 95% confidence interval ($2.37 billion), and
- Any further cost escalations that may occur later due to the risk of boring in such complex soil and water conditions, under valuable real estate and intense commercial activity.

4. There is still significant uncertainty around whether the preferred alternative can be fully funded. Decision makers deserve a clear picture of the alternative's basic financial viability. **WSDOT should prepare a comprehensive funding plan** for the preferred alternative that addresses:

- Clear description of what project elements promised as part of the tunnel program are covered by the minimal state allocation of $2.4 billion, the project budget of $3.1 billion, and what are not,
- What the project will do if the $700 million of project funding is not secured,
- What contingency funds remain unallocated, and how much this is expressed as a percentage of full $3.1 billion project budget,
- How WSDOT plans to exceed the constitutional debt limit to borrow $2.4 billion necessary for both 520 and SR-99 projects concurrently, and
- Exactly how potential cost overruns will be covered, given the unresolved contention between governments.

The public and elected decision makers at the City and State deserve a clear picture of total project costs (item 3 above) compared to the full funding plan (item 4.) WSDOT should explain how they will address any shortfalls, and what elements or the overall program scope are vulnerable to being cut. The City of Seattle, local neighborhoods, the federal GSA, or private property owners cannot be held liable for costs of the State's project.

"Measure twice, cut once" for funding would prevent a worst case situation: if the tunnel project is started but runs into trouble, and additional funding is not unavailable. Existing funds could be consumed, the project left incomplete, leaving a further degraded Viaduct intact and no money for transportation and waterfront improvements. That situation would represent a miserable failure of leadership in pursuing a project with full knowledge of risk, but without sufficient funding or a back-up plan.

C-001-033

It is unfortunate that decisions made by WSDOT in the early stages of drafting this DEIS document led to such a flawed evaluation. Many of the concerns described here were raised in early 2009 with WSDOT and SDOT, again in late 2009 in multiple EIS scoping letters from Seattle organizations, and once again by City officials in July 2010 when an early draft was released. The sooner WSDOT rectifies these errors and omissions, the sooner the viaduct replacement project can get back on track. Decision-makers in Seattle and the State are counting on accurate and robust information so they can assure a final decision provides public safety, mobility, and access for the future – while fully protecting Seattle's assets -- at a cost effective price.

Thanks for your consideration of these comments.

Sincerely,

Cary Moon
Director, People's Waterfront Coalition

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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 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.

C-001-017

The Final EIS Chapter 2, Alternatives Development, describes the history of the project, including development of the Purpose and Need and alternatives. This chapter also addresses development of the I-5, Surface, and Transit Hybrid. After the purpose and need statement was updated in 2009, design concepts were reevaluated and screened to determine the alternatives to be evaluated in the 2010 Supplemental Draft EIS. The Surface and Transit Hybrid concept was screened out because the lead agencies determined it lacked the capacity to serve the long-term needs of the region and it does not meet the project's purpose and need to provide capacity to and through downtown Seattle. The

Final EIS Appendix W, Screening Reports, includes the Surface and Transit Scenario Year 2030 Analysis Results.

C-001-018

Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Discipline Report. All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative).

The study area evaluated includes areas likely to be affected by changes in greenhouse gas emissions as a result of the project. The greenhouse gas effects were estimated for roadways within the city center area, as well as in the region. The city center area is bordered by Prospect Street on the north, 15th Avenue on the east, S. Holgate Street on the south, and Elliott Bay on the west. The region includes all the traffic movements in King, Pierce, Snohomish, and Kitsap Counties.

C-001-019

The travel forecasting for the project has been conducted using the industry standard modeling tools and data provided by the Puget Sound Regional Council. The modeling platform has undergone rigorous review and validation procedures. Forecasts of future travel are based on the relationship between forecasted population and employment growth and the configuration of existing and planned transit and roadway facilities. The models do not just extrapolate traffic growth trends, rather, the modeling procedures iterate mode choice, trip distribution and assignment to take into account both the demand for trip interchange between geographical areas and the capacities and services levels for transportation corridors. For further details, please refer to the Transportation Discipline Report, Appendix C of the Final EIS.

C-001-020

The Tolled Bored Tunnel Alternative is forecasted to carry 57,100 vehicles per day in 2030 as presented in Chapter 5 of the Final EIS. Traffic patterns on SR 99, including vehicle volumes, at the bored tunnel's year-of-opening are shown in the Supplemental Draft EIS, specifically in Section 5.1.4 of Appendix C, Transportation Discipline Report. Year-of-opening results are not presented in the Final EIS. Vehicles shifting back to SR 99 from alternate routes upon completion of construction will reduce the levels of traffic congestion on those routes, as discussed in Chapter 6 of Appendix C, Transportation Discipline Report, in the Final EIS. The traffic modeling methodology and assumptions are also discussed in Appendix C.

C-001-021

WSDOT and the City of Seattle have prepared an emergency response plan that addresses an unplanned event, such as an earthquake, closing the viaduct.

C-001-022

Final EIS Appendix H, Social Discipline Report, discusses the potential effects of toll payment on low-income populations, as well as the potential effects of using alternate routes to avoid the toll.

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct, and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the Viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation during the central waterfront phase of the viaduct program. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the agreement

has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently WSDOT is providing funding for King County on the S. Holgate to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is on-going and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as the need for a bus travel time monitoring system. WSDOT will also work with the County to identify funding sources for the service originally contemplated in the January 2009 agreement.

C-001-023

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). A final decision on the viaduct replacement will not be made before FHWA issues a Record of Decision.

The decision to evaluate the Bored Tunnel Alternative in the 2010 Supplemental Draft EIS did not represent a commitment to proceed with that alternative. Public statements by the state and local project sponsors are not binding on FHWA, and id not influence FHWA's analysis of the build alternatives. In addition, it is acceptable under FHWA's environmental regulations for a project sponsor to develop a single alternative to a higher level of detail, including conducting preliminary engineering on that alternative, as long as it does not preclude an 'apples to apples' comparison of the alternatives in the EIS. See FHWA Order 6640.1A, FHWA Policy on Permissible Project Related

Activities During the NEPA Process (October 1, 2010). FHWA is satisfied that WSDOT's consideration of the Bored Tunnel Alternative is consistent with FHWA regulations and policies, including Order 6640.1A.

Also, FHWA design-build regulations allow a state to conduct a procurement process for a design-build contract and enter into a design-build contract prior to completion of the NEPA process. The design-build contract also is allowed to undertake preliminary engineering prior to completion of the NEPA process. WSDOT's contracting activities on this project are consistent with the requirements in the design-build regulations (23 CFR 636).

C-001-024

The Final EIS Chapter 1, Introduction, describes the Purpose and Need for the project and one of several purposes is to provide capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle. Appendix C, Transportation Discipline Report, addresses local access and mobility for people and freight. The traffic modeling methodology and assumptions are also discussed in Appendix C. Please refer to Chapter 5 of the Final EIS for the discussion of permanent transportation effects for all of the alternatives.

The City of Seattle is leading redevelopment efforts and associated environmental reviews processes for the central waterfront, which would take place under NEPA and/or SEPA as appropriate. In addition, the proposed viaduct replacement project compliments a number of other projects with independent utility that would provide other improvements such as transit enhancements and a new Alaskan Way Promenade and public space. These individual projects include the moving forward projects identified in 2007, as well as improvements recommended as part of the Partnership Process. Please refer to Chapter 2, Alternatives Development, of the Final EIS for a description of these projects.

C-001-025

Extensive real-time monitoring will be conducted to prevent building damage. The monitoring plan is discussed in the section 106 Memorandum of Agreement and in Chapter 6 of Appendix I (Historic, Cultural and Archaeological Discipline Report) of the Final EIS. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. Monitoring of each building and structure will be done before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties. No damage to the Pioneer Square Historic District is anticipated.

C-001-026

Financial planning for the project follows established WSDOT procedures and has been independently reviewed by FHWA and other agencies.

C-001-027

The Final EIS Chapter 2, Alternatives Development, describes the history of the project, including how the Purpose and Need was updated and the design concepts reevaluated and screened. All reasonable alternatives to meet the project's purpose have been considered. The City of Seattle is leading redevelopment efforts and associated environmental reviews processes for the central waterfront, which would take place under NEPA and/or SEPA as appropriate.

C-001-028

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 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.

C-001-029

The Final EIS Chapter 1, Introduction, includes the Purpose and Need for the project. Chapter 5 describes the permanent effects and includes substantial detail on transportation in downtown Seattle. The project, with or without tolling and its related effects, provides substantial benefits. All alternatives meet the project's purpose and need, and the bored tunnel provides the best combination of benefits and least effects. Appendix C, Transportation Discipline Report, addresses the effects of potential tolling.

C-001-030

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. Because operational effects of the built alternative would be substantially better than the Viaduct Closed (No Build Alternative), long-term transportation mitigation measures are not anticipated. However, a number of mitigation measures in place during construction could have benefits over the longer term. Refer to Chapter 8 Mitigation in the Final EIS for details.

Because traffic in the Pioneer Square Historic District is controlled by signals, it is not anticipated that the increased volume will affect the pedestrian character nor will it make it more difficult to walk to shops or restaurants. Pioneer Square has historically been an active place with a high volume of traffic. The removal of the viaduct will facilitate re-establishing the connection between Pioneer Square and the waterfront. This connection and the widening of Alaska Way will be part of the City's Central Waterfront Project, which will undergo its own environmental review. Appendix C, Transportation Discipline Report, addresses traffic impacts on the Pioneer Square neighborhood. Please refer to the Final EIS for current information.

C-001-031

The potentially affected buildings and the monitoring plan are discussed in the Section 106 Memorandum of Agreement and in Chapter 6 of Appendix I (Historic, Cultural and Archaeological Discipline Report) of this Final EIS. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. While

laser scans could identify damage after it occurs, this process will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

C-001-032

The state legislature authorized funding to replace the Alaskan Way Viaduct in RCW 47.01.402. A detailed project budget as requested by this comment is not relevant for environmental analysis under NEPA and SEPA.

C-001-033

The Final EIS Chapter 2, Alternatives Development, describes how the project began and the alternatives development process, which included key decision points and public involvement.

GREATER Seattle
CHAMBER OF COMMERCE

December 9, 2010

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Angela Freudenstein
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RE: Alaskan Way Viaduct Replacement SDEIS

Dear Ms. Freudenstein,

C-002-001

Thank you for the opportunity to comment on the Supplemental Draft Environmental Impact Statement for the Alaskan Way Viaduct Replacement Project. We commend WSDOT, the City of Seattle and FHWA for the thorough discussion of alternatives and environmental impacts in this SDEIS. This supplemental document stands on the shoulders of two earlier EIS's, and as a cumulative evaluation it is very thorough in all areas. As required by SEPA/NEPA, some of the analysis includes 'worst-case' scenarios that we're confidant can be mitigated or avoided as the process goes forward. We support the decision to not include the so-called 'Surface Alternative' in the SDEIS because it reduces capacity and thus does not meet the project's defined purpose and need.

The Seattle Chamber Continues to Support the Bored Tunnel

In 2009, the Greater Seattle Chamber of Commerce Board of Trustees voted unanimously, on behalf of the nearly 2,400 member companies we represent in this region, to endorse replacing the Alaskan Way Viaduct with a bored tunnel. This summer, the Board made the timely and successful completion of the Bored Tunnel one of its top policy priorities. After reviewing the SDEIS, the Chamber would like to voice its continued full support for the bored tunnel. We thank you for listening to stakeholders and the broader community to develop a project that does three important things: creates jobs, relieves congestion, and opens the waterfront.

It Creates Jobs

The Tunnel + Transit project will create thousands of construction jobs, at a time when we need them most. It minimizes economic impacts by allowing the Port of Seattle and the current Viaduct to remain open during construction. It also provides long-term regional economic

C-002-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments in support of the Bored Tunnel Alternative.

C-002-001

benefits on one of our most important transportation corridors. Moreover, the faster we get going on this project, the more we can put people back to work and save taxpayer dollars by taking advantage of a highly favorable bidding climate.

It Relieves Congestion

The Tunnel + Transit project will maintain capacity and today's travel times for trips through downtown. Other project improvements will help improve mobility for residents, businesses, commuters, transit users and visitors and make it easier to access downtown Seattle. Also, the Tunnel+Transit plan includes $190 million to fund one million more hours of transit per year and ultimately provide more transportation choices to a broader segment of the population.

Doing nothing in the 'Surface Alternative', on the other hand, would have unloaded 110,000 vehicles per day onto downtown streets and guaranteed gridlock. It would have been "game-day traffic" every day, all day long. Construction of a new surface-road would have taken at least 4 ½ years, and drivers could have faced up to 2 years of detours. The surface-road would have also required 27 new stop lights on Alaskan way between SODO and Belltown. According to WSDOT, it would have taken 48 minutes to drive from Greenwood to the airport in stop-and-go traffic, and it would have taken a half an hour to get from West Seattle to downtown or from Ballard to downtown. Ambulances and emergency vehicles would have been stuck in traffic gridlock. According to the Secretary of Transportation, these traffic delays on SR99 would have virtually shut down I-5 and made it a parking lot for most of the day.

It Opens the Waterfront

The Tunnel+Transit project provides a once in a lifetime opportunity to create nine acres of new open space on a waterfront that will be free of the constraints imposed by the existing Viaduct. It will provide a welcoming place for pedestrians, bicycles and transit, restore our shoreline, manage carbon emissions, and capture and clean much of downtown Seattle's stormwater, which is a big boost for the clean-up of Puget Sound. It will eliminate noise, shadowing and view blockage from the existing Viaduct. Finally, it promises to be a new regional center for community activities, tourism and commerce while reducing the environmental impact of cars.

Conversely, according to WSDOT studies, the do-nothing 'Surface Alternative' scenario would have taken away over 400 parking spaces to make room for tens of thousands of idling cars and trucks. It would have hurt downtown merchants and small businesses like those at the Pike

C-002-001

Place Market that depend on a vibrant pedestrian-friendly environment and regional mobility. It would have also increased noise levels to an average of 60 decibels (about the same noise level as standing next to a very loud lawnmower). According to Gehl Architects, an independent and well-respected architectural firm from Copenhagen, the do nothing 'Surface Alternative' would have been the worst possible outcome for the waterfront and downtown's fragile urban landscape.

Let's Get Moving

Public safety and the Viaduct's significant risk of structural failure require that we move the tunnel to construction as soon as possible. Sufficient time has been devoted to the process. It's been nearly ten years since the Nisqually quake shook the Viaduct. Since then, 700 community meetings have been held, 15,000 public comments have been registered and a year-long process that included stakeholders representing diverse interests from across the region deliberated on the solution. Everyone gave something up in that process, but in the end 24 out of the 25 stakeholders reached a broad-based consensus about a positive path forward that was based on the data, the costs and benefits, and the different perspectives each stakeholder brought to the table. The project was subsequently endorsed by the governor, the state legislature, King County, the Port of Seattle, the City of Seattle and a broad and diverse coalition of over 150 business, labor and environmental groups from across the region.

The project has strong accountability and project oversight controls. It is fully funded by the state, and the state has set aside hundreds of millions of dollars within its budget for risk and inflation, providing a significant cushion for any issues related to the tunneling portion of the project. Doing nothing, on the other hand, would have put the project at risk of losing $2.4 billion in state money that is already on the table. That could have left the City of Seattle on the hook for the entire project costs, amounting to billions of dollars the city doesn't have—particularly during a recession.

It's important to remember that over 150 tunnels have been built in Seattle since 1890, mostly in glacial soils. The most recent example is the Beacon Hill light rail bored tunnels, which were completed on-time and on-budget. Sound Transit is currently boring another tunnel under Capitol Hill. Tunnels as large as Seattle's were recently successfully completed in Hamburg, Moscow, Shanghai and Madrid. Unquestionably, we have the tools and expertise to do this project. It's time to move forward.

C-002-001

By advancing the Tunnel + Transit project, this SDEIS recognizes the safety issues posed by the Viaduct's significant risk of structural failure. It is improves mobility, helps create thousands of construction jobs, keeps the economy moving and provides long-term regional economic benefits. It also provides a once in a lifetime opportunity to create a new waterfront that's a welcoming place for people, bikes and transit.

The Seattle City Council recently voted 8 to 1 to move the Tunnel + Transit project forward. During these proceedings, representatives from a broad coalition of over 150 individuals, elected officials and organizations urged the City Council to advance the project. Support came from groups as diverse as Allied Arts, Anderson Hay & Grain in Ellensburg, the Hispanic Chamber of Commerce, the King County Labor Council, the Snoqualmie Indian Tribe, the Pike Place Market PDA, the Pacific Merchant Shipping Association, the Seattle Aquarium and the Waterfront Legacy Committee. Testimony came from baristas, bloggers, bicyclists, construction workers, small businesses, pedestrian activists, and multicultural leaders from the African-American, Filipino-American, Vietnamese-American, Chinese-American, Hispanic-American, Eastern European-American, and Somali-American communities. Support also came from neighborhood leaders from Queen Anne, Downtown, Belltown, Rainier Beach, Seward Park, South Park, the University District, Pioneer Square, West Seattle, Montlake, and Ballard, just to name a few. See the attached 22 page document for the full record of supportive statements from the community.

It's time for all of us to advance this consensus decision forward and leave the chance and risk of further delay and political deadlock behind.

Thank you for your continued leadership and resolve on this vitally important project.

Sincerely,

Phil Bussey
President & CEO

BILL & MELINDA GATES *foundation*

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December 10, 2010

Via messenger with copy by e-mail

Angela Freudenstein
AWV Environmental Manager
AWV Project Office
999 Third Avenue, Suite 2424
Seattle, WA 98104-4019

Re: Comments on Supplemental Draft Environmental Impact Statement
Alaskan Way Viaduct Replacement Project

Dear Ms. Freudenstein:

The Bill & Melinda Gates Foundation (the "Foundation") provides the following comments on the Supplemental Draft Environmental Impact Statement (SDEIS) dated October 2010 for the Alaskan Way Viaduct Replacement Project (AVWR).

General Comments

C-003-001

We support the choice of the Curved Sixth Avenue as the identified preferred option for the north portal area. In reviewing the two options for possible future connection of Sixth Avenue N. between Harrison Street and Mercer Street, the SDEIS tends to understate the likely impacts associated with the Straight Sixth Avenue option. The Curved Sixth Avenue option satisfies all of the key functions desired for the extension of Sixth Avenue N. and the new intersection of Sixth Avenue N. and Mercer Street while it minimizes the effects on the Gates Foundation campus and avoids high rights-of-way acquisition costs for the City of Seattle that would arise with the Straight Sixth Avenue option.

The SDEIS should note that the City of Seattle (City) and IRIS Holdings, LLC (IRIS), the sole member of which is the Foundation, have entered into an agreement dated November 30, 2010 (the "Agreement") regarding the extension of Sixth Avenue N. in the vicinity of the Gates Foundation Campus as part of the City's Mercer West Project. The Agreement, authorized under Ordinance 123418 which passed by unanimous vote of the City Council, provides for coordination of the City's and IRIS' construction projects and for an exchange of property between the City and IRIS if the Curved Sixth Avenue option is selected. It provides the City the rights necessary to implement the Curved Sixth Avenue option.

C-003-001

Thank you for your support of the Curved Sixth Avenue option for the preferred Bored Tunnel Alternative. The Straight Sixth Avenue option is no longer being considered for this alternative. The Final EIS acknowledges that impacts with the Straight Sixth Avenue option for the Cut-and-Cover Tunnel and Elevated Structure Alternatives would be substantially greater than the Curved Sixth Avenue option. Appendix D, Land Use Discipline Report, addresses the impacts of each build alternative on the Bill and Melinda Gates Foundation Campus property.

C-003-001

Coordination and joint funding by the City and IRIS of certain construction activities as provided for in the Agreement will minimize construction impacts and result in significant savings in both cost and time for the City's Mercer West Project if the Curved Sixth Avenue option is selected. The coordination plan also allows IRIS to proceed with the construction of its planned third building without delays from the planned Mercer West roadway changes, while fully preserving the City's ability to extend Sixth Avenue N in the future. Under the plan described in the Agreement, IRIS will perform certain work for the City and help the City avoid some costs that would otherwise have been necessary. The City has calculated this coordination will reduce the cost of the City's Mercer West Project by $8.4 million, which we believe to be a conservative estimate.

In addition, the Agreement contemplates an exchange of property between the City and IRIS that would provide, at no out-of-pocket cost to the City, the IRIS-owned property along the current edge of the Gates Foundation campus necessary for construction of the Curved Sixth Avenue option. Under the Agreement, IRIS will convey the property required for the Curved Sixth Avenue option in exchange for a triangular portion of City property adjacent to the southeastern edge of the Gates Foundation campus that is expected to be vacated by the City upon the backfilling and closing of Broad Street between Ninth Avenue N. and Taylor Avenue N., as described in the SDEIS. The exchange will occur upon approval of the Broad Street vacation by the City Council.

There is no similar agreement for the City to acquire the property that would be required for the Straight Sixth Avenue option, and any attempt to do so would come at significant cost to the City. The Straight Sixth Avenue option would require considerably more land from the Gates Foundation campus property than the Curved Sixth Avenue option, and the land required would need to come from the center of the campus and not its edge. The take would divide the campus in two, impede internal circulation, reduce the utility of the eastern part of the campus, increase the costs of design and construction, and necessitate an extensive sky bridge over Sixth Avenue N. to restore campus connectivity. The sky bridge would have the effect of placing Sixth Avenue N. in a narrow tunnel.

In summary, the FSEIS should acknowledge the following issues associated with the Straight Sixth Avenue option:

- Both the Curved Sixth Avenue option and Straight Sixth Avenue option will provide satisfactory accommodation of vehicular, bicycle and pedestrian access and travel.
- The Curved Sixth Avenue option roadway will be landscaped and open to the sky. A large part of the Straight Sixth Avenue option would be in a narrow tunnel under buildings – a less desirable environment and travel experience.
- It is probable that with final engineering, the Straight Sixth Avenue option would have a steeper grade and tighter turning radii at Mercer Avenue and Republican

C-003-001

Street than the Curved Sixth Avenue option, making it less desirable for freight traffic.

- The Straight Sixth Avenue option would have major negative impacts to the development of the Gates Foundation campus, as noted above.
- The costs associated with property acquisition and impact compensation for the Straight Sixth Avenue option would be significantly greater than for the Curved Sixth Avenue option.
- As noted above, the City of Seattle has executed an agreement with IRIS Holdings, LLC, the wholly-owned entity of the Foundation, which will result in significant practical and financial advantages to the public if the Curved Sixth Avenue option is selected. These include resolution of the needed property acquisition at no cost, preservation of the City's and State's ability to complete the extension of Curved Sixth Avenue option indefinitely, coordination of the needed utility and roadway improvements, and significant overall project cost reductions.

The FSEIS should acknowledge these considerations and more properly reflect the adverse impacts associated with the Straight Sixth Avenue option when compared with the preferred Curved Sixth Avenue option.

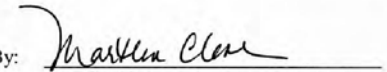
Specific Comments

Our more specific comments on the SDEIS and its Appendices are set forth in the attached document.

We appreciate the opportunity to provide these comments on the SDEIS. Please do not hesitate to contact us if you have any questions about these comments.

Sincerely,

BILL & MELINDA GATES FOUNDATION

By: 
Martha Choe
Its: Chief Administrative Officer

Attachment: Specific Comments (including GeoEngineers memorandum, of 11/30/10)

AWVR Draft Supplemental EIS
Specific Comments of Bill & Melinda Gates Foundation

December 10, 2010

DSEIS

	Document Location	*Comment*
C-003-002	Page 14 (exhibit 2-4)	Both drawings in this exhibit (as well as other exhibits throughout the DSEIS) incorrectly imply that Republican Street extends through the Gates Foundation campus. The street in that area has been vacated for many years.
C-003-003	Page 14	Description of Curved Sixth Avenue option should note there will be a half signal at Mercer allowing all vehicle movements except left turn from westbound Mercer onto southbound Sixth.
C-003-004	Page 26 (exhibit 2-23):	The predicted dates shown in this table for the Mercer Street widening and overcrossing construction activities are significantly different from schedule information obtained separately from SDOT. The FSEIS should provide updated schedule information for this exhibit.
	Page 27 (exhibit 2-24):	The predicted dates shown in this table for the Mercer Street widening and overcrossing roadway closure and restriction activities are significantly different from schedule information obtained separately from SDOT. The FSEIS should provide updated schedule information for this exhibit.
C-003-005	Page 29	The Stage 5 revision to Mercer Street described on this page should be indicated in exhibit 2-23 and 2-24.
C-003-006	Page 96	Description of Curved Sixth Avenue option should note there will be a half signal at Mercer Street allowing all vehicle movements except left turn from westbound Mercer Street onto southbound Sixth Avenue.
	Page 112	Description of Curved Sixth Avenue option should note there will be a half signal at Mercer Street allowing all vehicle movements except left turn from westbound Mercer Street onto southbound Sixth Avenue. Also, the description of access to southbound SR-99 from westbound Mercer Street should be changed to note the following routes: Left turn to southbound Dexter Avenue, right to westbound Harrison Street, right to northbound Sixth Avenue and onto southbound SR-99, and alternatively, right turn to

C-003-002

The mapping has been corrected for the Final EIS. The base mapping used for the Supplemental Draft exhibits shows the historical layout of the City's street grid and is not intended to imply that Republican Street extends through the Bill and Melinda Gates Foundation Campus.

C-003-003

In the Final EIS, the updated intersection analysis of Sixth Avenue at Mercer Street includes the signal operation that allows northbound left-turns from Sixth Avenue onto Mercer Street. Please refer to the Final EIS Appendix C, Transportation Discipline Report, for the updated analysis.

C-003-004

The Summary and Chapter 3 of the Final EIS contain updated schedule information on construction activities and roadway closures, restrictions, and detours.

C-003-005

The EIS text contains additional details about construction. The exhibits in the Final EIS have been updated to reflect current construction information for the alternatives.

C-003-006

The updated intersection analysis of Sixth Avenue at Mercer Street, in the Final EIS, includes the signal operation that allows northbound left-turns from Sixth Avenue onto Mercer Street. Updated traffic analysis of this intersection, discussions about travel routes and impacts to freight can be found in the Final EIS, Chapter 5 of Appendix C.

C-003-006		northbound Taylor Avenue, right turn to eastbound Roy Street, and onto southbound SR-99. The discussion of added travel time and difficulty for truck traffic is misleading.
C-003-007	Page 112	Correct Gates Foundation property acquisition areas are: Straight option 0.8 acre; Curved option 25,040 sf & 0.6 acre.
	Page 117 (exhibit 5-38):	The correct Gates Foundation property acquisition areas are: Straight Sixth Avenue option 35,875 sf; Curved Sixth Avenue option 25,040 sf. The total would change accordingly.
	Page 118	The correct Gates Foundation property acquisition areas are: Straight Sixth Avenue option 35,875 sf, about 0.8 acre; Curved Sixth Avenue option 25,040 sf, about 0.6 acre. The total in the preceding paragraph would change accordingly.
C-003-008	Page 137 (exhibit 6-4):	The predicted dates shown in this table for the Mercer Street widening and overcrossing roadway closure and restriction activities are significantly different from schedule information obtained separately from SDOT. The FSEIS should provide updated schedule information for this exhibit.
C-003-009	Page 142	It is not correct that one building would need to be acquired if the Curved Sixth Avenue option is implemented. (The building in that area was previously demolished.)

Appendix A – Public Involvement

C-003-010	Page 2	Description of Curved Sixth Avenue option should note there will be a half signal at Mercer allowing all vehicle movements except left turn from westbound Mercer onto southbound Sixth.

Appendix B - Alternatives

C-003-011	Page A-6 (attachment A):	The construction/implementation dates for the full Gates Foundation Master Plan are 2008-2021. The construction referred to in the first paragraph is for the first phase and an additional phase could be built over a 10-year period. The total employees when the campus is fully built out will be approximately 2,250 people.
C-003-012	Page 59 (exhibit 4-8):	The north portal description at Republican Street and Sixth Avenue North is worded differently than the description in the

2 of 7

C-003-007

A straight Sixth Avenue option is no longer carried forward as a part of the Bored Tunnel Alternative. The precise amount of property that would be acquired for the Curved Sixth Avenue option will be determined during the final design process.

C-003-008

The Summary and Chapter 3 of the Final EIS contain updated schedule information on construction activities and roadway closures, restrictions, and detours.

C-003-009

The Final EIS has been revised to state that no building demolitions would occur on the Gates Foundation Campus with the Curved Sixth Avenue configuration.

C-003-010

In the Final EIS, the updated intersection analysis of Sixth Avenue at Mercer Street includes the signal operation that allows northbound left-turns from Sixth Avenue onto Mercer Street. Please refer to the Final EIS Appendix C, Transportation Discipline Report, for the updated analysis.

C-003-011

Comment noted. The description of the Gates Foundation campus buildout in Attachment A of Appendix B, Alternatives Description and Construction Methods Discipline Report, has been revised in this Final EIS.

C-003-012

Appendix B, Alternatives Description and Construction Methods, of the Final EIS includes updated descriptions for each alternative's configuration and information on each construction plan.

C-003-012

	SDEIS page 26, exhibit 2-23. The latter appears more correct as it implies construction of the extension of Sixth Avenue North would occur during this Stage 7 and not just the ramp to SR-99.

Appendix C – Transportation

C-003-013

Page 17	In two places on this page, please note that the Curved Sixth Avenue option will have a half-signal at Mercer. In two places on this page, please note that other routes for westbound traffic accessing southbound SR-99 is to turn south onto Dexter, west onto Harrison Street and then north onto extended Sixth Avenue, or alternatively, from westbound Mercer Avenue turn north onto Taylor Avenue, then east onto Roy Street.
Page 19	Preliminary engineering has found that the grades at the Straight Sixth Avenue option would be similar to or possibly steeper than the grades at the Curved option because of the necessity to provide emergency vehicle access from Sixth Avenue to the Gates Foundation campus a short distance south of Mercer Street in the Straight Sixth Avenue option.
Page 19	The planned Curved Sixth Avenue option half signal at Sixth Avenue and Mercer Street will allow left turn movement from northbound Sixth Avenue to westbound Mercer Street.
Page 19	There will be a half signal at Curved Sixth Avenue option Sixth Avenue and Mercer Street (but without crosswalks across Mercer, so the conclusions are correct).
Page 182 (first bullet regarding intersection LOS):	Please review the conclusion that Straight Sixth Avenue option intersection level-of-service (LOS) would be better than the Curved Sixth Avenue option in light of the following: (i) SDOT now plans a half signal at Sixth Avenue and Mercer Street for the Curved Sixth Avenue option that will allow left turn movement from northbound Sixth Avenue to westbound Mercer Street, and (ii) there are alternative routes for traffic westbound on Mercer Street to reach southbound SR-99. These alternatives would not utilize the Fifth Avenue and Mercer Street intersection and seem unlikely to impact LOS at that intersection or other heavy traffic intersections. Also, please note the text on page 347 indicating "delays for affected intersections under the Curved option would not be expected to change noticeably compared to the Straight option…"

3 of 7

C-003-013

The Curved Sixth Avenue at Mercer Street configuration has been analyzed in the Final EIS as part of the preferred alternative. Please refer to Appendix C, Transportation Discipline Report, for updated analysis.

C-003-013

Page 189 (exhibit 5-32):	Same comment as for page 182.
Page 202-203:	Same comments as for pages 17 and 182.
Page 204	Same comments as for page 202.
Page 259	Same comments as for page 202.
Page 231	Same comment as for page 19 regarding grade comparisons for the Sixth Avenue options.
Page 233	Same comment as for page 19 regarding grade comparisons for the Sixth Avenue options.
Page 247	The planned Curved Sixth Avenue option half signal at Sixth Avenue and Mercer Street will allow left turn movement from northbound Sixth Avenue to westbound Mercer Street.
Page 266	Please review the statements about the Curved Sixth Avenue option now that SDOT plans a half signal at Sixth Avenue and Mercer Street for the Curved Sixth Avenue option that will allow left turn movement from northbound Sixth Avenue to westbound Mercer Street and that there are alternative routes for traffic westbound on Mercer Street to reach southbound SR-99.

C-003-014

Page 269 & subsequent pages:	The predicted dates shown in this Chapter 6 for the Mercer Street widening and overcrossing construction and the roadway closure and restriction activities are significantly different from schedule information obtained separately from SDOT. A schedule discrepancy may also be the case for the May 2013 date for the permanent closure date for Broad Street described on pages 275 and 276. The FSEIS should provide updated schedule information on these items.
Page 278 (exhibit 6-7):	The north portal description at Republican Street and Sixth Avenue North is worded differently than the description in the SDEIS page 26, exhibit 2-23. The latter appears more correct as it implies construction of the extension of Sixth Avenue North would occur during this Stage 7 and not just the ramp to SR-99. The FSEIS should provide updated schedule information for the construction of Sixth Avenue North between Harrison Street and Mercer Street.

C-003-015

Page 347:	Please review and revise the statements on this page in light of SDOT's plans for a half signal at Sixth Avenue and Mercer Street for the Curved Sixth Avenue option that will allow left turn

C-003-014

The Summary and Chapter 3 of the Final EIS contain updated schedule information on construction activities and roadway closures, restrictions, and detours.

C-003-015

The updated intersection analysis of Sixth Avenue at Mercer Street, in the Final EIS, includes the signal operation that allows northbound left-turns from Sixth Avenue onto Mercer Street.

C-003-015

	movement from northbound Sixth Avenue to westbound Mercer Street.

Appendix D – Visual

C-003-016

Page 73	Please revise the statement about the visual difference between the two Sixth Avenue alignment options. The Straight Sixth Avenue option would be in a narrow tunnel under buildings for about a third of its length, but the Curved Sixth Avenue option would be open to light and air with landscaping on both sides.

Appendix G – Land Use

C-003-017

C-003-018

C-003-019

C-003-020

Page 41 (exhibit 4-9):	The Seattle Center 5th Avenue North Garage is shown in the wrong location. It is located one block farther north than shown, on the north side of Harrison Street and the east side of Fifth Avenue.
Page 42	Two minor corrections to the description of the Gates Foundation campus are that the total area is approximately 900,000 square feet of office space and the completion of the third building will likely be by 2014-2017.
Page 49	For accuracy, the sentence beginning with "Access" should be restated as follows: "Vehicular and Pedestrian access to the property east of Sixth Avenue N. will be materially compromised by the Straight Sixth Avenue option. A combination of subterranean vehicular access beneath 6th Avenue and/or on 6th Avenue for service and parking will need to be added together with pedestrian access over Sixth Avenue."
Page 50	The correct Gates Foundation property acquisition areas are: Straight Sixth Avenue option 35,875 sf; Curved Sixth Avenue option 25,040 sf. The total would change accordingly.
Page 54	Same comment as for Page 50.
Page 55 (exhibit 5-3):	The correct Gates Foundation property acquisition areas are: Straight Sixth Avenue option 35,875 sf; Curved Sixth Avenue option 25,040 sf. This needs to be corrected in two places and may change the total. Also, the zoning for the Gates Foundation property should be Neighborhood Commercial 3.

5 of 7

C-003-016

The preferred alternative for Sixth Avenue is the Curved Sixth Avenue configuration, which would be open to air and light with landscaping on both sides. The Straight Sixth Avenue configuration is analyzed with the Cut-and-Cover Tunnel and the Elevated Structure Alternatives in this Final EIS.

C-003-017

The map showing development activity in the study area has been updated and revised in Appendix G, Land Use Discipline Report, of the Final EIS.

C-003-018

The text has been revised in Appendix G, Land Use Discipline Report, in the Final EIS.

C-003-019

The Straight Sixth Avenue option is no longer part of the Bored Tunnel Alternative. The text commented on has been removed from Appendix G, Land Use Discipline Report, in the Final EIS.

C-003-020

The straight Sixth Avenue option is no longer part of the Bored Tunnel Alternative in the Final EIS. The precise amount of property that would be acquired for the Curved Sixth Avenue option will be determined during the final design process. The zoning for the Gates Foundation Campus property has been revised in Appendix G, Land Use Report, of the Final EIS.

C-003-021

Page 56 (exhibit 5-4):	This exhibit (as well as other exhibits throughout the DSEIS discipline reports) incorrectly implies that Republican Street currently extends through the Gates Foundation campus. Both Republican Street and Sixth Avenue have been vacated for many years in this area.

Appendix H – Social

C-003-022

Page 42	For accuracy and consistency with other corrections, the description of the Bill and Melinda Gates Foundation Campus starting on the 5th line from the bottom of the page should be modified to. "The first phase of the proposed Bill and Melinda Gates Foundation Campus (approximately 900,000 square feet of office space at full build-out) at 500 Fifth Avenue N. currently under construction will have about 1200 occupants in spring 2011, many of them currently occupying buildings along Eastlake Avenue N. The final phase will be completed in the 2014-2017 timeframe."
Page 134	The third building on the Gates Foundation campus may be completed in the 2014 – 2017 timeframe.

Appendix L – Economics

C-003-023

Page 30	For accuracy and consistency with other corrections, the first sentence in the paragraph describing the Bill and Melinda Gates Foundation campus should be modified to say that the first phase of the campus will open in the spring of 2011. The second sentence should be modified to say "The new campus *at full build out"*, the total area changed to *approximately 900,000 square feet of office space* and the total employees and partners *at full-build out to approximately 2,250*. The 15,000 square foot visitor center is part of the first phase.

Appendix P – Earth

C-003-024

Page 53	The agreement between SDOT and the Gates Foundation eliminates the need for the "retained cut" and new retaining walls on the south side of Mercer Street between Fifth Avenue and Aurora, and for the Curved Sixth Avenue option only, eliminates

6 of 7

C-003-021

The base maps used for exhibits in Appendix G, Land Use Discipline Report, have been revised in the Final EIS to no longer show Republican Street extending through the Gates Foundation Campus.

C-003-022

Thank you for the information about the Bill and Melinda Gates Foundation Campus. As appropriate, this information has been incorporated into Appendix H, the Social Discipline Report, and the Final Environmental Impact Statement.

C-003-023

The text has been revised in Appendix L, Economics Discipline Report, of the Final EIS as requested.

C-003-024

The text of Appendix P has been revised.

C-003-024

	the need for the "retained cut" and retaining walls on most of the west side of extended Sixth Avenue between Harrison Street and Mercer Street. (The Straight Sixth Avenue option would require the retained cuts and retaining walls.)

Appendix Q – Hazardous Materials

More specific comments on the discussion of Hazardous Materials in the SDEIS are set forth in the attached GeoEngineers memorandum dated November 30, 2010.

C-003-025

Page 7	The Straight Sixth Avenue option would also require the acquisition of a large parcel of property that has known significantly contaminated soil. The Curved Sixth Avenue option does not require the acquisition of a building (the building was recently demolished). Considerable site investigation has recently been completed by the Gates Foundation campus consultants on the parcel of property that would need to be acquired for the Curved Sixth Avenue option and that information has been shared with SDOT.
Page 27	The Curved Sixth Avenue option does not require the acquisition of a building (the building was recently demolished).
Page 93 (exhibit 4-6, parcel 40.1-1):	Considerable site investigation has recently been completed by the Gates Foundation campus consultants on the parcel of property that would need to be acquired for the Curved Sixth Avenue option and that information has been shared with SDOT. Contamination does exist on that site. In the right column of this exhibit, the Straight Sixth Avenue option would also require the acquisition of a large parcel of property that is known to contain significantly contaminated soil.
Page 94 (exhibit 4-6):	Same comments as for page 93.
Page 132	Same comment as for page 27.
Page133	Same or similar comments as for pages 7 and 93.
Page 135	Same or similar comments as for page 93.
Page 140	Same comment as for page 27.
Page E-7 (block 40.1):	The depicted building has recently been demolished. See comment for page 27.

7 of 7

C-003-025

Appendix Q, Hazardous Materials Discipline Report, has been modified to reflect the recent demolition of the sports training facility near Mercer Street. The number of buildings potentially impacted by the project has been updated throughout the report.

The *Soil and Groundwater Characterization Study, 500 Fifth Avenue North Property, Phase 2 Campus Report* from August 2010 was not available at the time the 2010 Supplemental Draft EIS Appendix Q was prepared. Information in the Final EIS and Appendix Q of the Final EIS has been updated to describe the widespread historic contamination that would be encountered for along Sixth Avenue between Harrison and Mercer Streets.

Transportation Choices Coalition

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info@transportationchoices.org
www.transportationchoices.org

December 9, 2010

Angela Freudenstein
Alaskan Way Viaduct Replacement Project
Washington State Department of Transportation
999 Third Avenue, Suite 2424
Seattle, WA 98104

Dear Ms. Freudenstein,

On behalf of the Transportation Choices Coalition I would like to submit the following comments on the 2010 Supplemental Draft Environmental Impact Statement for the Alaskan Way Viaduct Replacement Project. The Bored Tunnel Alternative was identified in the SDEIS as the preferred alternative by the lead agencies, therefore our comments focus on issues that need to be considered in order to ensure the viaduct replacement project provides the best mobility benefits for the citizens of Seattle and the region with minimal negative impact on local business, residents or the environment.

C-004-001

(1) The Project Purpose and Need Statement should be revised to reduce the emphasis on vehicle capacity in order to better align with the state's transportation goals and the Partnership Process principles.

The project purpose statement changed since the 2006 SDEIS from *"maintain or improve mobility, accessibility, and traffic safety for people and goods along the existing Alaskan Way Corridor"* to:

- *"Reduce the risk of catastrophic failure in an earthquake by providing a facility that meets current seismic safety standards.*
- *Improve traffic safety.*
- *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.*
- *Protect the integrity and viability of adjacent activities on the central waterfront and in downtown Seattle."*

The reason for the change to the purpose and needs statement is stated in Chapter 3, page 53 in the 2010 SDEIS to "reflect current state and local priorities as expressed through the Partnership Process." The guiding principles of the Partnership Process are:

- *"Improve public safety*
- *Provide efficient movement of people and goods now and into the future*
- *Maintain or improve downtown, regional, port, and state economies*
- *Enhance Seattle's waterfront, downtown, and adjacent neighborhoods as a place for people*
- *Create solutions that are fiscally responsible*
- *Improve the health of the environment"*

We recommend additional revisions to the purpose statement to incorporate the language from the purpose statement from the 2006 SDEIS as well as include key principles developed by the

C-004-001

Thank you for your suggestions to revise the project's purpose and need statement. FHWA, WSDOT, and the City of Seattle worked extensively to update the project's purpose and need statement to have it reflect project needs and reflect the Partnership Process.

Changes made to the project's purpose and need statement in 2010 did not 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.

C-004-001

Partnership Process regarding waterfront revitalization and environmental impacts (described in more detail below in points 5 and 2) so that the purpose statement better reflects the need of the region for a transportation system focused on moving people and goods in a safe manner. The purpose statement included in the 2010 SDEIS focuses on capacity of vehicles over people, which discounts the needs of transit users, bicyclists, and pedestrians. These changes will also ensure that the purpose statement for the Alaskan Way Viaduct Replacement Project aligns with the Transportation System Policy Goals listed in Title 47, Chapter 4, Section 280 of the Revised Code of Washington:

(1) "It is the intent of the legislature to establish policy goals for the planning, operation, performance of, and investment in, the state's transportation system. The policy goals established under this section are deemed consistent with the benchmark categories adopted by the state's blue ribbon commission on transportation on November 30, 2000. Public investments in transportation should support achievement of these policy goals:

(a) Economic vitality: To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy;

(b) Preservation: To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services;

(c) Safety: To provide for and improve the safety and security of transportation customers and the transportation system;

(d) Mobility: To improve the predictable movement of goods and people throughout Washington state;

(e) Environment: To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment; and

(f) Stewardship: To continuously improve the quality, effectiveness, and efficiency of the transportation system."

We suggest the following language for the purpose statement, which is a hybrid of purpose statement from 2006, the existing Purpose Statement and the principles from the Partnership Process:

- *"Improve mobility, accessibility, and traffic safety for people and goods along the Alaskan Way Corridor now and into the future.*
- *Reduce the risk of catastrophic failure in an earthquake by providing a facility that meets current seismic safety standards.*
- *Provide linkages to the regional transportation system and to and from downtown Seattle and the local street system.*
- *Enhance Seattle's waterfront, downtown, and adjacent neighborhoods as a place for people.*
- *Create solutions that are fiscally responsible*
- *Improve the health of the environment and contribute to meeting city, county and state greenhouse gas reduction goals."*

C-004-002

(2) The project should support city, county and state efforts to reduce greenhouse gas emissions.

The City of Seattle, King County and the state of Washington have all made commitments to reduce greenhouse gas emissions. In 2010, the City Council adopted a goal of carbon neutrality. The 2008 King County Comprehensive Plan included the goal to reduce greenhouse gas emissions 80 percent below 2007 levels by 2050. The state's greenhouse gas reduction targets are listed in Title 70, Chapter 235, Section 20 of the Revised Code of Washington:

C-004-002

The Final EIS estimates the potential direct emissions of greenhouse gases under the build alternatives. Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Disipline Report. All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative).

The study area evaluated includes areas likely to be affected by changes in greenhouse gas emissions as a result of the project. The greenhouse gas effects were estimated for roadways within the city center area, as well as in the region. The city center area is bordered by Prospect Street on the north, 15th Avenue on the east, S. Holgate Street on the south, and Elliott Bay on the west. The region includes all the traffic movements in King, Pierce, Snohomish, and Kitsap Counties.

C-004-002

"(1)(a) The state shall limit emissions of greenhouse gases to achieve the following emission reductions for Washington state:

(i) By 2020, reduce overall emissions of greenhouse gases in the state to 1990 levels;
(ii) By 2035, reduce overall emissions of greenhouse gases in the state to twenty-five percent below 1990 levels;
(iii) By 2050, the state will do its part to reach global climate stabilization levels by reducing overall emissions to fifty percent below 1990 levels, or seventy percent below the state's expected emissions that year."

The local and state GHG reduction commitments are reflected in the Partnership Process's inclusion of "Improve the health of the environment" in their principles.

C-004-003

The updated purpose statement fails to include the Partnership Process principle's emphasis on environmental health or mention the state and local commitments to reduce greenhouse gas emissions. The city, county and state recognize the large percentage of total greenhouse gases emitted by the transportation sector. As Chapter 4 of the SDEIS states: "In Washington State, transportation related emissions from cars, trucks, planes, and ships account for nearly half of the state's total greenhouse gas emissions. Vehicles are the most common source of greenhouse gas emissions in the area." The Governor and State Legislature addressed the need to reduce greenhouse gases from transportation in Executive Order 09-05 and in Section 47, Chapter 1, Section 440 of the Revised Code of Washington, which set statewide vehicle miles traveled reduction targets as part of the plan to reduce statewide greenhouse gas emissions. The targets are:

- Decrease the annual per capita vehicle miles traveled by eighteen percent by 2020;
- Decrease the annual per capita vehicle miles traveled by thirty percent by 2035; and
- Decrease the annual per capita vehicle miles traveled by fifty percent by 2050;

None of the alternatives show a reduction in VMT or greenhouse gas emissions for 2015. In fact, all alternatives show an increase, which is inconsistent with state, county and city goals. The identified preferred alternative, the bored tunnel, is projected to increase VMT in the Seattle City Center area by 17% in 2030. The GHG emissions from vehicle use and tunnel operations in 2030 are projected to be 55,836 metric tons of CO2 a day, which is 16,646 daily metric tons over 2005 emissions. For an investment of this magnitude, which will endure for 30 or more years, significant mitigation measures are necessary in the corridor and elsewhere in the region to ensure the state meets its VMT and GHG reduction targets.

The Puget Sound Regional Council has developed robust and transparent tools to measure greenhouse gas emissions from transportation scenarios on a regional level. We recommend that for the Alaskan Way Viaduct Replacement Project, as well as all major transportation projects in the region, WSDOT work with PSRC to model mitigation plans in order to come up with a set of transportation projects that help the state meet its VMT and GHG reduction goals.

C-004-004

TCC recommends mitigation options include, but not be limited to, projects such as increased CTR investments in the corridor, support of GTEC programs like Commute Seattle, investments in increased bicycle and pedestrian infrastructure in the corridor, investments in transit operations in the corridor, and investments in capital projects including the proposed Waterfront or 1st Ave. Streetcar.

C-004-005

(3) The project should include ongoing funding for additional transit service, including during construction.

The "Consensus on the Recommended Alternative for Replacing the Alaskan Way Viaduct and Seawall" letter of agreement signed by Governor Gregoire, County Executive Sims, and Mayor Nickels in January 2009 identified additional transit service as part of the recommended alternative for replacing the Viaduct. The letter assigns King County responsibility for this aspect of the project and

C-004-003

The Final EIS examines the project-level effects on GHG emissions. Although not per capita, the Final EIS estimates the potential direct emissions of greenhouse gases under the build alternatives for the years 2015 and 2030. The study area evaluated includes areas likely to be affected by changes in greenhouse gas emissions as a result of the project. The greenhouse gas effects were estimated for roadways within the city center area, as well as in the region. The city center area is bordered by Prospect Street on the north, 15th Avenue on the east, S. Holgate Street on the south, and Elliott Bay on the west. The region includes all the traffic movements in King, Pierce, Snohomish, and Kitsap Counties.

Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Discipline Report. All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative). WSDOT is currently participating in a statewide effort, lead by the Department of Ecology, to draft planning-level guidance at the region, state, and/or national transportation systems level.

Vehicle miles traveled (VMT) would be slightly reduce with the Tolled Bored Tunnel Alternative when compared to totals for the 2015 Existing Viaduct. This reduction is likely due to a disincentive of trip making caused by increased traffic and congestion on city streets since roughly 100,000 daily trips on SR 99 would need to be accommodated by local street capacity, I-5, transit, or biking and walking.

C-004-004

The improvements cited in this comment do not address the purpose and need established for this project. These programs are included in transportation models to the extent they have been adopted by the

C-004-005

states that the city, county and state will seek legislative authority for King County to implement a 1% Motor Vehicle Excise Tax to help fund the additional transit service. The promise of this legislation has yet to be fulfilled.

King County is currently undergoing a transit funding crisis. The King County Regional Transit Task Force was created in February 2010 to develop recommendations on future growth and potential cutbacks in transit service. Recommendation 6 focuses on the need to pursue state legislation to create additional long-term, sustainable revenue sources for transit.

The advancement of the Viaduct Replacement Project and current transit funding crisis make it a particularly critical time to secure a new source of transit funding for the county and transit agencies across the state. The project budget should include funds for transit mitigation in order to maintain the speed and reliability of transit service in the corridor during and after construction. The state, city and county must redouble their efforts to pass and sign legislation to provide state funds for transit and allow local governments to raise additional revenue through sources such as an MVET. The Alaskan Way Viaduct Replacement Project should include a plan and timetable for securing additional funds for transit through state legislation so that transit agencies can better plan for future service. Additional transit service is also key to maintaining mobility along the corridor in the case of an early closure of the Viaduct for safety reasons (this is described in further detail in point 7).

C-004-006

(4) Tolling should be a part of the project, but it must be part of a comprehensive regional pricing and demand management strategy.

We believe that pricing strategies are an essential part of the transportation financing toolbox and that tolls should be a part of any new transportation project in the Puget Sound. However, the SDEIS indicates that tolling on only one highway, which is proposed in the bored tunnel alternative, will drive traffic to city streets and non-tolled highways. Therefore, we recommend that the city and WSDOT evaluate tolling of the replacement project as part of a comprehensive regional pricing and demand management strategy to ensure city streets are not forced to carry the additional 40,000 to 45,000 cars a day that are estimated in the SDEIS to come from using tolls in the tunnel. Additional transit service must also be included in any proposal to toll in this corridor to ensure the city maintains a socially and economically equitable transportation system.

C-004-007

(5) The project should ensure access to and from downtown without burdening city streets.

The current configuration of the Alaskan Way Viaduct provides important access to downtown Seattle through several on and off ramps. The current placement of tunnel entrances for the bored tunnel alternative takes away the direct access to downtown supplied by the Viaduct. The result will be increased vehicle volumes on downtown streets and Alaskan Way. The SDEIS estimates that 50,000 cars a day will use the southern interchange ramps and 29,000 of the current Viaduct users will shift to local streets with the bored tunnel alternative. As mentioned above, an additional 40,000 to 45,000 users will switch to local streets if the tunnel is tolled. The SDEIS estimates that Alaskan Way will carry an additional 35,000 cars a day.

The SDEIS and FEIS need to more thoroughly evaluate the affect of the bored tunnel on city streets and provide specific plans for mitigating any additional traffic. The city and WSDOT should use increased investments in transit and bicycle and pedestrian infrastructure and aggressive Transportation Demand Management and Commute Trip Reduction programs to minimize the impact on local streets. The bored tunnel project must protect the character of the neighborhoods surrounding it and ensure that the environmental for pedestrians and bicyclists on cities streets is improved, not diminished.

relevant transportation agency.

In the south portal area, bicycle and pedestrian conditions would be improved by replacing the existing 15-foot-wide Waterfront Bicycle/Pedestrian Facility currently located on the east side of Alaskan Way S. with the new 25-foot-wide City Side Trial that would be constructed east of Alaskan Way S. between S. Atlantic Street and S. King Street. In the north portal area, Aurora Avenue would be built to grade level between Denny Way and John Street. John, Thomas, and Harrison Streets would be connected across Aurora Avenue with signalize intersections at Denny Way and John, Thomas, and Harrison Streets. The new cross streets would be signalized and have sidewalks on both sides, which would be an improvement for pedestrians. Chapter 8 Mitigation, discusses the mitigation commitments that will be made by the lead agencies.

C-004-005

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently WSDOT is providing funding for King County on the S. Holgate Street to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of

(6) The project must ensure Alaskan Way does not become a high-speed thoroughfare in order to create an enhanced waterfront.

C-004-008 A vital goal of the city, county and state in considering an alternative to the current Viaduct is to reconnect and revitalize the waterfront. The current language in the Purpose Statement to "Protect the integrity and viability of adjacent activities on the central waterfront and in downtown Seattle" speaks to protecting the waterfront's current uses. However, it does not adequately speak to the need of the Viaduct replacement to contribute to an enhanced and revitalized waterfront.

A key strategy to revitalizing the waterfront is to create an Alaskan Way that is inviting to pedestrians and bicyclists of all ages and abilities and that positively contributes to the waterfront setting. As mentioned previously, an additional 35,000 cars a day are expected to use Alaskan Way as a result of the bored tunnel. Additional freight traffic is also expected on Alaskan Way. Turning Alaskan Way into a high volume wide street that primarily serves fast through traffic will hurt the waterfront redevelopment efforts. Narrow lane widths and traffic calming measures should be employed to ensure Alaskan Way is a safe and pleasant street.

(7) The lead agencies should create and publicize an early viaduct closure plan.

C-004-009 Safety concerns could require closure of the Viaduct before the replacement project is completed. The lead agencies should create and publicize an Alaskan Way Viaduct early closure transportation plan that could be implemented in this instance in order to ensure transportation users in the region can still meet their mobility needs. Increased transit service should be a vital component of this plan.

Thank you for the opportunity to comment on the Supplemental Draft Environmental Impact Statement. Robust public outreach and input is vital for this project to succeed. We look forward to following the project as it moves forward to ensure it creates the sustainable, equitable, multi-modal transportation system that Seattleites and Washingtonians demand.

Sincerely,

Rob Johnson
Executive Director
Transportation Choices Coalition

construction. This program is ongoing and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system. WSDOT will also work with the County to identify funding sources for the service originally contemplated in the January 2009 agreement.

C-004-006

Long-range planning documents, such as the Puget Sound Regional Council's (PSRC's) long-range transportation plan, *Transportation 2040*, have identified system-wide highway tolling as a means to control congestion and a funding source for future transportation projects as revenues from taxing gasoline continue to diminish. WSDOT is working with PSRC to implement the vision for system-wide tolling as discussed in *Transportation 2040*, but implementing that vision is long-term and will require additional legislative authority.

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct, and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the Viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation during the central waterfront phase of the viaduct program. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently WSDOT is providing funding for King County on the S. Holgate to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is on-going and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as the need for a bus travel time monitoring system. WSDOT will also work with the County to identify funding sources for the service originally contemplated in the January 2009 agreement.

C-004-007

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.

Because operational effects of the built alternative would be substantially better than the Viaduct Closed (No Build Alternative), long-term transportation mitigation measures are not anticipated. However, a number of mitigation measures in place during construction could have benefits over the longer term. Refer to Chapter 8 Mitigation in the Final EIS for details.

C-004-008

The project's purpose and need statement to "protect the integrity and viability of adjacent activities on the central waterfront and downtown

Seattle" speaks to both current and future uses along the waterfront. That adequately reflects the purpose of this project. Revitalizing the waterfront and roadway design for Alaskan Way is a project that is being lead by the City of Seattle. The City's efforts on the waterfront will have its own environmental process and opportunities for public input and dialogue.

C-004-009

WSDOT and the City of Seattle developed an emergency closure plan for the Alaskan Way Viaduct in 2005. As part of the plan, WSDOT installed an automated viaduct closure gate system that will enable the viaduct to be closed within minutes of detecting a significant earthquake. The Alaskan Way Viaduct Emergency Closure Plan is available online at http://www.seattle.gov/transportation/viaductemergencyclosure.htm

Pike Place Market Preservation and Development Authority (PDA)
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December 10, 2010

Angela Freudenstein
AWV Environmental Manager
AWV Project Office (Wells Fargo Building)
999 Third Avenue, Suite 2424
Seattle, WA 98104-4019

RE: Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft Environmental Impact Statement and Section 4(f) Evaluation

Ms. Freudenstein,

Thank you for the opportunity to comment on the Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft Environmental Impact Statement and Section 4(f) Evaluation (SDEIS). The Pike Place Market Preservation and Development Authority (PDA) operates under a charter agreement with the City of Seattle wherein the PDA serves as public trustee with the mission to ensure that the traditional character of the Public Market is preserved, oversee and manage renewal, rehabilitation, renovation, development and restoration in and around Pike Place Market including concern for rehabilitation and redevelopment of surrounding areas which may affect the character of the Market Historic District.

C-005-001

The Pike Place Market is one of the most significant economic, cultural and historic resources for our City and region. Accordingly, and consistent with our charter, the PDA has an ongoing interest and obligation to carefully consider the impacts related to the Alaskan Way Viaduct removal and SR99 re-routing alternatives. We have taken a strong position in support of the bored tunnel alternative because we believe that it enables the revitalization of Seattle's waterfront while maintaining important north-south transportation capacity for our region.

C-005-002

There are, however, issues and impacts that have not been fully addressed in the SDEIS, and we respectfully request that further analysis be conducted around the following impacts:

- Impacts to the Market due to traffic diversion and construction staging in the North and South Portals. Access and circulation during construction are both key to the economic survival of the Market. Our small businesses depend on their ability to accept delivery of fresh product during business hours. Our customers

C-005-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments in support of the Bored Tunnel Alternative.

C-005-002

The transportation analysis has been updated for the Final EIS. Discussions about the effects of each alternative on intersection and roadway operations, travel times, and construction are in Chapter 5, Permanent Effects, and Chapter 6, Construction Effects, of the Final EIS. More detail can be found in Appendix C, Transportation Discipline Report.

C-005-002 need to know that they can get to the market and find a place to park once they get there.

C-005-003
- Impacts related to the demolition of the viaduct, (identified SDEIS in Phase 8) scheduled for January 2016 with an estimated active construction/demolition window of 9 months. The responsibility for demolition of the viaduct falls within the project parameters of this SDEIS.

SDEIS Comments

The PDA has carefully reviewed the SDEIS including a recent presentation by Project Director Ron Paananen. We recommend some modest proposals that will support the Market's economic viability during tunnel construction and viaduct demolition and ensure its preservation as an important historic asset:

C-005-004
- During the FEIS, request that further analysis be done of construction-related impacts to truck and customer access and parking. We would request that the PDA be actively involved in this analysis and in the development of mitigations to address those impacts including review of potential replacement parking options and directional signage to assist with navigation from key access points where the north and south portal work are taking place.
- Request that mitigation resources be directed to marketing and transportation management programs during tunnel construction and Viaduct demolition.

C-005-005
- Request that the FEIS acknowledge and reflect the importance of the Market and Market District as a historic resource and consider appropriate mitigation measures to ensure its preservation including a more review of Section 4(f) evaluation of the Market as a vital historic asset.

C-005-006
- Request that the FEIS reflect the full complement of Social Services and social resources in the Market including the Senior Center, Pre-School, Medical Center and the Food bank.

C-005-007
- Request that the FEIS acknowledge potential impacts to Pike Place Market as outlined specifically in Attachment A – Comments on Specific SDEIS.

The PDA looks forward to working with WSDOT and all of the other project and program partners to realize the Full Program goals in a mutually beneficial manner while fulfilling our core mission as stewards of the Markets past, present and future in the public trust.

Sincerely,

Ben Franz-Knight
Executive Director

cc: **PPM PDA Council**
Market Historic Commission
Pike Place Market Constituency

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C-005-003

This project would be responsible for demolishing the existing viaduct between S. King Street and the Battery Street Tunnel. The updated construction activities time line is described in Chapter 3 of the Final EIS.

C-005-004

The preferred Bored Tunnel Alternative will have limited effects on the Pike Place Market area. The PDA will be involved as appropriate when detailed construction mitigation plans are developed for decommissioning the Battery Street Tunnel and demolition of the existing viaduct. More detail regarding the potential construction effects of each of the build alternatives can be found in Chapter 6 of the Final EIS and in Chapter 6 of the Final EIS Appendix C, Transportation Discipline Report.

C-005-005

The Pike Place Market Historic District as an historic resource and potential impacts and mitigation are discussed in the Final EIS (Chapter 5 and the Final Section 4(f) Evaluation) and in Appendix I, Historic, Cultural and Archaeological Discipline Report, and in Appendix J, Section 4(f) Supplemental Materials. The boundaries of both the NRHP and local historic districts are shown on the map in Chapter 4 of the Final EIS.

C-005-006

Thank you for your comment about the social services provided in Pike Place Market. As appropriate, this information has been incorporated into and addressed within Appendix H, Social Discipline Report, and summarized in Chapter 4, Affected Environment, of the Final EIS.

C-005-007

Please see the following responses to your comments in Attachment A.

Attachment A

Draft Comments on Specific SDEIS

Below is a summary, identified by chapter, of potential areas of concern related to Pike Place Market.

C-005-008

Chapter 2 – Summary - Page 22 – Effects to Parking

The SDEIS specifically addresses north and south portal parking only, but does not mention lost parking under viaduct. While this is addressed later in Chapter 6, the Market is not identified as a specific resource that may be impacted, review and consideration of impacts needs to be included.

C-005-009

Chapter 2 – Summary – Page 23 – Item 15 – Historic and Archaeological Resources.
There are a number of historic resources and districts that are identified, however, this section does not include Pike Place Market or the Market Historic District. Importance of the Market as a Historic Resource needs to be reviewed and acknowledged.

C-005-010

Chapter 2 – Summary – Page 24 – Item 16 – Community, Social Services, and Low-Income or Minority Populations.
Does not acknowledge significant Social Services Provided in the Market i.e. daycare, senior center, medical center, low-income housing, and foodbank. Discussion of impacts to social services as well as possible supporting role of Market Social Services needs to reviewed.

C-005-011

Chapter 2 – Summary – page 30 – Item 21 SR 99 users – Event Traffic.
Does not include acknowledgement of Pike Place Market as regular source of "special event" volume traffic times for the Market (holiday weekends, summer, spring break etc.) Review and identification of mitigation measures needs to include high volume traffic times for the Market.

C-005-012

Chapter 2 – Summary – Page 31 – Item 23 – Historic Resources
List does not include Pike Place Market/Market District as a historic location that may be impacted by noise – viaduct demolition most significantly and truck traffic. Review and study of potential impacts needs to be included.

C-005-013

Chapter 4 – The Project Area – Page 77 – Item 7 - Typical traffic and travel conditions.
North and South portal assessment of "special event" traffic, does not address high-volume traffic times for the Market (holiday weekends, summer, spring break etc.) Review of impacts and mitigation measures for "special event" traffic should take into account high-volume traffic periods for the Market.

C-005-014

Chapter 4 – The Project Area – Page 81 – Item 12 -Visual Features of project area.
"Although Pike Place Market has sweeping outward views, the colorful views from within the market are what make it unique. The market's traditional produce and goods stalls are mixed with a broad variety of shops, restaurants, offices, and apartments.

3

C-005-008

The lead agencies recognize that businesses along the central waterfront and Western Avenue, including the Pike Place Market, rely on the short-term parking in the area. The parking under the viaduct in the central waterfront would only be affected by the Bored Tunnel Alternative during viaduct demolition. Construction-related parking impacts and mitigation for all of the alternatives are discussed in the Final EIS (Chapters 6 and 8, respectively) and in Chapter 6 of the Final EIS Appendix C, Transportation Discipline Report. The removal of parking spaces could make it more difficult to find parking, resulting in drivers looking for parking spaces several blocks farther from their destinations or using pay lots instead of on-street parking.

Specific parking mitigation strategies have not yet been determined, but the project has allocated $30 million for parking mitigation. Although the mitigation measures would be most needed during construction, many of them could be retained and provide benefits over the longer term. The parking mitigation strategies will continue to evolve in coordination with the project and community partners.

C-005-009

The Pike Place Market Historic District as an historic resource and potential impacts and mitigation are discussed in the Final Section 4(f) Evaluation and in Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The boundaries of both the NRHP and local historic districts are shown on the map in Chapter 4 of the Final EIS.

C-005-010

Thank you for your comment about the social services provided in Pike Place Market. As appropriate, this information has been incorporated into Appendix H, the Social Discipline Report, and corresponding sections of the Final EIS.

C-005-014 Narrow brick-paved streets, modest market buildings, and the bustle of street oriented activities make this a pedestrian-friendly environment. Victor Steinbrueck Park is a prominent part of the view both to the west and southwest."

C-005-015 Need to address significant long term impact to the Market, particularly on the west side of the historic district. The removal of the viaduct will create significant changes in how people access the Market from the waterfront, how these changes may impact the Market, positively or negatively needs to be reviewed.

C-005-016 Chapter 4 – The Project Area – Page 81-82 – Item 15 – Historic Resources.
Does not directly mention Pike Place Market as a historic resource in the project area. Although diagram on page 82 (exhibit 4-17) shows the Pike Place Historic District, however the Market is not included in the specific dialog and/or analysis and should be acknowledged.

C-005-017 Chapter 5 – Bored Tunnel Alternative – Page 104 – Existing viaduct ramp volume at Western exit is 18,100 per day.(exhibit 5-17)
Currently a high volume of traffic utilizes the western exit, study of specific vehicle patterns of travel to the Market is needed including how those patterns may change and how the impact of those changes on the Market can be mitigated.

C-005-018 Chapter 5 – Bored Tunnel Alternative – Page 120 – item 17 – Historic Resources.
Pike Place Market/District is not mentioned as part of Historic resources that might be affected. This section of the SDEIS is important as it includes the first mention of Section 106 National Historic Preservation Act and need for mitigation measures to be addressed by a MOA (Memorandum of Agreement). The Pike Place Market should be included in this consideration.

C-005-019 Chapter 6 – Construction – Page 134 – Item 8 – How would the Viaduct be Removed?
"Demolition of the Viaduct is anticipated to begin in January 2016, early in stage 8, and take 9 months…Viaduct demolition activities are assumed to require two shifts per day, 5 days per week in the north and south portal areas, and two shifts per day 6 days per week along the central waterfront. Two construction teams would be working at the same time in different locations. Viaduct demolition and removal would occur from just south of S. King Street to the Battery Street Tunnel. Equipment used to remove the viaduct would include extended-arm trackhoes with concrete-pulverizing attachments (concert munchers), trackhoes with a concrete-breaking hammer attachment, manlifts, forklifts, track-mounted backhoes, and several pickup truck and dumptrucks."

Given the duration, scope and heavy machinery involved in the demolition, potential impacts need to be reviewed and extensive mitigation measures identified to address noise, traffic and access especially given the 6-day-a-week work schedule currently proposed.

Chapter 6 – Construction – Page 135 - 136 – Item 11 - Construction staging Areas.

4

C-005-011

Despite the large crowds that may develop at Pike Place Market, especially on holiday and vacation-related weekends, traffic levels are typically not as concentrated as special events at Qwest Field, Safeco Field, or Seattle Center. As such, special provisions and traffic control measures for Pike Place Market would likely continue to be localized near or around First Avenue and Western Avenue. The project does not include on- or off-ramps near Pike Place Market so traffic circulation and access will rely mainly on the downtown street system.

C-005-012

The Pike Place Market Historic District as an historic resource and potential impacts and mitigation are discussed in the Final Section 4(f) Evaluation and in Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. No significant impact on the Market is anticipated from viaduct demolition because the work in that vicinity would take place for only a short time. The project will coordinate specific construction plans with the PDA as they are developed. In the Final EIS, permanent effects are discussed in Chapter 5, construction effects are discussed in Chapter 6, and mitigation measures are discussed in Chapter 8.

C-005-013

Despite the large crowds that may develop at Pike Place Market, especially on holiday and vacation-related weekends, traffic levels are typically not as concentrated as special events at Qwest Field, Safeco Field, or Seattle Center. As such, special provisions and traffic control measures for Pike Place Market would likely continue to be localized near or around First Avenue and Western Avenue. The project does not include on- or off-ramps near Pike Place Market so traffic circulation and access will rely mainly on the downtown street system.

C-005-019 Two staging areas present potential impacts on the Market (truck traffic, visual etc.) City of Seattle Right of Way (ROW) under the viaduct will be used for viaduct demo. BNSF/Lenora Street Construction Zone (between Pine and Bell Street) used for material storage, viaduct demo and Alaska Way resurfacing (longer term staging use). The use of these staging areas will intensify truck, machinery and material hauling traffic in and around the Market and Market District, adequate measures to mitigate these impacts will be important.

C-005-020 Chapter 6 Construction – Page 143 – Item 19 - Noise Impacts.
Active demo of viaduct – truck and material movement etc. may have adverse impacts on Market visitors, businesses and residents. All three distinct populations of Market/District community should be acknowledged and mitigation measures considered.

C-005-021 Chapter 6 – Construction – Page 144 – Item 21 – Impact on views during construction.
Viaduct demo may pose view impacts for the market and residents and guests/visitors. Potential impacts both negative and positive need to be reviewed.

C-005-022 Chapter 6 – Construction – Page 144 – Item 22 – Temporary Construction Easements.
This section mentions the removal, both temporary and permanent, of parking during the viaduct demolition. Beyond PC1North are there other potential impacts to direct and indirect market parking? Lenora? Blanchard? Potential impacts and mitigation measures where parking is lost need to be reviewed.

C-005-023 Chapter 6 – Construction – Page 144 – Item 23 – Impacts on local and regional economy.
This section does not address the potential economic impacts of disruption to waterfront and travel/transport routes especially given the economic importance of Pike Place Market. Potential impacts need to be reviewed and mitigation measures identified.

C-005-024 Chapter 6 – Construction – Page 145, 146, 147 – Item 23 – Effects on parking.
Up to 160 parking spaces in the central waterfront area may be lost during the tunnel work (stages 1-7) and up to 750 lost during the viaduct removal (most not to be replaced). "Parking removals during viaduct demolition would make it more difficult to find parking along the central waterfront and in Pioneer Square during the demolition activities. Drivers may need to look for parking spaces several blocks farther from their destination than they normally would or use pay lots instead of on-street parking. There are numerous off-street parking lots near the central waterfront."

Vehicles will be more likely to fill market parking lots outside of this area including Market lots – need to review mitigation measures to address loss of direct market patron parking including replacement parking.

C-005-025 Chapter 6 – Construction – Page 148, 149 - Item 24 – Historic Resource Impacts. Section 4(f) review
No mention of Pike Place Market (either in text of SDEIS or in Appendix J. Pike Place Market does not appear to have been included in the list of resources evaluated for use

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C-005-014

The prominence of the views as important visual quality resources from the Pike Place Market and particularly from the Victor Steinbrueck Park, are noted in Chapter 4 of the Final EIS and Appendix D, Visual Quality Discipline Report. The preferred alternative, the Bored Tunnel, and the Cut-and-Cover Tunnel, would have the most beneficial effects on the views from the Market and Victor Steinbrueck Park, as the elevated viaduct structure that currently intervenes in the views to the west, would no longer be part of the landscape.

C-005-015

The Pike Place Market Historic District as an historic resource and potential impacts and mitigation are discussed in the Final Section 4(f) Evaluation and in Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The Hillclimb from the waterfront will be maintained. The Bored Tunnel Alternative would remove the traffic noise of the viaduct, making the climb up to the Market more pleasant.

C-005-016

The Pike Place Market Historic District as an historic resource and potential impacts and mitigation are discussed in the Final Section 4(f) Evaluation and in Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The boundaries of both the NRHP and local historic districts are shown on the map in Chapter 4 of the Final EIS.

C-005-017

The Elliott/Western Connector is an independent project associated with the Bored Tunnel Alternative. Although these specific improvements are not proposed with the Cut-and-Cover Tunnel and Elevated Structure Alternatives, these alternatives provide a functionally similar connection with SR 99 ramps at Elliott and Western Avenues, similar to the existing

C-005-025 under Section 4(f). Potential economic impacts from traffic diversions and viaduct demolition would appear to pose enough potential threats to qualify for review.

C-005-026 Chapter 6 – Construction – Page 156, 157, 158 – Item 37 – Construction Mitigation.
Parking Mitigation – the suggested measures include the following:

- Encourage privately held parking lots to institute measures that reward short-term parking.
- Provide short-term parking (off-street), especially serving retail and commercial areas.
- Partner with private and public parking facilities to implement e-Park, an electronic guidance system displaying real-time parking availability on right-of-way signs, facility signs, and the Seattle Parking Map website. Dynamic message signs would be located on key access points to the downtown, Pioneer Square and the central waterfront.
- Launch the Seattle Parking Map, featuring on-street parking regulations and off-street parking locations, hours of operations, and short-term parking rates.
- Develop a parking plan for construction workers to identify appropriate parking options for construction workers and discourage use of short term visitor/customer parking.
- Provide strong enforcement of short-term parking regulations in the immediate project area (two-three-block radius).

No replacement parking is mentioned or discussed, viable options and mitigation measures including replacement parking need to be considered.

C-005-027 Chapter 7 – Cumulative Effects – Page 162 – Item 5.
"Full program" includes the tunnel, viaduct demolition, seawall replacement and waterfront redevelopment. In total over 10 years of significant construction, traffic redirection and development, consideration needs to be given to the long-term economic impacts to the Market given the length of active construction along key access routes.

C-005-028 Chapter 8 – Comparison of Alternatives – Page 189-190 – Item 8 – Impacts on drivers, bicyclists and pedestrians.
Does not contemplate the potential for significant negative impacts to the Market with the Cut-and-Cover alternative and the changes to the flow of traffic on Western the alternative presents. Also does not include consideration of extensive impacts due to traffic disruption during construction of the Cut-and-Cover alternative.

C-005-029 Chapter 8 – Comparison of Alternatives – Page 191 – Item 10 – Change in Views.
Potential impacts to the Market from the Elevated Structure Alternative would be significant for visitors and residents. Impacts need to be review and considered.

C-005-030 Chapter 9 – Tolling Page 222 – Item 14 – Potential impacts of tolling.
Based on the various tolling models there may be increased congestion and traffic volumes on surface streets, potential direct impacts on Market visitors should be

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viaduct structure. The Bored Tunnel Alternative does not include these ramp connections, which would serve drivers heading to and from northwest Seattle neighborhoods. The Elliott/Western Connector is an independent project that would improve roadway connections for travelers heading to and from northwest Seattle neighborhoods compared to the connections provided by the Bored Tunnel Alternative.

Please see the Final EIS Appendix C, Transportation Discipline Report, for transportation analysis results, including volumes on the Elliott/Western ramps and proposed Elliott/Western connector. While overall travel patterns in the study area are discussed, analysis of specific businesses was not included in the Final EIS. However, traffic operations at intersections near the Pike Place Market were analyzed; see Chapter 5 of the Final EIS. Mitigation is discussed in Chapter 8 of the Final EIS.

C-005-018

The boundaries of both the NRHP and local historic districts are shown on the map in Chapter 4 of the Final EIS. No significant impacts to the Pike Place Market are anticipated, so specific mitigation measures are not needed or proposed.

C-005-019

Chapter 3, Alternatives Description, of the Final EIS contains updated information about the duration and activities associated with viaduct demolition for each alternative and Chapter 6, Construction Effects, contains updated information on the construction staging areas. Chapter 8 of the Final EIS describes mitigation measures for the project.

C-005-020

Construction noise would be disruptive to nearby visitors, residents, and businesses at Pike Place Market while the section of the viaduct

C-005-030 reviewed possibly cross-referencing any key market patron demographic data with tolling impact demographic data so that impacts to the Market can be appropriately reviewed.

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adjacent to the Market is being demolished. For the preferred Bored Tunnel Alternative, demolition would take about 9-months and occur in two-block segments at two locations at a time. Each segment is expected to last no more than 4 weeks per segment. Construction noise effects and mitigation measures for the project area are described in the Final EIS (Chapter 6 and 8, respectively). Please refer to Appendix F, Noise Discipline Report, for additional details.

C-005-021

The effects of the demolition and removal of the existing viaduct on the views from the Pike Place Market and Victor Steinbrueck Park is discussed in this Final EIS and in Chapter 6 of Appendix D, the Visual Quality Discipline Report. The demolition and removal may be perceived as interesting construction activity for many of the viewers from the vantage point of Victor Steinbrueck Park. Others may find their viewing experience disrupted by the intrusion of the heavy equipment and noise as they look toward the Olympic Mountains and Elliott Bay. However, the demolition of the portions of the viaduct in front of the Market area would likely take only two to three weeks, so these would be temporary effects.

C-005-022

The parking lots that could be affected by temporary construction easements have been counted in the parking assessment and are shown on the parking exhibits for construction in Chapter 6 of the Final EIS. The reference to privately owned pay lots adjacent to the viaduct includes the following lots along the central waterfront: 1) Fewer than 20 spaces in the lot adjacent to the viaduct just north of University Street and 2) About 30 spaces in the 130-space lot adjacent to the viaduct between Seneca and Spring Streets. These lots also are shown on the exhibits for parking affected during construction.

In addition the the discussion in the Final EIS, refer to the Chapter 6

discussions of parking effects and mitigation during construction in the Final EIS Appendix C, Transportation Discipline Report, for more details.

C-005-023

For the Bored Tunnel Alternative, Pike Place Market is not in the area of direct effects. Access between the Market and the waterfront will only be disrupted during the short duration of viaduct demolition and removal north of Union Street. Mitigation measures for construction effects on access and circulation between the waterfront and the retail downtown core are presented in Section 6.4 of the Economics Discipline Report, Appendix L of the Final EIS. Mitigation measures for the project also are discussed in Chapter 8 of the Final EIS.

C-005-024

The lead agencies recognize that businesses along the central waterfront, Western Avenue, and Pioneer Square rely on the short-term parking in the area. The City of Seattle Department of Transportation (SDOT), in coordination with the project, has conducted parking studies as part of the process to develop mitigation strategies and better manage the city's parking resources. SDOT's studies identified a number of strategies to offset the loss of short-term parking in this area, including new or leased parking and the increased utilization of existing parking. Although the mitigation measures would be most needed during construction, many of them could be retained and provide benefits over the longer term. Specific parking mitigation strategies have not yet been determined, but the project has allocated $30 million for parking mitigation. The parking mitigation strategies will continue to evolve in coordination with the project and community partners. Parking measures under consideration and refinement include:

- Encourage shift from long-term parking to short-term parking
- Provide short-term parking (off-street), especially serving waterfront piers, downtown retail, and other heavy retail/commercial corridors

- Implement electronic parking guidance system
- Provide alternate opportunities to facilitate commercial loading activities
- Develop a Center City parking marketing program
- Use existing and new social media and blog outlets to provide frequent parking updates
- Establish a construction worker parking policy that is implemented by the Contractor

Refer to the Parking Mitigation during Construction section in Chapter 6 of the Transportation Discipline Report (Appendix C of the Final EIS) for additional information.

C-005-025

The Pike Place Market Historic District as an historic resource and potential impacts and mitigation are discussed in the Final EIS Section 4(f) Evaluation, and in Appendix J, Section 4(f) Supplemental Materials. The district was evaluated for a potential use but no use was identified as no significant impacts are anticipated.

C-005-026

Replacement parking is under consideration as a mitigation measure and is captured by the bullet noting, "Provide short-term parking (off-street), especially serving retail and commercial areas." Specific parking mitigation strategies have not yet been determined, but the project has allocated $30 million for parking mitigation. The parking mitigation strategies will continue to evolve in coordination with the project and community partners.

C-005-027

As discussed in Chapters 2 and 3 of the Final EIS, the Cut-and-Cover Tunnel and Elevated Structure Alternatives include replacing the

seawall; improving the Alaskan Way surface street; improving conditions on Alaskan Way for bicyclists and pedestrians, and building a street car along the waterfront. The Cut-and-Cover Tunnel and Elevated Structure Alternatives include replacing the Elliott Bay Seawall because the alignments for these alternatives are located in close proximity to the failing seawall, which if not repaired, could compromise the seismic stability of the proposed cut-and-cover tunnel or elevated structure. The Bored Tunnel Alternative proposes to construct a new tunnel inland; therefore, the failing seawall does not have the potential to affect the seismic stability of this alignment. With the Bored Tunnel Alternative, separate independent projects are proposed that would replace the seawall and Alaskan Way as well as improve conditions on Alaskan Way for bicyclists and pedestrians; however, these improvements are not required, and therefore are not proposed as part of the description of the Bored Tunnel Alternative.

Because of this, Chapters 5 and 6 of the 2010 Supplemental Draft EIS and 2011 Final EIS evaluate effects to the waterfront and Pike Place Market area of replacing the seawall and improving Alaskan Way for the Cut-and-Cover Tunnel and Elevated Structure Alternatives. For the Bored Tunnel Alternative, direct effects to area near Pike Place Market are limited to viaduct demolition and decommissioning of the Battery Street Tunnel. Effects of these activities for the Bored Tunnel Alternative are discussed in Chapter 6. Chapter 6, question 32 identifies other projects that may be built in a similar time frame or within close proximity of the Bored Tunnel Alternative. If the Bored Tunnel Alternative is selected and built, effects associated with replacing the seawall will be evaluated in a separate environmental process for the Elliott Bay Seawall being lead by the City of Seattle and the U.S. Army Corps of Engineers. Public scoping for the Elliott Bay Seawall EIS occurred from June 1, 2010 through July 19, 2010 and development of a Draft EIS is underway.

C-005-028

More detail regarding the effects Cut-and-Cover Tunnel Alternative construction can be found in Chapter 6 of Appendix C, Transportation Discipline Report in the Final EIS. Construction-related detours, closures, and traffic congestion would result in changes in mobility on streets in the project area. Businesses may experience some degree of inconvenience such as disruptions in the flow of customers and employees and in the delivery or shipment of materials and supplies.

C-005-029

The description of potential visual quality effects that would result from the Elevated Structure Alternative are discussed in Chapter 5 of Appendix D, Visual Quality of this Final EIS. The major adverse effect would entail the continued intrusion of a very large elevated highway into the views to the west of Elliott Bay, the islands and the Olympic Mountains for Market visitors and the viewpoint offered from the Victor Steinbrueck Park. This adverse effect would not occur with either of the tunnel build alternatives evaluated in the Final EIS.

C-005-030

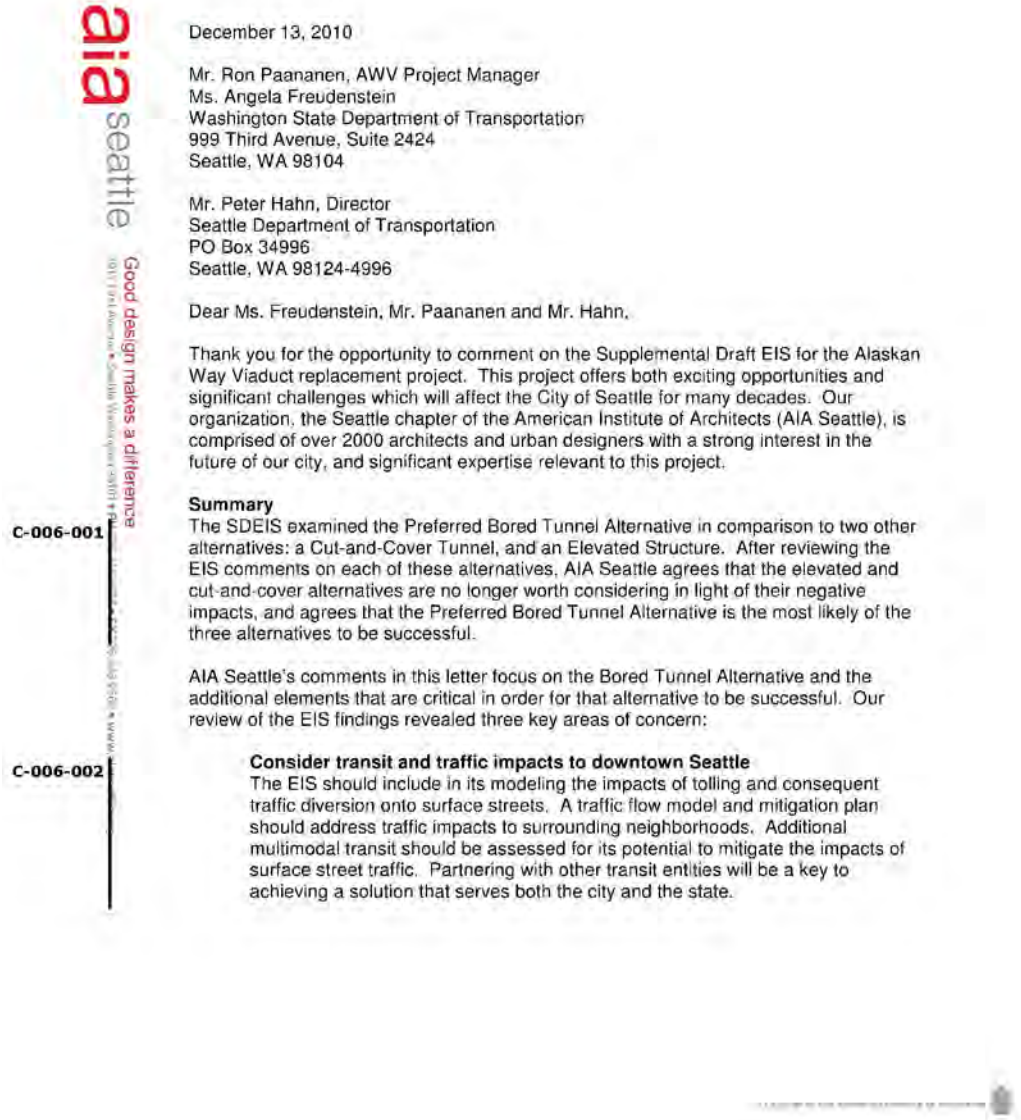
The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other

agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.



aia seattle

Good design makes a difference

December 13, 2010

Mr. Ron Paananen, AWV Project Manager
Ms. Angela Freudenstein
Washington State Department of Transportation
999 Third Avenue, Suite 2424
Seattle, WA 98104

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

Dear Ms. Freudenstein, Mr. Paananen and Mr. Hahn,

Thank you for the opportunity to comment on the Supplemental Draft EIS for the Alaskan Way Viaduct replacement project. This project offers both exciting opportunities and significant challenges which will affect the City of Seattle for many decades. Our organization, the Seattle chapter of the American Institute of Architects (AIA Seattle), is comprised of over 2000 architects and urban designers with a strong interest in the future of our city, and significant expertise relevant to this project.

C-006-001

Summary
The SDEIS examined the Preferred Bored Tunnel Alternative in comparison to two other alternatives: a Cut-and-Cover Tunnel, and an Elevated Structure. After reviewing the EIS comments on each of these alternatives, AIA Seattle agrees that the elevated and cut-and-cover alternatives are no longer worth considering in light of their negative impacts, and agrees that the Preferred Bored Tunnel Alternative is the most likely of the three alternatives to be successful.

AIA Seattle's comments in this letter focus on the Bored Tunnel Alternative and the additional elements that are critical in order for that alternative to be successful. Our review of the EIS findings revealed three key areas of concern:

C-006-002

Consider transit and traffic impacts to downtown Seattle
The EIS should include in its modeling the impacts of tolling and consequent traffic diversion onto surface streets. A traffic flow model and mitigation plan should address traffic impacts to surrounding neighborhoods. Additional multimodal transit should be assessed for its potential to mitigate the impacts of surface street traffic. Partnering with other transit entities will be a key to achieving a solution that serves both the city and the state.

C-006-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

C-006-002

The Final EIS considers the effects of tolling in Chapter 5, Permanent Effects. Additional information on the effects of tolling the alternatives can be found in Chapter 7 of Appendix C, Transportation Discipline Report, in the Final EIS.

Added King County Metro transit service is being considered as part of construction mitigation, but the funding for this added service has yet to be secured. Also, improvements to the speed and reliability of transit service may be supported by the project and could continue following construction completion. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit LRT and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

C-006-003

C-006-004

C-006-005

C-006-006

Describe physical and character risks to historic neighborhoods
The EIS should provide mitigation or alternative strategies to address the project's significant risk to historic buildings, and its potentially profound impact on the pedestrian character of historic districts.

Quantify and consider greenhouse gas emissions
The EIS should analyze how the project would help reduce carbon emissions in accordance with city, county, state and federal policies.

A more complete analysis of each of these concerns follows.

Traffic Impacts within Downtown Seattle

AIA Seattle's position on the viaduct replacement states:

> *The (viaduct replacement) should link surrounding and immediately adjacent urban districts through a system of connections. Mobility integration should address the individual needs of pedestrians, automobiles, transit, freight, service, bicycle, ferry, water taxi, trail network, accessibility, emergency, parking and the collective overlaps and opportunities where these modes come together. A sustainable solution must contribute to a comprehensive transportation plan, which incorporates multiple modes of transportation and anticipates changing technologies and patterns of mobility.*

To achieve the goals of enhanced mobility, improved traffic, and protection of urban assets, the Bored Tunnel Alternative must be analyzed for its overall impact on mobility and connectivity.

+ Identify total mobility needs and how to meet them

A primary use of the viaduct is to provide access to downtown Seattle with approximately 42% of the trips coming and going to downtown neighborhoods. With its focus on bypass trips through downtown, the preferred Bored Tunnel Alternative does not solve the full challenge of the viaduct replacement. With the impacts of tolling included, the preferred Bored Tunnel Alternative only serves approximately one third of the mobility needs currently served by the viaduct. It is incomplete without solutions that enhance local mobility and access. The EIS should identify local mobility and access to downtown as a goal, and evaluate alternatives based on their ability to provide this essential function.

+ Include the impacts of tolling in the model

The analysis in the entire document (except for Ch 9), including travel times, traffic volumes, greenhouse gas emissions, and storm water runoff, assumes that there will be no tolling on the project. However, tolling revenue is an essential part of the basic funding plan, and use of tolling will dramatically affect the impacts. According to the SDEIS, the impact of tolling will be to divert to surface streets an additional 40,000-45,000 vehicles which will be added to the 29,000 additional vehicles sent to surface

2

C-006-003

The strategies to address risk to buildings and historic districts are described in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report of the Final EIS. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

Chapter 8 of the Final EIS contains the mitigation measures proposed to address potential effects to historic buildings and districts (specifically Pioneer Square).

C-006-004

Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Disipline Report. All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative).

The study area evaluated includes areas likely to be affected by changes in greenhouse gas emissions as a result of the project. The greenhouse gas effects were estimated for roadways within the city center area, as well as in the region. The city center area is bordered by Prospect Street on the north, 15th Avenue on the east, S. Holgate Street on the south, and Elliott Bay on the west. The region includes all the traffic movements in King, Pierce, Snohomish, and Kitsap Counties.

C-006-006 streets in the bored tunnel alternative, resulting in a total of 69,000-74,000 additional vehicles on surface streets.

C-006-007 After analyzing the traffic impacts on surface streets that would result from tolling, the SDEIS concludes that "These effects would not be acceptable as part of a long term tolling solution." (Ch 9, pg 214) No alternative is suggested other than to state that "other scenarios" would be needed. After analyzing tolling impacts on transit riders (Ch 9, pg 215) this SDEIS concludes again that "These effects would not be acceptable as part of a long term tolling solution." No alternative is suggested other than to state that "other scenarios" would be needed.

Modeling should include tolling to clarify its impacts. Without it, the SDEIS creates an inaccurate depiction of traffic impacts.

+ Analyze downtown traffic flow and develop a mitigation plan

When the diversion effects of tolling are included in the model, the negative impacts to downtown's transportation system and its urban design character are significant or intolerable.

The EIS should include a traffic flow model that considers traffic diverted from the tunnel by tolling. The EIS should also include a mitigation plan to show elements in the project needed to prevent, resolve, or mitigate the negative impacts to the functioning of Seattle's local transportation system and to protect and enhance the urban design character of the waterfront.

C-006-008 The EIS must answer these questions: Specifically which city streets will carry the trips in and out of downtown from the tunnel interchanges? How many of these trips will use the new Alaskan Way surface street on the waterfront? How would this affect the waterfront parks and public spaces being planned now?

C-006-009 **+ Quantify needed transit service**

When the bored tunnel as preferred alternative was announced in January 2009, the package included $190 million worth of transit investments. Additional transit service was then, and is now, deemed necessary to provide access to and from downtown Seattle, since the bored tunnel does not provide sufficient access by itself.

The EIS should include and analyze additional transit service for its utility and effect on traffic on surface streets and in the tunnel.

C-006-010 **Risks to Historic Districts**

AIA Seattle supports the protection of historic resources as part of an overall strategy to create and sustain a livable city. To achieve the goal of protecting historic assets, the Bored Tunnel Alternative must fully assess its impact on nearby neighborhoods and include strategies to minimize destruction of historic buildings and neighborhood character.

3

C-006-005

Comment noted. The Bored Tunnel Alternative was identified as the preferred alternative because it best meets the project's purposes (goals) and needs as were stated in Chapter 1 of the 2010 Supplemental Draft EIS. Though the Bored Tunnel Alternative would alter travel patterns to and from downtown, access and mobility to this area would be maintained.

With the Bored Tunnel Alternative, access to downtown would be provided via ramps located at Alaskan Way and Dearborn Street in the Stadium area. Traffic using the Stadium area ramps would disperse over several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues to access downtown. Updated analysis has been included in the Final EIS. Appendix C, Transportation Discipline Report, of the Final EIS the detailed transportation analysis, including facility operational analysis, for this project.

C-006-006

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

C-006-007

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects

C-006-011

+ Identify street revisions in Pioneer Square Historic District and describe their impacts

Currently, the viaduct offers seven on and off ramps to provide access to downtown Seattle neighborhoods, spread from the stadium area to Belltown. (Ch 4 pg 74) The Bored Tunnel Alternative reduces the number of downtown ramps to four, and concentrates them all in the southern interchange adjacent to the Pioneer Square Historic District. This configuration concentrates all the traffic going between SR-99 and downtown Seattle on only a few streets, most of them in the Historic District. Because the existing street grid in this area is not well connected, there are not many viable routes; and some of the streets are narrow, fragile, and pedestrian oriented and not well suited for significant increases in traffic load.

The EIS should describe in detail the traffic volumes that are expected on specific streets around the southern interchange, identify street revisions necessary to accommodate the increased load, and describe their impacts. The EIS should answer these questions: How many vehicles will use Alaskan Way, First Ave, Second Ave, Fourth Ave? How will the planned street revisions affect the pedestrian character of the streets? Will the planned revisions remove street parking? Will the planned revisions remove any of the street trees in the Historic District? Will these changes affect the access to and viability of retail? How will the proposed changes to these streets affect the viability of travel by bicycle?

The EIS should also describe alternatives or mitigation strategies being considered, such as additional transit, routing traffic away from the Historic District, or demand management.

C-006-012

+ Analyze the physical risks to historic resources

Boring a tunnel next to Seattle's historic neighborhood, with its historic buildings, fragile and brittle infrastructure, high water table, and unstable soils, is challenging. The SDEIS describes the risks of digging and boring in this location (Ch 5 pg 126), possible damage to 12 historic structures (Ch 2 pg 31), and possible collapse or dramatic damage to two buildings (Ch 5 pg 142) during construction, and mentions measures to protect structures.

Additionally, given that water table is quite close to the surface, there is risk that the solidification of soils, due to tunnel walls, retained cuts at the portals, and the injection of jet grout under buildings, might alter natural water flows, create a water barrier, and cause water to back up in the Pioneer Square Historic District. (Ch 5 pg 127)

The EIS should provide a detailed analysis of these issues. Questions the EIS should answer include: What process will be used to determine the need for jet grout or other protective measures? Which specific buildings will need to be protected? What impacts will the protective measures have on the buildings, underground structures, sidewalks, and streets? What is the risk of submerging subsurface structures and which structures are vulnerable?

due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses. Traffic conditions on city streets are compared in Chapter 5 of the Final EIS and in Appendix C, Transportation Discipline Report.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

C-006-013

Reduction of Greenhouse Gas Emissions

AIA Seattle's position statement notes:

> *The environmental stewardship of our region, including the City of Seattle's Climate Action Plan, call for measures that sustain the environment by protecting natural habitats, reducing driving, and making cities more livable.*

To contribute to our state's overall carbon emissions reduction targets and lessen the impacts of global warming, the Bored Tunnel Alternative must identify project impacts on greenhouse gas emissions from vehicular traffic, and develop strategies to bring the project into compliance with carbon reduction targets.

+ Discuss compliance with government GHG reduction targets

The City, County, State and Federal governments have policies urging transportation agencies to pursue decreased Vehicle Miles Traveled over time, and increase the viability of other modes, as part of a larger effort to reduce green house gas emissions from vehicles. The Governor and State Legislature addressed the need to reduce greenhouse gases from transportation in Executive Order 09-05 and in Section 47, Chapter 1, Section 440 of the Revised Code of Washington, which set statewide vehicle miles traveled reduction targets as part of the plan to reduce statewide greenhouse gas emissions. The targets are:

- Decrease the annual per capita vehicle miles traveled by eighteen percent by 2020;
- Decrease the annual per capita vehicle miles traveled by thirty percent by 2035; and
- Decrease the annual per capita vehicle miles traveled by fifty percent by 2050.

The EIS should analyze how this project would help reduce vehicle miles traveled in compliance with the state's VMT reduction targets.

C-006-014

+ Allow for a wider range of low-carbon solutions by focusing on mobility

In the 2006 SDEIS the purpose was "The project will maintain or improve mobility, accessibility, and traffic safety for people and goods along the existing Alaskan Way Viaduct Corridor." This statement of purpose and need allowed for a variety of sustainable solutions, including transit, demand management, or use of available capacity on existing facilities, to be considered as part of a comprehensive solution.

The statement of purpose and need in the 2010 SDEIS addresses only car capacity, rather than the original goals of mobility, accessibility and safety. Yet to meet our ambitious carbon reduction goals, experts and policy makers agree that we must commit to more alternative transportation, and pro-actively plan for reduced Vehicle Miles Traveled.

5

C-006-008

It is expected that, overall, traffic will use several different streets near both the north and south portals to travel to/from the proposed Bored Tunnel. Traffic is expected to distribute based on available capacity and driver consideration of travel time of these various roadways.
Please see the Final EIS, Appendix C Transportation Discipline Report for information regarding traffic volumes on Alaskan Way. The impacts of the Alaskan Way waterfront project are evaluated as part of the cumulative effects of the project and included in the Final EIS. The final design of Alaskan Way will be determined as part of the City of Seattle's Central Waterfront Project.

C-006-009

Added King County Metro transit service is being considered as part of construction mitigation but the funding for this service increase has not yet been secured. Also, improvements to the speed and reliability of transit service will be supported by the project and will continue following construction completion. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit LRT and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

The Final EIS considers King County and Sound Transit planned transit projects in the cumulative effects analysis in Chapter 7. However, the Final EIS does not analyze these transit projects in the manner suggested in this comment because analyzing the effects of other projects is beyond the scope of this Final EIS.

C-006-010

Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS addresses strategies to minimize impacts to historic areas and demolition of and damage to historic buildings. Mitigation for potential

C-006-014

The EIS should revise the statement of purpose and need (Ch 1 pg 4) to use the long-established definition for this project, 'mobility for people and freight', and not redefine the goal as vehicle capacity.

aia seattle

C-006-015

Conclusion

The SDEIS reveals that the Bored Tunnel Alternative, while preferable to the other two alternatives examined in the SDEIS, solves only a portion of the challenge. For the project to be successful and enhance mobility and livability in our city, the SDEIS must include additional analysis and recommend additional solutions as part of the project.

The EIS should address the need for effective access into downtown Seattle neighborhoods, and study how to best provide this access for people and freight. The EIS should analyze additional transit service, demand management programs, street improvements that route local trips to other arterials, and I-5 improvements to shed light on how best to improve access to Seattle neighborhoods.

As decision makers weigh the alternatives, it is imperative that the answer not only serve bypass trips, but also enhance access into downtown Seattle neighborhoods, and ensure the opportunity of the new waterfront is protected and not inundated with excess traffic.

Thank you for this opportunity to comment on the SDEIS and its findings. If you would like further information on AIA Seattle's position on the viaduct replacement project, you may visit http://aiaseattle.org/node/1976 or contact Stephanie Pure, AIA Seattle External Relations Director, spure@aiaseattle.org.

With thanks,

Mark Reddington, Co-Chair
AIA Seattle Waterfront Task Force

Lisa Richmond, Executive Director
AIA Seattle

6

impacts is addressed in Chapter 8 of the Final EIS and in the Section 106 Memorandum of Agreement. An extensive monitoring program will be undertaken before, during and after tunneling to detect and prevent building settlement.

C-006-011

With the Bored Tunnel Alternative, access to downtown would be provided via ramps located at Alaskan Way and Dearborn Street in the Stadium area. Traffic using the Stadium area ramps would disperse over several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues to access downtown. The Bored Tunnel Alternative analysis shows the alternative in general would maintain or slightly improve the intersection traffic operation as compared to the 2015 Existing Viaduct. Chapter 5, Permanent Effects, of the Final EIS discusses transportation operation effects for all the proposed alternatives. Details are included in Appendix C, Transportation Discipline Report, of the Final EIS.

Because operational effects of the built alternative would be substantially better than the Viaduct Closed (No Build Alternative), long-term transportation mitigation measures beyond what are outlined in the alternative definitions (including the Program improvements) are not anticipated. However, a number of mitigation measures in place during construction could have benefits over the longer term. Refer to Chapter 8, Mitigation, in the Final EIS for details.

C-006-012

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after

tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

Measures that can be employed to mitigate the risk of groundwater mounding behind tunnel walls or ground improved areas are outlined in the Earth Discipline Report, Appendix P, and summarized in Chapter 5 of the Final EIS. The level of detail provided in the Earth Discipline Report is appropriate for environmental review purposes. The risk of groundwater mounding and associated design-related mitigation will be further evaluated during final design of the project.

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would

be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

C-006-013

The law setting the VMT benchmarks directs WSDOT to “adopt broad statewide goals to reduce annual per capita vehicle miles traveled by 2050 consistent with the stated goals of Executive Order 07-02.” The state law does not require individual projects to set VMT reductions. WSDOT is working on this task and related tasks in Executive Order 09-05 in conjunction with a working group established for this purpose. The cumulative greenhouse gas impacts of transportation projects are best addressed at a system-wide level where multiple projects can be analyzed in aggregate, such as in regional transportation plans. The Alaskan Way Viaduct Replacement Project is included in PSRC’s Regional Transportation Plan, *Transportation 2040*, which considered greenhouse gas emissions along with other transportation objectives.

C-006-014

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.

C-006-015

The lead agencies do not agree that additional analysis is needed to make a decision about what alternative should replace the failing viaduct. The lead agencies have evaluated a wide range of alternatives and concept since the Draft EIS was published in early 2004. The preferred alternative (the Bored Tunnel) meets the established puproses and needs for the project, which includes:

- Provide capacity of automobiles, freght, 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.

A full discussion of how the preferred alternative meets the project's established purpose and need is provided in the Final EIS. Proposal for additional transit service, street improvements, etc. are discussed in Chapter 7 of the Final EIS where complimentary projects in the local area are discussed. Details about the effects of these complmentary projects is provided in Appendix C, Transportation Discipline Report.

Seattle Marine Business Coalition

2201 WEST COMMODORE WAY, SEATTLE, WASHINGTON 98199

8 December 2010
Angela Freudenstein
Alaskan Way Viaduct Replacement Project Office
999 Third Ave., Ste. 2424
Seattle, WA 98104-4019

Comments on the Supplemental Draft EIS
for the Bored Tunnel Viaduct Replacement Alternative

Thank you for the opportunity to comment on the 2010 Supplemental Draft EIS.

The Seattle Marine Business Coalition represents roughly 300 marine industrial land users within the city limits. Most of our member companies are clustered at the north and south ends of the viaduct, and rely on the efficiency that structure provides for movement between the two industrially zoned neighborhoods of the BINMIC and the Duwamish.

C-007-001

We are concerned with the effects the bored tunnel alternative proposal will have on traffic movement between those two neighborhoods. We believe there has been inadequate analysis of the cumulative impacts of the project on vehicle mobility on I-5, Alaskan Way and other city truck routes, arterials and residential streets. Without more comprehensive analysis, there is insufficient information in the Draft EIS to provide adequate notice to the potential users of the revised road transportation system, and/or to plan and provide for appropriate mitigation of the impacts of the project.

Specifically, further analysis should answer the following:

1. The state project managers have consistently held that the current tunnel portal configuration and access points mean that virtually all freight movement will be diverted from the existing viaduct to a new at-grade Alaskan Way. What are the expected truck volumes along Alaskan Way?

2. Given that trucks operate differently from single occupancy vehicles, what will be the effect of the additional freight volumes on Alaskan Way to overall travel times between BINMIC and the Duwamish?

C-007-002

3. Tolling seems to be increasingly attractive to the state as a revenue source to help offset construction costs of the bored tunnel, yet the effects of various tolling scenarios are not well defined in the Draft EIS. What will be the diversion patterns for the various tolling scenarios? Which tolling scenario is the preferred scenario? What are projected revenues for that scenario, and what effect will that scenario have on Alaskan Way traffic volumes and travel times?

C-007-001

All freight traffic traveling between Ballard and the Duwamish industrial area, other than over-height loads or hazardous or flammable cargo, could use Mercer Place/Mercer Street to access the bored tunnel via the Republican Street ramps.

Travel times along the freight routes between Ballard and S. Spokane Street can be found in the Truck Traffic and Freight section in Chapter 5 of the Final EIS Appendix C, Transportation Discipline Report. These travel times are for an average of all vehicles including general purpose and freight traffic. The traffic analysis results represent an average of all vehicles including general purpose and freight traffic. A separate detailed traffic analysis for freight was not performed.

Refer to Chapter 8 of the Final EIS Appendix C, Transportation Discipline Report for cumulative effects, including the proposed Elliott/Western Connector and two-way Mercer West Project.

C-007-002

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

C-007-003

4. The bored tunnel alternative will by definition cause a reconfiguration of the street grid. What happens to existing recognized truck routes in the post bored tunnel scenario? It would be helpful to the freight community if WSDOT or SDOT could create a schematic to illustrate truck routes developed to accommodate freight needs under the bored tunnel alternative.

C-007-004

5. Finally, we note that two other alternatives were compared to the bored tunnel in the Draft EIS: the cut and cover tunnel and a new elevated structure. Why was maintenance and seismic upgrade of the existing structure not included in the comparison? Several of our members served on the Viaduct Advisory Committee. From that participation and independent study, we know that such a seismic upgrade would cost roughly ¼ of the cost of the bored tunnel alternative, and would maintain existing capacity and travel times.

Thank you for the effort represented by this Draft EIS, and for the opportunity to provide input regarding our concerns over the proposal.

Your responses to these concerns will help the freight community understand the effects the bored tunnel proposal may have on our businesses, such that we may work collaboratively with the city and the state to develop solutions that will help maintain the economic viability of the maritime industrial communities represented by the Seattle Marine Business Coalition.

We look forward to hearing from you.

Sincerely,

Peter Philips
President
Seattle Marine Business Coalition

C-007-003

The City of Seattle would update the Major Truck Street network to reflect changes in the street network. The City would work with the Freight Mobility Advisory Board and other stakeholders through the designation process.

C-007-004

Chapter 2, Alternatives Development, of the Final EIS describes how alternatives were evaluated in the environmental documentation for this project. The lead agencies recognize that retrofitting highways, roadways, and bridges is often a viable option to counter earthquake threats. However, unlike other bridges and structures in the area, it isn't practical to retrofit the viaduct to meet seismic safety standards by only strengthening one or two structural elements. Fundamentally, such fixes transfer the forces from one weak point in the structure to another, and the viaduct is weak in too many places. The concrete frames, columns, foundations, and even the soil under the structure don't provide enough strength by today's standards. The lead agencies have studied various retrofitting concepts, and all of these concepts fail to provide a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct. Therefore it is not considered a reasonable alternative.

THE UPTOWN ALLIANCE
3227-13th Avenue West, Seattle, WA 98119 206/283-2049

December 2, 2010 DRAFT

Angela Freudenstein
SDEIS Comments Coordinator
Alaskan Way Viaduct Replacement Project
999 Third Avenue
Suite 2424
Seattle, WA 98104
Awv2010sdeiscomments@wsdot.wa.gov

Dear Ms. Freudenstein:
Re: Uptown Alliance Comments on Alaskan Way Viaduct Replacement Project Supplemental Draft Environmental Impact Statement.

C-008-001

OPTIMIZING THE UTILIZATION OF BIKE, PEDESTRIAN, AND BUS RAPID TRANSIT MODES IN THE UPTOWN TRIANGLE
Section 13: Project Element: Surface Parking lot adjacent to the Tunnel Operations Building, bounded by Harrison St., Aurora Ave., and Thomas St.

How would the urban centers' economy be permanently affected?
Why is this an important question for the economic development of the Uptown Urban Center and the South Lake Union Urban Center?

- The new surface blocks of Aurora Ave. at the boundary of the Uptown Urban Center and the South Lake Union Urban Center can offer prime mixed use redevelopment sites in a part of these urban centers that has had poor access, but which will become very accessible as Harrison and Thomas Streets are carried across Aurora Ave.
- Surface parking lots are not a preferred type of development in the Queen Anne Plan or the Uptown Design Guidelines.
- The economic health of urban centers depends on the successful use of retail/service space fronting on the sidewalks. A surface parking lot destroys this potential on the aforementioned block face.

C-008-002

Why is the planned parking lot an important environmental issue?

- King County has experienced the nation's largest mode shift for all categories of trips to transit over the last decade – a trend that is projected to continue, despite current transit revenue shortfalls from taxation.
- Washington Stage government has adopted legislation aimed at reducing vehicle miles traveled (VMT.)
- One practical response to the mode shift and VMT reduction is the establishment of bus rapid transit RapidRide transit routes. The route with the widest catchment area will be the Aurora route connecting to the Community Transit Swift service at the north King County line and to dozens of other routes in downtown Seattle.
- The South Lake Union and Uptown Urban Centers, major job locations, will be served by the Aurora RapidRide service.

The civic organization for the Uptown Urban Center
A steward of the Queen Anne Plan

C-008-001

Overall, the infrastructure improvements in the north area would improve truck freight mobility and vehicle and pedestrian connections. In turn, these benefits would improve business efficiencies due to the increased circulation near the project area.

The surface parking lot adjacent to the Tunnel Operations Building would provide necessary parking for WSDOT employees stationed at the north portal's Tunnel Operations Building. Currently the remainder of the block is parking; therefore, the future use would not be inconsistent.

C-008-002

The parking lot adjacent to the tunnel operations building would be needed for employees working at the operations building. It would not be a public parking lot.

THE UPTOWN ALLIANCE
3227-13th Avenue West, Seattle, WA 98119 206/283-2049

C-008-002

• Therefore a functional transit hub connecting the Aurora RapidRide service to bike, pedestrian, and other transit services on the planned surface blocks of Aurora Ave. is an important consideration.

The current plan for a half-block surface parking lot adjacent to the Tunnel Operations Building would preclude construction of a transit hub facility on the west (southbound) side of Aurora Ave. between Harrison and Thomas Streets. King County Metro has indicated that this block face is the preferred stop location serving these two urban centers for the southbound Aurora Rapid Ride service.

A transit hub structure in that location could provide bike storage/service, bike share rentals, food service, pedestrian way-finding, and miscellaneous retail.

Why or why not implement the two following concepts that would retain the parking function for WSDOT and provide for a transit hub which would encourage RapidRide ridership and the use of bike and pedestrian trip extension into Seattle's Center City urban centers?

1/ Create a 30' setback along the west side of Aurora Ave. between Harrison and Thomas Streets. This setback would allow a minimal transit hub structure and would invigorate the retail/service economy of both urban centers.
2/ Create a public/private project to redevelop the half-block bounded by Harrison St., Aurora Ave., and Thomas St. which would provide space for a transit hub, housing or offices, and other commercial space. The developer would provide parking space for tunnel-related vehicles.

C-008-003

NORTHBOUND TURNS FROM SIXTH AVENUE TO MERCER STREET
It is our understanding that the Viaduct Team determined that a traffic signal allowing NB turns from Sixth Avenue to Mercer Street has been included as part of the Curved Alignment Alternative for Sixth Avenue. The SDEIS Document states this is a possibility, but our understanding is that the alternative now includes the signal. The SDEIS should be updated to reflect this. The signal is an important facility to provide improved access between the Uptown Urban Center and Downtown Seattle.

C-008-004

WIDENING THE MERCER UNDERPASS AT AURORA
The Uptown Alliance supports the need for a six-lane Mercer (with appropriate turn lanes) between Dexter Avenue and Fifth Avenue. While the SDEIS indicates this is included in the preferred alternative, the Uptown Alliance would like to be on record stating that the six-lane widening under Aurora is critical for both motorized and non-motorized transportation needs.

The civic organization for the Uptown Urban Center
A steward of the Queen Anne Plan

C-008-003

The Final EIS has been updated to reflect this change. Please see the Final EIS, Appendix C Transportation Discipline Report.

C-008-004

The Final EIS assumes that Mercer Street would be widened to six lanes. The Mercer Street widening project is a separate project being undertaken by the City of Seattle. Please refer to SDOT's website for more information on the project.

THE UPTOWN ALLIANCE
3227-13th Avenue West, Seattle, WA 98119 206/283-2049

C-008-005

ENSURING ADA COMPLIANCE FOR DISABLED-EQUIPPED VANS STALLED IN THE TUNNEL
Will the Deep Bore Tunnel constructed at the width now designated by the winning contractor group provide space on the shoulders for a van equipped to access a wheelchair to unload in an emergency situation?

Thank you for your consideration of these land-use, global warming, and transportation issues that relate to the proposed surface parking lot adjacent to the Tunnel Operations Building parking lot.

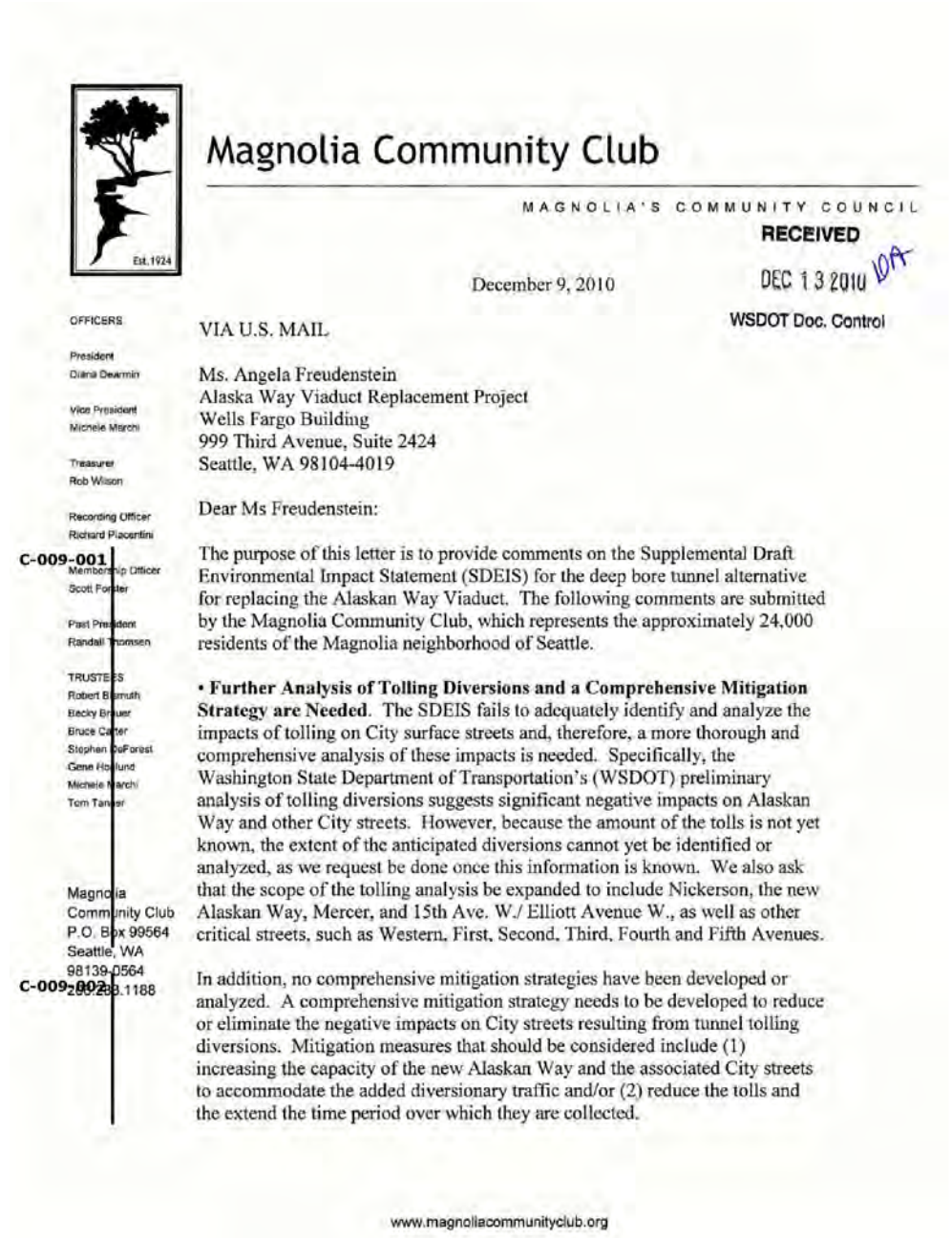
Sincerely,

John Coney, Co-Pres. Rick Hooper, Co-Pres.

The civic organization for the Uptown Urban Center
A steward of the Queen Anne Plan

C-008-005

The project is subject to compliance with the American Disabilities Act (ADA) so the final design of the project will meet all the necessary ADA requirements. However, roadway shoulders are not subject to ADA requirements, like sidewalks. The current roadway design within the bored tunnel includes a 2-foot-wide shoulder on one side and an 8-foot-wide shoulder on the side where the emergency exits are located. The 8-foot shoulder is a reasonable width for vehicles to pull off the road in case of emergency. Whether a wheelchair accessible van can unload entirely within the shoulder will depend on the type of wheelchair lift with which it is equipped.



Magnolia Community Club

MAGNOLIA'S COMMUNITY COUNCIL

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December 9, 2010

VIA U.S. MAIL

Ms. Angela Freudenstein
Alaska Way Viaduct Replacement Project
Wells Fargo Building
999 Third Avenue, Suite 2424
Seattle, WA 98104-4019

Dear Ms Freudenstein:

The purpose of this letter is to provide comments on the Supplemental Draft Environmental Impact Statement (SDEIS) for the deep bore tunnel alternative for replacing the Alaskan Way Viaduct. The following comments are submitted by the Magnolia Community Club, which represents the approximately 24,000 residents of the Magnolia neighborhood of Seattle.

C-009-001

• **Further Analysis of Tolling Diversions and a Comprehensive Mitigation Strategy are Needed**. The SDEIS fails to adequately identify and analyze the impacts of tolling on City surface streets and, therefore, a more thorough and comprehensive analysis of these impacts is needed. Specifically, the Washington State Department of Transportation's (WSDOT) preliminary analysis of tolling diversions suggests significant negative impacts on Alaskan Way and other City streets. However, because the amount of the tolls is not yet known, the extent of the anticipated diversions cannot yet be identified or analyzed, as we request be done once this information is known. We also ask that the scope of the tolling analysis be expanded to include Nickerson, the new Alaskan Way, Mercer, and 15th Ave. W./ Elliott Avenue W., as well as other critical streets, such as Western, First, Second, Third, Fourth and Fifth Avenues.

C-009-002

In addition, no comprehensive mitigation strategies have been developed or analyzed. A comprehensive mitigation strategy needs to be developed to reduce or eliminate the negative impacts on City streets resulting from tunnel tolling diversions. Mitigation measures that should be considered include (1) increasing the capacity of the new Alaskan Way and the associated City streets to accommodate the added diversionary traffic and/or (2) reduce the tolls and the extend the time period over which they are collected.

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C-009-001

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

C-009-002

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south

Page 2

C-009-003 • **The New Alaskan Way Must Be Able to Move Traffic Efficiently.** There must be a commitment by WSDOT and the City of Seattle to ensure the new Alaskan Way is developed to move traffic efficiently and effectively. There are many competing demands for how the new waterfront is to be developed. It is essential that the new Alaskan Way be able to efficiently service residential, commercial, and maritime traffic coming and going from the west and northwest areas of Seattle. Therefore, the mitigation measures must be revised to include specific benchmarks for traffic flow along the new Alaskan Way and for the implementation of contingency plans if traffic flow does not meet those benchmarks. Contingency plans may include the development of additional capacity improvements or the redirection of traffic to alternate roadways.

C-009-004 • **The West Mercer Project is Critical to Magnolia.** The West Mercer Project has the potential to significantly help move traffic from 15th Avenue W./Elliott Avenue W. along Mercer to access the proposed North Portal and I-5. Therefore, the SDEIS needs to address existing and anticipated future traffic congestion at the intersection of Elliott Avenue W. and W. Mercer Place given that the elimination of the Elliott/Western ramp to SR 99 and the proposed location of the North Portal will significantly alter existing traffic patterns along this major arterial. These changes are expected to detrimentally impact Magnolia's access both north/south and east/west. One specific mitigation measure that must be included and implemented is adequate carrying capacity eastbound at the W. Mercer Place hill to prevent the stacking up of vehicles, especially buses and trucks, in the two southbound left turn lanes on Elliott Avenue. Rapid Ride bus service is expected to begin in 2012 and the proposed bus route is up the W. Mercer Place hill. Even now, during rush hour, vehicles often extend beyond the left-turn lanes into the general purpose lanes. Also, W. Mercer Place does not have a sidewalk, so any redevelopment of this corridor requires the construction of an adequate sidewalk to convey pedestrians safely along the W. Mercer Place hill. Finally, timely construction of this project is essential so that the W. Mercer improvements are in place to facilitate access to the North Portal and I-5 once the Viaduct is removed from service and while the new Alaskan Way is being constructed.

C-009-005 • **A Comprehensive Detour Plan is Necessary for the 3-Year Period While the Viaduct is Removed and the New Alaskan Way is Constructed.** The SDEIS omitted a clear mitigation strategy during construction. WSDOT, working in conjunction with the City of Seattle and the Port of Seattle, needs to develop a mitigation strategy includes appropriate detours through City streets to maintain a reasonable flow of residential, commercial, and maritime traffic coming and going to the northwest areas of Seattle while the new Alaskan Way is being constructed and the Viaduct is no longer in service. Such a mitigation strategy is necessary because not all traffic will be able to or will choose to use the tunnel and there will be a critical need to move traffic north and south efficiently during the approximately 3-year period while the new Alaskan Way is being constructed.

and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

C-009-003

The updated transportation analysis and permanent effects to traffic are discussed for all of the build alternatives in Chapter 5, of the Final EIS and in Appendix C, Transportation Discipline Report. The ultimate design of Alaskan Way will be determined as part of the City of Seattle's Central Waterfront Project.

C-009-004

The West Mercer Project is an independent project being led by the City of Seattle and the details contained in this comment are not relevant to replacement of the Alaskan Way Viaduct. The West Mercer Project is important to the City's transportation system and as such it is included in the cumulative effects evaluation for the viaduct replacement project.

C-009-005

Overall construction effects of each of the alternatives are described in

We thank you for your attention to these important comments on the SDEIS.

Sincerely,

Diana Dearmin
President, Magnolia Community Club

cc: (via email)
Tom Rasmussen, Chair of Transportation Committee for Seattle City Council (Tom.Rasmussen@seattle.gov)
Bill Bryant, President of Port of Seattle Commissioners (bill.bryant@portseattle.org)
Larry Phillips, Chair of Transportation Committee for King County Council (larry.phillips@kingcounty.gov)
Senator Jeanne Kohl-Wells (kohl-wells.jeanne@leg.wa.gov)
Representative Reuven Carlyle (carlyle.reuven@leg.wa.gov)
Representative Marylou Dickerson (dickerson.marylou@leg.wa.gov)
Peter Hahn, Director of SDOT (Peter.Hahn@seattle.gov)

Final EIS Appendix C, Transportation Discipline Report. For environmental documentation purposes, the worst stage of construction for traffic was analyzed quantitatively while the overall construction activities were described qualitatively.

Demolition of the existing Alaskan Way Viaduct would occur as part of the viaduct replacement project. As part of that project, standard maintenance of traffic during construction plans will be developed, communicated with the general public, and implemented during project construction.

North Seattle Industrial Association
P. O. Box 70328
Seattle, WA 98127-0328

Eugene Wasserman, President 206-440-2660 eugene@ecwassociates .com
Suzanne Burke, Secretary 206-632-0124

December 12. 2010

Angela Freudenstein
Alaskan Way Viaduct Replacement Project Office
999 Third Ave., Ste. 2424
Seattle, WA 98104-4019

The North Seattle Industrial Association (NSIA) has reviewed the Alaskan Way Viaduct SDEIS and has found the following deficiencies in the analysis. We request that these deficiencies be address in the FEIS.

C-010-001

1. The SDEIS and the previous EISs do not adequately document the impact of the Deep Bore tunnel on freight movements through this corridor and its impact on the maritime/industrial businesses that use the corridor. The SDEIS is deficient in the following way;

   a. The SDEIS assumes that truck operations are the same as automobile operations. Freight operations are very different. The FEIS needs an analysis of impact of the Deep Bore Tunnel on freight operations.

   b. The SDEIS lacks an analysis of the impact of the grades in the Deep Bore tunnel, Mercer Place and the new Western and Elliott on freight and transit operations.

   c. The EIS does not show how truck routes will change through the entire corridor from Shoreline to Tukwila/SeaTac, I-5 to the Central Waterfront.

   The EIS cannot identify what is the freight movement impacts discussed above and how they might be mitigated. The FINAL EIS needs to document them these impacts and how they will be mitigated

C-010-001

The impacts of the Bored Tunnel Alternative on freight traffic and freight operations are discussed in Chapters 5, Permanent Effects, and 6, Construction Effects, of the Final EIS. Appendix C, Transportation Discipline Report, also contains detailed transportation analysis in Chapters 5, 6, and 7. The traffic analysis results represent an average of all vehicles including general purpose and freight traffic. A separate traffic analysis for freight was not performed because the effects of the project on freight were captured quantitatively in the overall traffic analysis for the project, as discussed in Chapter 2 of Appendix C. Freight traffic was also qualitatively discussed in other discipline reports such as Chapter 5 of Appendix L, Economics Discipline Report. Grades in the proposed bored tunnel as well as alternative routes such as Mercer Place and Western and Elliott Avenues are included in the transportation analysis.

C-010-002

2. The SDEIS and the previous EISs do not adequately address the movement of hazardous, flammable and combustible material through the Deep Bore corridor. There is no discussion of alternate routes or potential use of the tunnel. Combustibles materials particularly are used to fuel the maritime activity in NSIA area and their movement is very important to the growth of our maritime industries.

C-010-003

3. The SDEIS fails to identify all the traffic impacts from the tolling of the Deep Bore tunnel and fails to discuss any mitigation of these impacts. The SDEIS fails to adequately identify and analyze the impacts of tolling on surface streets. Specifically, WSDOT's preliminary analysis of tolling diversions suggests significant negative impacts on Alaska Way and other City streets. The scope of the tolling analysis should be expanded to include Nickerson, Mercer and 15th Ave. W. Elliott Avenue West as well as other critical arterials such as Western, First, Second, Third, Fourth and Fifth Avenues. Next, no comprehensive mitigation strategies have been developed or analyzed.

C-010-004

C-010-005

4. The SDEIS does not have an adequate description of the construction impacts of the Deep Bore tunnel on freight, transit or automobile movements.

C-010-006

5. The SDEIS does not have an adequate description of the operation of the Central Waterfront and particularly the operations of Alaskan Way surface for decision makers to make adequate decisions of the impacts of the Deep Bore Tunnel on traffic in this corridor. The Central Waterfront will be subject to a separate design project and a separate environmental process. The North Seattle Industrial Association wonders how the SDEIS can make so many assumptions about the operation and design of the Central Waterfront without a draft design.

C-010-007

6. The SDEIS makes many assumptions about transit operations, the Central Waterfront project, the West Mercer project, and tolling. Since these projects have not been designed the Viaduct project needs to have alternatives in place in case these projects are not implemented as planned.

C-010-002

Chapter 5 of Appendix Q, Hazardous Materials Discipline Report of the Final EIS has been modified to state that: "The bored tunnel will be closed to all placard vehicles transporting potentially dangerous cargo. This includes all vehicles carrying explosives, flammable substances, non-flammable gas, dangerous materials, oxidizer materials, corrosive materials, poison and radioactive materials. These materials are not currently allowed in the Battery Street Tunnel, so all these materials will continue to be transported using the hazardous material detour routes within the City of Seattle."

C-010-003

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

C-010-004

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other

The North Seattle Industrial Association looks forward to the correction of these deficiencies when you publish the Final EIS.

Sincerely,

Eugene Wasserman
President, North Seattle Industrial Association

agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

C-010-005

In the Final EIS, Chapter 6 describes how construction would affect traffic, freight, and transit for each of the alternatives, and Chapter 8 describes mitigation measures. Appendix C, Transportation Discipline Report, contains additional details about the modeling and analysis of transportation effects during construction.

C-010-006

The Final EIS provides an adequate description of operations on Alaskan Way for decision-makers to make decisions related to traffic impacts associated with the Bored Tunnel Alternative. Extensive traffic analysis has been completed to present decision-makers with information to understand both positive and negative traffic effects related to the Bored Tunnel Alternative. This information is provided in both the 2010 Supplemental Draft EIS (including Appendix C) and the Final EIS.

It's important to know that conditions on Alaskan Way were evaluated assuming that Alaskan Way remain as it is today (that's the analysis contained in Chapters 5 of both the 2010 Supplemental Draft EIS and the Final EIS) as well as, what conditions are expected in 2030 once the central waterfront improvements (including Alaskan Way improvements and the Elliott/Western improvements) are constructed. That analysis is contained in Chapter 7 (cumulative effects) of both the 2010 Supplemental Draft EIS and the Final EIS (see also the cumulative effects chapter in Appendix C). The baseline assumptions for the Alaskan Way improvements evaluated in the cumulative effects analysis assume the following:

- Alaskan Way would be six lanes wide between S. King and Columbia Streets and four lanes wide between Marion and Pike Streets. The new street is expected to have sidewalks, bicycle facilities, parking/loading zones, and signalized pedestrian crossing at cross-streets.
- Elliott/Western Connector would be four-lanes wide between Pike Street and Lenora Street and would integrate back into the street grid at Bell Street.

C-010-007

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information on transit and the other projects listed in this comment. Regarding the Central Waterfront Project, the City of Seattle is leading that effort and is a co-lead agency for the viaduct replacement project. This ensures both project work from common assumptions and will be closely coordinated. Regarding transit, King County is a cooperating agency for the viaduct replacement project and its staff have been and will continue to be closely involved in planning and design.

December 13, 2010

Angela Freudenstein
Alaskan Way Viaduct Replacement Project Office
999 Third Ave., Ste. 2424
Seattle, WA 98104-4019

Dear Ms. Freudenstein:

The Manufacturing Industrial Council shares the concerns expressed in the attached letter from the North Seattle Industrial Association and urges WSDOT to respond to these issues in the final EIS.

Sincerely,

Dave Gering, Executive Director
Manufacturing Industrial Council of Seattle

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December 12. 2010

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C-011-004 |

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C-011-007

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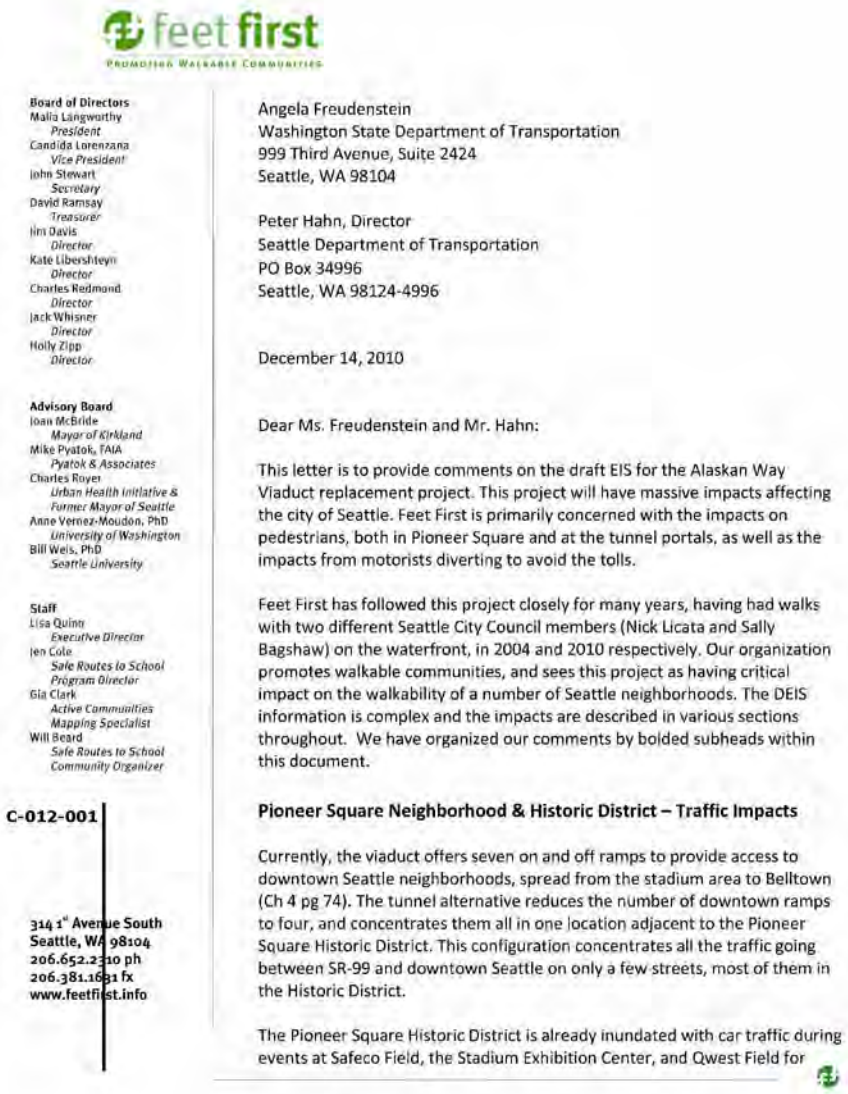

feet first
PROMOTING WALKABLE COMMUNITIES

C-012-001

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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 14, 2010

Dear Ms. Freudenstein and Mr. Hahn:

This letter is to provide comments on the draft EIS for the Alaskan Way Viaduct replacement project. This project will have massive impacts affecting the city of Seattle. Feet First is primarily concerned with the impacts on pedestrians, both in Pioneer Square and at the tunnel portals, as well as the impacts from motorists diverting to avoid the tolls.

Feet First has followed this project closely for many years, having had walks with two different Seattle City Council members (Nick Licata and Sally Bagshaw) on the waterfront, in 2004 and 2010 respectively. Our organization promotes walkable communities, and sees this project as having critical impact on the walkability of a number of Seattle neighborhoods. The DEIS information is complex and the impacts are described in various sections throughout. We have organized our comments by bolded subheads within this document.

Pioneer Square Neighborhood & Historic District – Traffic Impacts

Currently, the viaduct offers seven on and off ramps to provide access to downtown Seattle neighborhoods, spread from the stadium area to Belltown (Ch 4 pg 74). The tunnel alternative reduces the number of downtown ramps to four, and concentrates them all in one location adjacent to the Pioneer Square Historic District. This configuration concentrates all the traffic going between SR-99 and downtown Seattle on only a few streets, most of them in the Historic District.

The Pioneer Square Historic District is already inundated with car traffic during events at Safeco Field, the Stadium Exhibition Center, and Qwest Field for

C-012-001

As an on-going task for the overall planning and design effort, the project team will continue to communicate and coordinate with the Mariners and Seahawks organizations as well as the affected Pioneer Square and SODO businesses to ensure that reasonable measures are in place to accommodate trip activities during large sporting events. The proposed Stadium Area ramp connections to/from the north would essentially relocate the existing First Avenue S ramp connections to the frontage road at S. Royal Brougham Way. Therefore, traffic volumes on S. Atlantic Street or S. Royal Brougham Way east of First Avenue S. would not be expected to substantially change, even for larger sporting events at Qwest Field or Safeco Field. However, it is recognized that the revised SR 99 connections to/from the north and new SR 99 connections to/from the south will result in changes in travel patterns, redirecting some traffic from First Avenue S. to the frontage road and sections of S. Atlantic Street and S. Royal Brougham Way west of First Avenue S. It is also recognized that additional traffic will be concentrated along Alaskan Way and parallel arterials such as First Avenue as a result of the Bored Tunnel Alternative. Please consult the Transportation Discipline Report (Appendix C) of the Final EIS for more information regarding traffic conditions related to the Bored Tunnel Alternative.

C-012-001 almost 100 days a year, with a decent percentage of these happening during the week at rush hour. Accommodating additional traffic generated by the southern portal, including at least 50,000 cars a day and possibly 45,000 more due to toll diversion, on event days will be extremely challenging,

Feet First believes additional study is needed to understand how this additional traffic, at least 50,000 cars a day, and possibly 45,000 more with toll diversion, generated by the southern portal, will be accommodated on event days.

C-012-002 After analyzing the traffic impacts on surface streets that would result from tolling, the DEIS concludes that "These effects would not be acceptable as part of a long term tolling solution." (Ch 9, pg 214) No alternative is suggested other than to say another alternative is needed. **This is not acceptable**. The entire purpose of a DEIS process is to examine alternatives, yet in this document we are presented with an alternative deemed unacceptable with no valid options for consideration.

C-012-003 Without tolling, the DEIS says that 29,000 additional cars will shift to City streets from SR-99 (Ch 2 pg 19). Specific to the Pioneer Square neighborhood, the DEIS states that 50,000 cars a day are expected to use the southern portal ramps (Ch 5 pg 104). If tolling is implemented, as required by the funding plan for the project, an additional 40,000 to 45,000 cars are expected to divert to city streets. How many of these diverted cars are expected to use the southern portal, and the City streets to access this portal? The DEIS does not provide specific information on the number of diverted cars expected to use the southern portal ramp or city streets to access this ramp. The DEIS needs to more clearly define these impacts.

C-012-004 Traffic impacts to Pioneer Square Historic District streets are unacceptable. The existing street grid in this area is not well connected, and there are not many viable routes. Some of the streets are narrow, historic, physically fragile, pedestrian oriented and not suitable for use as access roads to a highway interchange. With the planned First Hill streetcar extending into the neighborhood in some scenarios, additional burden will be placed on these narrow streets. Feet First has already identified significant concerns about the area around the portals in previous correspondence.

This DEIS **must** describe in more detail the traffic volumes that are expected on specific streets around the southern portal. Feet First has five specific requests for additional data:

1) How many cars will use Alaskan Way, First Ave, Second Ave, Fourth Ave? This DEIS must identify street revisions to make room for all these cars, and describe in detail the impacts of these solutions.

C-012-005 2) How will the planned revisions affect the pedestrian character of the streets? Will WSDOT remove on-street parking, or any of the mature and cherished London Plane trees in the Historic District? The DEIS needs to include more details on pedestrian impacts in Pioneer Square.

C-012-006 3) Will these changes affect the access to and viability of retail? The DEIS does not mention this, and given the fragile nature of the Historic District Feet First believes more study is warranted.

C-012-007 4) Are these historic streets, built on fill and supported by 100 year old areaways and retaining walls, physically capable of carrying this much traffic? Again, the DEIS does not provide sufficient data to indicate enough work has been done on impacts in Pioneer Square.

C-012-008 5) If the impacts to transit are unacceptable, what alternative solution or mitigation is being offered? While we talk more about transit in particular later in this letter, it is important to point out again the DEIS provides no mitigation for the transit impacts of the project. Pedestrians need good transit, and Feet First believes this DEIS must contain better transit options.

C-012-002

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

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In advance of construction, WSDOT funded Intelligent Transportation

C-012-009

How many of these toll diversion trips will use the new Alaskan Way surface street on the waterfront? How would this impact the waterfront parks and public spaces being planned now? The Mercer Street project includes significant changes to Valley, the street running closest to the south end of Lake Union, to narrow and calm the street and make it a safer environment for pedestrians and cyclists. A significant number of toll diversion trips on Alaskan Way will increase the pressure to widen this street and 'take advantage' of the right-of-way created with the Viaduct's removal. This would have significant impact on the viability of the Alaskan Way/waterfront public spaces and their walkability.

C-012-010

To avoid burdening Historic District streets with an influx of traffic generated by the southern portal, additional alternatives and mitigation must be considered, such as additional transit, or routing traffic away from the Historic District, or demand management. These ideas should be evaluated to determine the impacts of these possible solutions. A mitigation plan must be developed to show how WSDOT will prevent, resolve, or mitigate the intolerable detriments to the functioning of Seattle's local transportation system.

C-012-011

Pioneer Square Neighborhood and Historic District – Areaways/historic walking tour

Boring a tunnel next to Seattle's historic Pioneer Square neighborhood, with its historic buildings, fragile and brittle infrastructure, high water table, and unstable soils, is a steep engineering challenge. This DEIS describes the risks of digging and boring in this location (Ch 5 pg 126), possible damage to 12 historic structures (Ch 2 pg 31), and possible collapse or dramatic damage to two buildings (Ch 6 pg 142) during construction, and mentions measures to protect structures.

The DEIS says this of the Western and Polson buildings, both 'contributing' buildings in the Pioneer Square Historic District: "Mitigation measures to protect the buildings may not prevent the need for demolition to avoid the possibility of collapse."

The DEIS says twelve buildings within the Pioneer Square Historic District or listed on the National Register of Historic Places – including the Historic Federal Building -- may be affected by settlement, structures could crack, and utilities may be disrupted or damaged. While the DEIS states measures will be implemented to avoid or minimize damage, it mentions that unavoidable damage might still occur with the preferred alternative. Feet First has specific requests for additional data:

1. What damage could soil settlement from tunnel boring cause, specifically?
2. What is the likelihood of unavoidable damage? Will residents and users of those buildings be at risk of harm?
3. Will Pioneer Square's unique but delicate areaways and historic underground level be at risk?
4. What buildings specifically will be required to have their supporting soil improved with jet grout?
5. What impacts will that have on the use of their underground portions?
   What sidewalks will be closed, what streets will be closed, what basements will be altered, what areaways will be temporarily or permanently affected?
6. Specifically, what impact will this have on the famous Underground walking tour, a Seattle tradition and tourist favorite?

C-012-012

Some of the 'solutions' proposed in the DEIS actually exacerbate other problems. Given that water table is quite close to the surface, there is risk that the solidification of soils -- due to tunnel walls, retained cuts at the portals, and the injection of jet grout under buildings -- might alter natural water flows, create a water barrier, and cause water to back up in the Pioneer Square Historic District. (Ch 5 pg 127). Feet First asks that the DEIS

System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

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C-012-004

During operation of the Bored Tunnel, traffic volumes on surface streets in the Pioneer Square area, for all three build alternatives, are expected to be less than the 2030 Viaduct Closed (No Build Alternative). Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles will disperse on to a variety of streets in the area, such as Royal Brougham, Alaskan Way, 1st Avenue, 4th Avenue, etc. Please see the Final EIS Chapter 5 and Appendix C, Transportation Discipline Report for updated transportation analysis. Appendix I, Historic, Cultural, and Archaeological Resources Discipline Report, of the Final EIS also contains information about the operational effects of the build alternatives on the Pioneer Square Historic District; traffic was considered in the analysis.

The ultimate design of Alaskan Way will be determined as part of the City of Seattle's Central Waterfront Project.

C-012-012 include a full evaluation of the impacts of working within these conditions, provide more information on the potential impacts that could significantly harm the Pioneer Square neighborhood, and pay particular attention to impacts on pedestrians moving through the area.

C-012-013 **Pedestrian Treatments - North and South Portals**

The areas around both the North and South Portals are located in vibrant urban neighborhoods that generate large volumes of pedestrians. Traffic volumes will likely significantly increase on the main roads accessing both portals, such as South Royal Brougham Way, South Dearborn Street, South King Street, South Atlantic Street, South Charles Street, Aurora Avenue North, Sixth Avenue North, and Dexter Avenue North. Street design at key pedestrian crossing locations should incorporate enhanced pedestrian crossing design elements. This would include refuge islands, enhanced pavement markings, and tight turn radii.

C-012-014 **Transit – The Pedestrian's Friend and Forgotten Partner**

After analyzing tolling impacts on transit riders (Ch 9, pg 215) the DEIS concludes again that "These effects would not be acceptable as part of a long term tolling solution." As the preferred alternative is described, the negative impacts to local traffic are egregious. When the diversion effects of tolling are included, these impacts worsen. Transit must be part of the solution.

Many of our members and supporters use transit to extend their pedestrian trips, and we have long been aware of the important relationship between pedestrians and transit. When the bored tunnel as preferred alternative was announced in January 2009, the package included $190 million worth of transit investments and $15 million worth of transit service. Additional transit service was then, and is now, essential for providing access to and from downtown Seattle, since the bored tunnel does not provide sufficient access by itself. Additional transit service should be included in this analysis and analyzed for its utility and effect on traffic on streets and in the bored tunnel.

Given WSDOT's insistence the City of Seattle is responsible for ramps, surface street projects, and mitigation related to the tunnel, it is clear there will be minimal funding for the necessary transit projects required by the tunnel. It is our further belief that WSDOT's position on this issue is incorrect, and that projects related to getting vehicles to and from the tunnel should be funded by the State, not the City. Transit is already in a very difficult fiscal condition, with both King County Metro and Sound Transit suffering significant loss of revenue from declining sales tax receipts.

C-012-015 **Sustainability**

The preferred alternative directly violates several city and state policies regarding emissions reduction, vehicle miles traveled reduction, multi-modal transportation, complete streets, and carbon neutrality. It may seriously hamper access between urban neighborhoods for pedestrians, bikes, and transit users by flooding local streets with private vehicles, and increasing emissions. The following plans and goals adopted by the City of Seattle goals are in direct conflict with the project, which include:

- City policy from Climate Action Plan
- City policy from Comprehensive Plan
- City goals for Carbon Neutral Seattle

C-012-005

Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse onto several streets such as S. Royal Brougham Way, Alaskan Way, First Avenue, Fourth Avenue, etc. Please see the Final EIS Appendix C, Transportation Discipline Report, for the transportation analysis. Because traffic in Pioneer Square is controlled by signals, it is not anticipated that the increased volume will affect the pedestrian character or make it more difficult to walk to shops or restaurants. Pioneer Square has historically been an active place with a high volume of traffic. There are no plans to remove the trees in the median. Appendix I, Historic, Cultural, and Archaeological Resources Discipline Report, of the Final EIS also contains information about the effects of the build alternatives on the Pioneer Square Historic District.

The project has allocated funds for parking mitigation and has identified strategies for short-term parking and for contractor parking during construction. Refer to the Parking Mitigation during Construction section in Chapter 6 of the Transportation Discipline Report (Appendix C of the Final EIS) for additional information.

C-012-006

The location of the South Portal of the Bored Tunnel Alternative near the waterfront and south of King Street would isolate the South Portal Construction from the existing retail area of Pioneer Square. After construction, the new Dearborn Street connection would improve circulation around the South Portal compared to existing conditions. The retail area in Pioneer Square, though not in the area of direct effects during construction, would see some increase in traffic as described in Appendix C of the Transportation Discipline Report. However, access to these businesses would not be affected. Nevertheless, the project cannot assure the viability of existing businesses as there a re many

C-012-015 The City and State both have policies urging transportation agencies to pursue decreased Vehicle Miles Traveled over time, and increase the viability of other modes, as part of a larger effort to reduce green house gas emissions from vehicles. State law says we shall "By 2035, reduce overall emissions of greenhouse gases in the state to twenty-five percent below 1990 levels." (http://apps.leg.wa.gov/rcw/default.aspx?cite=70.235.020)

C-012-016 **The assumptions in this EIS portraying an increased need for and usage of car capacity are counter to City and State policy.** These assumptions are also counter to evidence that car travel in this corridor has been flat for 12 years. This DEIS should aim for and explain how this project could help reduce the need for car usage in compliance with the state's VMT reduction targets. This analysis should also include pedestrian, bicycle, and transit modes.

C-012-017 The **statement of purpose and need** (Ch 1 pg 4) should continue to use the long- established definition for this project, 'mobility for people and freight', and not redefine the target as vehicle 'capacity.' In the 2006 SDEIS the purpose was to "...maintain or improve mobility, accessibility, and traffic safety for people and goods along the existing Alaskan Way Viaduct Corridor." This statement of purpose and need allowed for sustainable solutions --such as transit, demand management, or use of available capacity on existing facilities-- to be considered. Use of the term capacity instead of mobility precludes possible cost-effective solutions and counters city and state transportation policy.

C-012-018 In light of the EPA's recent decision to regulate **greenhouse gases as pollutants**, the DEIS should compare the greenhouse gas emissions for all the alternatives. The analysis should examine the construction emissions and cumulative use impacts of the solution - not just the trips on the facility, but the area-wide effects generated by the decision in this corridor.

C-012-019 An additional report is required that analyzes in detail how different alternatives could better meet the intentions and specific directions of these policies discussed above.

Appropriate Review of Reasonable Alternatives

It is clear from Feet First's review of the DEIS that the tunnel alternative is an expensive project with many unresolved challenges, and significant risk to the City of Seattle. The preferred alternative does not solve the full challenge of viaduct replacement, and is clearly incomplete without solutions that enhance local mobility.

The alternatives do not effectively replace access into Seattle without putting the Pioneer Square Historic District at risk. This DEIS should compare current and reasonable alternatives to the tunnel, in case its merits do not outweigh the costs and risks.

The DEIS should address the need for good access into downtown Seattle neighborhoods, and study how to best provide this access for people and freight. The DEIS should also analyze additional transit service, demand management programs, street improvements that route local trips to other arterials, and I-5 improvements to shed light on how best to improve access to Seattle neighborhoods.

At the conclusion of the 2008 stakeholder process, the leaders of the City, County and State Departments of Transportation recommended two alternatives for viaduct replacement: the I-5/ Surface / Transit hybrid, and the Elevated / Transit hybrid. After a year-long evaluation, these two approaches proved best for meeting the

factors that contribute to the success or failure of an individual business that are beyond the control of the project.

C-012-007

Pioneer Square has historically been an active place with a high volume of traffic. The streets regularly have large amounts of vehicles, particularly during sports events. The areaways have been inspected and instrumentation has been installed in the First Avenue S. areaways; they have been monitored for several years. The structures would be reinforced if monitoring showed a need.

Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse onto several streets such as S. Royal Brougham Way, Alaskan Way, First Avenue, Fourth Avenue, etc. Please see the Final EIS Appendix C, Transportation Discipline Report for the transportation analysis.

C-012-008

Refer to Chapter 8 Mitigation in the Final EIS for more information on mitigation strategies. Added King County Metro transit service will be provided as part of construction mitigation. Also, improvements to the speed and reliability of transit service will be supported by the project and will continue following construction completion. While some added travel time would be incurred by buses under the Bored Tunnel Alternative, transit operations would still be maintained. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit LRT and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

C-012-019 agencies' six goals for viaduct replacement. **These two solutions are reasonable, current, and should be evaluated in this DEIS.**

City of Seattle Ordinance 12246 states the City's preference for an alternative: "In the event a tunnel proves to be infeasible, the City recommends the development of a transit and surface street alternative that meets the intent of Resolutions 30664 and 30724." This alternative would offer the City one of the key advantages it seeks – reclaiming the downtown waterfront – at a significant cost savings.

Summary

C-012-020 This DEIS reveals that the merits of the preferred alternative are fewer than expected, and the harms and risks higher. The bored tunnel alternative, as described in this DEIS, only solves a portion of the challenge.

Specifically:

1. As the preferred alternative is described, the negative impact on local traffic is significant.
When the diversion effects of tolling are included, the negative impact appears intolerable.
A mitigation plan must be developed to show how WSDOT will prevent, resolve, or mitigate the intolerable impacts on the streets of the Pioneer Square Historic District. Additional transit, a robust traffic management plan to shift traffic away from Historic District streets, transportation demand management, improvements to I-5 - even relocating the interchange or two of the ramps elsewhere - should be analyzed for their ability to protect Historic District streets.

C-012-021 2. When the bored tunnel as preferred alternative was announced in January 2009, the deal included $190 million worth of transit investments and $15 million worth of transit service. Additional transit service was then, and is now, crucial in providing access to and from downtown Seattle, since the bored tunnel does not provide sufficient access by itself. Transit service should be included and funded as part of the project, Pedestrians need transit as a trip extension tool, and benefit greatly from transit service.

C-012-022 3. A mitigation plan must be developed to show how WSDOT will prevent, resolve, or mitigate the risks to historic buildings along the tunnel route, and specifically to the Pioneer Square Historic District.

C-012-023 4. A full budget for the above mitigation plans should be developed that identifies the appropriate source for responsibility. This is a state project, and the state must show it can cover costs for:

- the bored tunnel itself,
- other project components promised as part of the program (lids over the cut and cover sections, improvements to the street grid around the portals, pedestrian, bike and transit improvements, urban design and landscaping around the portals, etc),
- protection of or mitigation for local streets and historic resources, and
- any cost escalations that may occur due to the project risks.

Because of the state's firm cost cap at $2.4 billion, the lack of clarity around what costs are covered in the two bids, and the continuing contention around the liability for cost overruns, and the $700 million of project funding still not secured, decision makers at the City and State deserve a clear picture of total project costs compared to secure funding. The City of Seattle, local neighborhoods, or local property owners cannot be held liable for costs of the State's project.

C-012-009

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Your concern about this project's effect on the Mercer Street projects is noted. The final design for the Mercer Street projects are independent of this project. However, cumulative effects analysis for this project in Chapter 7 of the Final EIS includes the Mercer Street projects.

C-012-010

Mitigation for traffic effects during construction in the project area, including the Pioneer Square Historic District are discussed in Chapter 8 of the Final EIS. WSDOT will prepare a traffic management plan. The only mitigation proposed during the project's operation is related to the reduction of diversion expected due to tolling, also discussed in Chapter 8. With the Bored Tunnel Alternative, traffic using the Stadium

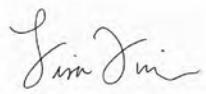
C-012-024

With this project, it is the State's responsibility to protect the pedestrian environment, streets, and physical fabric of the Historic District, including the underground and areaways. The Pioneer Square neighborhood is counting on City elected officials to negotiate with WSDOT on solutions to ensure highway-bound traffic is not routed through Historic District streets and excellent design components for local streets that are altered due to this project and to secure adequate funding for successful completion of this project. All of Seattle is counting on City and State decision makers to ensure that the historic buildings and underground are safe from damage, and Pioneer Square residents and visitors are safe from risks.

As decision makers weigh the alternatives, it is imperative that the answer not only serve automobile bypass trips going through Seattle, but also enhance access into downtown Seattle neighborhoods, support Seattle's policies supporting walking, biking, and transit modes, and ensure the opportunity of the new waterfront is protected and not inundated with excess traffic.

Feet First appreciates the opportunity to provide comments on the DEIS. We expect Washington Department of Transportation will consider these comments carefully, and take swift action to more clearly define the impacts and effects of this project. Should you have questions, feel free to contact me directly by calling 206-652-2310 or emailing lisa@feetfirst.info

Sincerely yours,



Lisa Quinn
Executive Director

cc:
Richard Conlin, Seattle City Council President
Tom Rasmussen, Seattle City Council Transportation Chair
Sally Bagshaw, Seattle City Council
Tim Burgess, Seattle City Council
Sally Clark, Seattle City Council
Jean Godden, Seattle City Council
Bruce Harrell, Seattle City Council
Nick Licata, Seattle City Council
Mike O'Brien, Seattle City Council

area ramps (southern portal) to access downtown would disperse over several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues.

C-012-011

The potential effects from soil settlement on historic properties are discussed in Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. As the report discusses, there is little risk of damage other than possible cosmetic cracks to a small number of buildings. No residents or building users will be at risk of harm.

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

The discipline report lists the buildings that will have soil improvements. This process has no effect on the use of the buildings, their basements or adjacent areaways. Only the Polson Building would have basement alterations, but the basement would remain usable after construction. Sidewalks may be closed in the 600 block of Western Avenue for a short period at the beginning of the project.

The Bored Tunnel alignment is some distance from Pioneer Square's areaways and no impacts on them or to the Seattle Underground Tour are anticipated. The areaways have been inspected by structural engineers and are included in the monitoring program; instrumentation has already been installed in First Avenue areaways. The areaways are

discussed in more detail in Chapters 4 and 6 of Appendix I of the Final EIS.

C-012-012

Measures that can be employed to mitigate the risk of groundwater mounding behind tunnel walls or ground improved areas are outlined in the Earth Discipline Report, Appendix P, and summarized in Chapter 5 of the Final EIS. The level of detail provided in the Earth Discipline Report is appropriate for environmental review purposes. The risk of groundwater mounding and associated mitigation will be further evaluated during final design of the project. A design guideline will be to mitigate groundwater mounding so that it is within existing tidal fluctuations in the groundwater.

C-012-013

The project will be designed to meet current roadway design standards, and the streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

Proposed roadway improvements in the south and north portal areas would improve pedestrian access and mobility. Please see the Final EIS Appendix C, Transportation Discipline Report.

C-012-014

Added King County Metro transit service is proposed as part of construction mitigation, but funding for this service has not yet been secured. However, WSDOT is working closely with King County to implement the additional service hours in the most effective manner. Also, improvements to the speed and reliability of transit service will be supported by the project and will continue following construction

completion. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit LRT and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

C-012-015

All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative). Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Disipline Report.

The law setting the VMT benchmarks directs WSDOT to adopt broad statewide goals to reduce annual per capita vehicle miles traveled by 2050 consistent with the stated goals of executive order 07-02. The state law does not require individual projects to set VMT reductions. WSDOT is working on this task and related tasks in Executive Order 09-05 in conjunction with a working group established for this purpose because the cumulative greenhouse gas impacts of transportation projects are best addressed at a system-wide level where multiple projects can be analyzed in aggregate, such as in regional transportation plans. This project is included in PSRC's Regional Transportation Plan, *Transportation 2040*, which considered greenhouse gas emissions along with other transportation objectives.

In addition, the streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

C-012-016

This project is not creating additional highway capacity; it is replacing a

facility that has reached the end of its lifespan. Pedestrian, bicycle, and transit modes are thoroughly discussed in each of chapters 4 through 8 of the Final EIS Appendix C, Transportation Discipline Report.

The law setting the VMT benchmarks directs WSDOT to “adopt broad statewide goals to reduce annual per capita vehicle miles traveled by 2050 consistent with the stated goals of Executive Order 07-02.” The state law does not require individual projects to set VMT reductions. WSDOT is working on this task and related tasks in Executive Order 09-05 in conjunction with a working group established for this purpose. The cumulative greenhouse gas impacts of transportation projects are best addressed at a system-wide level where multiple projects can be analyzed in aggregate, such as in regional transportation plans. The Alaskan Way Viaduct Replacement Project is included in PSRC’s Regional Transportation Plan, *Transportation 2040*, which considered greenhouse gas emissions along with other transportation objectives.

For further information regarding sustainable transportation practices at WSDOT please refer to the WSDOT website.

C-012-017

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.

C-012-018

The Final EIS estimates the potential direct operational emissions of greenhouse gases for the build alternatives under the tolled and non-tolled conditions. The study area evaluated includes areas likely to be affected by changes in greenhouse gas emissions as a result of the project. The greenhouse gas effects were estimated for roadways within the city center area, as well as affected roadways throughout the region. The city center area is bordered by Prospect Street on the north, 15th Avenue on the east, S. Holgate Street on the south, and Elliott Bay on the west. The region includes all the traffic movements in King, Pierce, Snohomish, and Kitsap Counties. Please refer to Appendix R, Energy Discipline Report, for additional details.

C-012-019

Chapter 8 (Comparison of Alternatives) in the 2010 Supplemental Draft EIS and Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS do compare effects of the Bored Tunnel, Cut-and-Cover Tunnel, and Elevated Structure Alternatives. Additionally, the 2010 Supplemental Draft EIS and the Final EIS both discuss how the proposed build alternatives meet the project's established purpose and need.

State, City, and King County leaders did not recommend replacing the viaduct with the I-5, Surface and Transit Hybrid or the Elevated Transit Hybrid. Rather, these concepts were considered as possible solutions through the Partnership Process. In January 2009 Governor Gregoire, former City of Seattle Mayor Nickels, and former King County Executive Sims recommended that the central waterfront portion of the viaduct be

replaced with a bored tunnel. As part of the alternatives development process for the project, the Elevated Structure and Transit Hybrid and the I-5, Surface and Transit Hybrid were considered in the 2010 Supplemental Draft EIS. For reasons discussed on pages 53 through 58 of the 2010 Supplemental Draft EIS, these concepts were screened out for further evaluation in the EIS as potential build alternatives.

The Final EIS Appendix W, Screening Reports, includes the Surface and Transit Scenario Year 2030 Analysis Results. Chapter 2 of the Final EIS discusses the alternatives development.

C-012-020

A detailed tolling analysis has been conducted and is described in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. Mitigation strategies could include, bus priority lanes near the north and south portals, ITS investments that provide improved signal operations and travel time information, supplemental transit services and transportation demand management. These mitigation strategies are being implemented with assistance from the City of Seattle and King County.

Please see Chapter 8, Mitigation, of the Final EIS for more discussion regarding mitigation due to tolling.

C-012-021

Added King County Metro transit service is a proposed construction mitigation measure, but funding for this increased service during the duration of the construction period for this project has not yet been

secured (increased transit service is currently bring provided by WSDOT for the S. Holgate Street to S. King Street Viaduct Replacment Project construction period). Also, improvements to the speed and reliability of transit service will be supported by the project and will continue following construction completion. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit LRT and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

C-012-022

Chapter 6 of Appendix I (Historic, Cultural and Archaeological Discipline Report) of the Final EIS discusses potential impacts, minimization and mitigation to historic buildings. Mitigation is also addressed in the Section 106 Memorandum of Agreement. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

C-012-023

Cost estimates for mitigation has always been included in the overall project costs. These estimates, along with other cost estimates, are refined as the planning and design process proceeds and details are developed. All cost estimates allow for escalation and inflation.

C-012-024

WSDOT and the City of Seattle are working with the Pioneer Square

businesses, tenants, and property owners to design and implement a project that maintains its integrity. The project's purpose and need statement provided in the Supplemental Draft EIS and the Final EIS outlines the project purposes and needs for the project, which include:

- Providing capacity of automobiles, freight, and transit to efficiently move poeple and goods *to and through* downtown Seattle, and
- Provide linkages to the regional transportation system and *to and from downtown* Seattle and the local street system, and
- Protecting the integrity and viability of adjacent activities on the central waterfront and in downtown Seattle.

The purpose and need for the project focuses on both trips going both to and through Seattle. The ability of the proposed build alternatives to meet the purpose and need statement is discussed in the Final EIS. Proposed project improvements to the pedestrian, biking, and transit modes are also discussed in the Final EIS. Both the 2010 Supplemental Draft EIS and the Final EIS clearly identify the effects and benefits associated with the build alternatives.

Friends of Seattle
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Seattle, WA 98115

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December 13, 2010

Angela Freudenstein
Alaskan Way Viaduct Replacement Project
999 Third Ave., Suite 2424
Seattle, WA 98104

Dear Ms. Freudenstein,

On behalf of Friends of Seattle, I submit the following comments on the Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS ("2010 Draft EIS"). The comments include this letter as well as the documents included with this letter on the enclosed CD-ROM.

Friends of Seattle is a membership-based advocacy organization whose mission is to make Seattle the green, urban city we need. We propose policy reforms, lobby elected officials, and endorse candidates for office. Since the 2006, Friends of Seattle has published op-eds on the Viaduct replacement project in the *Seattle P-I* and *Real Change*, has lobbied the members of the state legislature and the Seattle City Council on the project, and has participated in numerous public forums debating the issue.

C-013-001

1. Statement of Purpose and Need

The change of the project's purpose-and-need statement from the 2006 Alaskan Way Viaduct & Seawall Replacement Project Supplemental Draft Environmental Impact Statement ("2006 Draft EIS") to the purpose-and-need statement in the 2010 is unreasonably narrow, arbitrary, capricious, and contrary to law. The 2006 purpose-and-need statement was as follows:

> The main purpose of the proposed action is to provide a transportation facility and seawall with improved earthquake resistance. The project will maintain or improve mobility, accessibility, and traffic safety for people and goods along the existing Alaskan Way Viaduct Corridor as well as improve access to and from SR 99 from the Battery Street Tunnel north to Roy Street.

2006 Draft EIS, at 122.

The 2010 purpose-and-need statement is as follows:

> The purpose of the proposed action is to provide a replacement transportation facility that will:
> • Reduce the risk of catastrophic failure in an earthquake by providing a facility that meets current seismic safety standards.
> • Improve traffic safety.

C-013-001

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.

C-013-001

- 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.
- Protect the integrity and viability of adjacent activities on the central waterfront and in downtown Seattle.

2010 Draft EIS, at 6.

As is obvious, the statement of purpose and need changed from 2006 to 2010, but the Washington State Department of Transportation ("WSDOT") has not explained the reasons for this change. The 2006 version focused broadly on the movement of "people and goods," whereas the 2010 version seeks to "[p]rovide capacity for automobiles, freight, and transit." The concept of "capacity" is new and represents a radical departure. Instead of focusing on the movement of people of goods, however that might be achieved, the 2010 statement of purpose and needs focuses on "capacity" for vehicles. As recently as 2008, during the Partnership Process, WSDOT had agreed to a set of guiding principles for the project which included the goal of "[p]rovid[ing] efficient movement of people and goods now and into the future." 2010 Draft EIS, at 50. The reasons for this change have not been explained by WSDOT. To be sure, the 2010 statement links the concept of "capacity" with the movement of "people and goods." However, this linkage is new. Friends of Seattle's position is that this change was done to exclude consideration of reasonable alternatives that rely more significantly on transit. Transit-reliant alternatives cannot provide "capacity" for automobiles. Thus, WSDOT has arbitrarily and capriciously changed and tailored the statement of purpose need to favor to alternatives that have significant capacity for automobiles.

Under state law, WSDOT is required to focus on the movement of people and goods, not vehicles, and it must develop strategies for reducing vehicle-miles traveled statewide. For instance, the statute setting forth the goals for the state's transportation system does not mention capacity for vehicles. Rather, it states the goal of "improv[ing] the predictable movement of goods and people throughout Washington state," RCW 47.04.280(1)(d), and "[t]o promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy," RCW 47.04.280(1)(a). Capacity for vehicles is not one of the goals. To the contrary, the Legislature has required WSDOT to "[d]evelop strategies to gradually reduce the per capita vehicle miles traveled based on consideration of a range of reduction methods." RCW 47.01.078(4). More specifically, the Legislature has required WSDOT to develop and implement goals for reducing vehicle miles traveled statewide by 18% by 2020, 30% by 2035, and 50% by 2050. RCW 47.01.440(1). Therefore, WSDOT's statement of purpose and need is unreasonably narrow and contrary to law if it specifically requires capacity for automobiles.

Friends of Seattle urges WSDOT to remove the reference to "capacity for automobiles, freight, and transit" in the statement of purpose and need and instead focus broadly on the need to move people and goods.

C-013-002

2. A Reasonable Alternative Is Omitted

In violation of state and federal law, the 2010 Supplemental Draft EIS fails to consider a certain reasonable alternative. In 2008, as WSDOT knows, the Partnership Process emerged to develop a replacement solution for the central portion of the SR-99 corridor. A WSDOT convened a Stakeholder Advisory Committee, and during a yearlong process WSDOT narrowed down the choices to two—a so-called "I-5, surface and transit hybrid alternative" and an "elevated bypass hybrid alternative."[1] These alternatives were developed WSDOT in partnership with the City of Seattle and King County.[2] As WSDOT has said, "These hybrids were selected because they were the lower cost options and provided mobility for people and goods, although in different ways."[3]

An alternative based on improvements to city streets, transit, and I-5—i.e., the "I-5, surface and transit hybrid alternative"—should have been included in the 2010 Draft EIS, and WSDOT must consider it in the final EIS. WSDOT itself believed that this type of alternative was reasonable. The Stakeholder Advisory Committee endorsed it. This alternative was the result of a careful months-long process in 2008. It sustained careful vetting by the Stakeholder Advisory Committee. And the public had an opportunity to comment on it.

For your convenience, I have included, with the enclosed CD-ROM, an "Exhibit B," which is containing all of the documents that WSDOT presented to the Stakeholder Advisory Committee. Of course, because WSDOT produced them, WSDOT is familiar with them, and it is unnecessary to describe them in great detail. By failing to evaluate the surface-and-transit hybrid alternative as part of the EIS process, WSDOT has acted contrary to law. WSDOT is required to evaluate all reasonable alternatives so that decision-makers are able to carefully weigh the options.

C-013-003

3. The Bored Tunnel Alternative Is Flawed

The Bored Tunnel Alternative is fundamentally flawed alternative. The reasons for Friends of Seattle's position are many, and several other individuals and groups have explained the Bored Tunnel Alternative's flaws in their own comments on the 2010 Draft EIS.

Friends of Seattle focuses its comments here on how the Bored Tunnel Alternative fails to meet two of the purposes included in the statement of purpose and need that WSDOT has adopted for the 2010 Draft EIS, namely:

- 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.

[1] See Exhibit A - 082510_Central_process_fs_web.pdf.
[2] See id.
[3] See id.

C-013-002

The 2010 Supplemental Draft EIS does consider a surface transit hybrid concept, in addition to other possible replacement solutions for replacing the viaduct. For reasons discussed on pages 53 through 58 of the 2010 Supplemental Draft EIS, the surface and transit concept, in addition to several other concepts were screened out for further evaluation in the EIS as potential build alternatives. The lead agencies completed additional traffic analysis beyond the work done as part of the Partnership Process to confirm the rationale for screening out the surface and transit hybrid concept. The additional analysis confirmed the lead agencies' rationale for not evaluating this concept further. Details of that traffic analysis were provided in Attachment A of the 2010 Supplemental Draft EIS Appendix C, Transportation Discipline Report. In addition, the Final EIS Appendix W, Screening Reports, includes the updated Surface and Transit Scenario Year 2030 Analysis Results.

The Stakeholder Advisory Committee that was involved in the Partnership Process was a group that was created to inform the recommendation that came in January 2009 Governor Gregoire, former City of Seattle Mayor Nickels, and former King County Executive Sims. The Stakeholder Advisory Committee was convened as an advisory body. The recommendation to replace the central waterfront portion of the viaduct with a bored tunnel came from Governor Gregoire, former City of Seattle Mayor Nickels, and former King County Executive Sims as a result of the work done as part of the Partnership Process. The alternatives development process is described in Chapter 2 of this Final EIS.

C-013-003

The Final EIS contains a discussion explaining how the preferred alternative meets the project's purpose and need. In response to your comments, the Bored Tunnel Alternative does provide access both through and to and from downtown. Access to downtown from SR 99

2010 Draft EIS, at 6.

C-013-003 Because the Bored Tunnel Alternative has no exits for traffic bound for downtown Seattle, it does not provide capacity for people or goods going "to . . . downtown Seattle," nor does it create "linkages . . . to and from downtown Seattle and the local street system." 2010 Draft EIS, at 6. The only thing that the Bored Tunnel Alternative does is provide capacity for vehicles traveling *through* downtown, not *to* or *from* downtown Seattle.

Further, transit would not use the Bored Tunnel Alternative. There is not a single transit route in the Central Puget Sound area that simply passes through downtown Seattle. Every transit agency, however, has a route that stops in downtown Seattle. And yet the Bored Tunnel Alternative decreases, not increases, access to downtown Seattle for transit because it does not have exits to downtown.

In sum, the lack of downtown exits makes the Bored Tunnel Alternative unacceptable when measured against the 2010 statement of purpose and need. This design flaw means that the tunnel would not provide any capacity for downtown-bound traffic, whether that traffic be automobiles, freight, or transit.

C-013-004 **4. The 2010 Draft EIS Does Not Adequately Consider the Significant Impacts**

The EIS for this project is required to analyze significant impacts on the environment, including both the natural environment and the built environment. WAC 197-11-440(6)(e). The environment includes air quality, odor, noise, light and glare, historical and cultural preservation, parking, and vehicular traffic. WAC 197-11-444.

C-013-005 Any deep-bore tunnel replacement for the Viaduct will include tolling. The State's finance plan depends on it. *See* RCW 47.01.402. However, the 2010 Draft EIS does not carefully evaluate the many effects that tolling of the Bored Tunnel Alternative would have on the environment. *See* 2010 Draft EIS, at 205 ("As currently defined, the Bored Tunnel Alternative does not include tolls."). Even though any deep-bore tunnel requires tolling, as a practical matter, the 2010 Draft EIS expends only 20 pages, in Chapter 9, analyzing the effects of tolling.

C-013-006 The consequences of this cursory analysis are manifest. For example, the discussion of the effects on historical and cultural preservation states that there could be "potential congestion from increased car and truck traffic in the historic districts and in the vicinity of other historic resources due to diversion from the tolled facility." 2010 Draft EIS, at 222. But the 2010 Draft EIS does not quantify for the public or decision-makers how much additional traffic there would be in Pike Place Market, Pioneer Square, and the historic waterfront due to tolling. As for air

C-013-007 quality, the 2010 Draft EIS states that PM and CO levels could increase in local areas due to traffic diversion. But again, this potential significant impact on the environment is not

C-013-008 quantified. The analysis of the diverted traffic's effect on noise is also inadequate. In fact, the

C-013-009 word "toll" does not appear in the Noise Discipline Report, Appendix F. The diverted traffic

and from downtown to SR 99 are provided near S. King Street in the south and near Harrison Street in the north. Details about how these access point to and from downtown serve a variety of travel modes, including transit are provided in the Final EIS and Appendix C, Transportation Discipline Report.

Transit currently does not use SR 99/the viaduct to travel through downtown and that trend is expected to continue well into the future as discussed in both the 2010 Supplemental Draft EIS and the Final EIS. The Bored Tunnel Alternative proposes a variety of transit improvements to support transit access to and from downtown Seattle. In addition, transit enhancements are proposed as part of the Alaskan Way Viaduct and Seawall Replacement Program as discussed in Chapter 2 of the Final EIS.

C-013-004

FHWA, WSDOT, and the City of Seattle believe that the 2010 Supplemental Draft EIS does adequately consider significant impacts. The 2010 Supplemental Draft EIS and this Final EIS both describe potential effects to air quality, noise, visual quality, historical and cultural preservation, parking, and vehicular traffic per requirements under the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA).

C-013-005

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

C-013-009 | would create more light and glare in downtown neighborhoods when the vehicles travel with their headlamps and tail lights on. Yet the 2010 Draft EIS says nothing about these effects.

C-013-010 | The position of Friends of Seattle is that the Bored Tunnel Alternative should be evaluated as a tolled facility. It cannot be financed unless the Legislature approves tolling.

Thank you for your consideration of these comments.

Sincerely,

FRIENDS OF SEATTLE

Gary Manca
President

C-013-006

Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse onto several streets such as S. Royal Brougham Way, Alaskan Way, First Avenue, Fourth Avenue, etc. Because traffic downtown, in Pioneer Square and on the waterfront is controlled by signals, it is not anticipated that the increased volume will affect the pedestrian character nor will it make it more difficult to walk to shops or restaurants. Please see the Final EIS Appendix C, Transportation Discipline Report for the transportation analysis (both tolled and non-tolled) with further information on anticipated traffic volumes and roadway and intersection performance.

C-013-007

A detailed tolling analysis has been conducted for all alternatives and is described in this Final EIS.

C-013-008

A detailed tolling analysis has been conducted for all alternatives and is described in this Final EIS. Please refer to Appendix F, Noise Discipline Report, for additional detailed analysis of tolling impacts to noise elements.

C-013-009

This Final EIS and its Appendix F, Noise Discipline Report do evaluate the noise effects of diverted traffic in their measurement of "loudest hour of noise conditions" described for all three build alternatives as tolled facilities. Please refer to Appendix F and Appendix C, Transportation Discipline Report for detailed discussions and tables relating to peak hour traffic and the related noise effects.

C-013-010

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments and recognize your preference for the Bored Tunnel Alternative to be evaluated as a tolled facility. The build alternatives are evaluated both with and without tolls in the Final EIS. The Tolling Re-evaluation Memo is included as Appendix X of the Final EIS, and Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

futurewise
Building communities
Protecting the land

December 13, 2010

Ms. Angela Freudenstein
Washington State Department of Transportation
Alaskan Way Viaduct Replacement Project SDEIS
999 Third Ave., Suite 2424
Seattle, Washington 98104

Dear Ms. Freudenstein:

Subject: Comments on the *Second Supplemental Draft Environmental Impact Statement (SDEIS) for the Alaskan Way Viaduct Replacement Project* October 2010

Sent via email to: freuda@wsdot.wa.gov

Thank you for the opportunity to comment on *the Second Supplemental Draft Environmental Impact Statement (SDEIS) for the Alaskan Way Viaduct Replacement Project.* Futurewise is a statewide public interest group with members throughout Washington State. Our mission at Futurewise is to promote healthy communities and cities while protecting working farms, working forests, and shorelines for this and future generations.

We are commenting on the SDEIS because major transportation facilities directly affect the future of our communities. Futurewise does not have a position on any of the alternatives being considered for the Alaskan Way Viaduct Replacement, except that we do oppose a replacement aerial structure on the central waterfront because of its adverse impacts on the city and environment. We do agree the viaduct needs to be removed to protect the public safety and to reclaim the central Seattle waterfront.

C-014-001

The Supplemental Environmental Impact Statement must have a 2040 planning horizon and address the larger transportation context

As our scoping comment letter recommended, the environmental impact statement (EIS) must have a 2040 planning horizon and address the larger transportation context. WAC 197-11-440(6) requires that an SEIS shall describe and analyze the impacts on the elements of the environment that will be significantly affected by the proposal. This includes transportation systems.[1] The region's adopted transportation plan, *Transportation 2040*, uses a 2040 horizon year. This is an appropriate planning horizon for a project of this magnitude; the bored tunnel will certainly be in use in 2040.

[1] WAC 197-11-444(2)(c).

814 Second Avenue Suite 500 Seattle, WA 98104 www.futurewise.org phone 206 343-0681 fax 206 709 8218

C-014-001

The analysis conducted for the 2010 Supplemental Draft EIS and the Final EIS consider transportation impacts for the year 2040. The detailed discussion of how the the Puget Sound Regional Council's *Transportation 2040* plan was considered in our analysis is discussed in Appendix C, Transportation Discipline Report. The year 2030 was used as the transportation horizon year because a 20-year planning horizon is consistent with FHWA and WSDOT's analysis and planning efforts for our projects. It is also consistent with other transportation work being done in the region (such as the SR 520 and I-405 corridors) and the state.

C-014-001

Using 2040 as the horizon year will allow the EIS to benefit from the data available through the development of *Transportation 2040*. The Puget Sound Regional Council (PSRC) is the designated regional transportation planning organization (under state law) and metropolitan transportation planning organization (under federal law) for King, Kitsap, Pierce, and Snohomish counties and the cities in those counties. The *Transportation 2040* forecasts are based on updated information on the region's growth strategies, providing a critical link between land use and transportation planning. The *Transportation 2040* studies also include analysis on pricing and the transportation system--how user fees, including tolls, affect transportation demand and revenues. This information is critical to an informed decision on the SR 99 replacement options.

Using a 2040 horizon will also allow the SEIS to be placed in the larger regional transportation context. The alternatives in the EIS must be considered as part of the larger transportation system within the Seattle region. This includes the I-5 improvements including active traffic management, new managed lane capacity, and changes to lane configurations and on and off-ramps. In addition, options that significantly increase transit service and user fees (tolling) on state highways must be included within the document. The SEIS should analyze as alternatives the transportation options considered by the AWV Stakeholder Advisory Committee. The bored tunnel cannot be considered as an isolated corridor.

C-014-002

The Supplemental Environmental Impact Statement must analyze consistency with the state greenhouse gas (GHG) reduction requirements

Other elements of the environment that SEIS that must consider are air quality and climate.[2] RCW 70.235.020(1)(a) limits greenhouse gas emissions in Washington State to no more than the 1990 level by 2020, to 25 percent below the 1990 level by 2035, and to 50 percent below the 1990 level by 2050, or 75 percent below the state's expected emissions that year. The purpose of these limits is to protect air quality and to address climate change.[3]

While we appreciate the CO_2 emission estimates in the *Appendix Q Air Quality Discipline Report*, the emissions were not analyzed for their consistency with the limits in RCW 70.235.020(1)(a). The EIS must include this analysis and disclose whether the alternatives are consistent with the reduction requirements. The selected alternative should be part of a program to achieve the transportation sector's fair share reductions of greenhouse gas emissions so the state can meet the limits adopted by the legislature and signed by the governor in RCW 70.235.020(1)(a). The SEIS must show how the selected alternative can be altered to meet this requirement. This topic was included in our letter commenting on the scope of the SEIS.

[2] WAC 197-11-444(1)(b)(i) and (ii).
[3] RCW 70.235.005.

C-014-002

Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Disipline Report. All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative).

State agencies are to meet these greenhouse gas emission limits over time, but individual projects are not obliged to prove consistency with RCW 70.235 as asserted in this comment.

C-014-003

The Supplemental Environmental Impact Statement must analyze consistency with the state vehicle miles traveled (VMT) reduction benchmarks

Related to the air quality and climate elements of the environment are Washington State's vehicle miles traveled (VMT) reduction benchmarks. They are also related to vehicular traffic.[4]

RCW 47.01.440 includes benchmarks for decreasing annual per capita vehicle miles traveled by 18 percent by 2020, 30 percent by 2035, and 50 percent by 2050. The EIS must estimate per capita vehicle miles traveled for the alternatives and disclose whether the estimates are consistent with the benchmarks. The selected alternative should be part of a program to achieve the benchmarks adopted by the legislature and signed by the governor in RCW 47.01.440. The SEIS must show how the selected alternative can be altered to meet this requirement. This topic was also included in our letter commenting on the scope of the SEIS.

C-014-004

The Supplemental Environmental Impact Statement should use the statement of purpose and need from the 2006 Supplemental Draft Environmental Impact Statement (SDEIS)

The SEPA rules, in WAC 197-11-060(3)(a)(iii), provide that "proposals should be described in ways that encourage considering and comparing alternatives." One important way to encourage the comparison of alternatives is to have a broad purpose and need statement. To aid the consideration and comparison of alternatives, we recommend that the statement of purpose and need from the 2006 SDEIS should be substituted for the third and fifth bullets under the "Purpose and Need for the Proposed Action" on page 4 of Chapter 1. That purpose and need statement was "[t]he project will maintain or improve mobility, accessibility, and traffic safety for people and goods along the existing Alaskan Way Viaduct Corridor." So the third bullet should read:

- Maintain or improve mobility and accessibility for people and goods along the existing Alaskan Way Viaduct Corridor.

The fifth bullet could then be deleted. Focusing on the movement of people and goods will allow a broader consideration of alternatives then the new purpose statement which focuses "capacity" for traffic. This better fits the requirement to consider and compare a board range of alternatives.

[4] Designated by WAC 197-11-444(2)(c)(ii) as an element of the environment which must then be considered in an EIS as required by WAC 197-11-440(6).

C-014-003

The law setting the VMT benchmarks directs WSDOT to "adopt broad statewide goals to reduce annual per capita vehicle miles traveled by 2050 consistent with the stated goals of executive order 07-02. The state law does not require individual projects to set VMT reductions. WSDOT is working on this task and related tasks in Executive Order 09-05 in conjunction with a working group established for this purpose because the cumulative greenhouse gas impacts of transportation projects are best addressed at a system-wide level where multiple projects can be analyzed in aggregate, such as in regional transportation plans. This project is included in PSRC's Regional Transportation Plan, *Transportation 2040*, which considered greenhouse gas emissions along with other transportation objectives.

The VMT reduction law enacted in 2008 refers to a report detailing strategies to meet the law. This report was released in January 2011. Although the report does not identify specific requirements any project must implement, the potential approaches identified in Appendix D of the report indicate that strategies are being investigated at the regional and state level rather than on a project-by-project basis. For further information regarding sustainable transportation practices at WSDOT please refer to the WSDOT website.

C-014-004

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

Ms. Angela Freudenstein
Alaskan Way Viaduct Replacement Project SDEIS Comments
December 13, 2010
Page 4

Thank you for considering our comments. If you require additional information please contact me at 206-343-6081 Ext 118 or tim@futurewise.org

Sincerely

Tim Trohimovich, AICP
Co-Director of Planning & Law

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.

HISTORIC SEATTLE

13 December 2010
Via Email

Angela Freudenstein
Alaskan Way Viaduct Replacement Project
Washington State Department of Transportation
999 Third Avenue, Suite 2424
Seattle, WA 98104

Re: Comments on the Supplemental DEIS and Section 4(f) Evaluation for the Alaskan Way Viaduct Replacement Project

Dear Ms. Freudenstein:

This letter provides comments on the 2010 Supplemental Draft Environmental Impact Statement (SDEIS) for the Alaskan Way Viaduct Replacement Project. I am writing on behalf of Historic Seattle, which is Seattle and King County's only nonprofit membership organization dedicated to preserving our architectural legacy. Our mission is to educate, advocate and preserve. Historic Seattle is also a Section 106 Consulting Party in this process.

From our review of the SDEIS and Section 4(f) Evaluation, the most adverse impacts appear to be in the Pioneer Square Historic District, listed on the National Register of Historic Places and designated as a City of Seattle historic district. **Following are our concerns regarding impacts to historic and cultural resources.**

C-015-001

-The Pioneer Square Historic District as a whole will be adversely affected, directly and indirectly.

In the Section 4(f) Evaluation, the historic district is not included as a "resource subject to use under 4(f)," but some individual resources within the district are subject to use. How does 4(f) apply in a National Register-listed district such as the Pioneer Square Historic District? Why are the effects on the district as a whole not considered an impairment on the district?

C-015-002

Pioneer Square is the city's original business district defined by the interplay of buildings and structures, system of alleys, sidewalks, areaways, and streets. The pedestrian-friendly character of the district will be greatly impacted by the tens of thousands of vehicles expected to go through city streets (specifically Pioneer Square streets) as a result of the proposed south portal for SR 99. Can this old and historic infrastructure, built on fill, carry the heavy loads and volumes of traffic that are projected? Since there is no central downtown access proposed, Pioneer Square will be taking the "hit" as a thoroughfare for city traffic. Is there a plan to deal with these traffic impacts to the streets of the historic district to protect its pedestrian character?

C-015-001

The Section 4(f) Evaluation in the Final EIS and Appendix J, Section 4(f) Supplemental Materials, recognize that the Pioneer Square Historic District is a protected 4(f) resource and discuss the effects of the build alternatives on this resource.

Through the Section 106 process for the Bored Tunnel Alternative, FHWA has concluded that the effects on the four historic properties would result in an adverse effect that would constitute a use under Section 4(f): the Alaskan Way Viaduct and Battery Street Tunnel, Seattle Maintenance Yard (Archaeological Site 45K1958), Lake Union Sewer Tunnel, and Western Building, which is a contributing building within the Pioneer Square Historic District. The Western Building is the only property within the Pioneer Square Historic District with effects that rise to a level that constitute a Section 4(f) use.

C-015-002

Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles will disperse on to a variety of streets in the area such as Royal Brougham, Alaskan Way, First Avenue, and Fourth Avenue. Please see the Final EIS Appendix C, Transportation Discipline Report for transportation analysis. Included within the discipline report are a variety of metrics that looked at roadway and intersection performance. These analyses were performed with analytical tools using data for a range of modes including pedestrians, trucks, transit, ferries and automobiles.

The Pioneer Square Historic District would experience an increase in traffic, but effects related to the project would not rise to the level of a Section 4(f) use of the district. Please see Appendix I, Historic, Cultural, and Archaeological Resources Discipline Report, of the Final EIS for the discussion of project effects on Pioneer Square for all the alternatives.

C-015-003

The Section 106 Cultural Discipline Report (Appendix I) does not adequately recognize indirect effects to the historic district. It focuses on direct effects to specific buildings during construction. How will the considerable traffic impacts to the historic district be dealt with after construction of the preferred alternative (Bored Tunnel) is completed?

-Building Damage Assessment

C-015-004

Exhibit 6-2 (Potential Effects on Historic Properties) in Appendix I (pp. 97-98) focuses on potential damage to 15 buildings within the Pioneer Square Historic District and outside the district. How accurate are the effects determination? What happens if the effects are greater than anticipated? The majority of the effects are classified as "slight" at this point. What if, in reality, they become "moderate" or worse? What are the proposed actions to deal with this potential?

C-015-005

The building damage assessment (pp. 95-96) focuses on the Western Building and Polson Building, both contributing resources to the historic district, because they will be adversely affected by construction. Section 6.2.1 (Built Environment Resources, p. 103) states that (in reference to the Western Building) "Given the current condition of the building, demolition may be the only safe option." It goes on to say, "Further analysis of the building options is being performed." What are these options? Where are the structural engineer's report and cost estimates for stabilizing the structure? Are there different ways to structurally stabilize the building? A temporary, exterior, steel frame is mentioned as needed to stiffen and strengthen the building. A temporary exterior, steel frame was used to shore up the Cadillac Hotel Building in Pioneer Square after the 2001 Nisqually earthquake so there is precedent in the district for similar treatment. Many also thought the Cadillac Hotel could not be saved after the earthquake, yet it was successfully rehabilitated and since 2005, has stood as a model for restoration in Pioneer Square. Granted, the foundation conditions are probably different and there are other issues at play here.

WSDOT should consider carefully the ramifications of demolishing a contributing resource in the Pioneer Square Historic District. The district has not lost a building in a long time (if you don't count the King Dome). The point is made clearly in the SDEIS that the existing condition is poor but this takes nothing away from its value to the district. Neither Section 106 nor Section 4(f) take cost into consideration. It appears the proposed mitigation measures for the Polson Building would stabilize the structure during construction and not jeopardize it.

Thank you for the opportunity to comment.

Sincerely,

Eugenia Woo

Eugenia Woo
Director of Preservation Services

C-015-003

Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse onto several streets such as S. Royal Brougham Way, Alaskan Way, First Avenue, Fourth Avenue, etc. Please see the Final EIS Appendix C, Transportation Discipline Report for the transportation analysis.
The Final EIS Appendix I (Historic, Cultural, and Archaeological Discipline Report) also addresses traffic and historic districts. Because traffic in Pioneer Square is controlled by signals, it is not anticipated that the increased volume will affect the pedestrian character nor will it make it more difficult to walk to shops or restaurants. Pioneer Square has historically been an active place with a high volume of traffic. Modest increases in traffic volumes are expected between 2015 and 2030. In most cases, these traffic volume increases are related to expected population and employment growth in the study area and region.

C-015-004

The effects determination is based on review of building plans and inspections of all buildings along the alignment by structural engineers. The buildings will be inspected again before tunneling begins. Extensive monitoring of each building and structure will be undertaken before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties. The monitoring plan and mitigation are addressed in the Section 106 Memorandum of Agreement and in Chapter 6 of Appendix I (Historic, Cultural, and Archaeological Discipline Report) of the Final EIS.

C-015-005

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building,

and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural, and Archaeological Discipline Report, of the Final EIS. The construction process includes

monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

HISTORIC SOUTH DOWNTOWN

Leveraging the historical and cultural assets of Pioneer Square and the Chinatown/International District

Grand Central Building
216 First Avenue South, Suite 240
Seattle, Washington 98104
www.historicsouthdowntown.org

December 13, 2010

Alaskan Way Viaduct Replacement Project

999 Third Ave., Suite 2424

Seattle, WA 98104

Attn: Angela Freudenstein

RE: 2010 Supplemental Draft EIS Comments

The Pioneer Square – International District Community Preservation and Development Authority, informally known as Historic South Downtown, was created by the Washington State legislature in 2008 to support community development and historic preservation in Seattle's most historic neighborhoods. Part of our mission is to help obtain mitigation for significant public works projects that are located in or have major impacts on these communities.

C-016-001 We are writing to request a complete and thorough analysis of the impacts of the viaduct replacement project, bored tunnel alternative, on traffic, parking, and pedestrians in Pioneer Square and Chinatown-International District.

The Supplemental Draft EIS is almost silent on the impacts of the projected 40,000 additional vehicle trips daily through the south end of downtown, resulting from tolling and lack of downtown exits.

Impacts and mitigation must be identified, planned and funded, not simply ignored.

We wrote to SDOT officials over a year ago about our concerns about traffic impacts and mitigation, and received no reply. We ask that you address this serious concern of Pioneer Square and International District residents, businesses, and property owners.

Thank you,

Mark Blatter, President

Historic South Downtown

C-016-001

Detailed transportation analyses have been conducted for the entire project area, including the Pioneer Square District and can be found in Final EIS Appendix C, Transportation Discipline Report. This discipline report addresses a variety of transportation related topics including, pedestrians, parking, traffic operations, transit operations, event traffic, safety, etc. A detailed tolling analysis has been conducted for all alternatives and is described in this Final EIS. Please refer to Chapter 7 of Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

GRAHAM & DUNN PC

ELAINE L. SPENCER
(206) 340-9638
espencer@grahamdunn.com

December 13, 2010

Hand Delivered

WSDOT
Attn: Angela Freudenstein, Project Environmental Manager
AWV Project Office (Wells Fargo Building)
999 Third Avenue S. Suite 2424
Seattle, WA 98104-4019

Re: Comments of the Seattle Historic Waterfront Association on the 2010 Draft Supplemental EIS for the Alaskan Way Viaduct Replacement Project

Dear Ms. Freudenstein:

Thank you for the opportunity to comment on the October 2010 Draft Supplemental EIS (DSEIS) for the Alaskan Way Viaduct Replacement Project. These comments are submitted on behalf of the Seattle Historic Waterfront Association and its members, who are the owners of the private piers and the businesses within and alongside those piers in the Central Waterfront of downtown Seattle.

C-017-001

The members of the Seattle Historic Waterfront Association have been vitally interested in the development of the Alaskan Way Viaduct Replacement Project over the years since the Nisqually earthquake because being located waterward of Alaskan Way, they stood at risk that the construction process would result in the destruction of their businesses. We must complement the Project Team on the current state of the replacement project. This is an instance where the National and State Environmental Policy Acts have accomplished what they were intended to accomplish. Although the process has been long, at times frustrating, and fraught with extremely difficult issues, the Project Team has responded to the public reaction to the alternatives put forward in the March 2004 Draft EIS and the July 2006 Draft Supplemental EIS by recognizing that those proposals had such significant adverse environmental impacts that could not be reasonably mitigated, that the proposals had to be considered unacceptable and a completely new approach needed to be developed. The deep bore tunnel proposal that is now the preferred alternative is not without impacts, but its adverse impacts are vastly reduced over those that would have occurred under any of the other alternatives. In short, this is a proposal to replace the viaduct that not just the Seattle Historic Waterfront Association members, but the City of Seattle as a whole, can survive.

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2801 Alaskan Way ~ Suite 300
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C-017-001

Thank you for your continued participation in the Alaskan Way Viaduct and Seawall Replacement Program. Stakeholder feedback and public participation since 2001 has helped move the program forward and shaped the preferred alternative.

C-017-002 The DSEIS drives home another point, which is that "no action" is not an option. To the extent that the current status quo has advantages for some people over the deep bore tunnel, that current status quo is not the "no action" alternative, because the viaduct must either be shut down, or it will fall down, in the very forseeable future. Shutting it down will leave the City in gridlock, and will, before a replacement can be constructed, have caused the relocation of businesses dependent upon the ability to move people and goods in Seattle and the loss of visitors to the region who are discouraged from coming here by the extent of the traffic congestion that will result. In light of the reality that the viaduct must be replaced as quickly as possible in order to avoid its collapse or unplanned closure, the members of the Seattle Historic Waterfront Association urge the Project Team to promptly complete the NEPA/SEPA process so that construction of the deep bore tunnel can commence.

Comments on the Selection of the Preferred Alternative

C-017-003 There is no easy or entirely painless way to thread a major highway through the heart of a great 21st century city. When the Alaskan Way viaduct was built, the hearts of cities were gritty, noisy places of industry that people attempted to escape from after the work day. In the early 21st century, cities have become where people work, live and play on a 24/7/365 basis. Great downtowns are destinations, not places to flee. It is critical if we are to limit carbon emissions and consumption of natural resource lands that cities like Seattle continue to attract density and vitality.

In light of those changes in the way cities function, the Alaskan Way viaduct currently passes through the most sensitive part of early 21st century Seattle, along the entire waterfront of the city's downtown core, cutting off the commercial heart of the city from its waterfront, and creating visual blight, noise and dirt that detract from the Central Waterfront, which has over the last few decades become a major destination for visitors to Seattle. (We appreciate that the DSEIS, p. 5, recognizes that the current waterfront is a vibrant neighborhood of shops, restaurant, homes and recreational and educational opportunities, which makes a significant contribution to Seattle's status as a world-class city, but which is blighted by the viaduct. More than $300 million of capital investments have been made along the Central Waterfront in the past decade by the Aquarium, the hotels, the port, restaurants and pier owners. Earlier EISs seemed to assume that the current waterfront remained in its mid-20th century form, ripe for becoming something once the viaduct is removed, but currently safe to ignore. That characterization was inaccurate.)

Replacement of the viaduct with the deep bore tunnel will have some significant adverse impacts, which we believe the DSEIS fairly and adequately describes, but they pale by comparison to the adverse impacts of the various other alternatives that were considered in the

C-017-002

The lead agencies agree that the Viaduct Closed (No Action Alternative) is not acceptable and are working to obtain a Record of Decision and begin construction on the project as soon as possible.

C-017-003

Thank you for your comments on the preferred alternative. The selection of the preferred alternative is described in Chapter 3 of the Final EIS.

C-017-003 2004 and 2006 EISs, and to the Surface + Transit Hybrid considered as part of the Stakeholder process described on pp. 49-54 of the DSEIS.

C-017-004 One of the most important things that was learned from the earlier EISs was that it was not only destruction of the businesses of Seattle Historic Waterfront Association that would result from the impacts of the construction process for the alternatives originally proposed. The cost in lost jobs and business closures to the region's economy of an extended closure of SR 99 as part of the viaduct replacement could far exceed the cost of the construction of the replacement itself. That is not just from the cost to the users of SR 99, but from the consequences of the congestion that closure of SR 99 would cause to the streets of downtown Seattle and to I-5. The November 2006 Alaskan Way Viaduct Replacement Economic Impact Research Report prepared by Hebert Research, Inc. estimated the annual economic impact from closure of SR 99 and the resultant congestion on I-5 and on the surface streets of Seattle at $3.2 billion ($2.06 billion per year for partial closure). That cost can be estimated in dollars, but it would play out in closed shops along Seattle's downtown streets as congestion made the shops too hard to get to and the sidewalks unpleasant to stroll, businesses relocating from Seattle because it was too hard to get employees to them, construction delayed or cancelled because of the added cost of getting goods and equipment to sites in downtown, and the Port of Seattle being put at a competitive disadvantage relative to other major ports by congestion clogging the approach to its major terminals. The deep bore tunnel is the only alternative that can keep the closure of SR 99 to an acceptable 3 weeks, with occasional night and weekend closures, as compared to 27 to 42 months of closure for the cut and cover tunnel, 6 months of closure with 5 years of substantial lane restrictions for the elevated structure, and permanent closure for the Surface + Transit alternative. DSEIS p. 201. While we do not disagree that the long-term need to replace the capacity provided by the viaduct is so great that the region must accept the pain of the construction process, we believe the critical concept is found in the statement on p. 5 of the DSEIS that "there is a need to replace the existing viaduct in a manner that minimizes disruption of traffic patterns by minimizing the time lapse between closure of the existing viaduct and opening of a replacement facility or facilities." Replacement of SR 99 cannot be allowed to be the cause of a self-inflicted recession, as the alternatives proposed in the 2004 and 2006 environmental documents would have caused.

Much of the traffic analysis in the various EISs has focused on vehicles carried per day or per AM or PM peak period, vehicle miles traveled, vehicle hours of delay, and person throughput. While that is standard traffic analysis, and allows for important comparisons among alternatives, it misses a key fact about transportation systems in the 3-county Central Puget Sound Region. That is the extent to which Seattle's hour glass shape and water edges causes downtown Seattle to be a bottleneck to be passed through, not the destination, for components of users of the transportation system that are vital to our economy. Exhibit 4-38, page 101 of the Transportation

C-017-004

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

C-017-004 Discipline Report, partially illustrates this issue by showing that the City of Seattle's two industrial areas are to the north and to the south of downtown Seattle. Those industrial areas account for hundreds of millions of dollars of household income, and billions of dollars of revenues in the City of Seattle, and many of those businesses depend on the ability to move people and freight between the two industrial areas. Limiting the consideration of the need for traffic to pass through downtown Seattle without being impeded by downtown to just the boundaries of Seattle misses a larger regional issue, however, which is that the region's iconic aerospace and maritime industries are also located both south and north of downtown Seattle, and it is essential that they be able to move people and goods from their southern nodes in SODO and Renton and around Boeing Field to their northern node around Ballard and Paine Field. Other major industries likewise have a continuing need to move people and goods from north of downtown to south of downtown Seattle and vice versa. I-5, which is the other major north-south arterial, is at virtually full capacity, and currently experiences increasing peak periods during which speeds are often reduced to a crawl. SR 99 is the only major north-south corridor with remaining capacity, and thus becomes critical to businesses that require north-south mobility for people and goods. If we have learned anything from the economic downturn of the last three years it should be that industrial jobs are precious to a community. In planning its transportation systems, a region must not only move people to and from jobs in their central business districts, but must preserve the required mobility for their industries. With the unique geography of Seattle, that requires providing transportation corridors that can get through downtown Seattle without being impeded by it. In that regard, while the deep bore tunnel is not ideal, particularly in the way that traffic to and from the Ballard/Magnolia/Interbay area is handled, it nonetheless both avoids extended shut down of SR 99 during construction, and also maintains through-capacity for the long term.

C-017-005 For much the same reason we believe the deep bore tunnel is the only logical outgrowth of the environmental analysis that has preceded it, we agree with the analysis that led to exclusion of the Surface + Transit alternative from further detailed study as an alternative in the EIS. As shown by the traffic analysis in Attachment A to the Transportation Discipline Report,[1] by every measure the Surface + Transit alternative produces markedly poorer performance than the deep bore tunnel, with fewer vehicle miles traveled, over more hours, with more hours of delay, and

[1] The EIS would have been better if it were easier to find the traffic analysis comparing the Surface + Transit alternative to the deep bore tunnel, and if the analysis which the Project Team developed and presented to the Stakeholder process were included as well. The FEIS should make the location of that analysis known in response to question 5 on page 4, because there has been enough public focus on the Surface + Transit alternative so that readers should be quickly directed to the analysis that led to its exclusion as an alternative for full consideration in the DSEIS.

C-017-005

Your analysis is consistent with the lead agency's findings regarding the "Surface + Transit" concept.

C-017-005

fewer people moved. *See*, Appendix C, Attachment A, pp. A-8 and A-9. When fewer people are spending more hours to go fewer miles, that also translates into cars, busses and trucks idling on clogged streets and freeways, which maximizes their greenhouse gas production.[2] An important difference between the Surface + Transit alternative and the deep bore tunnel that is not fully reflected in the analysis is the impact on critical through-traffic. As suggested on p. A-21 of Attachment A to Appendix C, travel times for through traffic would rise by 50% or more for some of the modeled through trips. With the deep bore tunnel, trips that need to get through downtown Seattle will continue to have two routes, not just I-5, which is at capacity and facing increasing hours of congestion, but also SR 99. For businesses for which time is money, the increases in trip times that would be experienced with the Surface + Transit alternative would be expected to result in businesses relocating to where their transportation costs are more manageable. As the City of Seattle struggles to emerge from the current recession, it is critical that it replace the capacity of SR 99 in a manner that encourages future economic growth rather than making that growth impossible.

Finally it is important to highlight the comparison of the impacts of the Surface + Transit and the deep bore tunnel on streets within downtown Seattle. By 2030 congestion will have grown under any scenario. But as congestion becomes a greater and greater deterrent to coming to downtown Seattle, and as congestion on the streets makes life on the adjacent sidewalks less pleasant, marginal differences in levels of congestion will have a disproportionate adverse impact on the environment. In that light, the comparison on pp. A-17 to A-20 of the number of 2030 intersections within the project area at level of service E and level of service F shows the adverse impact of the Surface + Transit alternative on the quality of life and economic vitality of downtown Seattle.

Surface + Transit		Deep Bore Tunnel	
a.m. peak hour	p.m. peak hour	a.m. peak hour	p.m. peak hour
LOS E = 11	LOS E = 5	LOS E = 5	LOS E = 5
LOS F = 11	LOS F = 10	LOS F = 1	LOS F = 8

[2] Because the public may assume that removing a highway has a positive impact on greenhouse has emissions, the FEIS might provide an analysis of greenhouse gas emissions from the Surface + Transit alternative as compared to the deep bore tunnel alternative.

C-017-005

Total E + F = 22	Total E + F = 15	Total E + F = 6	Total E + F = 13

C-017-006

If one could look past the impacts of the construction closure that the elevated alternative would cause, and as described above, we do not believe you can look past those impacts, one could argue that the elevated alternative would have the same benefit as the deep bore tunnel has of protecting through traffic needing to get from one side of Seattle to the other, and indeed would better serve the Ballard/Magnolia/Interbay area than the deep bore tunnel will serve that area. We agree, however, with the rejection of the elevated alternative, because it loses the once-in-a-lifetime opportunity to reconnect downtown Seattle to its waterfront, and also exacerbates the blighting effect of SR 99 on the Seattle waterfront itself. As described above, this is a highway being threaded through a world class 21st century city. When Seattle's waterfront was a shipping, warehouse and industrial center, the noise, dust, vehicle emissions and visual blight of the viaduct were consistent with the neighborhood it passed through. But the nature of 21st century cities is very different. Because we must concentrate more and more people within urban areas, it is increasingly critical that cities make the most of their natural assets. Recent estimates are that 57,000 people now reside in downtown Seattle, most of them in median or low-income households. There is very little open space in the downtown area. In that context, one can simply not discount the benefit to the city and region as a whole to reconnecting downtown Seattle to its waterfront. The Central Waterfront has become an attraction for visitors to Seattle, and removal of the blighting influence of the viaduct will enhance its attraction. Reconnecting the waterfront to the rest of downtown Seattle will make it the park and amenity for all of downtown that will encourage the continued development of downtown Seattle as a place to live, work and play.

Parking Must Be Replaced as the Project Team Has Promised

C-017-007

There is one area where we believe the DSEIS is grossly inadequate, and that is in its discussion of parking, pp. 33, 118, 156. Although not the purpose of the structure, the Alaskan Way viaduct currently provides up to 1100 spaces of covered parking serving the Central Waterfront. Removal of the viaduct will also remove that parking, not just during construction but, without further action, permanently. That is a significant adverse impact that must be mitigated. The only discussion of parking mitigation is in Chapter 6, which deals with mitigation during construction, but the removal of parking when the viaduct is torn down will be permanent, and requires permanent mitigation.

The parking mitigation approaches discussed on p. 156 will reduce congestion from drivers in the central business district circling in search of parking spots. Mitigation such as e-Park

C-017-006

The preferred Bored Tunnel Alternative would remove the existing viaduct, which would help the waterfront to feel more connected to downtown Seattle. The Central Waterfront Project lead by the City of Seattle will determine the final configuration of Alaskan Way.

C-017-007

The lead agencies recognize that businesses along the central waterfront, Western Avenue, and Pioneer Square rely on the short-term parking in the area. The City of Seattle Department of Transportation (SDOT), in coordination with the project, has conducted parking studies as part of the process to develop mitigation strategies and better manage the city's parking resources. SDOT's studies identified a number of strategies to offset the loss of short-term parking in this area, including new or leased parking and the increased utilization of existing parking. Although the mitigation measures would be most needed during construction, many of them could be retained and provide benefits over the longer term. Specific parking mitigation strategies have not yet been determined, but the project has allocated $30 million for parking mitigation. The parking mitigation strategies will continue to evolve in coordination with the project and community partners. Parking measures under consideration and refinement include:

- Encourage shift from long-term parking to short-term parking
- Provide short-term parking (off-street), especially serving waterfront piers, downtown retail, and other heavy retail/commercial corridors
- Implement electronic parking guidance system
- Provide alternate opportunities to facilitate commercial loading activities
- Develop a Center City parking marketing program
- Use existing and new social media and blog outlets to provide frequent parking updates
- Establish a construction worker parking policy that is implemented

C-017-007

programs and the Seattle Parking Map are not likely, however, to mitigate the loss of parking that the businesses along the Central Waterfront depend upon. As we have discussed in our comments on the two previous EISs and in our scoping comments on this DSEIS, parking actually located within close proximity (within eye contact) to the waterfront is critical to the vitality of the businesses along the Central Waterfront. A very substantial portion of the visitors to the Central Waterfront are from out of town and arrive by car and they need to "park within sight" of their destination. Market research performed by Argosy and Ivar's over the past 12 years indicates that 69% in summer and 59% in winter arrive by car in family groups. They are not familiar with the city, and they do not navigate the city well. These multi-generational family groups include children in strollers and grandparents as part of the group. These are not people who will park at the convention center or stadiums and walk or bus to the waterfront. Transit on east-west routes is virtually non-existent to reach the waterfront, and the steep slope of the sidewalks impedes pedestrians to the waterfront. The Pike Place Market parking garage, the only major public parking along the Central Waterfront that is certain to survive the viaduct removal, is often full during the summer months with people visiting the Pike Place Market, and thus does not provide readily accessible parking to replace the parking lost on the Central Waterfront.

In our now several years of discussion with the Project Team, we have always been told, dozens of times, that the Project Team had allocated $30 million to build a parking structure along the waterfront. While that is not enough money to replace anything like all the parking spaces that will be lost, it is essential to mitigate the loss of parking on the waterfront. We see no reference to that mitigation now, and it needs to once again be part of the mitigation program. We support the City's efforts to limit the use of available parking to visitors, rather than commuters. But it is essential that a significant amount of visitor parking be available and visible along the Central Waterfront if the City wishes to maintain viable businesses along the waterfront and maximize attraction of the public to the newly opened public space that removal of the viaduct will enable.

Tolling Effects Remain Uncertain

C-017-008

Because the issue of tolling has been part of the public discussion for some time now, we want to comment briefly on the DSEIS's discussion of tolling. It would be useful for WSDOT to include its January 2010 study "SR 99 Alaskan Way Viaduct Replacement Updated Cost and Tolling Summary Report to the Washington State Legislature" as an appendix to the FSEIS, so that it is readily available to the public. At the same time, it must be recognized that any discussion of the impact of tolling on traffic diversion is quite speculative at this point because

by the Contractor

Refer to the Parking Mitigation during Construction section in Chapter 6 of the Transportation Discipline Report (Appendix C of the Final EIS) for additional information.

C-017-008

Chapter 5 of the Final EIS includes analyses for each of the alternatives both with and without tolls. How tolls might be implemented as part of the proposed action will be refined further should the state legislature authorize tolls. The potential effects resulting from analyses described in Chapter 5 of the Final EIS represent a conservative tolling analysis meaning that we anticipate expect effects will be notably less than described in the Final EIS.

The tolling scenario evaluated is generally conservative in that the rates are higher than other tolling scenarios so the amount of diversion is correspondingly higher. As your comment notes, there are many other factors in play that could affect how tolling is actually applied to this project. By addressing the range of effects in this Final EIS we are laying the groundwork for further planning and implementation. At this time there are no specific plans for a broader tolling system, although the idea is certainly under discussion.

The Cost and Tolling Summary Report to the Washington State Legislature can be found online at: http://www.wsdot.wa.gov/Projects/Viaduct/Library.htm.

We understand your point about comparing tolled conditions to either no-action or the "surface+transit" concept. In this Final EIS we have provided further discussion on tolling, its effects, and steps the lead agencies would take to implement tolling without undo disruption.

C-017-008

1) it is not known at this point whether there will be a need to toll the viaduct replacement in order to pay for the viaduct replacement, or if so, how much revenue will have to be raised by tolls, and

2) it is not known whether the Legislature will impose a much broader tolling system by the time any tolls on the viaduct replacement may be imposed.

Bids for the tunnel itself, the portion of the deep bore tunnel that has been considered the highest budget risk, have now come in just under the engineer's estimate. Other portions of the Alaskan Way Viaduct Replacement Project have come in substantially under the engineer's estimate. If WSDOT continues to be able to take advantage of the current favorable bidding climate, it is likely that the amount of revenue that must be raised by tolls will be less than originally assumed or the need for tolls for the viaduct replacement may be even eliminated. It is certainly unlikely that the worst-case tolling scenario that WSDOT studied would be implemented. As the EIS points out, Puget Sound Regional Council's Transportation 2040 recommends moving to a new system of user fees, including a broader tolling system. The state does not have revenue to address many of the transportation needs of the Central Puget Sound Region, and a switch to higher gas mileage or electric cars will cause more and more motorists to avoid paying for roads through the gas tax. It is likely that over the next few years the Legislature will address that problem by imposing a broader system of tolls in the Central Puget Sound Region. Should that happen, the result would be a reduction of traffic diversion from the viaduct replacement to other regional roadways. Without actually knowing what revenues will be required to complete the viaduct replacement, and without knowing what other tolls may be imposed, it is impossible to make any meaningful projections of the impact of tolling on the deep bore tunnel.

It is also important to recognize that even if tolls are imposed on the deep bore tunnel and not on the other major arterials, and even if tolls result in diversion from the deep bore tunnel, the deep bore tunnel would continue to provide substantial through capacity, and indeed for businesses for which time is money needing to move people and goods through downtown Seattle, the lower volumes of traffic using the tunnel would mean that the trip is faster. In that sense it is inaccurate to compare congestion from the deep bore tunnel with tolling to the no action (viaduct closed) alternative or the Surface + Transit alternative, because although the general levels of congestion may become closer with tolling of the bored tunnel, with the bored tunnel, any party seeking to avoid that congestion can do so for the price of the toll. With the no action (viaduct closed) scenario or Surface + Transit, there would be no escape from the congestion.

Again thank you for the opportunity to comment on the DSEIS. We look forward to continuing to work with the Project Team as the project moves into the construction phase.

Sincerely,

GRAHAM & DUNN PC

Elaine L. Spencer

ELS/els
cc: Members of the Seattle Historic Waterfront Association
M35410-1499704

WASHINGTON TRUST FOR HISTORIC PRESERVATION

December 13, 2010

Angela Freudenstein
Washington State Department of Transportation
Alaskan Way Viaduct Replacement Project SDEIS
999 Third Ave., Suite 2424
Seattle, WA 98104

RE: Alaskan Way Viaduct (SR99) Replacement Project – SDEIS

Dear Ms. Freudenstein,

The Washington Trust for Historic Preservation received information on CD related to the Supplemental Draft Environmental Impact Statement (SDEIS) for the Alaskan Way Viaduct Replacement Project. Thank you for sending this information. As a consulting party through the Section 106 process for this project, the Washington Trust appreciates the opportunity to provide comment.

C-018-001 After reviewing material included in the SDEIS, the Washington Trust agrees that a number of cultural resources will be adversely affected. In addition, while proposed best practices utilized before, during and after construction are anticipated to prevent adverse effects, the potential for other cultural resources to experience unanticipated adverse effects remains.

C-018-002 Both the Viaduct, slated to be removed, and the Battery Street Tunnel, slated to be de-commissioned, have been identified as eligible for inclusion in the National Register of Historic Places (NRHP). As noted in the SDEIS, HAER documentation has been completed for these resources, while other interpretive programs are under development. The Washington Trust looks forward to learning more about the scope and breadth of these interpretive elements and engaging in discussions related to additional mitigation measures for the loss of the resources.

C-018-003 Numerous historic resources have been identified within the Area of Potential Effect (APE). The SDEIS anticipates that the majority of these resources will not be adversely affected by the tunnel and may experience damage classified as 'very slight to slight' given the proposed monitoring and grouting measures. While these monitoring and grouting measures seem appropriate, given the intensely complicated nature of the project, comprehensive contingency measures should be in place in the event adverse effects become evident and damage increases as a result of construction. The timeframe for monitoring settlement is described in the SDEIS as being 6 months prior to construction through 1 year after the project is completed. Consideration should be given

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C-018-001

WSDOT has identified those historic properties that will be adversely affected by developing measures in consultation with consulting parties to avoid, minimize and/or mitigate adverse effects. These measures will be outlined in Section 106 Memorandum of Agreement. As part of this Section 106 consulting process, WSDOT developed an unanticipated discovery protocol to address potential unanticipated discoveries of archaeological resources, including human remains. WSDOT and the Design Builder will also develop a monitoring and instrumentation plan and contingency plan as well as a claims process, which will address potential unanticipated effects to built environment resources.

C-018-002

The Section 106 consulting parties, including the Washington Trust for Historic Preservation, have been involved in developing mitigation plans and the Section 106 Memorandum of Agreement. WSDOT will continue to work with the Washington Trust for Historic Preservation as a consulting party.

C-018-003

The monitoring plan will be refined and updated before tunneling begins. Each building will also be inspected again by structural engineers. The monitoring enables any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties. The monitoring plan will be addressed in the Section 106 Memorandum of Agreement.

C-018-003 to extending this window on either end given the fact that settlement from construction activity and subsequent vibration effects due to vehicular traffic can take a long time to manifest.

C-018-004 Of paramount concern are the Western and Polson Buildings, located near the proposed south portal tunnel entrance. Each building serves as a contributing element to the Pioneer Square Historic District. Due to the deteriorated existing condition of the Western Building, the SDEIS notes that demolition may be the only safe option. Demolition of the Western Building should be considered only as a last resort and after the discovery of clear evidence suggesting the building would not withstand construction activity related to the tunnel boring machine. To this end, the Washington Trust respectfully requests a copy of the structural engineering report for the Western Building. While structural reinforcement measures have been implemented to the Polson Building, the SDEIS notes the potential for 'severe to very severe damage' to occur. Because of this, and due to the fact that the Polson Building shares a common wall with the Western Building, considering should be given to adding the Polson Building as subject to use under Section 4(f) review.

C-018-005 The Pioneer Square Historic District constitutes an irreplaceable historic resource for the city, state and region. While much consideration has been given to the buildings, it seems that other elements related to the district have not received the same attention. For example, the areaways below grade are associated as character-defining features of historic buildings. The SDEIS notes that no adverse effect is anticipated to those areaways that retain historic integrity. Areaways, even if minor settlement occurred, may be more vulnerable to damage than their above ground counterparts. It may be prudent to pay closer attention to these elements even though the above ground resources with which they are associated are not anticipated to be adversely affected.

C-018-006 Finally, traffic in and around the Pioneer Square Historic District is a concern. While removal of the Viaduct may enhance the historical context of the district (a somewhat problematic claim made in the SDEIS), it will certainly increase traffic. Yet the SDEIS does not highlight any adverse effects for the historic district related to traffic either during or after completion of the project.

The Washington Trust for Historic Preservation looks forward to addressing these issues and others with all stakeholders involved. Thank you for the opportunity to comment on this important and monumental project.

Sincerely,

Chris Moore
Field Director

C-018-004

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the

alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

The Final Section 4(f) Evaluation follows Chapter 9 in the Final EIS and discusses Section 4(f) resources subject to use under each of the build alternatives.

C-018-005

The Bored Tunnel alignment is some distance from Pioneer Square's areaways and no impacts on them are anticipated. The areaways are included in the monitoring program; instrumentation has already been installed in First Avenue areaways. Any damage would be minimized by careful monitoring to warn of potential settlement as the TBM advances; temporary supports or cribbing would be installed in the unlikely event that the monitoring and building assessment indicate a need. The areaways are discussed in more detail in Chapters 4 and 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS.

C-018-006

Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse onto several streets such as S. Royal Brougham Way, Alaskan Way, First Avenue, and Fourth Avenue. Please see the Final EIS Appendix C, Transportation Discipline Report for the transportation analysis. Because traffic in Pioneer Square is controlled by signals, it is not anticipated that

the increased volume will affect the pedestrian character nor will it make it more difficult to walk to shops or restaurants. Pioneer Square has historically been an active place with a high volume of traffic. Modest increases in traffic volumes are expected between 2015 and 2030. In most cases, these traffic volume increases are related to expected population and employment growth in the study area and region.

From: LWV President [President@seattlelwv.org]
Sent: Monday, December 13, 2010 3:55 PM
To: AWV SDEIS Comments
Subject: Alaskan Way Viaduct replacement DEIS

C-019-001

The League of Women Voters of Seattle urges the Washington State Department of Transportation to respond fully to concerns raised in the Draft Environmental Impact Statement concerning the Deep Bore Tunnel before any construction contracts are signed and before any further funds are committed to the project.

Concerns raised in the DEIS are numerous and deal with a variety of problems, among them greatly reduced access to downtown Seattle from a tunnel designed to bypass downtown; harm to the citizens of Seattle resulting from the increase in traffic due to the significant number of the current viaduct users who will not use the (reduced access) tunnel; harm to historic buildings from the construction itself; and harm to Pioneer Square resulting from its use as the only downtown access to or from the tunnel.

The DEIS does not consider any alternative to the deep bore tunnel, including the two alternatives recommended by the 2008 Partnership Process, it only compares the tunnel to the existing structure. Nor does it indicate how the additional costs associated with the tunnel—including but not limited to costs resulting from the problems enumerated above—will be funded if current funding plans prove to be inadequate. Given the state's current budget crisis, such a contingency is not at all unlikely. The governor has committed most of the money allocated for "contingencies" to the bidders. Even without contingencies, there is no money budgeted for public transit to help ease the impact. Finally, the failure to include the effects of tolling on usage, and its concomitant effect on funding raises serious questions that need to be considered.

The League of Women Voters promotes an open governmental system that is representative, accountable and responsive. We support a balanced state transportation policy and increases in funding to provide adequate revenue and flexibility for a multi-modal system of transportation. The League of Women Voters of Seattle urges the Washington State Department of Transportation to adhere to the guiding principles developed by the Governor's own Partnership Process in responding fully to the DEIS. WSDOT's plan should

1. improve public safety
2. provide efficient movement of people and goods now and into the future
3. maintain and improve downtown, regional, port, and state economies
4. enhance Seattle's waterfront, downtown, and adjacent neighborhoods as a place for people
5. create solutions that are fiscally responsible
6. improve the health of the environment

(ESDEIS, p 3)

C-019-001

The Bored Tunnel Alternative does provide access both through and to and from downtown. Access to downtown from SR 99 and from downtown to SR 99 are provided near S. King Street in the south and near Harrison Street in the north. Details about traffic effects associated with the Bored Tunnel Alternative are provided in the Final EIS and Appendix C, Transportation Discipline Report. Other environmental effects of the Bored Tunnel Alternative, including effects to historic buildings and Pioneer Square are also provided in the Final EIS.

The 2010 Supplemental Draft EIS and the Final EIS do consider and evaluate alternatives to the Bored Tunnel Alternative. The build alternatives evaluated and compared in both documents are the Bored Tunnel, Cut-and-Cover Tunnel, and Elevated Structure Alternatives. The effects of these build alternatives are compared in both the 2010 Supplemental Draft EIS and the Final EIS.

As part of the alternatives development process for the project, the Elevated Structure and Transit Hybrid and the I-5, Surface and Transit Hybrid were considered in the 2010 Supplemental Draft EIS. For reasons discussed on pages 53 through 58 of the 2010 Supplemental Draft EIS, these concepts were screened out for further evaluation in the EIS as potential build alternatives. WSDOT conducted further analysis as documented in the Surface and Transit Scenario Year 2030 Analysis Results, which is included in the Final EIS Appendix W, Screening Reports.

Effects of tolling the build alternatives was provided in Chapter 9 of the 2010 Supplemental Draft EIS. This information was updated and is provided in Chapter 5 of the Final EIS. Costs and funding are not issues that need to be discussed in an EIS per requirements of the National Environmental Policy Act; however, a discussion of project costs and assumptions is provided in the Final EIS.

C-019-001 We urge complete transparency in this process and a commitment to addressing all the issues raised in the DEIS—as required by federal law—before proceeding any further with the Bored Tunnel Alternative.

Allison Feher
President
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Join the LWV — where men and women like you are actively engaged in making change happen on the local, state and national level!

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13 December 2010

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Comments on the Supplemental Draft Environmental Impact Statement for the Alaskan Way Viaduct Replacement Project

Dear Ms. Freudenstein, Mr. Paananen and Mr. Hahn,

We appreciate this opportunity to comment on the Supplemental Draft Environmental Impact Statement for the Alaskan Way Viaduct Replacement Project. The Sierra Club is very interested in a sustainable, forward-looking, and responsible transportation solution that prioritizes cost efficiency, social justice and environmental sustainability. We favor transportation options that support state, county and city greenhouse gas (GHG) emission reduction goals.

This project represents a major investment in the future of our urban mobility and the quality of the surrounding places. Sierra Club urges WSDOT to observe the following goals when evaluating alternatives and advancing this project:

1. emphasize the movement of people and goods rather than vehicles;
2. mitigate climate change impacts through reducing GHG emissions;
3. prioritize transit use to prepare for rising energy costs;
4. protect the integrity of the Pioneer Square Historic District during construction and operations;
5. improve the urban and natural character of the waterfront;
6. promote thriving communities while reducing sprawl.

Specific concerns are grouped into categories throughout this letter followed by concluding remarks.

C-020-001

1. **This project should plan for reducing vehicle usage and greenhouse gas emissions, according to by City, County, State and Federal policies and statutory benchmarks.**

   a) **The City of Seattle** has policies urging transportation agencies to pursue decreased Vehicle Miles Traveled (VMT) over time, and increase the viability of other modes, as part of a larger effort to reduce green house gas emissions from vehicles:

   - The City recently established a goal for Carbon Neutrality as one of its 16 priorities for 2010, knowing that this will demand dramatic efforts to reduce fossil fuel consumption and driving. A citizens' commission is at work defining specific implementation steps.
   - The City's transportation policy as defined by the Comprehensive Plan states: Ensure that transportation decisions, strategies and investments are coordinated with land use goals and support the urban village strategy.
   - The City's Climate Action Plan, launched in 2006, says: "The goal of the Seattle Climate Protection Initiative is to reduce greenhouse gases in Seattle by 7% below 1990 levels by 2012, 30% below 1990 levels by 2024, and 80% below 1990 levels by 2050." Reducing VMT is a key strategy to reduce emissions, as 60% of Seattle's emissions come from vehicles.

   b) **King County** has made addressing climate change a priority of its comprehensive plan, and is one of three framework policies guiding the entire plan. FW-102 states that "King County will be a leader in prevention and mitigation of, and adaptation to, climate change effects." This overarching policy is carried through the rest of the comprehensive plan, including the following policies on Reducing Climate Pollution:

   - Recommends that the County collaborate with other local governments to reduce greenhouse gas emissions in the region to 80% below 2007 levels by 2050 (Policy E-216)
   - Establishes a goal of reducing County government GHG emissions by 6% below 2000 levels by 2010 (Policy E-204).

   c) **Washington state** has established statutory benchmarks and policy urging transportation agencies to pursue policies that decrease VMT over time, and increase the viability of other modes, including transit, bicycling and walking, as part of a larger effort to reduce green house gas emissions from vehicles:

   - State law says we shall "By 2035, reduce overall emissions of greenhouse gases in the state to twenty-five percent below 1990 levels, and by fifty percent by 2050." RCW 70.235.020.
   - State law requires agencies distributing capital funds for infrastructure projects to consider whether the entity (WSDOT) has adopted policies to reduce greenhouse gas emissions. The agencies must consider whether the project is

C-020-001

The law setting the VMT benchmarks directs WSDOT to "adopt broad statewide goals to reduce annual per capita vehicle miles traveled by 2050 consistent with the stated goals of Executive Order 07-02." The state law does not require individual projects to set VMT reductions. WSDOT is working on this task and related tasks in Executive Order 09-05 in conjunction with a working group established for this purpose. The cumulative greenhouse gas impacts of transportation projects are best addressed at a system-wide level where multiple projects can be analyzed in aggregate, such as in regional transportation plans. The Alaskan Way Viaduct Replacement Project is included in PSRC's Regional Transportation Plan, *Transportation 2040*, which considered greenhouse gas emissions along with other transportation objectives.

In February 2010, the state's Office of Financial Management (OFM) provided guidance to agencies for applying RCW 70.235.070 to funding programs. This guidance states that programs using federal funding when the distribution criteria cannot be changed are not subject to this requirement. Because this project is federally funded, it is not subject to this state requirement. Nevertheless, as discussed in responses to previous comments, the project would support increased use of transit and decreased use of single-occupant vehicles, and thereby would reduce GHG emissions in the project area.

Greenhouse gas effects are discussed in Chapter 7 of the Final EIS Appendix R, Energy Discipline Report. Climate changes is discussed in Question 23 of Chapter 7, Cumulative Effects, in the Final EIS.

C-020-001

consistent with the state's limits on the emissions of green house gases and statewide goals to reduce annual per capita miles traveled.

d) **The federal government**, including the DOT, the EPA and House of Representatives, have shifted policies away from vehicular capacity and congestion relief, and have prioritized mobility by other modes in order to reduce greenhouse gas emissions, reduce oil dependence and to improve public health:

- At the end of 2009, the U.S. Environmental Protection Agency (EPA) announced that greenhouse gases (GHGs) threaten the public health and welfare of the American people. EPA also announced their finding that GHG emissions from on-road vehicles contribute to that threat.
- Ray La Hood, Secretary of the US Department of Transportation, announced in March 2010 a dramatic change from existing policy regarding transportation funding. This "major policy revision" aims to give bicycling and walking the same policy and economic consideration as driving. "Today I want to announce a sea change.... This is the end of favoring motorized transportation at the expense of non-motorized." The DOT's current priorities aim to foster livability, sustainable communities, and reduced car dependence. One of its six principles is: "Provide more transportation choices to decrease household transportation costs, reduce our dependence on oil, improve air quality and promote public health."
- The American Clean Energy and Security Act passed by the House in summer 2009 set the goal of reducing greenhouse gas emissions by 17% from 2005 levels by 2020, and 83% by 2050.

Summary:
Global warming induced climate change is the most significant and daunting challenge facing this generation. Many agencies at all levels are working to shift how mobility is understood and delivered to achieve reduced pollution, increased choice, and reduced economic dependence on fossil fuels. Countless scientific and policy analyses of how to meet these goals arrive at the same fundamental conclusions: decision makers and agencies must commit to more alternative transportation, and pro-actively plan for reduced VMT, in order to achieve reductions in greenhouse gas emissions.

The preferred alternative ignores the clear import of local, state, and federal laws requiring the reduction of VMT and greenhouse gas emissions, and the much broader policy rationale underlying them. Environmental review under SEPA requires consideration of how a short-term use of the environment affects sustainability over the long-term. RCW 43.21C.030(c)(iv). Environmental review must adequately inform responsible officials so that they may make a "reasoned and informed" decision about the impacts of a project. See RCW 43.21C.030-031; Citizens Alliance to Protect Our Wetlands v. City of Auburn, 126 Wn.2d 356 (1995). Review must consider impacts that "pose long term risks to human health[.]" WAC 197-11-440(6)(c)(ii). To so callously omit an analysis of VMT and greenhouse gas emissions in light of the policy direction in which all corridors of government are moving is simply unacceptable. SEPA and NEPA require more.

C-020-001 **Action:** In light of City, County, State, and Federal policies aimed to reduce greenhouse gas emissions from vehicles, the EIS should aim for reductions in emissions and VMT. We favor GHG assessments that evaluate, rank, and select project elements and design configurations, rather than simply identify mitigation measures for a business-as-usual approach. The analysis should examine the cumulative use impacts created by the decision in this corridor – not just the trips on the facility, but the GHG emissions from construction and the area-wide effects generated by the decision for this SR 99 corridor. Priority should be given to those alternatives that reduce VMT and greenhouse gas emissions, in compliance with local, state and federal guidelines.

2. All reasonable alternatives have not been included in this SDEIS.

C-020-002 The alternatives analysis is the heart of the Environmental Impact Statement. Under both the National Environmental Policy Act and Washington's State Environmental Policy Act, the project proponent should analyze a set of reasonable alternatives—those considered to "feasibly attain or approximate a proposal's objectives". Sierra Club strongly believes this obligation of the lead agency WSDOT has been impeded through a narrowly defined set of options. A viable alternative that serves mobility of all modes, serves access to downtown Seattle, and also preserves the opportunity for a vibrant Seattle waterfront should be included in this DEIS.

a) Purpose and Need statement was inappropriately changed

C-020-003 "Statement of purpose and need" is the essential starting point for identification of alternatives, consistent with public expectation and community goals. By the recent alteration of the "Statement of Purpose and Need," the SDEIS narrows the previous definition, and now excludes viable and cost effective alternatives, to favor the preferred alternative. This contradicts the legal, standard guidelines for environmental impact evaluation, and contradicts the goals established in the viaduct replacement planning process reflecting the understanding of community members over years, and scores of public meetings.

By its fixation on "capacity", WSDOT has relegated the set of alternatives to a business-as-usual list by excluding solutions including transit, demand management, or available capacity on other facilities. This violates the requirement and intent of SEPA to include all reasonable alternatives. Instead of a focus on congestion mitigation, the project should expand mobility options, including transit improvement projects that minimize greenhouse gas emissions.

Action: WSDOT should change the present purpose and need statement back to its 2006 DEIS statement of purpose and need including "mobility and access for people and freight."

b) Unreasonable risks with the preferred alternative

C-020-004 Deep bore tunnels are marvels of engineering, but are also among the most difficult

C-020-002

FHWA, WSDOT, and the City of Seattle have extensively studied a wide range of possible viaduct replacement options as documented in the 2004 Draft EIS, the 2006 Supplemental Draft EIS, the 2010 Supplemental Draft EIS, and this Final EIS. Alternatives evaluated throughout the process have included an expanded Alaskan Way surface street, replacing the viaduct with aerial structures, and replacing the viaduct with a range of possible tunnel structures, and combinations of these replacement options. This work has been reviewed publicly and the lead agencies have engaged the public on multiple occasions throughout the life of the project. The possible viaduct replacement concepts were most recently reconsidered as part of the development of the 2010 Supplemental Draft EIS. Text on pages 53 to 58 of the 2010 Supplemental Draft EIS documents the results of this process and explains why the three build alternatives (Bored Tunnel, Cut-and-Cover Tunnel, and Elevated Structure Alternatives) were carried forward for evaluation in the 2010 Supplemental Draft EIS and the Final EIS.

C-020-003

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

C-020-004

projects to plan and control financially. This proposed tunnel would be the largest diameter bore ever attempted in the world. The drilling would take place in extremely challenging soil and water conditions, located under our state's most valuable real estate. Abrasive soils, clay, boulders, uncontrollable water flows, or unexpected utilities could stop the boring machine from advancing. The delay and cost consequences of the machine getting stuck are very high. Removing a 56' x 400' machine from underneath downtown Seattle streets or buildings would be a nightmare, and represents a huge financial risk.

- According to a thorough analysis of 258 massive transportation projects by one of the world's foremost authorities on the subject, Bent Flyvbjerg, a professor at the University of Oxford, 9 out of 10 transportation megaprojects run over their cost estimates. For tunnel and bridge projects, Flyvbjerg found, "actual costs are on average 34 percent higher than estimated costs."
- Both tunnel experts hired by the City of Seattle affirmed that costly problems are likely to emerge, despite WSDOT's best intentions. Using WSDOT's own data, these professionals predicted this project is 40% likely to exceed its establish cost cap. Further, David Dye, WSDOT leading project official at that time, said on record at the conclusion of the 2008 stakeholder process, about why they did not select the bored tunnel: "And so it's a cold dose of fiscal reality that I guess I'm the one who has to bring the bucket and pour on this.... But it is out of reach in the current state of affairs to make it happen."

- Significant uncertainty exists around the state's ability to fully fund the bored tunnel alternative. It is essential for this DEIS to consider a viable back up plan that meets goals for mobility and access into downtown neighborhoods -- and protects the full opportunity of the future waterfront. Neither of the two other alternatives in this DEIS, both of which were soundly rejected by Seattle voters in the 2007 advisory ballot, offers this.

C-020-005

c) SEPA requires not only a detailed statement on the impact of a proposed action, but also a "detailed analysis" of project alternatives. WAC 197-11-440(5)(b). Sufficient language shall be devoted to permit a comparative evaluation of the alternatives. WAC 197-11-440(5)(c)(v)-(vi). Review must not only consider alternatives, but also meaningfully evaluate them: where a description is "brief" and "conclusory" courts find it impossible to allow decision makers to engage in any comparison. See Weyerhaeuser v. Pierce County, 124 Wn.2d 26 (1994). The current SDEIS wholly omits discussion of a surface alternative and fails to meet the legal requirements of SEPA and NEPA.

C-020-006

d) At the conclusion of the 2008 stakeholder process, the leaders of the City, County and State Departments of Transportation recommended two alternatives for viaduct replacement: the I-5/ Surface / Transit hybrid, and the Elevated / Transit hybrid. After a year-long evaluation, these two approaches proved best for meeting the agencies' six goals for viaduct replacement at an affordable cost. These alternatives

capacity to efficiently move people and goods to and through downtown Seattle, but it doesn't specify that existing capacity must be maintained.

C-020-004

Extensive planning and analysis has been completed to minimize the potential for cost overruns and contingencies are included in the project's cost estimates.

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 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.

C-020-005

The Final EIS Chapters 5 (Permanent Effects), 6 (Construction Effects), and 7 (Cumulative Effects) do compare and evaluate all reasonable alternatives in accordance with NEPA and SEPA regulations. The 2010 Supplemental Draft EIS compared and evaluated all build alternatives in Chapter 8, Comparison of Alternatives. A surface and transit concept was considered in the 2010 Supplemental Draft EIS, but screened out

C-020-006

are conspicuously absent from the current DEIS. **Each of these two solutions were determined by the City, County and State DOTs as feasible, cost effective, and able to provide greater mobility for all modes. The I-5/ Surface/ Transit hybrid alternative should be evaluated in this EIS.**

- The I-5/ Surface / Transit proposals A and B provide mobility for through-travel and for local access, offer a four lane urban street on the waterfront, and can be achieved at a cost savings of $700 million to $1 billion compared to the tunnel. Like the tunnel, these options offer a calm four-lane waterfront street, which is central to the City's plans for the new waterfront. To exclude these from the DEIS analysis creates a false choice for waterfront proponents.
- The I-5/Surface/Transit proposal solves the problems ignored or exacerbated by the deep bore tunnel preferred alternative. It increases mobility for low income residents, adds transit, provides for greater bicycle and pedestrian safety, includes multiple access points to and from downtown Seattle, and saves WSDOT the onerous task of identifying additional funding as well as paying for likely cost overruns.
- The Seattle Urban Mobility Plan report of 2008 identified transit and non-motorized mobility options as a supplement and foundation for evaluation of the viaduct replacement options by the Stakeholders Advisory Committee.
- Further, the City of Seattle Ordinance 12246 states the City's preference for an alternative to the tunnel: "In the event a tunnel proves to be infeasible, the City recommends the development of a transit and surface street alternative that meets the intent of Resolutions 30664 and 30724." This alternative would offer the City one of the key advantages it seeks – reclaiming the downtown waterfront – at a significant cost savings.

Action: A version of I-5/ Surface / Transit alternative that includes an urban, four-lane waterfront street should be included in this EIS. The technical studies in the Urban Mobility Plan should be re-introduced into the viaduct replacement evaluation. Such an alternative would fairly represent the available choices so that decision makers who care about mobility for people and freight, and Seattle's new waterfront have a lower cost, lower risk alternative to consider. This option also meets the goals of reducing VMT and greenhouse gas emissions. It reduces the financial risk to citizens and creates infrastructure that is socially just for all of Seattle's citizenry.

C-020-007

3. **The high cost of tolls will create traffic diversion away from the bored tunnel contributing to significant degradation of transit travel times. This will cause disproportionate hardship for low-income citizens, which must be evaluated as a social justice impact for the preferred alternative.**

Equity is a very important consideration when setting tolling policy. Sierra Club strongly supports the use of congestion management toll revenue for transit operations. By providing better transit options, those travelers who might otherwise find tolls to present a hardship will have suitable alternatives for travel. Given the likelihood of tolling in this

for the reasons discussed on pages 53 through 58 of that document. The Final EIS Appendix W, Screening Reports, includes the updated Surface and Transit Scenario Year 2030 Analysis Results. Chapter 2 of the Final EIS discusses the alternatives development process and screening analysis.

C-020-006

Chapter 2, Alternatives Development, of the Final EIS describes the history of the project and how the alternatives developed. Question 5 of this chapter addresses the I-5, Surface, and Transit Hybrid, and subsequent 2009 recommendation by Governor Gregoire, former King County Executive Sims, and former Mayor Nickels to replace the central waterfront portion of the Alaskan Way Viaduct and Seawall with a single large-diameter bored tunnel. Question 6 in Chapter 2 of the Final EIS discusses how the purpose and need was updated and the additional traffic analysis completed for the surface and transit hybrid concept to test the rational for screening out the alternative. Please refer to the Final EIS for this information. Final EIS Appendix W, Screening Reports, includes the updated Surface and Transit Scenario Year 2030 Analysis Results.

C-020-007

The Final EIS evaluates all alternatives with and without tolls based on a single tolling scenario. Tolls can be adjusted in response to travel demand. The "need" for mobility is not eliminated by the existence of tolls. Final EIS Appendix H, Social Discipline Report, discusses the potential effects of toll payment on low-income populations, as well as the potential effects of using alternate routes to avoid the toll.

C-020-007 corridor to finance a replacement facility and manage the traffic using it, the response of the traveling public in both mode and route selection should be a key input to the design and evaluation of alternatives.

a) **The Bored Tunnel Alternative does not include tolls.** WSDOT then considers tolls as an after thought independent of any specific alternative, despite the inclusion of $400 million in tolling revenue as a part of the project finance plan. Reasons cited for not including tolls in the preferred alternative include potential for inaccurate distinction among alternatives, relegating the revenue need to a design option for all alternatives, and independently considering the facility need and the effects of tolling.

- Methods and models for projecting traffic volume that do not adequately account for driver response to tolling result in inaccurate characterization of traffic demand. The selection of alternatives evaluated in the EIS suffers from such an inaccurate "need" for mobility.
- WSDOT views tolls as an operational approach that can be changed as needed (ch. 9, p. 205) yet regards the facility replacement as a decision that can be made independent of a tolling plan and its effects on motorists' responses.

Action: WSDOT must incorporate predicted changes to commuter behavior resulting from tolling in its corridor use projections, evaluations of real capacity "need", and design work on reasonable project alternatives.

C-020-008

b) **This DEIS reveals WSDOT intends to charge tolls of up to $4 each way for a trip through the tunnel causing potential hardship to low income citizens:**

- The DEIS states that tolling significantly impairs transit service due to increased congestion. After analyzing tolling impacts on transit riders (Ch 9, pg 215) the conclusion is that "These effects would not be acceptable as part of a long term tolling solution." In light of VMT concerns highlighted above, it is irresponsible public policy to build a project that reduces transit reliability, particularly when it negatively affects those who can least afford to drive.
- preliminary scenarios evaluated in chapter 9 of the EIS do not invest toll revenue in public transport.
- The "Consensus on the Recommended Alternative for Replacing the Alaskan Way Viaduct and Seawall" letter of agreement signed by Governor Gregoire, County Executive Sims, and Mayor Nickels in January 2009 identified additional transit service as part of the recommended alternative for replacing the Viaduct. These three jurisdictions were to work together to deliver authority to King County to implement a 1% Motor Vehicle Excise Tax to help fund the additional transit service. No such authority has been established and the intent of this provision remains unfulfilled.

C-020-008

Chapter 5, Permanent Effects, of the Final EIS analyzes transportation effects for each of the build alternatives both with and without tolls. Question 26 of Chapter 5 discusses effects to low-income and minority populations. Appendix H, Social Discipline Report, of the Final EIS also discusses the potential effects of toll payment on low-income populations, as well as the potential effects of using alternate routes to avoid the toll.

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct, and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the Viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation during the central waterfront phase of the viaduct program. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently WSDOT is providing funding for King County on the S. Holgate to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is on-going and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as the need for a bus travel time monitoring system. WSDOT will also work with the

C-020-008

Action: This DEIS must analyze how the combination of high tolls, the absence of the additional transit service, and impairments to existing transit from congestion will affect lower income people. The DEIS must answer how affordable proposed tolls are for low and average income earners. In addition, it must reconcile the fact that the plan for high tolls and the impaired transit service is in contention with the State's goal of improving mobility for everyone, regardless of economic class or transportation mode.

C-020-009

c) Tolling of only one highway as proposed for the bored tunnel alternative will divert traffic to city streets and non-tolled highways

- Traffic modeling associated with tolling scenarios results in more diversion from SR 99 to slower facilities, such as city streets, and, therefore is expected to cause more delay.
- WSDOT estimates roughly 40,000 to 45,000 of more than 86,000 total daily trips projected to use the bored tunnel in the untolled 2015 Bored Tunnel alternative would remain on that route (ch. 9, p. 209) under a toll scenario that has a chance of raising the intended revenue.
- Nearly 65% of traffic projected to use the Viaduct in the present configuration 2015 design year does not travel through a bored tunnel under tolling scenarios intended to help finance this alternative. The perceived needed capacity is not fixed, but intimately linked to the operation of the roadway system (including tolls) and the viability and ease of use for alternatives to driving on very expensive highways.

Action: The city of Seattle and WSDOT must evaluate tolling of the replacement project as part of a comprehensive regional pricing and demand management strategy to ensure city streets are not flooded with an additional 40,000 to 45,000 vehicles per day as is estimated in the SDEIS under revenue-adequate tolling scenarios. Additional transit service must be included in any tolling plan for this corridor and related north-south routes that are part of an integrated system approach. Toll proposals must maintain a socially and economically equitable transportation system that does not cater solely to motor vehicle drivers.

C-020-010

4. Decision makers and the public deserve transparency on the promised project scope, budget, and security of funding.

a) With the data that exists now, it is practically impossible for decision makers to get a firm fix on full cost of the preferred alternative and its funding sources. It is not clear what elements of the project scope are funded and what might be cut, the full cost of protecting against or mitigating for expected harm is not known, and contingency reserves necessary for potential future problems seem to have been mostly drained. The total funding is unclear:

- There is a firm budget cap of $2.4 billion on the state's resources. That leaves $700 million in unsecured commitments.
- The Port of Seattle's promised $300 million has not been allocated, and may not.

County to identify funding sources for the service originally contemplated in the January 2009 agreement.

C-020-009

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent

C-020-010

- $400 million from future toll revenues may not be realistic. Initiative 1053 also casts doubt on whether WSDOT can impose tolls without action by the Legislature, which is uncertain.
- There is significant doubt as to whether the state will be able to float bonds on future tolling revenue because the state is at the limit currently for debt capacity, and both SR-520 and SR-99 projects are dependent on raising $2.4 billion in new bonds.
- Finally, there is firm resistance from all parties – City, County, and State -- to accept liability for the cost overruns, overruns that are likely to occur with 40% probability.

b) SEPA requires a level of detail consistent with the importance of the environmental impacts of the proposed project. WAC 197-11-402(2); see *Klickitat County Citizens Against Imported Waste v. Klickitat County*, 122 Wn.2d 619 (1993). Where lingering issues about cost remain unclear, and major impacts to the environment are only broadly and vaguely considered, it is hard to imagine a court deeming the current SDEIS sufficient to reasonably inform decision makers about the adverse consequences of this project.

Action: WSDOT must prepare a table comparing full project costs (including reasonable contingency reserves), and a full funding plan, (including back up plans if the unsecured funds fall through, and willing sources for potential overruns) and present it to the public and decision makers. Also in a time of budget shortfalls, during which the State is asking for great sacrifices in other sectors, including the closure of State Parks and user fees, every department, including WSDOT, should be enacting policy that is fiscally responsible. Building the most expensive replacement of the Alaskan Way Viaduct is not fiscally responsible.

C-020-011

5. The preferred alternative represents an unacceptable risk to Historic Resources – Pioneer Square Historic District and buildings. The viaduct replacement project must guarantee protection of these historic resources from harm.

The protection of our historical heritage is important to the Sierra Club as well as protecting our natural environment for future generations. The deep bore tunnel creates unwarranted risk to Seattle's historic heart. Pioneer Square's historic buildings are fragile and sit upon brittle infrastructure, a high water table, and unstable soils. Boring a tunnel beneath is, admittedly, a steep engineering challenge:

a) This DEIS describes the risks of digging and boring in this location (Ch 5 pg 126), possible damage to 12 historic structures (Ch 2 pg 31), and possible collapse or dramatic damage to two buildings (Ch 6 pg 142) because of difficulty controlling soil loss or preventing over-excavations or sinkholes. WSDOT will not know if there is an adverse effect to an at-risk building due to their boring activities until they start tunneling under it.

land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

C-020-010

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 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

C-020-011

- The DEIS says this of the Western building, a 'contributing' building in the Pioneer Square Historic District: "Mitigation measures to protect the building may not prevent the need for demolition to avoid the possibility of collapse."
- Further, the DEIS says of the Polson Building, another 'contributing' building: it "may also experience settlement, if unmitigated."
- The DEIS also states that twelve buildings within the Pioneer Square Historic District or listed on the National Register of Historic Places – including the Historic Federal Building -- may be affected by settlement, structures could crack, and utilities may be disrupted or damaged.
- While the DEIS claims measures will be implemented to avoid or minimize damage, it adds that despite these measures, unavoidable damage might still occur with the preferred alternative.

Action: WSDOT must provide more information and answer the following questions:

- How and when damage is likely to occur?
- What damage could soil settlement from tunnel boring cause, specifically?
- Will Pioneer Square's unique but delicate areaways and historic underground be put at risk?
- What are the total impacts to Pioneer Square, including possible closures to public right-of-way?
- What actions will be taken to prevent, repair, or mitigate damage?
- Is WSDOT planning to purchase and demolish any of these buildings?
- What is the likelihood of unavoidable damage to the fourteen buildings at risk?
- Will residents and users of those buildings be at risk of harm?

C-020-012

b) Some of the 'solutions' proposed to prevent structural damage actually exacerbate other problems:

- Given that water table is quite close to the surface, there is risk that the solidification of soils -- due to tunnel walls, retained cuts at the portals, and the injection of jet grout under buildings -- might alter natural water flows, create a water barrier, and cause water to back up in the Pioneer Square Historic District. (Ch 5 pg 127.)
- Many basements at risk in Pioneer Square are occupied, either by active retail or other business uses. Many are part of the historic underground, which is a popular visitor attraction, and occupied at times by hundreds of people.

Action: WSDOT must answer questions as to the mitigation of potential construction caused flooding events:

- What exactly is the risk of potentially submerging subsurface structures?
- What structures are vulnerable?
- Will decayed and fragile underground water and sewage infrastructure be at risk of failing if the ground becomes over-saturated due to altered water flows?
- What is the risk of basements flooding?

legislative intent that would need clarification to become operative.

The estimated project costs for the build alternatives are identified in the Summary of the Final EIS.

C-020-011

Final EIS Appendix I, Historic, Cultural and Archaeological Discipline Report, addresses the risks to historic buildings. In the Final EIS, Chapter 6 discusses construction effects and Chapter 8 discusses mitigation. The board tunnel alignment skirts the western edge of the Pioneer Square Historic District, away from the older buildings and areaways. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers; each one will be inspected by engineers again before tunneling begins. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

C-020-012

Measures that can be employed to mitigate the risk of groundwater mounding behind tunnel walls or ground improved areas are outlined in the Earth Discipline Report, Appendix P, and is summarized in Chapter 5 of the Final EIS. The level of detail provided in the Earth Discipline Report is appropriate for environmental review purposes. The risk of groundwater mounding and associated mitigation will be further evaluated during final design of the project.

The Bored Tunnel alignment is some distance from Pioneer Square's

C-020-013

c) Pioneer Square Historic District is listed in the National Register of Historic Places. Why is it not being protected via Section 4(f)?

Action: This DEIS should provide Pioneer Square Historic District full protection under section 4(f). It should identify and evaluate alternatives that avoid the possible harms to the streetscape, the buildings, and the underground that together comprise the unique quality of this district.

C-020-014

6. The focus must be on mobility, not vehicle capacity, due to the projections of declining oil supplies and increasing economic distress

The SDEIS uses a traffic forecasting methodology that ignores both current trends in Seattle area driving and the projections of skyrocketing oil prices or rationing over the next generation as world oil supplies go into decline and the historic era of economic growth comes to an end. It is critical that our remaining resources go into infrastructure for the future, not the past. Already traffic on the Alaskan Way Viaduct is flat and the trend among young people is strongly toward less driving.

a) Oil Supplies & Traffic Forecasting

The traffic forecasting methodology in chapter 2 of the "Transportation Discipline Report" is deeply flawed as it fails to reflect geopolitical reality – that global economic growth is slowing because the net energy produced from fossil fuels is about to or has already peaked. Higher costs for renewable energy and the remaining fossil fuel supply will translate into less future traffic due to higher costs—both in absolute terms and relative to income—for driving and owning a motor vehicle (http://www.theglobeandmail.com/report-on-business/commentary/jeff-rubins-smaller-world/).

Yet section 2.3 "Travel Demand Estimates and Forecasts" uses assumptions for regional population and employment growth from PSRC's regional plan, *Destination 2030*, and several updates, all of which use outdated methodologies. These methodologies rely on statistical extrapolation from time series data on population and employment and how these have related historically to traffic. Factors well known to petroleum geologists and natural resource specialists that are rapidly changing the underlying dynamics are not taken into account.

Reports of these trends in global energy are commonly available (www.odac-info.org/reports-resources), such as The Oil Crunch - A wake-up call for the UK economy by The Industry Taskforce on Peak Oil and Energy Security (ITPOES), February 2010. Even the US military is worried that "by 2012 surplus oil production capacity could entirely disappear, and as early as 2015, the shortfall in output could reach 10 million barrels a day" (www.peakoil.net/headline-news/us-military-warns-oil-output-may-dip-causing-massive-shortages-by-2015). The German military has similar concerns (www.consumerenergyreport.com/2010/09/02/leaked-study-peak-oil-warns-severe-global-energy-crisis). A wide variety of current reports are available at www.energybulletin.net, www.odac-info.org, and www.theoildrum.com.

areaways and no impacts on them are anticipated. The areaways are included in the monitoring program; they will be monitored if needed. The areaways are discussed in Chapter 6 of the Final EIS and in more detail in Chapters 4 and 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS.

C-020-013

The Section 4(f) Evaluation in the Final EIS and Appendix J, 4(f) Supplemental Materials, recognize that the Pioneer Square Historic District is a protected 4(f) resource and discuss the effects of the build alternatives on this resource.

C-020-014

The travel forecasts prepared for the Final EIS use fully vetted standard modeling techniques that have been reviewed by experts in the industry and applied consistently to similar projects throughout the region for decades. The methodology and tools used in travel forecasting are based on the regional model developed and maintained by the Puget Sound Regional Council, our regional Metropolitan Planning Organization, and are consistent with procedures recognized by the Federal Highway Administration. Additional detail regarding the travel forecasting methodology can be found in Final EIS Appendix C, Transportation Discipline Report.

C-020-015

b) Current Trends

Empirical data make the PSRC forecasts dubious:

- According to the City's annual counts, usage of the Alaskan Way Viaduct has been flat over the past twelve years.
- Research from Sightline Institute (http://www.sightline.org/research/energy/res_pubs/braking-news-gas-consumption-goes-into-reverse) reveals car travel has been declining the past 13 years in our region.
- A new study by Advertising Age reveals that young people (16-20 years old) are driving 20 to 25% less than their parents' generation. (http://adage.com/digital/article?article_id=144155).
- Forty percent of regional trips are less than 2 miles in length, which means it would be viable to serve a significant portion of SOV trips by biking, walking, or transit.

A combination of changes in demographics, societal values, the energy economy, and land use and transportation patterns in Seattle point to less need for mega projects that serve only motor vehicle travel in urban areas.

C-020-016

Action: WSDOT should use traffic modeling approaches based on different scenarios of possible rise in petroleum prices. The resulting changes in total traffic would include scenarios such as: no change in Seattle-area traffic by 2030, a 10% drop, a 20% drop, and so on. This project should be organized around an increase in use of transit, biking, and ride-sharing and provide corresponding infrastructure. Evaluation measures should compare access and mobility for people and freight without a fixation on vehicle capacity, and develop solutions that provide viable alternatives to SOV travel.

Conclusion

C-020-017

Sierra Club is committed to a future of smarter energy and transportation choices. The choices we make today will determine whether or not the region can navigate a path toward sustainability tomorrow. The public will be best served when our resources are spent in the most environmentally effective, least damaging manner. Consistent with these values and objectives, Sierra Club emphasizes the following points concerning the SR 99 project and its 2010 SDEIS:

1. In the 21st Century, we should be investing in infrastructure that advances transportation demand management and future use of modes other than single-occupant vehicles. Projects should meet the greenhouse gas emission reduction goals of State, City and County governments. The preferred alternative degrades existing transit on the corridor, and gives priority to SOV through traffic. A deep bore tunnel, as the most expensive option that serves the smallest number of users, is an extremely inefficient use of transportation investment dollars.

C-020-015

The statement that traffic on the Alaskan Way Viaduct has been flat over the past twelve years is not supported by City of Seattle data. Traffic volumes on the Alaskan Way Viaduct in downtown have varied from 1996 to 2008, and did remain flat over a 6-9 year time period, but this result may also be due to the fact that this segment is approaching capacity during peak travel periods. On the other hand, volumes in the Battery Street Tunnel, which are more indicative of travel patterns with the proposed Bored Tunnel Alternative, show a 19 percent growth rate over the 12-year period from 1996 to 2008. Growth in traffic volumes is lower but still notable north of the Battery Street Tunnel as well. It is clear that growth generally stagnated around the period from 2000 to 2005, but the traffic numbers do not reflect the stated claim.

Even though per capita gas consumption has been declining in the region over the last 13 years, as noted in the Sightline Institute Report, total vehicle travel in the region has not gone down, due to a combination of improved fuel efficiency and regional population and employment growth. Also, while it is true that youth may be less likely to obtain a driver's license today than a generation ago, the effect on travel is not explicit, nor does travel patterns the 16-20 year age group reflect the typical traveling population.

The travel demand model typically shows an average trip length of around 9 miles in the Puget Sound Region. While it is true that the median trip is shorter due to the skewing of trip length by some long-distance trips, the average trip length for Alaskan Way Viaduct users is greater than the 9 mile average for the region. Thus, while transit, biking, and walking are suitable replacements for short-distance trips, trips currently using the viaduct are unlikely to be replaced by walking and biking to any appreciable degree.

C-020-017

2. The tunnel alternative only answers part of the viaduct replacement challenge. This alternative fails to serve users currently reliant on the existing viaduct. Only trips that bypass downtown Seattle are well-served. Access into downtown Seattle and adjacent neighborhoods for vehicles, freight and transit users are not well served by the deep bore tunnel. This results in egregious negative impacts to local streets and low income residents. When the diversion effects of tolling are included, these negative impacts are compounded, and cast doubt on whether the current alternative meets the statement of purpose and need.

3. The evaluation of alternatives in this SDEIS has been skewed by adoption of an inappropriate purpose and need statement. A fixation on "capacity" instead of "mobility" has unnecessarily constrained the options while excluding solutions that rely on transit, demand management, or capacity of other facilities. WSDOT has side-stepped the requirement and intent of SEPA to include all reasonable alternatives.

4. The public and elected decision makers at the City and State deserve a clear picture of total project costs (item 4 above) compared to the full funding plan. WSDOT should explain how it will address any shortfalls, and what elements of the overall program scope are vulnerable to being cut. The City of Seattle, local neighborhoods, the federal GSA, or private property owners cannot be held liable for costs of the State's project.

5. An EIS must provide a discussion of impacts *impartially* and not serve as a mere means to justify "decisions already made." WAC 197-11-402. Washington courts require a project proposal's environmental consequences to be thoroughly discussed and analyzed. We request that you do so here.

Thank you for your consideration of these comments.

Sincerely,

Morgan Ahouse
Chapter Chair, Sierra Club Cascade (WA) Chapter

For further details, please refer to the Transportation Discipline Report, Appendix C of the Final EIS.

C-020-016

The travel forecasts prepared for the Final EIS use fully vetted standard modeling techniques that have been reviewed by experts in the industry and applied consistently to similar projects throughout the region for decades. The methodology and tools used in travel forecasting are based on the regional model developed and maintained by the Puget Sound Regional Council, our regional Metropolitan Planning Organization, and are consistent with procedures recognized by the Federal Highway Administration.

C-020-017

These points have all been addressed in response to previous comments in this letter. The lead agencies want to thank the Sierra Club for the substantial effort you have invested in this project, both during the Partnership Process in which you played a direct role and for your continued work on transportation issues in our community. Your thoughtful comments help ensure a healthy discussion and help us develop a better transportation system that serves the needs of all users.

From: Victor Gray [vgray@olympus.net]
Sent: Monday, December 13, 2010 4:45 PM
To: cvbrown.pe@gmail.com
Cc: AWV SDEIS Comments
Subject: the SDEIS

Commetns by the Viaduct Preservation Group

Ms Angela Freuenstein, Environmental Manger
Alaskan Way Viaduct Replacement Project
999 Third Avenue; Suite 2424
Seattle, WA 98104

Re The Viaduct EIS

C-021-001

This letter will attempt to summarize my concerns about the EIS.
First of all I have in the past responded to the DOT but these comments have been ignored by the DOT. The current EIS consisting of some 245 pages including some 92 references and a list of preparers about 50 in number. Included were all of the comments paid for by the DOT to provide professional services at the DOT direction. Can we really expect a objective analysis from those paid by the DOT

First of all as the lead agency the DOT should insist that al of the FHWA and State design standards are enforced. Yet they are asking for deviations from the standards regarding lane widths, shoulder widths and ignore the provisions of the American Disabilites Act (ACT). All of these deal with public safety. The DOT claims these deviations are necessary to save money yet the tunnel budget lists a 415 million of for risk and contingency. The tunnel design must be safe and revised to meet all off the current standards.

The claim is made that the viaduct is not safe and must be torn down. Yet the southern section was not damaged during the 2001 and serves the traffic needs of today. The northern section was damaged but repaired after the quake Why tear down a working facility that has served 10 years and can continue to serve another 50 years if maintained The EIS is incomplete as it does not include the retrofit as a viable option.

The sad fact is that the DOT and the City of Seattle are willing to ignore a savings of some 2 billion with a retrofitted viaduct and spend the extra money while at the same time wind up with a reduced traffic capacity of 4 lanes with the new tunnel while the existing viaduct has 6 lanes. The State and the City ignore the cost to the pubic for traffic disruption , yet it is real. About all that is done with the tunnel is to move traffic problems around . No provision is made for traffic growth. In fact traffic problems will be worse

It is ironic that the DOT is pushing ahead with a 5 billion project while the State's general fund is looking at a 5 billion shortfall in the next two years not to mention current shortfall of about 1

C-021-001

Thank you for your comments. Our team has worked hard to prepare a comprehensive Environmental Impact Statement that evaluates the many technical details associated with the complexities of replacing the viaduct. WSDOT appreciates the time and thought you have put into your ideas related to viaduct replacement. We do not agree that we have ignored your comments. WSDOT has responded to your comments on multiple occasions, including the following specific documents, which have been publicly available on the Project's website at http://www.wsdot.wa.gov/Projects/Viaduct/libraryalternatives.htm:

- Evaluation of Gray's Retrofit Proposal, T.Y. Lin International Review, July 2006 (pdf 5 Mb)
- Additional Retrofit for Gray's Modified Proposal, T.Y. Lin International review of modified retrofit proposal, November 2006 (pdf 614 kb)
- Cost Comparison between Elevated Structure and Gray Retrofit, with comments from Victor Gray, December 2006 (pdf 197 kb)

FHWA, WSDOT, and the City of Seattle have been working together to ensure that the design of the viadcut's replacement will protect public safety. Provisions of the American Disabilities Act have not been ignored, they are an important requirements that are incorporated into our design. Design deviations for urban roadways are common, particularly in an environment as constrained as downtown Seattle. However, in order to be allowed to deviate from state and federal standards, WSDOT and FHWA go through a rigourous deviation review process to ensure that the deviations are appropriate and reflect a design that protects public safety. The project's budget for risk and contingency are not unusual, rather they are commonplace and viewed as acceptable and necessary within the industry.

We are not sure what specific section of the viaduct you are referring to in your letter when you refer to the southern and northern sections.

C-021-001

billion .Granted that the DOT funds are not for the general fund use. However the City and State taxpayer will still pay the bill

The letter by traffic engineer , Christopher V. Brown 12/13/2010 , best covers many of the key points that should be considered . I urge that his letter be carefully considered and answered.

Viaduct Preservation Group 12/13/2010
Victor O. Gray, PE
120 Colman Drive.
Port Townsend , WA 98368
360-379-9862

However, WSDOT has extensively studied the concept of retrofitting the viaduct and has obtained review by other parties, such as the American Society of Civil Engineers, before coming to the conclusion that retrofit was not a viable alternative for replacing the entire portion of the structure that is at-risk. The studies listed below have been focused on both the seismic vulnerabilities of the existing viaduct and various retrofit proposals that have been evaluated, including your concept:

- Retrofit Technical Analyses Table of Contents and Conclusions(pdf 77 kb)
- Seismic Vulnerability of the Alaskan Way Viaduct: Summary Report, Washington State Transportation Center (TRAC), July 1995 (pdf 63 kb)
- Alaskan Way Viaduct: Report of the Structural Sufficiency Review Committee, June 2001 (pdf 503 kb)
- Alaskan Way Viaduct Phase 1 Retrofit Option Report, American Society of Civil Engineers Review, July 2002 (pdf 50 kb)
- Rebuild/Retrofit Alternative Report, Parsons Brinckerhoff, August 2002 (pdf 475 kb)
- Rebuild/Retrofit 500, Parsons Brinckerhoff, April 2003 (pdf 4.5 Mb)
- Rebuild/Retrofit 500, Appendix B: Preliminary Deep Foundation Engineering Analyses, Existing Piles, Alaskan Way Viaduct Project, Shannon & Wilson, January 2003 (pdf 925)
- Alaskan Way Viaduct Summary: Safety and Service Limitations of the Alaskan Way Viaduct, 2005 (pdf 118 kb)
- Proposed Retrofit of Alaskan Way Viaduct Using Fluid Viscous Dampers: Preliminary Phase, Miyamoto International, Inc., July 2006 (pdf 8.9 Mb)
- Evaluation of Gray’s Retrofit Proposal, T.Y. Lin International Review, July 2006 (pdf 5 Mb)
- Additional Retrofit for Gray’s Modified Proposal, T.Y. Lin International review of modified retrofit proposal, November 2006 (pdf 614 kb)

- Report of the American Society of Civil Engineers Review Committee, December 2006 (pdf 36 kb)
- Cost Comparison between Elevated Structure and Gray Retrofit, December 2006 (pdf 47 kb)
- Cost Comparison between Elevated Structure and Gray Retrofit, with comments from Victor Gray, December 2006 (pdf 197 kb)
- Seismic Vulnerability Analysis Report, Parsons Brinckerhoff, November 2007 (pdf 3.9 Mb)
- Alaskan Way Viaduct: Evaluation of Seismic Retrofit Options, KPFF Consulting Engineers, September 2008 (pdf 466 kb)
- Stakeholder Advisory Committee Retrofit Presentation, July 17, 2008 (pdf 1.6 mb)

The conclusion of these analyses are summarized in the following statement in a September 2008 report entitled *Alaskan Way Viaduct: Evaluation of Seismic Retrofit Options*, published by KPFF Consulting Engineers. That report concluded that the "damping retrofit scheme proposed by the Viaduct Preservation Group would cost approximately 80 percent of the cost of replacing the viaduct."

WSDOT believes we have adequately studied various retrofit concepts and have concluded they are not feasible. WSDOT and the City have not ignored the effects that construction will have on traffic disruption. These effects are discussed in detail in the 2004 Draft EIS, 2006 and 2010 Supplemental Draft EISs, and the Final EIS. Provisions for growth have been included in our traffic modeling work.

The costs for the alternatives evaluated for replacing the viaduct are lower than $5 billion and have been updated in the Final EIS. Responses to comments provided by Christopher V. Brown have been provided in Appendix T, 2010 Comments and Responses, item I-018. The response to your 2004 letter is provided in Appendix S, 2004 and 2006 Comments and Responses, item I-215.

Daystall Tenants' Association
1916 Pike Place
Suite 12, #50
Seattle, WA 98101–1056

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DEC 14 2010
WSDOT Doc. Control

December 12, 2010

Dear Ms. Freudenstein,

C-022-001

On Saturday December 11th, two officers from the Pike Place Market Daystall Tenant's Association spent part of an hour gathering signatures in support of the letter sent to you by the Market's PDA council. Our petition (enclosed), asks that the Market be formally included in discussions pertaining to the Viaduct's demolition and the rebuilding of the waterfront.

We stopped collecting signatures after filling six pages. To give you some sense of the support we found, all the Market merchants, farmers, craftspeople and street performers that we approached, but for one, asked to sign. And that one hold out also supported our petition, but she explained her business partner sits on the board of the Market Historical Commission and she felt signing might raise a conflict of interest.

And so, after conducting our brief petition drive, there is no doubt in our minds our entire Market community hopes we will be an official part of the shaping of these projects. This is an important moment in Seattle's history, and the changes these projects create will impact the Market's future for many decades to come.

Thank you sincerely.

Haley Land—officer-at-large, Daystall Tenants' Association

C-022-001

We welcome and encourage the Daystall Tenant's Association's participation in the Program, specifically where you have particular interest such as the waterfront development and viaduct demolition. As stated in the Final EIS, the proposed timeline for viaduct demolition would be after the bored tunnel opens at the end of 2015. At this time, planning for demolition is in very preliminary stages.We strive to keep open dialogue with your organization and others as planning progresses.

The City of Seattle is the agency responsible for waterfront improvements and there will be many opportunities for the public and stakeholders to be involved as planning processes. Key contacts and general information about the project is available here:

http://www.seattle.gov/dpd/Planning/Central_Waterfront/Overview/.

Daystall Tenants Associations (DTA)

1916 Pike Place
Suite 12, #50
Seattle, WA 98101-1056

December 11, 2010

The Pike Place Market business community of craftspeople, farmers, street performers, merchants and their employees fully supports the Market PDA council's resolution and letter to the Alaska Way Viaduct Replacement Project which states that the Pike Place Market must be an active participant in the rebuilding of the Seattle waterfront.

Over the next 6-8 years, as the tunnel is bored, the viaduct demolished and the city's downtown waterfront future looms; parking, auto and pedestrian access, street signage, traffic flow, air and noise pollution and marketing challenges in a time of transition will impact us. Solutions must be planned and implemented with thorough Market input.

We, Market business people who have signed this letter of support ask that the Alaska Way Viaduct Replacement Project include the Market as a fully invested stakeholder in all decisions shaping our future.

Signed

(signature here)	(print your name here)
Sharon Mckay	Sharon McKay
Pieter Muller	Pieter Muller
Jessica Hibbard	Jessica Hibbard
	John VanGilder
Kimberly Woodhead	
Paul Petersen	
RANDY LOCTOR	RANDY LOCTOR
	Alan Carlisle

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Signed

(signature here)	(print your name here)
	Jose Amesquita #76
	Richard Romero #95
	Danica Sheridan #27
	Terry Berg
	Gregory Paul
Nathaniel W. Hinde	Nathaniel W Hinde

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Signed

(signature here)	(print your name here)
Charmaine Slaven	Charmaine Slaven
Charlie Beck	Charlie Beck
Dorihea Gaffaney	Dorihea Gaffaney
Sylne Albanese	Sylne Albanese
Doris Mech	Doris Mech
Bao Cha	Bao Cha
Linda Boitano	Linda Boitano
	Doug Gross

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Signed

(signature here)	(print your name here)
	JAMES JOHNSON
	Miles Abrams
	David Ortiz
	HENRY H KIM
	Skip Ross
	DAVID P. MEARS
	Randy Gaucet
	Matthew Phillips

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Signed

(signature here)	(print your name here)
Kris Sacksteder	Kris Sacksteder
Frances Das	FRANCES DAS
Ann U. Brown	ANN U. BROWN
Rhonda Guilford	RHONDA GUILFORD
Mary K. Sherwood	Mary K. Sherwood
Scott Alberts	SCOTT ALBERTS
Rebecca Bontch	Rebecca Bontch
William Clark	William Clark

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December 11, 2010

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Signed

(signature here)	(print your name here)
Kim Inabnit Clark	Kim INABNIT CLARK
Mutsuko Palms	Mutsuko Palms
Kristin Wilson	Kristin Wilson
Haley Land & Lemma Clarke	Haley Land & Lemma Clarke

From: Mark Wainwright [mwainwright@mac.com]
Sent: Tuesday, December 14, 2010 9:51 AM
To: AWV SDEIS Comments
Subject: Comments from the Admiral Neighborhood Association

Dear WSDOT:

C-023-001

The following comments are submitted on behalf of the Admiral Neighborhood Association in West Seattle. We have been involved in the EIS process through our past president, Mark Wainwright, who sat on the Central Waterfront Working Group.

There are many benefits and problems that come from the construction of this project. We have summarized our perspective in the bullets below:

Some of the positive aspects of the proposed tunnel project are:

- Constructing the bored tunnel minimizes the duration of no highway 99. The other alternatives involve three years of no highway and also disruption to businesses in the area.
- The bored tunnel diminishes the traffic noise at the waterfront and what can be heard from the eastern shores and hills of West Seattle.
- The bored tunnel has not been voted down by Seattle voters as have the other alternatives.

Some of the issues we see with the proposed tunnel are:

C-023-002
- The bored tunnel costs a lot of money for the benefit it delivers to everyone impacted by its construction. Specific stakeholders and end users are benefitted much more than others.

C-023-003
- The tolls that are being studied as a necessity for funding the bored tunnel also significantly increase the non-highway traffic. In order to minimize that, a logical step would be to toll the length from Spokane Street to Mercer Street, not just the tunnel itself. This option is listed but not analyzed in the document.

C-023-004
- The bored tunnel leaves the seawall replacement as a separate project (and separate expense).
- The bored tunnel takes away the downtown exits and entrances that are used by West Seattle buses and drivers.

C-023-005
- It appears that the current proposed configuration will impact negatively the historic neighborhood of Pioneer Square.

We believe that the tunnel will benefit those who wish to move from south of Seattle to north of Seattle, bypassing the downtown core, but we see that issues exist for those looking to access the downtown core, either through Pioneer Square or the north portal area. We hope that these and other issues are address more clearly and thoroughly as the planning and design process continue.

C-023-001

Thank you for your support of the preferred Bored Tunnel Alternative. The Final EIS presents the current information including the effects and benefits for each of the build alternatives.

C-023-002

Overall project costs are included with the project description and are used for the analysis of economic impacts. The infrastructure improvements would enhance mobility near activity centers in the south and north areas, which would benefit freight, vehicles, and pedestrians using the roadway as well as regions economy. Chapters 5 (Permanent Effects) and 6 (Construction Effects) of the Final EIS and Appendix L, Economic Discipline Report, describe the economic impacts and benefits of the alternatives.

C-023-003

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. This project is not considering tolling other than on SR 99. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

C-023-004

Chapter 2, Alternatives Development, of the Final EIS describes the project and also what other projects are part of the Program with the Bored Tunnel Alternative. The Cut-and-Cover Tunnel and Elevated Structure Alternatives would include the seawall replacement as part of the project. However, with the Bored Tunnel Alternative the City of Seattle would replace the Elliott Bay Seawall in a separate project with the Corps of Engineers.

Regards,

Jim Cavin, Vice President
jimc@nwlink.com

Mark Wainwright, Board Member
mwainwright@mac.com

Admiral Neighborhood Association

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the alternatives. With the Bored Tunnel Alternative, traffic to and from West Seattle bound for downtown would likely use ramps at the south portal, which include bypass lanes for busses.

C-023-005

WSDOT will avoid, minimize, or mitigate the direct adverse effects of the project to historic buildings that are contributing elements to the Pioneer Square Historic District.

Since the 2010 Supplemental Draft EIS was published, various options for retrofitting or demolishing the Western Building have been studied. After receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative.

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected

immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

Please see Chapters 5 (Permanent Effects), 6 (Construction Effects), and the Final Section 4(f) Evaluation in the Final EIS for the discussion of effects to historic resources.

Ballard District Council

5604 22nd Ave NW Seattle, WA 98107
206-684-4060 206-233-7060 fax

December 13, 2010

Angela Freudenstein
Alaskan Way Viaduct Replacement Project Office
999 Third Ave., Ste. 2424
Seattle, WA 98104-4019

Dear Ms. Freudenstein:

The Ballard District Council appreciates an opportunity to comment on WSDOT's Supplemental DEIS for the Seattle Deep Bored Tunnel project. We feel strongly that this project will have a substantial affect on the lives and livelihoods for those of us in Ballard during the estimated five year construction period. After the tunnel opens and the viaduct is removed, the project will dramatically alter how this community will access downtown Seattle/central waterfront destinations and will forever change how we navigate virtually every traffic corridor in Seattle.

In our review, we identified the following concerns with the analysis in the SDEIS:

C-024-001

1. The impact of the bored tunnel alternative on traffic movement between Ballard, downtown Seattle and beyond has been has not been analyzed in depth. Further analysis of impacts on freight mobility and other motorized vehicles on I-5, Alaskan Way, various truck routes, and east/west connectors between the waterfront and I-5(such as Mercer Street) would be helpful, particularly focusing on the relative benefits of the mitigation projects and whether they can truly be coordinated. Without such further information and analysis, we believe that there is insufficient evidence in the SDEIS to provide a realistic idea of the impacts of construction to the potential users of the revised road transportation system. We understand that this item is addressed more specifically in comments discussing freight mobility impacts that have been submitted by the Ballard Interbay North Manufacturing Industrial Center (BINMIC), the Seattle Marine Business Coalition (SMBC) and the North Seattle Industrial Association (NSIA).

C-024-002

2. The SDEIS is insufficient because it does not include adequate mitigation plans that mitigate impacts or effects from tolling. This deficiency makes it difficult to comment on impacts identified as a result of tolling. The potential diversion of traffic from SR 99 to I-5 and Seattle surface streets (as a result of tolling) is a significant impact and needs to be better addressed and potentially mitigated.

C-024-003

3. The SDEIS does not attempt to quantify economic impacts that will occur due to travel delays due to reduced freight mobility through this area. (see comments 1 and 2 above). These could result in profound impacts on businesses in Ballard and other areas, but because it was not analyzed, it makes it difficult to comment on impacts. This also appears to be a deficiency in the SDEIS.

Member Organizations

15th Ave NW Assn • 36th District Demos •36th District Green Party • 36th District Republicans • Ballard Chamber of Commerce • Ballard High School PTSA • Ballard Historical Society
Ballard Landmark Residents Assn • Ballard Northwest Senior Center • Ballard Rotary • Ballard Place Condominium Assn • Canal Station Condominium Assn • Crown Hill Business Assn
Crown Hill Neighborhood Assn • East Ballard Community Assn • Friends of Burke Gilman Trail • Groundswell NW • Nordic Heritage Museum
North Beach Elementary PTA • North Seattle Industrial Assn • Norwegian Commercial Club • Olympic Manor Community Club • Seaview Neighborhood Assn • Shilshole Liveaboard Assn
Sunset Hill Community Assn • Sunset West Condominium Assn • Sustainable Ballard • Whittier Heights Community Council

C-024-001

Please see Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS as well as Appendix C, Transportation Discipline Report, for a discussion of traffic effects. Chapter 8 of the Final EIS presents potential mitigation measures and strategies. WSDOT will prepare a traffic management plan, which will contain localized traffic mitigation measures. These measures will be developed as construction details are refined.

C-024-002

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

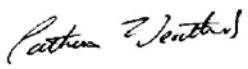
As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should

C-024-004

4. The SDEIS fails to describe a specific plan for detouring traffic and how that detour will be mitigated during the time from when the existing viaduct is removed to when traffic on the new surface Alaska Way is established. It is critical that WSDOT develop a traffic management plan so that a logical and efficient flow of traffic can be maintained for all modes of travel including commercial, maritime, industrial, freight, commute and residential traffics to and from Northwest Seattle during this period. It is our belief that that much of the traffic originating in Northwest Seattle will be unable to or will choose not to travel the corridor via the tunnel and that this impact needs to be addressed and mitigated.

We are grateful for the opportunity to help determine how this project will be of maximum benefit while doing the least harm to Ballard and all of Seattle. We look forward to your further analysis of the deficiencies we have identified and hope that we can be part of a mutual discussion to consider reasonable mitigations and their funding.

Respectfully,



Catherine Weatbrook, President

Cc: Mayor Michael McGinn
All Members – Seattle City Council
Larry Phillips, King County Council District 4
Bill Bryant, President, Seattle Port Commission
Delegation – 36th State Legislative District

reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

C-024-003

The economic effects to freight were described in the 2010 Supplemental Draft EIS and Appendix L, Economics Discipline Report. Travel time information is a more useful measure as the cost per minute of travel will vary greatly for different freight users. Please refer to the Final EIS Chapter 5, Permanent Effects, for an updated discussion of freight and economic effects.

C-024-004

Overall construction impacts for each of the alternatives were documented in Final EIS Appendix C, Transportation Discipline Report. For environmental documentation purposes, the most constrained stage of construction for traffic (other than the short closures of SR 99) was analyzed quantitatively while the overall construction activities were described qualitatively. During the viaduct demolition phase of the

project, standard maintenance of traffic during construction plans would be developed, communicated with the general public, and implemented.

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The City of Seattle

Pike Place Market Historical Commission

Mailing Address: PO Box 94649 Seattle WA 98124-4649
Street Address: 700 5th Ave Suite 1700

December 9, 2010 MHC 238/10

Angela Freudenstein
AWV Environmental Manager
AWV Project Office (Wells Fargo Building)
999 Third Avenue, Suite 2424
Seattle, WA 98104-4019

Dear Ms. Freudenstein:

Thank you for the opportunity to comment on the Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft Environmental Impact Statement and Section 4(f) Evaluation. The Pike Place Market Historical Commission provides the following comments and requests for clarifications:

2004 Draft EIS:

C-025-001 A vent structure for the tunnel is variously described to be located north of Union Street adjoining the Pike Place Market Historical District (March 2004 Historic Technical Memorandum/DEIS Appendix L - Historic Resources, pp. 41-42; 52; 61) and Pike Street (Noise and Vibration Discipline Report pp. 29 and 54) but is not shown on the maps in the EIS and does not appear in the supplemental updates in 2006 and 2010. Has the proposal to locate a ventilation building/structure near the Pike Place Market Historical District been eliminated from the plans?

2006 Supplemental Draft EIS:

C-025-002 The documentation includes potential proposals for a Steinbrueck Park Lid/Walkway (July 2006 Alternatives Description and Construction Methods Technical Memorandum, pp. 26 and 31). The proposal does not appear in the 2010 Supplemental Draft EIS. Was the proposal eliminated from the plans? Are there any current plans that would impact Victor Steinbrueck Park directly?

2010 Supplemental Draft EIS:

Historic, Cultural and Archaeological Resources Discipline Report

C-025-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. The project has evolved since comments were submitted in 2004, please refer to this Final EIS for information on the current alternatives. The preferred Bored Tunnel Alternative would not have a tunnel operations building near Pike Place Market. The Cut-and-Cover Tunnel Alternative does include a tunnel operations building that would be constructed on the block bounded by Pine Street, SR 99, and the Alaskan Way surface street.

C-025-002

The Steinbrueck Park Lid is part of the Cut-and-Cover Tunnel Alternative in this Final EIS. The preferred Bored Tunnel Alternative and the Cut-and-Cover Tunnel Alternative would have beneficial effects on the views from the Market and Victor Steinbrueck Park, as the aerial viaduct structure that currently intervenes in the views to the west, would no longer be part of the landscape.

C-025-003 | 1) On p. 11, there is a description of mitigation measures, including monitoring historic building areaways in Pioneer Square. Would the areaways in Pike Place Market also be monitored?

C-025-004 | 2) On p. 49, it indicates that WSDOT plans to meet with the Commission to discuss the project and potential impacts. Please indicate when this meeting will occur;

C-025-005 | 3) The list of areaways in Pike Place Market on pp. 75-76 needs to be expanded to include the areaway at the Butterworth Building, 1921 First Avenue, located in the Pike Place Market Historical District;

C-025-006 | 4) On p. 104, there is a discussion of mitigation measures where it states that approval would be sought from the Pike Place Market Historical Commission for any exterior alterations. Per SMC 25.24.06, interior alterations also require approval from the Historical Commission;

C-025-007 | 5) On p. 105, it says that if historically significant areaways in Pioneer Square are damaged, necessary repairs would be made. Does this plan extend to the areaways in the Pike Place Market Historical District?

C-025-008 | 6) On p. 118, it states that placement of pilings between Pike Street and Virginia Street may adversely affect Native American or historic period archaeological material. Will there be any damage to historic buildings as a result of the pile driving between Pike Street and Virginia Street? Identify the construction methodology and measures you have taken to mitigate damage to historic buildings in the Pike Place Market Historical District;

C-025-009 | 7) Did the DEIS consider carefully the effects of the vibrations for the construction of the deep bore tunnel on Pike Place Market buildings, located near First Avenue? Although the DEIS addresses this problem in general and specifically raises a red flag concerning the Commerce and Polson Buildings located in the Pioneer Square Historic District, it seems to imply that there will be minimal effects on the Pike Place Market, outside of noise and dust. The Commission is specifically concerned about the Butterworth Building, which has known structural problems, particularly at the areaway level, and the neighboring Alaska Trade Building.

Sincerely,

Sara Patton, Chair
Pike Place Market Historical Commission

Cc: Ben Franz-Knight, Pike Place Market Preservation & Development Authority

C-025-003

There is no monitoring planned specifically for areaways in Pioneer Square or Pike Place Market since the areaways are some distance away from the bored tunnel. However, when individual building monitoring plans are developed some areaways may be included and monitored as needed. A number of Pike Place Market buildings on First Avenue and Pike Place would be routinely monitored for potential settlement. At least 5 of these buildings have areaways, which are believed to be in good condition.

C-025-004

WSDOT briefed the Commission on the project in April 2011. The meeting had been re-scheduled due to the Commission's workload in reviewing on-going renovation projects.

C-025-005

The Butterworth Building areaway has been noted.

C-025-006

The need for approvals from the Pike Place Market Historical Commission has been clarified.

C-025-007

Yes, any damage to either buildings or areaways in the Pike Place Market Historical District would be repaired in the same manner as those in Pioneer Square.

C-025-008

No damage to historic buildings is anticipated as a result of pile driving. Please see the Final EIS Appendix B, Alternatives Description and Construction Methods Discipline Report, for more information.

C-025-009

The potential for damage to Pike Place Market buildings due to vibration caused by deep bore tunnel construction has been studied. At this point, the tunnel is approximately 200 feet below the surface and no damage is anticipated. Building monitoring will continue throughout construction as discussed in the Final EIS Appendix I, Historic, Cultural, and Archaeological Resources Discipline Report.

PUGET SOUND ENERGY

December 13, 2010

Angela Freudenstein
Alaskan Way Viaduct Replacement Project
999 Third Ave., Suite 2424
Seattle, WA 98104-4019

RE: SR 99 Alaskan Way Viaduct Replacement Project
2010 Supplemental Draft Environmental Impact Statement Comments

Dear Ms. Freudenstein:

Puget Sound Energy (PSE) remains engaged in the development and environmental review of both the SR 99 Alaska Way Viaduct Replacement ("Viaduct Replacement Project") and related projects. The additional opportunity to provide comments on the Viaduct Replacement Project Supplemental Environmental Impact Statement (SEIS) is appreciated.

PSE's overarching concern is to protect the safety of our natural gas system and the general public. Ensuring continuity of service and fiscal responsibility throughout all phases of your project is also a priority for PSE, as both an obligation to our utility ratepayers and a requirement of the Washington Utilities & Transportation Commission.

B-001-001

A general but important comment on the project pertains to the inherent challenge of design-build contracts and utility coordination. The compressed schedule coupled with the need for relocations to be accomplished prior to the start of construction or demolition activities means issues must be identified and resolved on a very aggressive timetable. PSE strongly encourages close coordination with private utility providers; regular meetings dedicated to utility issues should be scheduled to accomplish this.

More specific comments are provided below that pertain to and are listed separately for two of the project documents; Appendix K: Public Services & Utilities Discipline Report and the SEIS.

Appendix K: Public Services & Utilities Discipline Report Comments:

B-001-002

1) Page 8, 1.2.3 Utilities Construction Mitigation
This section suggests a safety watch arrangement with respect to Seattle City Light facilities and services. Given the potential safety concerns, a similar arrangement should be considered for PSE's natural gas facilities and services, and the following language added:

- *Coordinate with PSE to provide safety watch during construction, and establish emergency natural gas protection and restoration procedures to minimize the potential for natural gas flow interruption.*

B-001-001

The lead agencies will continue to coordinate with PSE as the project progresses. As part of the WSDOT contract and general construction management practices, there will be regular utility coordination meetings that includes private utilities. Please refer to Final EIS Appendix K, Public Services and Utilities for the discussion of mitigation, which includes coordination efforts, during construction.

B-001-002

Private utilities will be notified of construction activities near their facilities, but provision of a safety watch is the responsibility of the private utility (whereas, with Seattle City Light, safety watch is codified in law). Please refer to the Final EIS Appendix K, Public Services and Utilities, for additional detailed analysis of potential impacts to utilities.

B-001-003

2) Page 13, 2.5.1 Operational Effect Analysis
This section acknowledges the option of modifying design for the Viaduct Replacement Project should utility relocations become prohibitively costly or difficult. PSE supports this flexible approach to design and appreciates the inclusion of this option.

B-001-004

3) Page 31, 4.2.4 Natural Gas
The location of PSE's 12-inch high pressure gas line is incorrectly described as being in Blanchard Street (it is located in Bell Street). In the description of natural gas facilities located within the study area, please consider replacing the second paragraph with the following:

> *"Natural gas service is provided throughout the streets, alleys, public and private properties located within the study area. Natural gas is distributed through a network of high pressure natural gas mains, district regulators that reduce natural gas pressures, mains, service lines, valves and meters, all of which, except for the meters, are located underground.*
>
> *The study area contains three district regulators that serve broad areas of the City by reducing natural gas pressure in the system. Large areas of PSE's system will be affected if these district regulators require relocation or fail due to settlement induced by tunneling activity. The potential effects include safety concerns as well as disruption of natural gas service to large numbers of customers.*
>
> *A 12-inch diameter, high pressure gas main is also located in the study area in S. Main Street and along Bell Street. Disruption of this high pressure gas main would also create safety concerns as well as natural gas service impacts to large numbers of customers."*

B-001-005

4) Page 48, 6.1.2 Utility Effects
The subject of settlement is addressed in this section in a single sentence. Given the importance of this topic, we suggest adding a reference that points to section 6.2.3 Construction Risks and Ground Improvement Methods for more information on the subject.

B-001-006

5) Page 49, 6.1.2 Utility Effects
This section discusses the direct effects to utilities of service disruption. Please note that PSE cannot disrupt service to natural gas customers. The SEIS should note that with few exceptions, new replacement natural gas facilities must be in place before existing facilities can be removed. This is particularly important with respect to the district regulators and 12-inch high pressure pipelines located within the study area.

B-001-003

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the project. Final EIS Appendix K, Public Services and Utilities, identifies project design revisions as a potential means of reducing impacts on utilities.

B-001-004

Final EIS Appendix K, Public Services and Utilities, has been revised to incorporate your suggestions.

B-001-005

Final EIS Appendix K, Public Services and Utilities, analyzes potential effects from all three build alternatives. Settlement effects are only relevant to the Bored Tunnel Alternative. Section 6.1.2 is a summary section that generally discusses effects to utilities that could result from the construction of any of the alternatives. Settlement is discussed in more detail in the Utilities Effects Specific to the Bored Tunnel Alternative section.

B-001-006

Final EIS Appendix K, Public Services and Utilities, discusses potential effects to all utilities, including service disruption. Specific construction and mitigation strategies will be developed through ongoing coordination between the utility providers and the lead agencies.

B-001-007

6) Page 49, 6.1.2 Potentially Affected Utilities
A reference is made in this section and elsewhere in Appendix K to the Utility Impact Report (Jacobs 2009). These comments will not address the adequacy of that report, however the bullet pertaining to natural gas in this section should be amended to read as follows:
" Natural Gas facilities including high-pressure, intermediate-pressure and low-pressure mains, district regulators to reduce pressure (including vaults) services, valves and metering equipment."

B-001-008

7) Page 52, 6.1.4 Bored Tunnel
The last paragraph in this section discusses the impacts of settlement caused by the tunnel boring machine, and that emergency repairs to utilities could be required. Please add to this section the additional impacts of potential utility service outages and possible safety hazards.

B-001-009

8) Page 55, 6.1.6 Viaduct Removal, Natural Gas
Please include a statement in this section that there is a potential for impact to the 12-inch high pressure gas line and other lines located below the viaduct. The high pressure line is likely be relocated and would need to be moved to a new permanent location prior to the demolition of the viaduct.

B-001-010

9) Page 59, 6.2.2 Utilities
In the bullet list of potential measures that could be used to mitigate effects on utilities, please add the following bullets:

- *Consider the option of modifying project design when utility impacts are prohibitively costly or difficult to accomplish"*
- *Coodinate with PSE to provide safety watch during construction, and establish emergency natural gas protection and restoration procedures to minimize the potential for natural gas interruption*
- *All Contractors should use the 811 "Call Before You Dig" service*

B-001-011

10) Page 61, 6.2.3 Construction Risks and Ground Improvement Methods
Please address the possibility that some ground improvement methods used for construction mitigation could in fact contribute to additional differential settlement that could adversely affect existing natural gas or other utilities.

B-001-012

11) Fact Sheet, Alaskan Way Viaduct Replacement Project, dated October 2010
A minor correction is needed on the Fact Sheet, on sheet III. A list of "Other Seattle Permits/Approvals" is provided and Puget Sound Energy is included as the contact for coordination Transmission Outage Requests. This should be corrected; PSE has no electric transmission corridors in Seattle that would trigger outage notification.

B-001-007
Final EIS Appendix K, Public Services and Utilities, has been revised to incorporate your suggestions.

B-001-008
Final EIS Appendix K, Public Services and Utilities, has been revised to incorporate your suggestions.

B-001-009
Final EIS Appendix K, Public Services and Utilities, identifies the 12-inch high pressure line and its treatment will be determined during ongoing coordination between the utility providers and the lead agencies.

B-001-010
Final EIS Appendix K, Public Services and Utilities, has been revised to incorporate your suggestions.

B-001-011
Final EIS Appendix K, Public Services and Utilities, has been revised to incorporate your suggestions.

B-001-012
This error has been corrected in the Final EIS.

Viaduct Replacement Project Supplemental Environmental Impact Statement Comments:

B-001-013

1) Page 131 Chapter 6, Construction
Please note that the area between S. Main and S. Washington Streets, where no soil improvements are planned, is also the location where one of PSE's most significant facilities – the 12-inch high pressure gas line – is impacted by construction.

B-001-014

2) Page 199, Chapter 8, Comparison of Alternatives – Bored Tunnel Alternative, Utilities
It should be noted that the Bored Tunnel Alternative presents unique challenges to PSE facilities due to the potential for stress on the pipe resulting from settlement. There will still be additional utility relocations for the seawall and Alaskan Way surface street projects, potentially causing relocation of the same facility more than once.

Thank you again for the opportunity to provide input on the Viaduct Replacement Project. If you have any questions concerning these comments please contact our Project Manager, Julie Kelly, at (425) 462-3919.

Sincerely,

Elaine M. Babby
Senior Land Planner

B-001-013

The contractor's use of "tunnel-in-a-box" has changed the construction approach in this area. As would be done elsewhere in the construction area, natural gas facilities in this area will be monitored and will be either protected in place or relocated, as determined through ongoing coordination between WSDOT and PSE. The lead agencies will continue to coordinate with PSE as the project progresses. Several major construction activities could cause temporary disruptions to utility service customers within the project areas; however, these outages would be planned in advance and affected customers would be notified. Please refer to Final EIS Appendix K, Public Services and Utilities for the discussion of mitigation during construction.

B-001-014

The construction process includes extensive monitoring before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. Potential settlement issues are discussed in the 2010 Supplemental Draft EIS. Chapter 6, page 131, discusses the soil improvements and stabilization measures that are necessary along the bored tunnel alignment to protect existing structures and utilities from settlement and to strengthen existing soil so that it can better accommodate tunnel construction.

From: Joanie's Catering [joanieclare@comcast.net]
Sent: Wednesday, December 01, 2010 4:15 PM
To: AWV SDEIS Comments
Subject: Alaskan Way Viaduct Replacement Options

Hello,

B-002-001

I just want you to know that I definitely would like to see the elevated replacement option used in place of a bored tunnel (or any kind of tunnel!).

I was born in Seattle, and have been a 30+ year resident and longtime business owner in West Seattle
I drive on the Viaduct at least once, sometimes 2-3-4 times per day and it it a major artery to being able to do business or get around this city. Any time it is closed traffic goes into almost total lockdown everytwhere else and I believe that building the new structure alongside the existing one to be used until construction is completed is a much more cost effective way to go.
I don't understand why, when our state and city do not have all this extra money, they do not go with the better deal!

Sincerely,

Joan Allen ~ Owner

Joanie's Catering
3416 SW Webster Street ~ Seattle, WA 98126
Office Voice Mail 206-938-9890
Cell: 206-941-8947
Fax: 206-764-9041
Email: joanieclare@comcast.net
Website: www.joaniescatering.net

B-002-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Elevated Structure Alternative.

McCULLOUGH HILL, PS

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December 13, 2010

VIA ELECTRONIC MAIL

Angela Freudenstein
AWV Environmental Manager
AWV Project Office
999 Third Avenue, Suite 2424
Seattle, WA 98104-4019

Re: Comments on Supplemental Draft Environmental Impact Statement
Alaskan Way Viaduct Replacement Project

Dear Ms. Freudenstein:

We are writing on behalf of Martin Smith, Inc., which manages the building located at 505 First Avenue ("505"), to provide the following comments on the Supplemental Draft Environmental Impact Statement (SDEIS) dated October 2010 for the Alaskan Way Viaduct Replacement Project (AVWR). 505 is the owner and developer of the new office building located at 505 First Avenue. 505 First Avenue is the most significant new office development completed in the Pioneer Square area in several decades, and 505 desires to ensure that the construction, design and operation of the AVWR and its components do not detract from this investment or the benefits it brings to the Pioneer Square area.

General Comments

The design, construction and location of the Tunnel Operation Building (TOB) at the South Portal will have a significant impact on 505 First Avenue. In previous communications with WSDOT and the Seattle Design Commission (SDC), we have emphasized that the TOB at this location should respond to the following criteria:

B-003-001

- Vent Stack location and design
  - Align vent stacks on the east/west axis at the south end of the proposed TOB site along the Dearborn Street right-of-way (as extended)
  - Minimize, as much as technically possible, the height of the vent stacks

701 Fifth Avenue • Suite 7220 • Seattle, Washington 98104 • 206.812.3388 • Fax 206.812.3389 • www.mhseattle.com

B-003-001

The design for the tunnel operations building has been developed to a conceptual level for analysis in this EIS. Part of the building would be constructed underground. The remaining portion of the building is expected to be approximately 60 feet tall, with ventilation stacks extending up to 30 feet above the roof. This means that the stacks would be approximately 90 feet above ground level. The ventilation stacks would be exempt from zoning height restrictions. The tunnel operations building could be designed to meet the requirements of the existing Industrial Commercial zone, Stadium Transition Area Overlay District, and other applicable land use code regulations. The building would be west of the Pioneer Square Historic District. The commenter's more specific design suggestions will be considered during final design of the building.

B-003-001

- TOB design renderings presented by WSDOT to the SDC should be implemented by the selected contractor

- Building location, design, and construction

  - Mass the TOB as far to the south on the proposed site as possible
  - Minimize the height of the north portion of the Vent Building as much as possible
  - Set back Vent Building from Railroad Way to allow view corridors and a wide pedestrian walkway
  - Ensure that access to the existing parking garage and loading bays at 505 First Avenue, and to the west service entrance to the 83 King building, are maintained on Railroad Way, with easy connections to nearby arterials
  - Design-build contractor shall coordinate with neighboring property owners to reduce construction, location, and design impacts
  - The building design should be sympathetic to, and compatible with, the Pioneer Square Historic District Design Guidelines

The SDEIS begins to address some of these design criteria in its visual simulations. The FEIS should complete the process of defining the TOB in a manner that is consistent with these criteria.

Specific Comments

B-003-002

505 also offers the following specific comments on the text of the SDEIS:

Page	*Comment*
94	The depiction of the building footprint of the Tunnel Operating Building is significantly larger than identified in the pre-EIS process or depicted elsewhere in the SDEIS. For example, the TOB footprint depicted in Exhibit A-7 of Appendix E is substantially smaller.
114	The visual simulation showing the Tunnel Operating Building at the South Portal (Exhibit 5-33) depicts five vertical stacks, four of which are aligned on the north/south axis, which is inconsistent with the more specific analysis contained in the SDEIS Appendices. The TOB depicted in Exhibits A-5 and A-7 of Appendix E (Visual Simulations) portrays a substantially smaller building with stacks aligned along the east/west axis, consistent with the narrative discussion in the SDEIS and the presentation of WSDOT to the Seattle Design Commission. Unfortunately, while the description of the TOB in the body of the SDEIS suggests that it will be approximately 65 feet in height, Exhibit 5-33 suggests that the structure (not including stacks) would be closer to 85 feet in height. Exhibit 5-33 should be revised to reflect a structure height that is no greater than 65 feet. It should also be noted that elsewhere in the SDEIS, the TOB is described as not greater than 60 feet in height (Appendix B, page 18; Appendix G page 48).

B-003-002

Please see the Final EIS for updated text and exhibits, which have been revised for consistency.

We appreciate the opportunity to provide these comments on the SDEIS. Please do not hesitate to contact us if you have any questions about these comments.

Sincerely,

John C. McCullough

JCM/ldc

cc: Martin Smith, Inc.

Ron Paananen, AWV Project Manager
Angela Freudenstein
Washington State Department of Transportation
999 Third Avenue, Suite 2424
Seattle, WA 98104-4019

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

December 13, 2010

Dear Ms. Freudenstein, Mr. Paananen, and Mr. Hahn,

This letter provides comments on the draft environmental impact statement (DEIS) for the Alaskan Way Viaduct Replacement Project. The Underground Tour, operated by Bill Speidel Enterprises Inc., has been a steward of and advocate for the Pioneer Square Historic District for nearly five decades. We care deeply about Seattle's first neighborhood, and the incredible historic resource value it represents. We are interested in ensuring, that whatever solution you decide on for viaduct replacement, the streets and character and vitality of our neighborhood are protected, not destroyed.

The following are our concerns with the DEIS.

Adequacy of Review, and Range of Alternatives

B-004-001 When the preferred alternative was announced in January 2009, the package included $190 million worth of transit investments. Additional transit service was then, and is now, necessary to serve demand for access to and from downtown, since the bored tunnel itself does not. Moreover, the Letter of Agreement (LOA) between the City, County, and State promises funding for this transit service (see pg 258). **Additional transit service should be included** with the bored tunnel alternative, and analyzed for its utility.

B-004-002 Further, late in 2008, WSDOT, the City of Seattle, King County and various stakeholders completed an extensive review of multiple options for addressing the stated purpose of the project. That group concluded that there were two acceptable options. One of those options was a three-pronged plan to improve flow on Interstate 5, improve transit, and improve surface streets. That option—designated by your agency as one of the best and most viable options available—has never been analyzed in detail in an EIS. Why not? It is not too late to correct this error.

B-004-001

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently WSDOT is providing funding for King County on the S. Holgate Street to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is ongoing and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system. WSDOT will also work with the County to identify funding sources for the service originally contemplated in the January 2009 agreement.

B-004-002

As part of the alternatives development process for the project, the Elevated Structure and Transit Hybrid and the I-5, Surface and Transit Hybrid developed through the Partnership Process were considered in the 2010 Supplemental Draft EIS. For reasons discussed on pages 53 through 58 of the 2010 Supplemental Draft EIS, these concepts were screened out as potential build alternatives for further evaluation in the

B-004-003 The **importance of the viaduct for local access has been understated** in assumptions, and data presentations, throughout the DEIS's analysis. A primary use of the current viaduct is to access downtown Seattle; 42% of current trips are coming and going to downtown neighborhoods (Ch 4, pg 73). The EIS should identify local mobility and access to downtown as a goal, and evaluate alternatives based on their ability to provide this.

B-004-004 **The significant traffic impacts of tolling are not fully described in the analysis** (Ch 9, pg 205). "As currently defined, the Bored Tunnel Alternative does not include tolls." The impact analyses in the entire document, including travel times, traffic volumes, greenhouse gas emissions, and stormwater runoff all assume that there will be no tolling on the project. However, tolling revenue is a necessary part of the basic funding plan, and use of tolling dramatically affects the impacts. Tolling should be included in the modeling throughout the EIS to clarify the impacts.

It is insufficient merely to reprise the State's January 2010 Tolling Study in Chapter 9 without incorporating tolling's impacts throughout the analysis. Without it, this EIS creates an inaccurate depiction of impacts—especially traffic effects on local streets.

Traffic Impacts to Pioneer Square Historic District Streets

B-004-005 Currently, the viaduct offers seven on- and off-ramps to provide access to downtown Seattle neighborhoods, spread from the stadium area to Belltown. The tunnel alternative reduces this number to four on- and off-ramps, and concentrates them all in one location: adjacent to the Pioneer Square Historic District (Ch 4 pg 74). This configuration concentrates in our neighborhood all the traffic going between SR-99 and downtown Seattle.

Without tolling, this DEIS says that 30,000 additional cars will shift to city streets from SR-99 (Ch 2, pg 19). More specific to our neighborhood, this DEIS states that 50,000 cars a day are expected to use the southern interchange ramps (Ch 5, pg 104). If tolling is implemented, as required by the funding plan for the project, an *additional* 40,000 to 45,000 cars are expected to divert to city streets. It is unclear how many of these cars are likely to use this interchange.

The Pioneer Square Historic District is already inundated with car traffic during events at Safeco Field, the WaMu Theater, and Qwest Field on 205 days a year, with 105 of these happening during rush hour. How will this additional traffic generated by the southern interchange, at least 50,000 trips a day and perhaps much more, be accommodated on event days?

B-004-006 After analyzing the traffic impacts on surface streets that would result from tolling, the conclusion is, "These effects would not be acceptable as part of a long term tolling solution" (Ch 9, pg 214). No alternative is suggested other than to say another alternative is needed.

After analyzing tolling impacts on transit riders (Ch 9, pg 215) the conclusion again is, "These effects would not be acceptable as part of a long term tolling solution."

EIS. As documented on page 53 of the 2010 Supplemental Draft EIS, "None of the concepts met all of the screening criteria. The screening criteria were applied by first determining if a proposed design concept could meet the first element of the project purpose - providing a facility that meets current seismic safety standards. All of the design concepts considered met this criterion and were advanced. Concepts that satisfied the seismic design criterion were evaluated against the screening criteria for the remaining elements of the project purpose. In this stage of the screening analysis, design concepts were not required to achieve each of the project purposes. Instead, they were evaluated based on their overall ability to achieve the project purposes. In cases where two similar concepts were being considered, the concept that better satisfied the screening criteria was advanced and the other was eliminated. In cases where a concept had substantial deficiencies in its ability to achieve one or more elements of the project purpose, such that it would substantially compromise mobility, or if that concept had other major drawbacks, such as severe impacts on the local community, the concept was designated as unreasonable and was eliminated."

As the quoted sections of the 2010 Supplemental Draft EIS describe, the criteria for mobility and capacity were not more heavily weighted than the other screening criteria. The I-5, Surface and Transit Hybrid was screened out because the lead agencies found it had greater effects to overall mobility than was assumed in the Partnership Process analysis. For example, in 2030 the Surface and Transit Hybrid had approximately 35,000 more vehicles per day on I-5 than the other three alternatives. The analysis completed for the Partnership Process focused on transportation conditions in the year 2015, and the analysis presented in the 2010 Supplemental Draft EIS focused on the project's design year of 2030. For reasons identified in the 2010 Supplemental Draft EIS, analyzing the I-5, Surface and Transit Hybrid in 2030 showed this concept did not meet the project's purpose and validated the rationale for not evaluating this concept further. Details of that traffic analysis were

B-004-007 The existing street grid in this area is not well connected, and there are not many viable routes. Some of the streets are narrow, historic, physically fragile, and pedestrian oriented, and not suitable for use as access roads to a highway interchange.

This EIS must describe in more detail the traffic volumes that are expected on specific streets around the southern interchange, both without tolling and with it. How many cars will use Alaskan Way, First Ave, Second Ave, and Fourth Ave? What revisions will WSDOT make to these streets to make room for all these cars, and for pedestrian traffic crossing First Ave? What are the impacts, in detail, of these solutions? How will this affect the pedestrian character of the streets? How will it affect on-street parking and the viability of retail? Are these historic streets, built on fill and supported by 100-year-old areaways and retaining walls, physically capable of carrying this much traffic? How will the proposed changes to these streets affect the viability of travel by bicycle? If the impacts to transit are unacceptable, what alternative solution or mitigation is being offered?

B-004-008 In general, what alternatives or mitigation are being considered—such as additional transit, or routing away from the Historic District and improvements to pedestrian rights of way—to minimize the untenable impact of adding at least 50,000 vehicles, and perhaps more (if the project is tolled), to our local streets? And what impacts do these possible solutions bring?

Concerns about the significant impacts of heavy concentrations of traffic on Pioneer Square streets caused by the preferred alternative were raised by neighborhood stewards over a year ago. It is misleading for this draft EIS to not provide decision makers more detail on these problems, and possible solutions, within this draft EIS.

Physical Risks to Historic Resources

B-004-009 Boring a tunnel next to our historic district, with its historic buildings, fragile and brittle infrastructure, high water table, and unstable soils, is a steep engineering challenge. This EIS describes the risks of digging and boring in this location (Ch 5, pg 126), possible damage to 12 historic structures (Ch 2, pg 31), and possible collapse or dramatic damage to two buildings during construction (Ch 6, pg 142), and mentions measures to protect structures. But many important issues remain unaddressed.

What damage could soil settlement from tunnel boring cause, specifically? Will residents and users of those buildings be at risk of harm? Will Pioneer Square's unique but delicate areaways —its historic Underground—be at risk?

What buildings specifically will be required to have their supporting soil improved with jet grout? What impacts will that have on the use of their Underground portions? What sidewalks will be closed, what streets will be closed, what basements will be altered, what areaways will be temporarily or permanently affected?

Some of the "solutions" proposed actually exacerbate other problems, but these impacts are not disclosed or assessed.

provided in Attachment A of Appendix C to the 2010 Supplemental Draft EIS.

The Final EIS Appendix W, Screening Reports, includes the updated Surface and Transit Scenario Year 2030 Analysis Results. Chapter 2 of the Final EIS discusses the alternatives development process and screening analysis.

B-004-003

The Final EIS Chapter 1, Introduction, describes the Purpose and Need for the project and one of several purposes is to provide capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle. The build alternatives would result in enhanced mobility to activity centers in both the south and north portal areas and beyond, particularly to the SODO commercial and business district and the stadium area. Overall, the infrastructure improvements in the north portal area would improve truck freight mobility and vehicle and pedestrian connections. Both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the city's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

B-004-004

A detailed tolling analysis has been conducted for all alternatives and is described in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements. The potential effects resulting from these preliminary analyses represent the conservative end of implementing tolls on the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

B-004-010 Because the water table is quite close to the surface in this neighborhood, there is risk that the solidification of soils—due to tunnel walls, retained cuts at the portals, and the injection of jet grout under buildings—might alter natural water flows, create a water barrier, and cause water to back up (Ch 5, pg 127). What exactly is the risk of potentially submerging subsurface structures? Which structures? Will decayed and fragile underground water and sewage infrastructure be at risk of failing? What is the risk of basements flooding? Many of these basements are occupied, either by functioning retail or other business uses. Some are part of the historic Underground, which is a popular visitor attraction, occupied at times by hundreds of visitors. What will WSDOT do to protect against flooding events?

Duty to Obtain Important Information

B-004-011 SEPA and NEPA require your agencies to identify information gaps and fill them, especially when that information is important to making a reasoned decision. Some of the issues identified in this letter will not be easy to address. But considering the magnitude of the possible impacts, your duty to acquire important information compels you to do the studies necessary to answer these critical questions. State and Federal agencies involved in this project must not make such irrevocable decisions without benefit of the required critical information identified above.

Process Issues

This letter has identified many issues that have not been addressed adequately or at all in your draft document, and notes the absence of reasonable alternatives. Including this missing analysis for the first time in the FEIS deprives the community and public agencies of the opportunity to comment on a draft version of this important information. Another draft containing the missing alternative and missing impact analysis should be prepared.

We are deeply troubled by the focus on your preferred alternative before the environmental review process is complete.

When the EIS is complete, decision makers should have a *real* opportunity to choose between alternatives. If one alternative has been developed to a far greater extent than the others, you leave decision makers with little genuine choice—or, at minimum, you skew the choice severely in favor of the more fully developed alternative.

That seems to be precisely the process you are using here. You have spent tens of millions of dollars engineering the tunnel option to the 30% level. You have solicited, received and now awarded a bid for construction of the tunnel. You have taken a host of other actions making it all but impossible for a decision maker to choose any alternative other than the tunnel.

You must move the other alternatives far enough along so that when the FEIS is released decision makers have real options, not simply the option of approving a *fait accompli.*

Summary

B-004-012 I've been advocating for Pioneer Square for the last 24 years or so. I have participated in legions of projects related to my favorite neighborhood. Today, I'm concerned for Pioneer

Currently, the Washington State Department of Transportation does not have the authority from the Washington State Legislature to toll SR 99. As legislative action is required to toll this facility, the evaluation of the non-tolled Bored Tunnel Alternative in the 2010 Supplemental Draft EIS accurately reflected the status of the project. The 2010 Supplemental Draft EIS evaluated the potential effects of three toll scenarios in Question 6 of Chapter 9. If the Washington State Legislature decides to use tolling to fund a portion of the project, the potential effects of tolling do need to be evaluated and documented. Therefore, the Final EIS evaluates the potential effects of the build alternatives with and without tolls.

B-004-005

The function of the downtown ramps at Columbia and Seneca Street will be replaced by new ramps to Alaskan Way at King Street. Traffic analysis indicates that this arrangement will 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.

A detailed tolling analysis has been conducted for all alternatives and is described in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements, including event traffic.

B-004-006

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below)

B-004-012 Square's survival. I am asking you, please, to take special care of our beloved historic district, its buildings, streets, areaways and sidewalks, as you make decisions on this project.

Pioneer Square is a beautiful and cherished neighborhood, and has irreplaceable historic value to the city of Seattle. Preserving our lovely thoroughfares has not been easy. Every generation of stewards has devoted significant attention to protecting our streets, whether by saving the majestic plane trees on First Ave or carefully guiding façade renovations or doing the hard work to ensure ferry traffic is routed away from our neighborhood streets.

The risks and harms to Pioneer Square mentioned in this DEIS might truly be overwhelming. The traffic generated—certainly 50,000 cars a day, and likely more with tolling—by placing a massive highway interchange in our neighborhood could ruin our fragile neighborhood and our connection to the new waterfront.

The DEIS acknowledges the traffic impacts are "unacceptable." It acknowledges that the absence of tunnel entrances and exits in the downtown core, combined with the effects of tolling required by the State's statutory funding plan, will divert to surface roadways over half the trips which currently use the viaduct. Yet the EIS refuses to disclose the full scope of these impacts and minimizes their adverse effects, treating the increased congestion more like an accounting problem than an assault on the integrity of Pioneer Square. Compounding the problem, the DEIS discusses mitigation measures as if funding were available for them, totally misleading most readers who are not aware that there is no funding available for these measures. The EIS should candidly disclose the likelihood (or not) of funds being available for critical mitigation measures. City and State decision makers deserve immediate clarity on exactly how WSDOT intends to "improve" our local street grid. These "solutions" should be included for analysis in this EIS.

B-004-013 Two historic buildings might need to be torn down, and twelve others could suffer damage. The flooding risks caused by the project's inability to prevent changes to ground water flows could put some of the over 100,000 annual visitors to the Underground Tour, and the neighborhood, in danger.

It is our collective responsibility to protect the pedestrian environment, streets, and physical fabric of the historic district, including our Underground areaways. Our neighborhood is counting on City and State decision makers to ensure highway-bound traffic is not routed through our streets, to negotiate excellent design for local streets that must be altered, and to secure adequate funding for successful completion. We are counting on the City and State decision makers to ensure the historic buildings and Underground are safe from damage, and Pioneer Square residents and visitors are safe from risks. Pioneer Square must not only survive WSDOT's tunnel project, but emerge on the other side stronger.

Thank you,

Sunny Speidel
President, CEO
Bill Speidel Enterprises Inc.

should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also

implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

B-004-007

Because operational effects of the build alternatives would be substantially better than the Viaduct Closed (No Build Alternative), long-term transportation mitigation measures are not anticipated. However, a number of mitigation measures in place during construction could have benefits over the longer term.

As part of the preferred Bored Tunnel Alternative and related projects, the lead agencies have or will implement several strategies to keep traffic moving during construction. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the city's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses. WSDOT will prepare a traffic management plan, which will contain localized traffic mitigation measures. These measures will be developed as construction details are refined. Mitigation measures are described in Chapter 8 of the Final EIS and Chapter 6 of Appendix C, Transportation Discipline Report.

A detailed tolling analysis has been conducted for all alternatives and is described in this Final EIS. Additional detailed analysis of tolling impacts is described in Chapter 7 of Appendix C, Transportation Discipline Report. Chapter 5 of the Final EIS compares conditions on local streets south of S. King Street, between King Street and Denny Way, and north of Denny Way. As part of the Bored Tunnel Alternative and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion.

WSDOT funded Intelligent Transportation System (ITS) investments provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that are likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management have also been implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to monitor and provide input to this analytical and decision-making process, including identification of strategies considered for alleviating diversion impacts.

B-004-008

Because operational effects of the build alternatives would be substantially better than the Viaduct Closed (No Build Alternative), long-term transportation mitigation measures are not anticipated. However, a number of mitigation measures in place during construction could have benefits over the longer term. Refer to Chapter 8 Mitigation in the Final EIS for details.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies to keep traffic moving. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR

99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses. WSDOT funded Intelligent Transportation System (ITS) investments provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that are likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management have also been implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

B-004-009

The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the *Secretary of the Interior's Standards for Rehabilitation of Historic Properties*.

The Bored Tunnel alignment is some distance from Pioneer Square's areaways and no impacts on them are anticipated. The areaways are included in the monitoring program; instrumentation has already been installed in First Avenue areaways. The areaways are discussed in more detail in Chapters 4 and 6 of Appendix I of the Final EIS.

B-004-010

Measures that can be employed to mitigate the risk of groundwater mounding behind tunnel walls or ground improved areas are outlined

in Appendix P, Earth Discipline Report, of the Final EIS. The level of detail provided in the Earth Discipline Report is appropriate for environmental review purposes. The risk of groundwater mounding and associated mitigation will be further evaluated during final design of the project. Design guidelines will provide for mitigation of groundwater mounding to within existing tidal fluctuations.

B-004-011

Through the course of project development, all reasonable alternatives have been evaluated as required by NEPA and SEPA regulations. Chapter 2 of this Final EIS and Chapter 3 of the 2010 Supplemental Draft EIS provide substantial information on alternatives development and how the preferred alternative was identified.

Issues previously addressed in this letter are addressed in preceding comment responses.

B-004-012

The lead agencies are well aware of the potential impacts to the Pioneer Square area and are committed to reducing or mitigating them to the extent practical. Mitigation costs have consistently been included in overall project costs. WSDOT and the City of Seattle will continue to work closely with the Pioneer Square community and others who may be affected by the project as planning continues and throughout construction.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals

and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

WSDOT funded Intelligent Transportation System (ITS) investments provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that are likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management have also been implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

B-004-013

There are no longer any historic buildings expected to be torn down with the preferred Bored Tunnel Alternative. WSDOT has defined a program of protective measures for the Western Building that would protect the building by constructing structural reinforcements and bracing for the interior and exterior of the building. The building would be unavailable for approximately 12 to 20 months during the construction period.

Because traffic in Pioneer Square is controlled by signals, it is not anticipated that the increased traffic volume will affect the pedestrian character nor will it make it more difficult to walk to shops or

restaurants. Pioneer Square has historically been an active place with a high volume of traffic. Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse onto several streets such as S. Royal Brougham Way, Alaskan Way, First Avenue, Fourth Avenue, etc.

Please see the Final EIS Appendix C, Transportation Discipline Report for the transportation analysis. The Bored Tunnel alignment is some distance from Pioneer Square's areaways and no impacts on them are anticipated. The areaways are included in the monitoring program; instrumentation has already been installed in First Avenue areaways. The areaways are discussed in more detail in Chapters 4 and 6 of the Final EIS Appendix I, Historic, Cultural, and Archaeological Discipline Report.

December 15, 2010

Angela Freudenstein
AWV Replacement Project SDEIS
Washington State Department of Transportation
999 Third Avenue, Suite 2424
Seattle, Washington 98104

Via email attachment: freuda@wsdot.wa.gov

Re: Comments on second SDEIS for the Bored Tunnel Project

Dear Members of the Project Team:

The Seattle Mariners appreciate the opportunity to provide input to the AWV replacement program – bored tunnel project. The following comments are made on behalf of the Mariners and over 31 million baseball fans that have attended baseball games, and the hundreds of thousands of others who have attended non-baseball events, at Safeco Field since opening in 1999. We look forward to continuing our work with the project staff to ensure that the Alaskan Way Viaduct Replacement Project moves quickly to successful completion.

B-005-001

We have previously commented on scopings and earlier EIS drafts, (2003, 2007, 2008, etc.) covering various projects within the AWV program. We have, however, continuing concern with the issues of access and parking that we do not believe have been fully acknowledged or adequately addressed. In particular we are concerned with statements in the current SDEIS that seem to deny a problem has developed due to the multiple phases/projects of the AWV replacement program. Using parking inventory as an example, in the various documents where losses were documented in earlier project phases, and which losses could theoretically have been returned to use if the bored tunnel project

B-005-001

The project team recognizes the ongoing concerns of the Seattle Mariners and the Washington State Major League Baseball Stadium Public Facilities District with respect to parking and we appreciate your comments. The Final EIS takes previous parking losses into account with respect to the environmental documentation for the S. Holgate to S. King Street Viaduct Replacement Project. For instance, the S. Holgate to S. King Street Viaduct Replacement Project assumed that 200 spaces could be replaced on the WOSCA site. Although those spaces are currently gone, this Final EIS counts the 200 spaces as a removal beyond that caused by the S. Holgate to S. King Street Viaduct Replacement Project because they could have otherwise been replaced at the completion of that project.

Although parking mitigation measures would be most needed during construction, many of them could be retained and provide benefits over the longer term. Specific parking mitigation strategies have not yet been determined, but the project has allocated $30 million for parking mitigation. The parking mitigation strategies will continue to evolve in coordination with the project and community partners. Parking measures under consideration are listed in Chapter 6 of the Transportation Discipline Report (Appendix C of the Final EIS).

B-005-001 did not move forward, they are not acknowledged in the current SDEIS. Accuracy in documenting the total program-related parking loss of over 1400 spaces is critical not just to the event facilities but to the Port of Seattle, businesses, residents, visitors and even to the program itself. Understanding and documenting in a concise manner the compounding of impacts must ultimately transition into a plan to permanently replace the lost parking.

B-005-002 Of additional concern to the Mariners is the continuing inclusion of statements within the document regarding the availability of public transit to events. Based upon current federal regulation, neither Metro nor Sound Transit are able to provide any additional transit service to substitute for lost parking capacity for the events facilities. On page 120: "Event-goers would continue to be encouraged to use bus and rail service and to carpool to the stadiums." While this somewhat accurate, nothing in the Safeco Field TMP states nor implies that regular route transit service is in any way adequate to provide anything more than a very small supplemental transportation opportunity. If event-goers were, because of a loss of parking, aggressively directed to use the available regular route service the impacts on commuters could become severe, especially during the late evening hours when service is extremely limited. The document also fails to understand or recognize that rail service is only available for a small number of weekend baseball games, and never available for night games (the vast majority of games). Finally, the statement that the Safeco Field TMP has "transit-related goals" is totally erroneous. Assuring that the ballpark's access needs are maintained during the bored tunnel project cannot be addressed by assuming transit agencies will pickup the slack when there is no plan and no ability of those agencies to do so.

Construction Phase Issues

Conditions during construction, as portrayed in the current SDEIS document, which already produce, and will continue to produce, adverse impacts on Safeco Field include (1) transportation of spoils and materials, (2) construction worker parking, (2) traffic detours, (3) loss of event parking.

Transportation of Spoils and Materials

B-005-003 We understand that the contractor will complete the design of the transportation system for the bored tunnel project. We do note, however, that Edgar Martinez Dr. S. was specifically identified in the SDEIS as a primary or preferred transportation route. While that street provides a direct route to freeways, it is also the primary vehicle route, and second major pedestrian access route, for events a both Safeco Field and Qwest Field and Event Center.

Approximately 30% of the pedestrians coming to games at Safeco Field arrive from parking locations south of Royal Brougham. With approximately 2000 cars parking in the Safeco Field Garage representing approximately over 6000

B-005-002

Additional King County Metro transit service will be provided as part of construction mitigation. While some added travel time would be incurred by buses during construction, transit operations would still be maintained. The project would not support ongoing transit expansion after construction is completed. Improvements to the speed and reliability of transit service will also be supported by the project and continue to be in place after construction is completed. Following construction of this project, transit service enhancements by other agencies are expected in downtown Seattle; for example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

B-005-003

To maintain acceptable operation along the S. Atlantic Street corridor (including Edgar Martinez Way) between E. Marginal Way and Interstate I-90, the following limitations on the Bored Tunnel Alternative construction haul traffic would be imposed:

- AM and PM peak hour (6:00 to 9:00 am and 3:00 to 7:00pm on weekdays) – Construction haul traffic entering and exiting the South Portal area shall be limited to 15 trucks per hour in each direction.
- Midday (9:00am to 3:00pm on weekdays) – Construction haul traffic entering and exiting the South Portal area shall be limited to 30 trucks per hour in each direction.
- Weekend event peaks (from 2 hours in advance to 1 hour following a scheduled event with more than 15,000) – Construction haul traffic entering and exiting the South Portal area shall be limited to 15 trucks per hour in each direction.

B-005-003

pedestrian crossings, and up to an additional 8000 additional pedestrian crossings from other south end parking locations (probably representing an additional 2500 vehicles), for a full house event, the importance of Edgar Martinez Drive S. to the functioning of Safeco Field cannot be underestimated. This access need is not limited to just 81 baseball games per year since Safeco Field Garage is also under covenant to Qwest Field and Event Center for event parking, including 10 or more professional football games, 20 or more soccer games, concerts, flat shows, and during 2012 all Husky home football games.

We must also note that 1200 trucks also use Edgar Martinez Drive to get to the Port of Seattle, with which said pedestrians and vehicle drivers mentioned above must already contend. Plus a growing number of p.m. peak commuters use Edgar Martinez Drive to access I-90.

Planning for the movement of trucks that will support the project must address and protect the existing use of Edgar Martinez Drive South by event-goers in terms of ingress and egress of the area by vehicles, and the final movement of pedestrians to and from the ballpark from parking locations. These movements must be accommodated in the time frames and variable event durations consistent with the operations of these major event facilities. Attempting to address the access needs of Safeco Field cannot be done by subjectively adding an untested number on top of commuting movements. Event movements are categorically different, frequently overlap with commuter movements, move in different directions and further intensify competition for access to and through the ballpark area.

Construction Worker Parking

B-005-004

Earlier conversations with project staff indicated that construction worker parking would not interfere with surrounding businesses, including the event facilities, and that a construction TMP had been prepared to address this issue. It was startling, therefore, to see on page 33; "Construction workers who are not able to park within the construction zone may seek available long-term parking in the area, first pursuing on-street spaces, and then pay lots away from the jobsite." It further goes on to say construction workers would be prohibited from parking in the area of the construction zone, however, that gives no comfort to the event facilities who rely on parking in a broad area around the facilities – a fifteen minute walk or 6000 feet being the historically identified distance. There is no description in the document of what the "construction worker exclusion zone" would include or how the ballpark would be effectively protected since no inventory of parking was completed.

Traffic Detours

B-005-005

To date, the traffic working group has addressed issues with the AWV Holgate to King project. So far, it has worked well, however, on-street disruptions and

B-005-004

Specific parking mitigation strategies have not yet been determined. One strategy under consideration is requiring a Construction Worker Parking Management Plan for the general contractor that would specifically address minimizing the negative effects of construction workers seeking parking near the work sites. This plan would be developed in conjunction with the contractor as construction plans are refined.

B-005-005

The lead agencies acknowledge the desire to establish during construction of this project a traffic working group similar to the one established for the S. Holgate to S. King Viaduct Replacement Project, as referenced in this comment. Continued coordination will occur with the Mariners and other affected businesses in the project area during construction, but it has yet to be determined if that coordination would include a working group. This is a decision that will be made closer to the time of construction.

B-005-005

detours and work during summer high-event seasons, has not been a major part of the discussions. We look forward to a continuation of this working group. We must reiterate the need for ongoing and complete analysis of construction impacts over a broad area if the work of this group is to be meaningful in terms of accommodating event traffic.

Loss of Event Parking

B-005-006

The 2010 SDEIS only addresses the additional loss of parking caused by the bored tunnel project. This is an inaccurate reflection of the total loss of parking which commenced with the AWV Holgate to King Project but continues through the bored tunnel project. While there is a desire to separate the additional loss from the original loss, parking lost in the south end project continues to be lost in the bored tunnel project. In theory, some of the spaces lost in the earlier Holgate to King phase could have been returned to use if the bored tunnel project did not proceed. If these are truly separate projects the cumulative loss should be re-addressed and acknowledged in the bored tunnel project and the total program-related cumulative impacts revealed. This loss is not inconsequential.

It should be recognized that the number of event parking spaces actually lost on the WOSCA site is not reflected on page 120. Many of the spaces on that site were located inside the demolished terminal building and those have not been included. A count of the number of exterior parking spaces from aerial photographs shows that the WOSCA site had a total of well over 800 outside parking spaces on event days (Royal Brougham to Dearborn, First to ferry holding lanes). Even if the numbers in the first project EIS and the current SDEIS were added together they would not add up to the actual total parking that was historically available on that site. The Union Pacific site (tail track site) south of Royal Brougham, also contributed a substantial amount of parking – over 400 spaces on event days - which was also included in the south end project and not reflected in the overall program related loss. In theory a substantial portion of that parking could also have been returned to use if the bored tunnel project did not proceed and therefore should have been accounted for in the bored tunnel project as additional spaces lost.

A review of historic documents will show that the design day parking need for Safeco Field is 14,400 parking spaces. Again on page 120 the document incorrectly includes parking that is no longer available (Home Plate Lot) and acknowledges that the major nearby lots and garages only supply 6,900 spaces (minus the 300 at Home Plate Lot, 6,600 spaces), and says there is other parking available but does not go into any analysis of where the other parking spaces are located, only making a vague reference to there being some other parking available somewhere. The 6,600 spaces identified only represent 46% of the total spaces needed. Without an analysis it is not adequate or accurate to portray or assume any remaining parking supply is there, is adequate, or where it is located is accessible to the ballpark.

B-005-006

Fewer than 300 parking spaces in the south portal area would be affected during project construction compared to spaces currently available. The spaces already removed and accounted for in the S. Holgate to S. King Street Viaduct Replacement Project environmental documentation are considered, by definition, an existing condition for the purposes of the analysis conducted for the Final EIS.

The parking spaces that could have been replaced after S. Holgate to S. King Street Viaduct Replacement Project completion were accounted for in the Supplemental Draft EIS and continue to be reflected in the Final EIS. The S. Holgate to S. King Street Viaduct Replacement Project Environmental Assessment showed 794 parking spaces on the WOSCA site that were affected by that project. Several hundred more spaces were identified on the parcels to the south of WOSCA. Approximately 200 parking spaces could have been replaced on WOSCA but are precluded by the Bored Tunnel Alternative so have been counted as a parking loss for the Bored Tunnel Alternative.

B-005-006 Understanding parking impacts developed and compounded through the duration of the entire program must ultimately transition into a plan to replace the lost parking to meet the needs of the event facilities. As has been stated in the letter from the Public Facilities District, the WOSCA site post-project should be reviewed as a viable location for replacement parking.

Operational Phase Issues

Traffic Increases

B-005-007 The placement of an interchange at Royal Brougham/Atlantic during construction of the south end project will bring new traffic into close proximity of Safeco Field and Qwest Field and Event Center. There will be a significant increase in surface street traffic when the bored tunnel portion of the program is completed due to the loss of CBD ramps. Once the new roadway is in operation the competition for available roadway near the ballpark will intensify substantially under "normal" circumstances. The impact of that additional traffic on access to the ballpark was only given a rudimentary review for the south end project. Prior to moving forward, the bored tunnel project must understand the severe bottleneck that will develop near the stadiums due to increased peak commute use of First Avenue and Edgar Martinez Drive and develop a plan to address this issue. Measures to mitigate new bored tunnel-related traffic impacts on the operations of this regional event facility must be provided.

Transit

B-005-008 Similar to the statements made in the construction period section of this letter, none of the transit agencies can supply enhanced capacities for events, and none have made any plans to do so. Any statement made in the SDEIS that implies that any more than a small number of event-goers can come to, or go home from, these facilities via transit is erroneous. These mis-statements can seriously harm the ballpark but would also harm commuters who would find themselves competing for space on already full coaches late in the evenings – left at bus stops for extended periods of time because buses would become overloaded. At a time when the transit agencies are preparing to cut service, unless and until the transit agencies provide specific, approved plans to provide additional transit service to the event facilities it is misleading and irresponsible to make statements about transit service to the major event facilities anywhere in the SDEIS document.

Parking

B-005-009 As stated in the construction section above, the project documentation has created a misleading "analysis" of the parking loss in the stadium area. In fact,

B-005-007

As an on-going task for the overall planning and design effort, the project team will continue to communicate and coordinate with the Mariners and Seahawks organizations as well as the affected SODO businesses to ensure that reasonable measures are in place to accommodate all trip activities even during large sporting events. The proposed Stadium Area ramp connections to/from the north would essentially relocate the existing First Avenue S ramp connections to the frontage road at S. Royal Brougham Way. Therefore, traffic volumes on S. Atlantic Street or S. Royal Brougham Way east of First Avenue S. would not be expected to substantially change, even for larger sporting events at Qwest Field or Safeco Field. However, it is recognized that the revised SR 99 connections to/from the north and new SR 99 connections to/from the south will result in changes in travel patterns, redirecting some traffic from First Avenue S. to the frontage road and sections of S. Atlantic Street and S. Royal Brougham Way west of First Avenue S. It is also recognized that the removal of downtown ramps for the Project would add traffic to the SODO area. Steps would be taken to develop a suite of measures (detour routes, road closures plans, signage plans, etc.) that may be used to address high concentrations of traffic during major south-end events.

B-005-008

The lead agencies acknowledge that event goers arrive at Safeco Field via several modes and transit is one component. Additional King County Metro transit service will be provided as part of construction mitigation. While some added travel time would be incurred by buses during construction, transit operations would still be maintained. The project would not support ongoing transit expansion after construction is completed. Improvements to the speed and reliability of transit service will also be supported by the project and continue to be in place after construction is completed. Following construction of this project, transit service enhancements by other agencies are expected in downtown

B-005-009

there has not been an analysis of the impact of the loss of parking on the event facilities. This issue is further exacerbated by the erroneous assumption (see "Transit', above) that event-goers would have the option to switch to transit, where no transit option exists, and none is planned. To mitigate for the loss of over 1400 parking spaces (10% of the parking needed to support Safeco Field), the project needs to identify and set aside a new parking location nearby to where the parking was removed to serve the event facilities. We suggest the option to develop the remaining property at the WOSCA site at the end of the construction project should be considered.

We also note that the Washington State Major League Baseball Stadium Public Facilities District, "PFD", the owner of Safeco Field, has submitted a separate comment letter. The Mariners have reviewed that comment letter and join in the concerns and issues raised by the PFD.

Thank you again for this opportunity to comment on behalf of the regional event facilities, baseball fans, and the hundreds of thousands of others who have enjoyed coming to Safeco Field. We look forward to future opportunities to work with the project team on impacts, alternatives and mitigation measures related to Safeco Field. If you have any questions please contact me at (206) 346-4236 or by mail at: Seattle Mariners, PO BOX 4100, Seattle, WA 98194.

Sincerely,

Susan K. Ranf
Director of Transportation and Neighborhood Relations

cc: Bart Waldman, EVP and General Counsel, Seattle Mariners
Tom Backer, Counsel, Public Facilities District

Seattle; for example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

B-005-009

As documented in the Final EIS, fewer than 300 parking spaces in the south portal area would be affected during project construction compared to spaces currently available. Specific parking mitigation strategies have not yet been determined, but the project has allocated $30 million for parking mitigation.

The lead agencies acknowledge that event goers arrive at Safeco Field via several modes and transit is one component. Additional King County Metro transit service will be provided as part of construction mitigation. While some added travel time would be incurred by buses during construction, transit operations would still be maintained. The project would not support ongoing transit expansion after construction is completed. Improvements to the speed and reliability of transit service will also be supported by the project and continue to be in place after construction is completed. Following construction of this project, transit service enhancements by other agencies are expected in downtown Seattle; for example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

Richard Edwards, 2734 57th Avenue Southwest, Seattle, 98116.

H-001-001

MR. EDWARDS: My comment is: Many West Seattleites love driving on the viaduct. Its days are numbered, and it must be dealt with. I'll get to the point. This project, the deep bored tunnel, makes sense. It's expensive. Any option is expensive, but it makes sense.

It makes sense because all other options consign our city to a decade of gridlock and disruption, commerce brought to a crawl. This project makes sense because it creates a seamless transition between the northern and southern halves of our city, taking pressure off the streets that serve Magnolia, Ballard, Green Lake.

This project makes sense because it will employ many construction workers, like myself. I'm a laborer with Local 440, and I might just get a few years of work out of this project. And those salaries will revitalize -- help revitalize our economy. I will spend most of my money in West Seattle, where I live.

But more importantly, this project makes sense because I love my city. I want a functioning city that's also a pleasant place to be, and this project, deep bored tunnel, serves both those purposes by creating that transition from north to south while opening up some possibilities of green space on our waterfront and making that a pleasant place to be for humans.

Also, this project makes sense because it's the only project -- the only option that allows commerce and traffic to continue flowing while it is being built, thereby minimizing the disruption when the viaduct does

H-001-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

H-001-001 come down, because this tunnel will be up and running. That, to me, makes sense, and, as a Washington state taxpayer, I'm willing to pay for that.

(End of comment.)

Michael Campbell, 813A Second Avenue North, Seattle, 98109.

H-002-001 MR. CAMPBELL: I'm for it.

(End of comment.)

H-002-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

H.E. "Bud" Shasteen, 7333 39th Avenue Southwest, Seattle, 98136.

H-003-001 MR. SHASTEEN: I am with the Stop The Tunnel group, and we still are very active in trying to get the alternative that we preferred, we think would be a lot more reasonable and a lot less trouble for people, and that is retrofitting the present viaduct. And we think that it would be a lot less expensive for the people; don't see how the people of Seattle can afford this.

(End of comment.)

5

H-003-001

The Final EIS Chapter 2, Alternatives Development, describes environmental documentation that occurred prior to the 2010 Supplemental Draft EIS, including the screening criteria used to develop the alternatives evaluated in the environmental process for this project. The alternatives development process included evaluation of the Rebuild Alternative. After studying several retrofitting concepts, the lead agencies found that rebuilding the viaduct would not be cost effective or a prudent use of public monies. Therefore it is not a reasonable alternative. Instead, the elements of the Rebuild Alternative have been incorporated into the Elevated Structure Alternative, which was considered in the Final EIS.

John Jovanovich, 11227 18th Place Southwest, Seattle, 98146.

H-004-001

MR. JOVANOVICH: I'm really opposed to tearing down that viaduct for the simple reason it's a hell of a good design. You can get on that -- I use the viaduct a lot in our business. We use it sometimes maybe 10 times, 15 times a week. And it's so handy if you've got business downtown. You can get off right in the middle of town. You can go down to the stadiums. You can go north into that part of Seattle, and you can continue on. If you want to go to the Seattle Center, you can get off -- I forget the street you get off, but it takes you right -- Harrison takes you right up to Seattle Center. If you want to go to Ballard, you just continue.

And I feel very strongly -- I've spent 18 years in construction -- that that viaduct could be retrofitted, and I don't think they did enough research into taking that avenue. And there's several concepts that could have been studied, and one that kind of intrigues me is suspending the viaduct, in case of an earthquake. It would be like the Tacoma Bridge, with the cables down there holding up the deck.

And so I think the design is poor when you compare it to the viaduct. And I think that there's going to be a lot of angry voters if the tunnel starts causing problems: gridlock, and especially money problems. And these big projects like this do run into money problems, and money is in very, very short supply, and the Governor should know that.

H-004-002

And I just want to voice my displeasure about the way they're going about this. They're just going to ram it down everybody's throat without real big ideas and without a vote of the people. I don't think that the

H-004-001

The Final EIS Chapter 3, Alternatives Development, describes environmental documentation that occurred prior to the 2010 Supplemental Draft EIS. This included evaluation of the Rebuild Alternative. After studying several retrofitting concepts, the lead agencies found that rebuilding the viaduct would not be cost effective or a prudent use of public monies. Therefore it is not a reasonable alternative.

H-004-002

Following the 2007 public advisory vote rejecting both a cut-and-cover tunnel and an elevated structure replacement, WSDOT, King County and the City of Seattle began an open and transparent public process to review options for the Alaskan Way Viaduct's central waterfront section.

The agencies assembled a Stakeholder Advisory Committee of almost 30 people, representing neighborhoods, business and freight interests, labor groups, and environmental and other cause-driven organizations to review options; hosted public meetings to share the committee's process; and sought public input.

As we initially evaluated surface and elevated options, many of the stakeholders expressed concerns about how such options would affect the waterfront as a place for people and maintain mobility in and through downtown both during and after construction. The proposed bored tunnel was seen by many as the solution that would best balance all of these goals.

In 2009, following this process, the Governor, then-King County Executive, then-Seattle Mayor and Port of Seattle CEO recommended the bored tunnel as the replacement. The Washington State Legislature passed legislation that endorses the bored tunnel and provides the budget authority necessary for its construction, and Governor Gregoire signed the bill into law. The Seattle City Council also voted unanimously

H-004-002 elected officials of one city and the county should have the power to go into a project of this size without a vote of the people, because the people are the one -- the people are the government, and they should have put that on the ballot. They put the first, open-ditch, tunnel on the ballot, and it was voted down pretty strongly.

H-004-003 And I don't know, can I make one other gripe? Okay. Well, I just wrote her a letter about fisheries. I'm in the business of selling commercial fishing equipment. And they've got a -- Washington Department of Fish and Wildlife is made up, very strongly, of sports-oriented people, and they are running the show. And I think she's getting her information that's very, very biased, and she doesn't really know what's actually going on.

I have nothing against sportsmen. We could have plenty of fish if the Department was run right. They got rid of the best Fisheries director we ever had, and he had great ideas. And the guy was a scientist, and his ideas were simple ideas but solid.

And I quote him. He said, "No matter how many spawners you get on the spawning ground, we're not going to bring the salmon back if the offspring of those spawners are killed in the fresh water. And we've been trying for 10 years to get a bill through the Legislature, and I've worked really hard on that, to prohibit wading.

It would not prohibit fishing, but it would prohibit wading on the spawning grounds until the eggs are hatched and the spawning activities are over. And so then the recreational people can go -- whatever they do in the river, swim or whatever.

But her campaign literature -- and I sent her a copy of this -- stated

to authorize the Mayor to sign a memorandum of agreement that outlines the State and City's responsibilities for the viaduct replacement program, including the proposed bored tunnel.

H-004-003

The preferred Bored Tunnel Alternative would improve water quality compared to existing conditions because stormwater runoff would be treated prior to being discharged. Treating stormwater runoff prior to discharge would reduce potential effects to fish, wildlife, and vegetation resources compared to existing conditions. Please see the Final EIS Chapters 5 (Permanent Effects) and 6 (Construction Effects) for current information about impacts to fish.

H-004-003 that the spawning grounds are now being protected. And I told her in my letter they're not being protected and never have been adequately protected, and that's why we don't have any salmon.

50 years ago, there were very few people in this state, probably around a million people. Now, we have six and a half million people. Six and half million people, and they have these -- all kinds of equipment -- high-powered motorboats that go up the rivers, and they have a force that will blow apart any nest of incubating eggs that they pass over. And when they're drifting down the river, the boat is drifting too fast to fish the way they like to fish certain holes. Then they'll throw the anchor over the back end of the boat to slow the boat down, and any nest in the path of that anchor is going to be destroyed. And there's no evidence of the nest being there because, when the eggs float up and float away, the trout eat them.

And let's see. Did I talk about the money that's being lost?

Okay. Well, I pointed that out in my letter, but I would appreciate it if I could get this to her too. Sportsmen, as an example. For the spring chinook salmon run on the Columbia River, the sportsmen got an allocation, and I don't believe in allocations. I believe in the rights of sportsmen. Everybody should have the right to fish, whether it be commercially or for recreation.

Anyway, they got 75 percent of the harvest of that fish. And for the price of a sports-fishing license and, if they go out on their own boat, they can go out and catch one or two fish, whatever the quota is. So they're getting 20 -- the commercials get $10 a pound for those fish on the grounds,

H-004-003

not dressed, with the head on; and the eggs are very valuable too. And if they catch a 30-pound salmon, that's worth, on the spawning -- or on the river, $300, they get $10 a pound for those fish.

And if you go to the market -- the average person goes to the market to buy a piece of that fish, if it's available -- and if there's no commercial fishing, it's not going to be available. It's going to be available only to the person that can afford to go down there and afford to have equipment or his own boat or go on a charter boat.

And so I pointed out to her that commercially caught fish are taxed. I believe it's 5.4 percent for king salmon and chinooks. They are the prized fish. And I believe that sports-caught fish should be taxed just like commercially caught fish. And if they got 75 percent of the sports-caught fish or of the Columbia River spring chinooks, that could run into millions of dollars of tax money.

Plus that would include -- if you -- if you would charge those people -- let's say those fish are worth $10 a pound on the grounds to the fisherman -- they should be worth at least $3.00 a pound to a sportsman. I would gladly pay $3.00 a pound for one of those choice kings.

And what the Governor -- I believe the Governor is not aware of this. There's a group that was formed down in Texas, and the head person that formed that group was none other than the big -- the -- I guess you would call him the executive director of Exxon, and their goal was to get rid of all commercial fishing in the Gulf, and that includes Texas, Georgia, Louisiana, and Florida.

There are no commercial fishing with nets in the Gulf, and now the ploy

H-004-003 is to try to eliminate the commercial net fishing on the Columbia River. They want to go back to methods of harvesting salmon that they outlawed way back in the early 1930s, with fish wheels and fish traps.

And the fish wheels especially, and the fish traps also, catch all kinds. They will catch not only salmon but different species of salmon. They catch chinooks and silvers and sockeye salmon and steelhead trout. And so that's not the way to harvest fish.

The commercial guys have to use nets -- they call them "tooth nets," and if you catch a fish and the -- I sell fishing equipment, by the way. That's why I know this. If you sell -- or if you use a net where the salmon can push his head past the gills, he's probably going to die. In the process of taking him out, you're going to make him bleed in the gills.

So now, they're very much restricted. They have to use a net which they call a "tooth net." And it won't get past his nose, hardly. And what the salmon -- when he hits a net, his teeth get entangled in the netting and it just holds him there.

He may be able to shake himself loose but, if he can't, when the net comes and the guy sees that he's got a fish hanging by his teeth, they have a revival box that's not required on gill-netters, and if the fish looks like he's pretty played out, they put him in the revival box, that has fresh Columbia River water being pumped into the revival box all the time he's in there. And within 15 minutes, that salmon is just like he's never been in the net or the box. And so the mortality rate is next to nothing compared to sports fishing.

Whereas up river, the sportsmen -- they catch chinook salmon the same

H-004-003 way they've always caught them -- with a barbed hook -- and the salmon have no chance to shake the hook. And being on the line and a hook, they're going to fight for all their life. And by the time they get to the boat, they're almost dead. And so I don't know how they release those fish.

If their -- if their adiposal fin has been clipped, that means it's a wild fish. No, excuse me. That means it's a hatchery fish. If they have a fin, that means it's a wild fish, and those are the fish we're trying to save for spawners. And so the ones that are caught on hook -- and if they're handled, where you grab them and squeeze them and hold them real tight till you get the hook out, by the time you throw him back, he can barely swim. And there's no way of telling what the mortality is. That fish could sink to the bottom and die, or he could continue swimming real slow, and the next seal or sea lion that comes along is going to have a feast. So I think we're losing a lot of very precious spawners that way.

Another thing that really bothers me: I called Fisheries, and each sports fisherman must have a punch card, but there's no way to tell how many fish are being caught because there's no requirement to return your punch cards, like there is with deer or elk. If you shoot an elk or a deer -- in fact, it's got more restrictive. You have to return your card whether you got an elk or deer or not.

And the fishermen, the sports fishermen, are not required to do that. Commercially caught fish -- they have to be issued a fish ticket when they sell their fish to a processor. And on the fish ticket, there's a rate of taxation they have to pay, and that -- they get that taken right out right there, I believe.

H-004-003

So in summary, the sportsmen are not taxed on the fish they catch, and they're getting a lot of fish free. They should at least pay three bucks a pound, minimum, for that species of salmon; and for silvers, maybe a little less. That could be figured out by the people in the Fisheries Department.

And one other point that bothers me. When they got rid of the -- Dr. Koenigs, who was a scientist, and he was with Alaska Fish and Game in Alaska, they appointed a guy that's never been to college, and he has a charter-boat operation, and I feel that that is a conflict of interest. And I pointed out to the Governor that I've been to their meetings, their commission meetings. You've got three minutes to talk. It's impossible to talk for three minutes and make a point. And nobody is going to drive, like in my case, over 100 miles to talk for three minutes. My name is so long, it takes me three minutes to tell them what it is.

So that's got to change. What needs to happen is, they should have open hearings, like they do in Washington, D.C. -- all-day hearings if necessary, and two-day hearings if necessary -- so that people can tell exactly what's going on.

The legislators don't know what's going on. I served in the Legislature myself, about 30 years ago, and I was aghast. I told a friend of mine, I says, "I never went to college, and I might feel out of place down there." He says, "You won't." He says, "The first week, you're going to maybe feel out of place, and you're going to wonder how you got there. And after the first week, you're going to wonder how most of the other guys got there." And that's true.

I mean, there's extremely good people in Olympia, but there's people

H-004-003 in Olympia that are duds. As a point, I point out that the chairman of House Resources -- Natural Resources Committee told me that "we could probably do something with your bill if you could take out the part about walking around on the spawning grounds." That is the bill. I mean, he should have at least brought it to a vote, and he should have allowed testimony to be presented to point out why that bill is so critically needed.

So I think that sums it up. You might say that I was a strong supporter of hers. I gave her 300 bucks and, to me, that's a lot of money.

(End of comment.)

(End of public comments.)

Edward Plute, 3105 Northwest 84th Street, Seattle, 98167.

H-005-001

MR. PLUTE: For the record, my name is Edward Plute and, if they build the tunnel on glacial soil underneath the city, and there is surely going to be catastrophic events, no insurance company, Lloyds of London nor anybody else, is going to insure this thing. They explicitly said that it would cost a billion -- $1 billion insurance. They said no. No insurance company would do anything to insure this tunnel.

The ESI (sic) report was done by law, and the federal government did not approve it. The big push was done basically because these people did not have the right solution and Governor Gregoir, the Secretary of Transportation had, at this point, no legal laws to sell bonds before the bids and ESI report was done, and there should be a federal investigation done.

And that is it.

(End of comment.)

H-005-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments and recognize your preference against the Bored Tunnel Alternative.

Richard Pauli, 614 West Halladay Street, Seattle, 98119.

H-006-001 MR. PAULI: I'm going to read four paragraphs of a paper that I'm submitting in the box here. It's called "Summary Conclusion."

"This second draft EIS statement is not properly derived from any baseline definition of our dynamically changing environment. The final EIS should address environment change, the rate of change, the risk to consideration of climate models, and the timeline of change plotted against the lifetime of the project," which I now understand is 100 years.

H-006-002 "The entire bored tunnel project is at risk of being terribly embarrassed by this missing science. The bored tunnel EIS draft failed to define existing conditions for the environment. Missing is current reference to recent climate-change research in 2007 IPCC. It's outdated. Current references to recent science on projected sea-level rise to the year 2100 now includes levels up to 7 feet; citations to the current science, such as the UW Climate Impacts Group; and no statement of the duration of the life of the tunnel," which I've heard -- I probably should strike that. It's all right. Go ahead.

H-006-003 "Totally missing from the EIS is any statement as to how the environment will impact the entire project. Everyone who has studied Washington state history knows the story of the most famous bridge failure, nicknamed Galloping Gertie. The marvelous piece of engineering collapsed due to unforeseen, until then, unrealized harmonic stresses that caused the breakdown. The bored tunnel has the benefit of foreknowledge and forewarning of destabilizing and potentially catastrophic events that

H-006-001

The 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). Climate change is addressed appropriately and consistent with WSDOT guidance. Please refer to the Final EIS for current information.

H-006-002

The design has taken into account current information on climate change and what is reasonably expected to occur for the life of the project. Existing conditions are included in chapter 4 of the SDEIS.

H-006-003

The lead agencies have taken the steps necessary for a successful bored tunnel project. Extensive geotechnical investigations have been performed to characterize the soil conditions that could affect the construction of the bored tunnel. Tunnel design and construction experts from around the world continue to be engaged in the development of the Bored Tunnel Alternative through expert review panels, a Strategic and Technical Advisory Team, and as members of the project team. These experts will continue to advise the lead agencies through the life of the project.

Also, structural engineers generally agree that tunnels are one of the safest places to be during an earthquake because the tunnel moves with the earth.

H-006-003 represent real risk.

"You do not want the bored tunnel to take on the moniker of the underground Galloping Gertie; potential failures made worse by the fact that there are now more than ample warnings to this situation.

(End of comment.)

Barry Kellems, 7116 Greenwood Avenue North, Apartment 406, Seattle, 98103.

H-007-001

MR. KELLEMS: My comment is: I was discouraged to hear that the surface-street alternative is no longer being considered. So I thought that we were still looking at a true alternative to tunnels/structures, which would ultimately get the traffic off the streets of Seattle.

I understand that it was eliminated in an earlier EIS, and I guess I'm just kind of discouraged about that. I think maybe we should bring that back and have one more look at it, because the long-term benefits of getting more cars off the streets in Seattle would be a good thing.

(End of comment.)

H-007-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the surface alternative. However, this alternative was eliminated after because it would not meet the purpose and need to provide capacity to and through downtown Seattle. Please refer to the Final EIS for current information.

Mark Rogers, 8711 31st Avenue Northwest, Seattle, 98117.

H-008-001

MR. ROGERS: I wish they could incorporate an esthetic viewpoint to help -- oh, I don't know. What would be the word? You know, to -- it's too bad. If you're going to tear down the viaduct, why you can't replace, like, part of the elevated structure, just so people can have the option -- like a vista. You know, like a vista road. Not a viaduct, for replacing the viaduct, but for people who may want to bring, you know, people to town. They could charge 20 bucks a car, you know, to drive along this vista. You know what I mean? Like an automotive vista with a toll, at least to, you know -- what's the word? You know, trying to appease the people who are against the removal of the viaduct because it removes that view.

It's sort of like -- you can rephrase it, or I'll try to rephrase it on this thing -- like, a scenic turnout, an elevated scenic turnout, with a toll. They could charge 20 bucks, and I swear to God, if I went to the airport to pick guests up, I would use it. You know, a one-way toll, a scenic automotive vista for your car, you know. Because you're obviously going to drive, you know, to pick guests up at the airport, you know. I don't know.

I mean, it's just a stupid idea, but that's one thing people say: "It's the most beautiful view of Seattle." And you don't have to take a bus to see it. You can drive, you know. You know what I mean? That's the only thing.

And it would only have to be one lane. It could be, like you say, like,

H-008-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. Constructing a bored tunnel and a mini viaduct, as suggested, would essentially result in the construction of two transportation facilities instead of one. Instead, the lead agencies have identified the Bored Tunnel Alternative as the preferred alternative. Please see the Final EIS for current information about the proposed build alternatives.

H-008-001 you know, a ride at Disneyland, you know, only for your car, not a -- you know, but it would be a highway. It would still be a road. It would be an elevated road above street level, so it would be nonstop both ways, no traffic lights or, you know, surface congestion, none of that. I don't know.

That's my thought. If they could incorporate that, more people would probably say, "Hey, at least we have an option to see the water from our car without traffic," you know. I mean, it would be a mini, mini, mini viaduct, one lane each way, going this way and that way. And then, you know, why, they could probably put a lid on that and have a park and charge people 20 bucks each way, so they could -- you know. And then people from downtown can go up there and have a picnic in the park if they wanted to, you know.

And, I mean, then you can still bore that tunnel. I mean, they could bore that tunnel and appease everybody, appease the people that want to be able to show people the city from a car and still have a bored tunnel and move traffic.

That's my thought.

(End of comment.)

Harvey Friedman.

H-009-001

MR. FRIEDMAN: State Route 99 is a state route so should be voted on by the citizens of Washington. Democracy only works if the electorate is informed. Not only have the powers that be not given us all the information, but they didn't even let the whole state vote.

If folks knew that they could have a safer, quieter elevated Alaska Way Viaduct for even the same amount of money that a deep bored tunnel would cost, the vote would probably be 3-to-1 in favor of rebuild.

At the rate our choices are being limited, next might be no personal motor vehicles at all in downtown Seattle. But built Seattle doesn't have the charm of Zermatt, Switzerland, where there are no cars. Keep Seattle Seattle. No bored tunnel.

(End of comment.)

(End of public comments.)

H-009-001

The Program team is committed to sharing information and involving the public in the ongoing process for replacing the aging Alaskan Way Viaduct. Please see Appendix A, Public Involvement Discipline Report, for additional information.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. The Bored Tunnel Alternative has also been endorsed by Governor Gregoire, the 2009 Washington State Legislature, and other elected bodies such as the Seattle City Council and the Port of Seattle Commission.

Dorli Rainey, 320 West Roy, Apartment 213, Seattle, 98119.

H-010-001 MS. RAINEY: My comments are: First of all, the Environmental Impact Statement does not speak to a lot of things, like the accessibility for the Americans With Disabilities Act. You can see on the simulation that there's only a 2-foot shoulder in the northbound lanes, which does not comply with ADA standards.

Then, according to some of their own brochures, the replacement would have wider lanes and shoulders. Well, they've narrowed the shoulder down now, at least on two lanes. The lanes are narrower on two.

H-010-002 Then there are really no provisions for rapid transit, which was originally planned, to have rapid transit. And there's no access to downtown Seattle, which could include -- their own brochures, some of the traffic will be slower going through the tunnel than it will be going the way it is now, on the viaduct and the Battery Street Tunnel.

H-010-003 So those are things that really bother me. And, also, what bothers me more than anything else is that there is no money. The feds have no money. The State has no money. The County has no money. The City has no money. Where is all this money supposed to come from? I just don't -- I can't see that. So those are my concerns.

(End of comment.)

H-010-001

The Alaskan Way Viaduct Replacement Project is subject to compliance with the Americans with Disabilities Act (ADA), so the final design of the project will meet all the necessary ADA requirements. However, the proposed bored tunnel is not a pedestrian facility, and as such travelers will not be allowed to leave their vehicles or walk through the tunnel other than during emergency situations when directed to evacuate. Current project design allows for one 8-foot shoulder in the bored tunnel (in each direction), which is a reasonable width for vehicles to pull off the road in case of emergency. WSDOT believes that during an emergency evacuation situation, transit operators will be able to maneuver their vehicles sufficiently to allow deployment of wheelchair lifts, although they may need to encroach into the adjacent lane to do so. All traffic will be directed to stop during this type of emergency, so maneuvering into the adjacent lane will not present a traffic safety problem.

WSDOT has worked very closely with the Seattle Fire Department on developing safety measures and procedures to ensure that the tunnel meets applicable safety criteria during emergencies. To exit the tunnel in case of emergency, one must use stairs. As explained in the 2010 Supplemental Draft EIS and this Final EIS, people who are unable to use the stairs to exit the tunnel would wait in the enclosed, protected refuge area for assisted rescue. The refuge areas and egress corridor provide a safe environment for evacuees since they are ventilated separately with fresh air and are isolated from roadway traffic and emergencies with continuous walls, and it is accessible without needing to step over a curb.

WSDOT has developed a preliminary corridor operations plan that requires the designer of the facility to develop a detailed emergency response plan. It includes information on plans for emergency response and coordination with first responders including the Seattle Fire Department, Washington State Patrol, and the Seattle Police

Department. The emergency response plan will include provisions for assisting mobility-impaired and incapacitated people.

H-010-002

The scope of the project did not include rapid transit. Rapid transit development for the region is identified by Sound Transit in its Long-Range Plan and includes expanded light rail service operating in the Downtown Seattle Transit Tunnel.

H-010-003

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 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.

Bob Messina, 1301 North 90th Street, Seattle, 98103.

H-011-001

MR. MESSINA: My comment is regarding not exactly the bored tunnel itself, but the surface -- the new surface street, which is called the Elliott-Western connector. This Elliott-Western connector will be in the footprint of the former elevated viaduct.

My concern is, two places on the Elliott-Western connector, which is where the at-grade, new street will intersect Pike Street, and, also, it will intersect Pine Street, which is not a street, actually, at that point; it's a stairway. And I should go back and say that, at Pike Street, it is also a stairway.

So the Pike Street stairway and Pine Street stairway, today, allow people to walk uninterrupted from Pike Place Market, First Avenue, down to the waterfront. When the new Elliott-Western connector is constructed, those same people descending both of those staircases will have to stop at the end of the street and will have to be held there with some kind of traffic control.

My concern is traffic will be too fast or too heavy, and there will be conflicts with people, especially tourists -- big crowds of people, wanting to cross at grade. So I see this as a future safety concern, pedestrian safety concern, for the Elliott-Western connector, and I would hope that they could address this by possibly having overpasses, pedestrian overpasses, constructed in both places to allow the same uninterrupted walking flow, with the new construction, that you have today.

(End of comment.)

(End of public comments.)

H-011-001

The Pike Street hillclimb will not be affected by the new Elliott/Western connector. The pedestrian connection along Pine Street, which currently passes underneath the existing Viaduct structure, will now connect with the Elliott/Western connector before descending the hill to Alaskan Way. It is assumed a signalized pedestrian crossing will be provided at this location, to provide safe crossings for pedestrians.

Under the Bored Tunnel Alternative the ultimate design of the Elliott/Western connector is part of the City of Seattle's Central Waterfront Project.

Greg Adams
1629 Summit Ave., Apt. 404
Seattle, WA 98122

December 8, 2010

Angela Freudenstein
Alaskan Way Viaduct Replacement Project
999 Third Ave., Suite 2424, Seattle, WA 98104

Re: Alaskan Way Viaduct and Seawall Replacement

Dear Angela,

I-001-001 Thank you for receiving public comments; I value the opportunity to respond to the developing plans for the Alaskan Way Viaduct and the current Supplemental Draft Environmental Impact Statement. This letter serves as a summary of my comments.

I strongly support the removal of the structurally deficient Viaduct as it exists today, and I believe the decisions you make will have a large impact on the future development of Downtown Seattle and the surrounding region, and I realize that you are trying to evaluate potential alternatives and a great variety of subsequent impacts.

After reviewing the report I recommend greater attention be given to a No Build Alternative (with an added Surface Boulevard). Attention should be shifted to focus on improving transit to downtown rather than continuing to support poor travel behavior.

I-001-002 The analysis provided in this report seems a continuation of a long standing transportation planning approach of 'predict and provide'. Research shows that expensive improvement projects like a Bored Tunnel serve to **enable** poor land use decisions, including the location decisions of businesses and residents -- a 'self-fulfilling prophecy'. i.e. "We expect 90,000 ADT, so we spend vast amounts of money to accommodate this behavior" thereby ensuring that it continues.

Concerns about impacts from a Viaduct removal are likely overstated in this report. Examples like San Francisco show that cities adapt well to large capacity reductions, especially in the context of a central core. Your study should look at case studies such as the Embarcadero Freeway in San Francisco or Harbor Drive in Portland. Roadway tunnels under existing cities are also enormously expensive as shown in Boston's Big Dig project.

I-001-003 Furthermore, I fail to see how the Bored Tunnel option is going to help Seattle address climate action goals or have any positive impact on congestion or multimodal accessibility over the long term. Expensive projects aimed at subsidizing access to downtown via private automobile are an outdated strategy in a 21st Century city.

Thanks,

Greg Adams

I-001-001

Chapter 2, Alternatives Development, of the Final EIS describes the project's history and alternatives evaluated prior to the 2010 Supplemental Draft EIS. The 2004 Draft EIS included evaluation of the Surface Alternative. This alternative was eliminated because it reduced roadway capacity and didn't meet the project's purpose as identified in the 2004 Draft EIS. Transit enhancements are program elements associated with the preferred Bored Tunnel Alternative and are discussed in Chapter 7, Cumulative Effects, of the Final EIS.

I-001-002

As discussed in Chapter 1, Introduction, of the Final EIS, the purpose of this project is to replace a seismically-vulnerable transportation facility that is at the end of its useful life. This project does not influence regional land use decisions. The indirect effects on land use as a result of the Bored Tunnel Alternative are discussed in Appendix G, Land Use Discipline Report, of the Final EIS.

I-001-003

The Final EIS Chapter 1, Introduction, describes the Purpose and Need for the project and one of several purposes is to provide capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle. The preferred Bored Tunnel Alternative has been evaluated based on their ability to meet the Purpose and Need. Appendix C, Transportation Discipline Report, covers issues related to congestion and accessibility. Appendix R, Energy Discipline Report covers issues related to climate change. Please refer to the Final EIS for current information.

From: Ron Adams [mailto:ronboadams@mac.com]
Sent: Saturday, October 30, 2010 8:09 AM
To: AWV SDEIS Comments
Subject: SR99 tunnel

I-002-001

I was born in Seattle in 1945 . I have waited my entire life to see the eye sore viaduct 99 replaced . I am thrilled at the possibility of a world class Seattle waterfront. I believe that the future of Seattle centers on better public transportation . Do not be bullied by the more auto , more freeway more bullies. BUILD THIS TUNNEL and make it as slick as the video presentation you have produced.

I-002-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: allisonpaints@gmail.com [mailto:allisonpaints@gmail.com]
Sent: Sunday, November 07, 2010 8:14 PM
To: Alaskan Way Viaduct
Subject: AWV Feedback

Sent from: Allison Agostinelli
Address:
City:
State: WA
County:
Zip:
Email: allisonpaints@gmail.com
Phone:

Comments:

I-003-001 After reading the following report my understanding is that the building that I have a lease for 4000 sq feet and have about 14 artists on my floor that I rent to at 619 Western will likely not survive the impact of the viaduct removal. We were well aware that the building would eventually come down but the timeline is confusing. Basically I am trying to ask how long we have. I am sorry to see that we do not have a cultural impact on the environment according to the report. Perhaps someday someone will drill a hole and find evidence of us. ALASKAN WAY VIADUCT REPLACEMENT PROJECT 2010 Supplemental Draft Enviornmental Impact Statement

I-003-001

Use of the Western Building by artists and their place in the Pioneer Square neighborhood is described in this Final EIS and Appendix H, Social Resources Discipline Report. The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

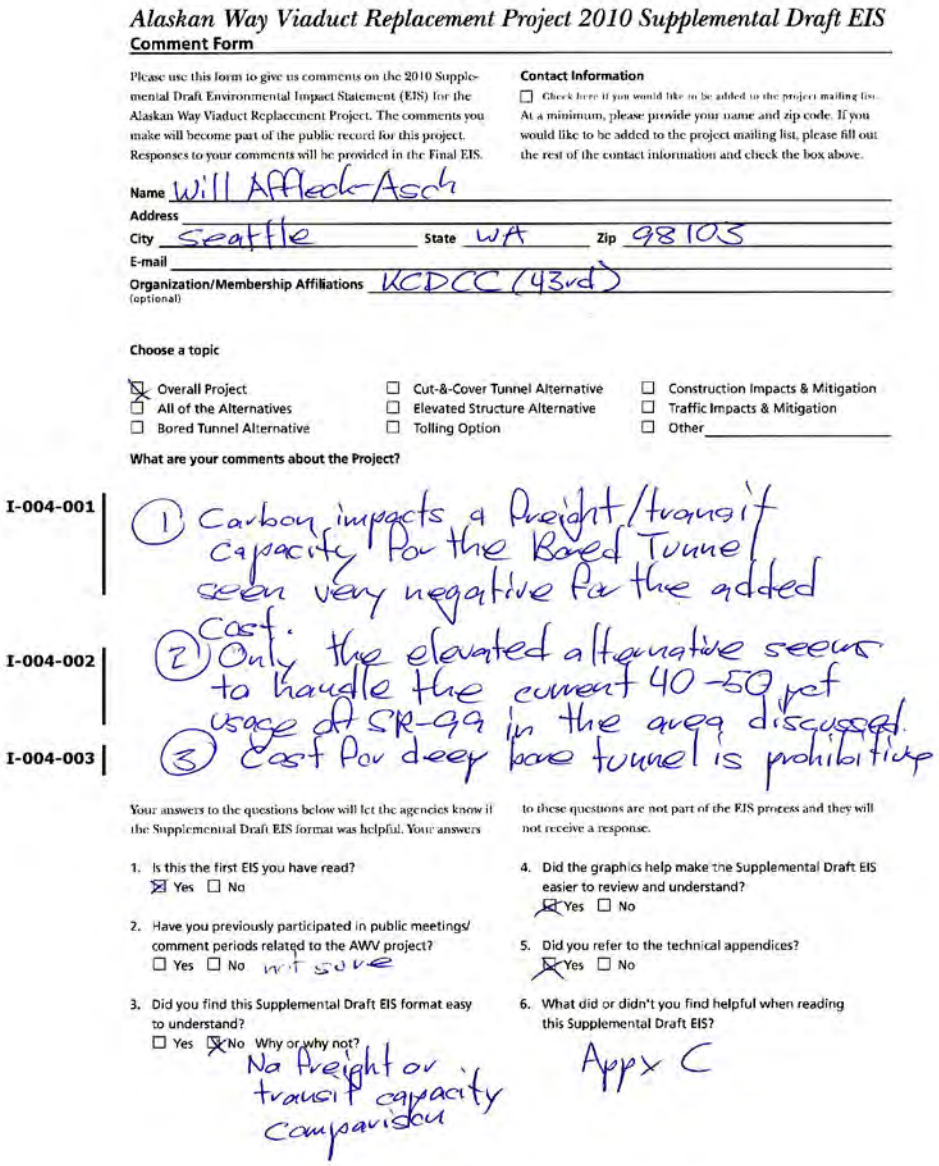
1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior’s Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the

basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS
Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information
☐ Check here if you would like to be added to the project mailing list.
At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Will Affleck-Asch
Address
City Seattle State WA Zip 98103
E-mail
Organization/Membership Affiliations (optional) KCDCC (43rd)

Choose a topic

☒ Overall Project
☐ All of the Alternatives
☐ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

What are your comments about the Project?

I-004-001 (1) Carbon impacts & freight/transit capacity for the Bored Tunnel seem very negative for the added cost.

I-004-002 (2) Only the elevated alternative seems to handle the current 40-50 pct usage of SR-99 in the area discussed.

I-004-003 (3) Cost for deep bore tunnel is prohibitive

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read? ☒ Yes ☐ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project? ☐ Yes ☐ No not sure
3. Did you find this Supplemental Draft EIS format easy to understand? ☐ Yes ☒ No Why or why not? No freight or transit capacity comparison
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand? ☒ Yes ☐ No
5. Did you refer to the technical appendices? ☒ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS? Appx C

I-004-001

Carbon impacts and transit capacity would be similar for all the build alternatives. Freight connections to the downtown core and Ballard/Interbay area would change with the Bored Tunnel Alternative since the existing ramps to Columbia and Seneca Streets and Elliott and Western Avenues would be removed. These freight movements would need to use the surface street network. Vehicles carrying hazardous and flammable cargo would be prohibited in the bored tunnel (this type of cargo is not permitted in the Battery Street Tunnel today). However all other freight and transit movements would be allowed in the bored tunnel.

I-004-002

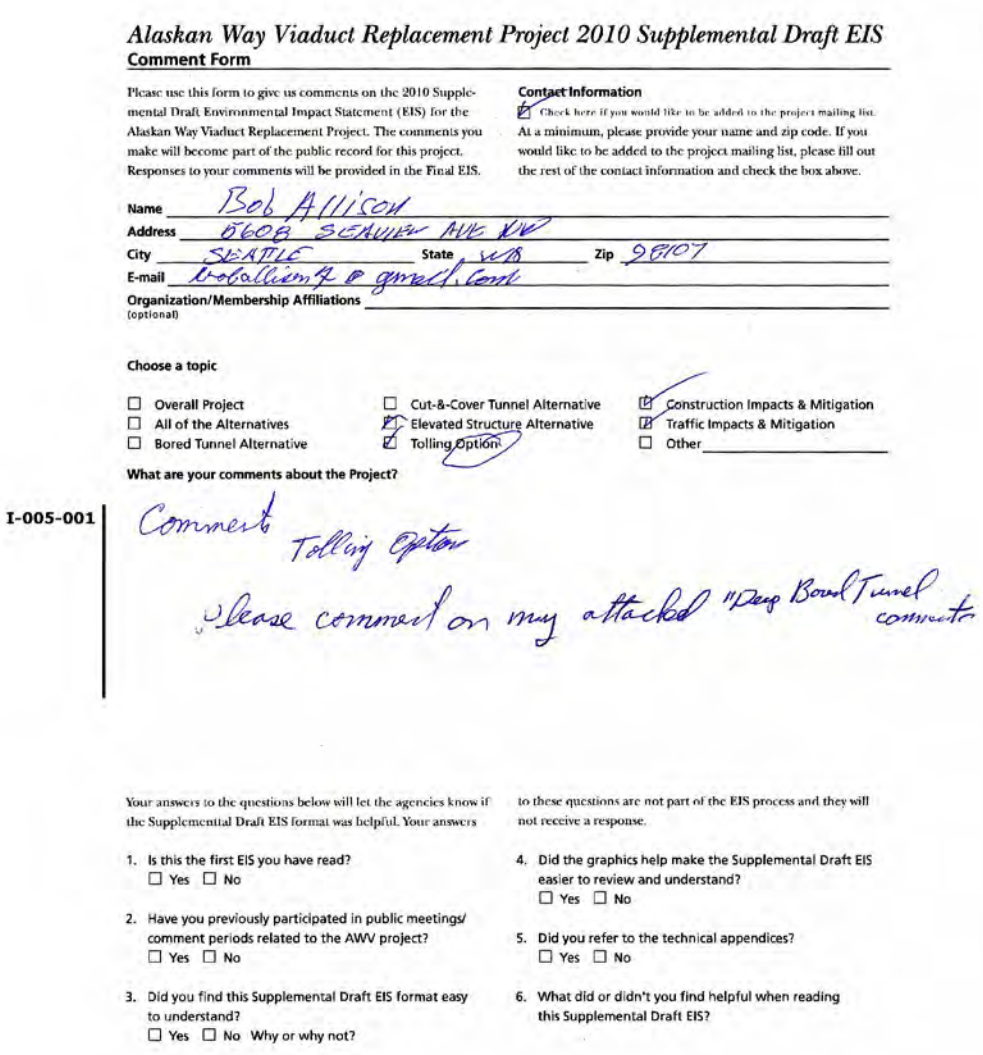
As described in Chapter 8 of the 2010 SDEIS, the Bored Tunnel Alternative will carry only 2 to 2.5 percent fewer vehicles than the Cut-and Cover and Elevated Structure Alternatives.

I-004-003

Overall project costs are included with the project description and are used for the analysis of economic impacts. Cost estimates for mitigation are included in the overall project costs. These estimates, along with other cost estimates, are refined as the planning and design process proceeds and details are developed. All cost estimates allow for escalation and inflation and include contingencies for unforeseen events. The project is included in the financially-constrained long range plan adopted by the Puget Sound Regional Council (the area's Metropolitan Planning Organization, or MPO). Cost estimates for the alternatives evaluated in the Final EIS are:

- Bored Tunnel – $1.96 billion
- Cut-and-Cover Tunnel – $3.0 to $3.6 billion
- Elevated Structure – $1.9 to $2.4 billion

These cost estimates do include different elements. The Bored Tunnel Alternative cost does not include replacing the seawall, improving the Alaskan Way surface street, or building a streetcar. Costs for the Cut-and-Cover Tunnel and Elevated Structure Alternatives do not include replacing the seawall between Union and Broad Streets.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS
Comment Form

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Contact Information
☑ Check here if you would like to be added to the project mailing list.
At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Bob Allison
Address 6608 SEAVIEW AVE NW
City SEATTLE State WA Zip 98107
E-mail boballison42@gmail.com
Organization/Membership Affiliations (optional)

Choose a topic

- ☐ Overall Project
- ☐ All of the Alternatives
- ☐ Bored Tunnel Alternative
- ☐ Cut-&-Cover Tunnel Alternative
- ☑ Elevated Structure Alternative
- ☑ Tolling Option
- ☑ Construction Impacts & Mitigation
- ☑ Traffic Impacts & Mitigation
- ☐ Other

What are your comments about the Project?

I-005-001

Comment
Tolling Option
Please comment on my attached "Deep Bored Tunnel" comments.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read? ☐ Yes ☐ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project? ☐ Yes ☐ No
3. Did you find this Supplemental Draft EIS format easy to understand? ☐ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand? ☐ Yes ☐ No
5. Did you refer to the technical appendices? ☐ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-005-001

Thank you for attending the public hearing. We did not receive any comments attached to this form. Please see the Final EIS for updated information of tolling.

From: Matt Anderson [mailto:emattanderson@me.com]
Sent: Thursday, November 04, 2010 11:35 PM
To: AWV SDEIS Comments
Subject: Comment on SR99 Tunnel environmental document

I-006-001

However you address the environmental impact of a bored tunnel in the terrain beneath Seattle, it seems to me that the environmental impact of a tunnel beneath the city of Seattle is inherently far greater than that for a "tunnel" consisting of a tube(s) on, or embedded in, the seabed of Puget Sound. Why has this option been ignored? I haven't heard any mention of a seabed option being considered, although I have sent in this suggestion previously.

Just a few "environmental concerns" that come to mind that favor a seabed tunnel under Puget Sound:
1, The seabed would be much more flexible and protective in the event of an earthquake.

2. Tidal forces could be utilized to generate power for lighting and signage. Possibly even recharging strips for electric cars.

3. Independent water available for fire suppression and any other water needs.

4. Much easier access for repairs and/or emergencies along the entire stretch of that section of SR99.

5. Zero impact on any building, property, or utilities in downtown Seattle, ever.

6. Easily expanded in the future to handle increases in traffic.

7. Easily provide any number of exits or entrances, either now or in the future.

8. Easily enable, or tie in to a cross sound underwater tunnel. I-90 too.

9. Cost way less. This may not be "environmental" in the strictest sense, but savings could be applied to other environmental issues.

I-006-001

The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS. This chapter dissusses all of the alternatives that have previously been evaluated. The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support that it has received from diverse interests. Seabed or immersion tunnels are only used for crossing waterbodies. Since the existing viaduct does not cross any waterbodies, immersion tunnels were not considered as a viable alternative. Please refer to the Final EIS for current information.

From: Liisa Antilla [liisa_antilla@hotmail.com]
Sent: Sunday, December 05, 2010 11:23 AM
To: AWV SDEIS Comments
Subject: objection to bored tunnel

I-007-001 I wish to record my objection to the bored tunnel/viduct project. My main objections relate to:

1) increased greenhouse gas emissions and energy use
I-007-002 2) the expense
I-007-003 3) the lack of providing incentives for mass transit.

I-007-004 I would prefer a surface street option that would be more affordable, would not threaten historic sites and buildings, and would encourage alternative modes of transport.

Thank you.

Liisa Antilla
2311 N 45th St, Ste 315
Seattle 98103

I-007-001

Regional greenhouse gas emissions from all of the build alternatives are predicted to be higher in 2030 than for the 2015 Existing Viaduct, but lower than for the Viaduct Closed (No Build Alternative). Projected increases in greenhouse gases would be due primarily to the increases in future vehicle traffic and fuel use in the region. The bulk of greenhouse gas emissions from the build alternatives would come from vehicle exhaust. Emissions from energy sources that would power SR 99 ventilation and lighting systems and provide maintenance would produce a tiny fraction of greenhouse gas emissions.

I-007-002

Overall project costs are included with the project description and are used for the analysis of economic impacts. Cost estimates for mitigation are included in the overall project costs. These estimates, along with other cost estimates, are refined as the planning and design process proceeds and details are developed. All cost estimates allow for escalation and inflation and include contingencies for unforeseen events. The project is included in the financially-constrained long range plan adopted by the Puget Sound Regional Council (the area's Metropolitan Planning Organization, or MPO). Cost estimates for the alternatives evaluated in the Final EIS are:

- Bored Tunnel – $1.96 billion
- Cut-and-Cover Tunnel – $3.0 to $3.6 billion
- Elevated Structure – $1.9 to $2.4 billion

These cost estimates do include different elements. The Bored Tunnel Alternative cost does not include replacing the seawall, improving the Alaskan Way surface street, or building a streetcar. Costs for the Cut-and-Cover Tunnel and Elevated Structure Alternatives do not include replacing the seawall between Union and Broad Streets.

I-007-003

Downtown transit access to and from the south would likely be similar to existing conditions for the Elevated Structure Alternative, since the Columbia and Seneca ramps would be rebuilt and transit could continue to use these ramps as they do today to access downtown and SR 99 (although transit would have the option to use the ramps to Alaskan Way S. as well). For the tunnel alternatives, downtown transit access to and from the south would change, since the Columbia and Seneca ramps would be relocated and buses would likely access downtown via the new ramps on Alaskan Way S., and then use S. Main Street and/or S. Washington Street to access the north-south Third Avenue bus “spine.” The new ramps would extend transit service coverage to a larger portion of the downtown area, particularly the Pioneer Square area.

For transit vehicles serving downtown Seattle from the north, transit access is expected to be comparable for the build alternatives.

I-007-004

Chapter 2, Alternatives Development, of the Final EIS describes the& project’s history and alternatives evaluated prior to the 2010 Supplemental Draft EIS. The 2004 Draft EIS included evaluation of the Surface Alternative. This alternative was eliminated because it reduced roadway capacity and didn't meet the project's purpose as identified in the 2004 Draft EIS.

From: ardeananvik@hotmail.com [mailto:ardeananvik@hotmail.com]
Sent: Tuesday, November 09, 2010 12:53 PM
To: Alaskan Way Viaduct
Subject: AWV Feedback

Sent from: Ardean Anvik
Address:
City: Elma
State: WA
County: Mason County
Zip: 98541-9619
Email: ardeananvik@hotmail.com
Phone:

Comments:

I-008-001 The tunnel will be a failure because of these 5 reasons:
1. There will be a cost overrun, just like there was a cost overrun in the Big Ditch in Boston.

I-008-002 2. You will find Indian artifacts and this will bring the digging to a close for a long period of time.

I-008-003 3. This tunnel is based not upon transportation needs but upon social engineering. The leftists in Seattle want people out of their cars so they will make it difficult to commute and thus force people onto mass transit. And you have not solved the social problems of mass transit, such as crime, threats, and stinky people on the transit. Thank you but I prefer my car.

I-008-004 4. This tunnel will leak, just like the Big Ditch in Boston.

I-008-005 5. Hey folks, we live in earthquake country or have you forgotten. When the tunnel collapases after an earthquake, or when there are hugh cost overruns or when you find the Indian artifacts I will write a Letter to the Editor and a letter to the governor and to my legislative contacts complaining about this and how you were warned. Thank you.

I-008-001

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 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-008-002

Much of the area of potential ground disturbance was historically part of the transportation corridor and has a low likelihood for the presence of significant archaeological resources. However, known archaeological

sites are near both the south portal and north portal excavation areas as presented in Chapter 6 of the Final EIS.

The lead agencies will develop an archaeological treatment plan for archaeological investigations, data recovery, and monitoring during project construction. An Unanticipated Discovery Plan will be prepared for the project that provides for notification and consultation among concerned agencies and tribes related to discoveries of unanticipated archaeological materials or human remains.

I-008-003

The Bored Tunnel Alternative would carry almost the same traffic volume as the other build alternatives and will be available for use by passenger cars. Please see Chapter 5 in the Final EIS for a comparison of the estimated vehicle volumes for all the build alternatives.

I-008-004

The segmental tunnel lining is composed of interlocking panels that will seal the tunnel from the adjacent groundwater. Some groundwater seepage is anticipated; accumulated groundwater would be collected and pumped to the south portal for discharge and treatment through the combined sewer system.

I-008-005

All build alternatives would provide a safe transportation facility that meets current seismic design standards. The existing viaduct is at a substantially higher earthquake risk than any of the build alternatives. The earthquake risk of the existing viaduct is one of the driving factors for the need for this replacement project.

From: michael archambault [michael.arch@gmail.com]
Sent: Monday, December 13, 2010 6:55 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov
Subject: Comments on the Alaskan Way Viaduct 2010 SDEIS

I-009-001 Thank you for your work on the Viaduct Replacement Supplemental Draft EIS. After reviewing the SDEIS, I am left with serious questions and concerns about the current plans to replace the Alaskan Way Viaduct.

My biggest issue with the SDEIS is that it is not at all clear that the bored tunnel has any significant benefits over the surface/transit/I-5 option, not to mention that the bored tunnel is a more costly and inherently riskier project.

I-009-002 The environmental impacts of the tolled bored tunnel option (primarily the impact to the surface-level traffic) seem to have relatively similar consequences to surface traffic as the Surface/Transit/I-5 improvements option has suggested, except that the bored tunnel alternative comes with an addition $1 billion+ price tag and does little to rethink the long term vision of our

I-009-003 transportation infrastructure. If that weren't enough, the risk of building the world's largest bored tunnel undoubtedly results in a world of potentially unaffordable risks that do not get enough attention in this SDEIS.

The surface/transit/I-5 option gets barely a passing mention throughout this entire report.

Since it has no downtown exits, the number of cars that will use this bored tunnel (less than many of Seattle's 4-lane roads, including most prominently, the Ballard Bridge!) is incredibly insignificant when considering the significant costs and risks associated with boring such a large tunnel under downtown. For example, the fact that the presence of the south portal will significantly increase car traffic through historic and treasured Pioneer Square area while threatening its historical buildings is especially disconcerting.

Especially during times of forced fiscal restraint, this SDEIS does very little to justify its expensive price tag and risks, especially since it only compares it to other nearly-as-expensive alternatives (cut and cover, rebuilt viaduct). I am seeing negative impact after negative impact in this report, yet no serious positive that justifies its enormous price tag.

I strongly demand that WSDOT provide information comparing the bored tunnel option (with tolls) to Surface/Transit/I-5 option, which is cheaper and uses more proven and predictable construction methods. WSDOT's own studies were beginning to show serious promise for the Surface/Transit/I-5 improvements option, and until the bored tunnel is fairly compared against the Surface/Transit/I-5 option, I consider this SDIES significantly lacking and desperately incomplete.

Thanks for your concern and attention,
Michael Archambault
Seattle resident
206-529-7558

I-009-001

The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS, which included the consideration of the I-5, Surface, and Transit Hybrid. This approach was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support that it has received from diverse interests.

I-009-002

In the Surface and Transit Alternative, substantial delays would be expected in the stadium area for northbound SR 99 traffic near S. Atlantic Street where vehicles would transition from a limited-access facility to an urban arterial with signalized intersections. Substantial delays also would be expected in the area north of Denny Way for southbound traffic at intersections along Aurora Avenue at Valley and Roy Streets. More reasonable operations are predicted for many intersections beyond these bottleneck intersections. The 2030 transportation analysis presented in the 2010 Supplemental Draft EIS Appendix C, Transportation Discipline Report's Attachment A shows operational benefits for the Bored Tunnel over the Surface and Transit Alternative and compares the two alternatives. Updated analysis for the Surface and Transit Scenario Year 2030 Analysis Results has been included in Appendix W, Screening Reports, of the Final EIS.

I-009-003

The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS, which included the I-5,

Surface, and Transit Hybrid. This approach was seriously considered during the Partnership Process, but was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region. The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support that it has received from diverse interests.

Because the I-5, Surface, and Transit Hybrid did not meet the purpose and need for the project, detailed cost estimates were not prepared. Cost estimates for the alternatives evaluated in the Final EIS are:

- Bored Tunnel – $1.96 billion
- Cut-and-Cover Tunnel – $3.0 to $3.6 billion
- Elevated Structure – $1.9 to $2.4 billion

These cost estimates do include different elements. The Bored Tunnel Alternative cost does not include replacing the seawall, improving the Alaskan Way surface street, or building a streetcar. Costs for the Cut-and Cover Tunnel and Elevated Structure Alternatives do not include replacing the seawall between Union and Broad Streets. Please refer to the Final EIS for current information.

From: Anthony Avery [aaavery1@gmail.com]
Sent: Saturday, November 06, 2010 2:31 PM
To: AWV SDEIS Comments
Subject: Viaduct Replacement Plan

Good Afternoon,

I-010-001 I appreciate the DOT's willingness to accept feedback on the viaduct replacement alternatives.

I wanted to take this opportunity to offer my fervent support of the bored tunnel alternative to replace the Alaskan Way Viaduct. My strongest point of support for this option is with regards to reclaiming Seattle's magnificent waterfront. With this, the streetcar and streetscape improvements would need to be made, and a majority of the reclaimed space be made available for the public enjoyment.

I-010-002 Some of the reclaimed space should also be sold for increased development for the purposes of residential and mixed commercial uses. The purpose for this sale is to cover some costs associated with improvements around the project and cover expenses related to park development, and also to provide a naturally vibrant environment and extend the downtown core to the waterfront.

I-010-003 If I can do anything to assist in making this project go through, please let me know and I will do what I can. I'm currently attending school in Arizona, but will be available remotely and during my occasional trips home until I move back in July.

Sincerely,

Anthony A. Avery

Arizona State University
Candidate
Masters of Real Estate Development
WP Carey School of Business

I-010-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. The Alaskan Way Viaduct Replacement Project has been coordinating with the City of Seattle's waterfront planning efforts to design the Alaskan Way surface street. The City of Seattle is leading redevelopment efforts and associated environmental review processes for the central waterfront, which would take place under NEPA and / or SEPA as appropriate. Additional information on the Central Waterfront Project can be found at http://waterfrontseattle.org/.

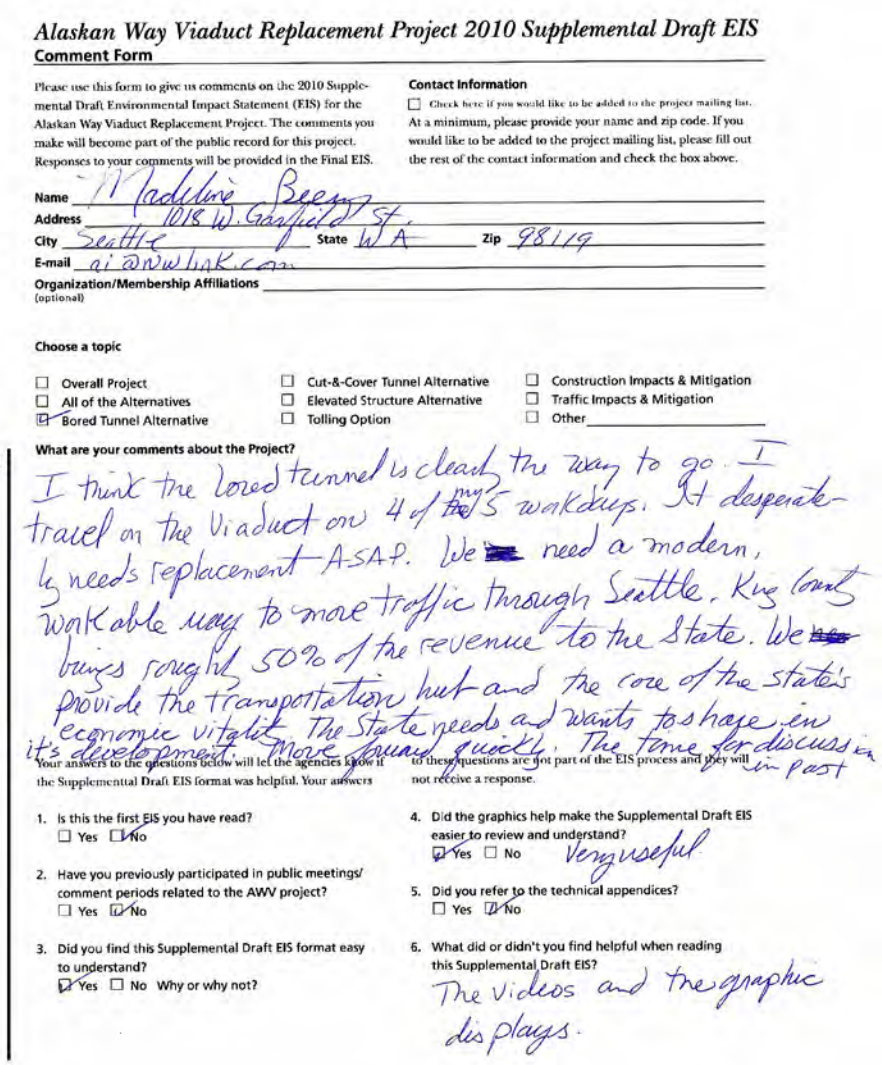
I-010-002

As stated in the Final EIS Appendix G, Land Use Discipline Report, new development on vacant or under-used property or redevelopment may take place around the new Alaskan Way surface street. No development within existing viaduct right-of-way is proposed as part of the Bored Tunnel Alternative.

The Alaskan Way Viaduct Replacement Project has been coordinating with the City of Seattle's waterfront planning efforts to design the Alaskan Way surface street. For the Bored Tunnel Alternative, the City will lead planning and design of the central waterfront via the Central Waterfront Project. Additional information on the Central Waterfront Project can be found at http://waterfrontseattle.org/.

I-010-003

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list.

At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Madeline Beeny
Address 1015 W. Garfield St.
City Seattle State WA Zip 98119
E-mail ai@nwlink.com
Organization/Membership Affiliations (optional)

Choose a topic

☐ Overall Project
☐ All of the Alternatives
☑ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

I-011-001

What are your comments about the Project?

I think the bored tunnel is clearly the way to go. I travel on the Viaduct on 4 of my 5 workdays. It desperately needs replacement A-SAP. We need a modern, walkable way to move traffic through Seattle. King County brings roughly 50% of the revenue to the State. We provide the transportation hub and the core of the state's economic vitality. The State needs and wants to have its development move forward quickly. The time for discussion is in past

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
   ☐ Yes ☑ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project?
   ☐ Yes ☑ No
3. Did you find this Supplemental Draft EIS format easy to understand?
   ☑ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
   ☑ Yes ☐ No Very useful
5. Did you refer to the technical appendices?
   ☐ Yes ☑ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?
   The videos and the graphic displays.

I-011-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

I-012-001

From: Bruce Bieber [bruce@perpetualpromo.biz]
Sent: Friday, November 05, 2010 1:16 PM
To: AWV SDEIS Comments
Cc: bruce@perpetualpromo.biz
Subject: A tunnel with as few lanes as indicated in the current plans...

Is like trying to stuff 10 pounds of meat into a five-pound bag.

I-012-001

As shown in the traffic analysis presented in Chapter 5 of the Final EIS, the Cut-and-Cover Tunnel and Elevated Structure Alternatives are expected to carry higher traffic volumes through downtown on SR 99 because of the Elliott and Western Avenue ramps. However, during peak travel times, this added traffic volume would result in lower travel speeds on SR 99 between S. King Street and Denny Way than are estimated for the Bored Tunnel Alternative.

SR 99 is projected to carry fewer vehicles through the south area and downtown with the Bored Tunnel Alternative. Despite this, total vehicle volumes across the transportation network are expected to be comparable for the build alternatives. Therefore, the transportation network in downtown Seattle is expected to carry nearly the same volume of traffic for each of the alternatives, but with the Bored Tunnel Alternative, SR 99 will carry fewer vehicles in the south and central areas than with the other alternatives. Because of this, more vehicles are projected to travel on city streets with the Bored Tunnel Alternative than with the other alternatives.

From: Mark D. Blitzer [pfeffer828@comcast.net]
Sent: Sunday, October 31, 2010 6:33 PM
To: AWV SDEIS Comments
Subject: comments on viaduct replacement

I-013-001

I believe that the deep bore tunnel is the best all around solution to the fact that the viaduct needs to come down. It will be a solution for the ages--we won't have to revisit this issue ever again. The sooner we start, the fewer the cost overruns, if there would be any at all. Besides, the decision has been made. Now it's [long over] time to finalize the process so that we can go forward without any legal or voter hanky panky to deal with.
Sincerely,
Mark D. Blitzer
Seattle, Washington

I-013-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: Mark D. Blitzer [pfeffer828@comcast.net]
Sent: Sunday, December 05, 2010 6:14 PM
To: AWV SDEIS Comments
Subject: Preferred replacement for Central Waterfront Viaduct

I-013-001 I prefer the tunnel option. One advantage it has is that the current viaduct can remain open during the construction of the tunnel, a huge "selling pint" in my opinion. The tunnel will be only a mile (or slightly longer). You'd think we were tunnelling to Bainbridge for all the ansgt over this project! We really need to build for the ages, not some stop-gap plan--even if it might be less expensive. Let's do it right the FIRST (or should I say SECOND time--first was the mistaken viaduct to begin with, but now we know [I hope] better).

Sincerely,
Mark D. Blitzer
Seattle, Washington

From: Linda Bothell [lindabothell@me.com]
Sent: Tuesday, November 30, 2010 8:38 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-014-001

I have read the reports and attended meetings. I do not see the logic in building a new road that has less capacity, contains the danger of a tunnel, takes away a spectacular entry to our geographically beautiful city and does not adequately address trucking interests. Not to mention cost overruns and possible disturbance of Indian burial grounds.

Given our economic budget woes both local and state, can we use some common sense and pull back? I have watched the building of the case against the viaduct over the last several years and so far I have seen nothing that proves we need to tear it down and replace it. Why not create employment by reinforcing our existing highway?

I would appreciate a response,
thank you,
Linda Bothell

I-014-001

The Final EIS Chapter 1, Introduction, describes the Purpose and Need for the project and one of several purposes is to provide capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle. The Nisqually earthquake in 2001 demonstrated the urgent need for replacing the viaduct with a seismically safe facility. The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support that it has received from diverse interests. Final EIS Appendix C, Transportation Discipline Report, covers issues related to capacity, traffic patterns and conditions, and access for freight. Final EIS Appendix I, Historic, Cultural, and Archaeological Resources Discipline Report, covers issues related to potential effects of the project on cultural resources. FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Elevated Structure Alternative and rebuilding the viaduct.

From: Dale Bright [Dale@Laborerslocal440.com]
Sent: Monday, November 08, 2010 9:15 AM
To: AWV SDEIS Comments
Subject: Alaskan WAy Viaduct Replacement SDEIS

I-015-001

The Alaskan Way Viaduct Replacement with a deep bore tunnel is the most viable option. It allows the existing viaduct to remain open during most of construction maintaining freight mobility and a vital transportation corridor for commuters. This project will also serve to directly create jobs in the construction industry that is currently experiencing 20% to 30% unemployment.

Dale Bright
Laborers' Local 440
425-246-1745

I-015-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: eric [ebroeren@gmail.com]
Sent: Tuesday, November 16, 2010 12:50 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: do NOT build a tunnel, tear down the viaduct, turn it into a park

I-016-001

After reading the impact statement of the proposed tunnell, I have three thoughts on the matter:

- do NOT build a tunnel
- tear down the viaduct
- turn it into a park

I can live without the viaduct, and a majority of Seattleites can too. Please do not burden our children, and our children's children with unforseen debt, loss of historic buildings, and this misguided attempt at moving people around this city. We don't need any of it. Tear the viaduct down, build a park. Simple as that.

Sincerely,
-Eric Broeren
Seattle, WA

I-016-001

There are only two north-south through routes in Seattle: I-5 and SR 99 on the existing viaduct. With I-5 already at capacity during peak periods and throughout much of the day, SR 99 plays a critical role in the regional transportation system.

If the viaduct is closed and the central waterfront portion of SR 99 not replaced, trips that would have used the roadway would need to find other routes. Because alternative routes are longer and already congested, we expect that some travelers would change their travel patterns or avoid the trip entirely. In addition, land use and development patterns would adapt to different degrees of accessibility. Without the viaduct, the trips to and from the downtown core would not change much, but through trips (i.e., trips between districts north and south of downtown in the primary travel shed) would change to a greater degree.

In addition, many transit routes to and from downtown Seattle are on SR 99 or nearby parallel streets such as First Avenue S., Dexter Avenue, and Elliott and Western Avenues. Without the viaduct, this transit access would be greatly impeded. Further, the loss of the viaduct would also eliminate one of only three truck routes through downtown, and increased vehicle volumes on downtown streets would degrade conditions for vehicles, bicycles, and pedestrians.

In summary, not replacing the Alaskan Way Viaduct would have a significant adverse effect, and it would require many years for the area businesses and residents to adjust.

From: Alexander Broner [abroner@hawaii.edu]
Sent: Monday, December 13, 2010 6:23 PM
To: AWV SDEIS Comments
Subject: a fair comparison of options

I-017-001 Hello my name is Alex Broner. I've lived in Seattle for three years and at the moment I'm studying urban planning at University of Hawaii.

Thank you for reading my comments, I hope you take them seriously and use them to improve this document.

I read Attachment A of Appendix C in which justification is given for excluding the I5/Surface/Transit option from analysis. This exclusion is problematic in two ways.

1. Comparing a 4.2 billion dollar tunnel to the 3.3 billion dollar surface transit option is in no way a fair comparison. When the stakeholders worked with you they were given a certain budget with which to develop solutions. When additional money was found from the city, the port, and from tolling this should have gone into the EIS process at the alternatives formulation level. This lack of apples to apples comparison makes a mockery of the EIS process and should it make it into the final EIS may trigger lawsuits that may delay or derail the project.

I-017-002 2. Attachment A furthermore compares the I5/Surface/Transit option to the deep bore tunnel project without consideration of the effects of tolling. In the stakeholder process Option A was focused on "demand management" in which tolling was a central element. Going forward with an EIS that does not consider tolling impacts as integral on demand is like taking a step backward from all that we know and all the work put into the stakeholder process.

I-017-003 Here's what I propose.

a. Bring the stakeholders group back together to develop a surface transit option that has a comparable budget to the tunnel. We'll call this surface/transit 2.0

I-017-004 b. Treat tolling as integral to the tunnel option and select a demand management strategy that maximizes use of the tunnel and minimizes use of surface streets while meeting funding goals. This will probably mean congestion pricing on surface streets designed to mitigate the worst of tolling diversion during peak periods. Certainly I5 and downtown should be included, probably all north/south routes on this side of lake Washington and possibly 405 as well. Increased demand management might also raise additional revenue to fund the transit identified in the original tunnel agreement. We'll call this tunnel 2.0

I-017-001

The Final EIS Chapter 3, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS, which included the I-5, Surface, and Transit Hybrid. This approach was seriously considered during the Partnership Process, but was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region. The Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS. The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support that it has received from diverse interests.

Although costs are an important part of project planning and decision-making, they are purposely not a major part of the environmental review process. As provided in CFR 1502.23 "For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations." Overall project costs are included with the project description and are used for the analysis of economic impacts. Cost estimates for the alternatives evaluated in the Final EIS are:

- Bored Tunnel – $1.96 billion
- Cut-and-Cover Tunnel – $3.0 to $3.6 billion
- Elevated Structure – $1.9 to $2.4 billion

These cost estimates do include different elements. The Bored Tunnel Alternative cost does not include replacing the seawall, improving the Alaskan Way surface street, or building a streetcar. Costs for the Cut-and-Cover Tunnel and Elevated Structure Alternatives do not include replacing the seawall between Union and Broad Streets.

I-017-005

c. Compare the tunnel 2.0 to surface transit 2.0 and take into account state goals for VMT reduction and city goals for carbon neutrality in assessing various options

A complete EIS process is essential for good public decision-making, I hope you take these comments seriously and use them to improve the EIS process.

Sincerely,
Alex Broner

I-017-002

A detailed tolling analysis has been conducted for the build alternatives and is described in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements. Tolling analysis was not conducted for the surface/I-5 alternative.

I-017-003

Please refer to the response to Comment I-017-001.

I-017-004

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and

partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

I-017-005

Chapter 2, Alternatives Development, of the Final EIS describes the project's history and alternatives evaluated prior to the 2010 Supplemental Draft EIS. The 2004 Draft EIS included evaluation of the Surface Alternative. This alternative was eliminated because it reduced roadway capacity and did not meet the project's purpose as identified in the 2004 Draft EIS. Subsequent to the publication of the 2004 Draft EIS, a hybrid approach of I-5, Surface, and Transit hybrid was developed through the 2008 partnership process. The Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS. This concept was eventually dropped in favor of the three build alternatives analyzed in the 2010 Supplemental Draft EIS and Final EIS for the following reasons as presented in the 2010 Supplemental Draft EIS (Exhibit 3-9):

- Mobility for trips heading to and through downtown would be reduced, and for some trips, travel times would increase substantially compared to existing conditions or bypass concepts.
- North-south capacity would be reduced, resulting in added congestion on city streets and I-5.

Christopher V. Brown
9688 Rainier Avenue S.
Seattle, WA 98118

December 12, 2010

Ms. Angela Freudenstein, Environmental Manager
Alaskan Way Viaduct Replacement Project
999 Third Avenue, Suite 2424
Seattle, WA 98104

Re: Alaskan Way Viaduct Replacement Project
2010 Supplemental Draft EIS & Draft Section 4f Evaluation
Comments

Dear Ms. Freudenstein:

I-018-001

My comments for your inclusion in the *Final SEIS* are as follows.

1. On the first page of the document, in the section entitled Abstract, the first statement reads, "The existing Alaskan Way Viaduct … was damaged … is at the end of its useful life and must be replaced." This statement is clearly erroneous since it fails to give any credence to the established fact, presented to WSDOT by the renowned structural engineer Victor O. Gray, P.E., and soils engineer, the late Neil Twelker, PhD. P.E., that the existing viaduct can be completely refurbished and brought up to modern seismic standards with current, new engineering methods. Briefly, this would be done with additional (deep) foundation piling, the installation of hydraulic dampers (now found on Sound Transit light-rail structures), and other bracing so that the viaduct could, as a direct consequence, have a very long extended life, easily as long as the deep-bore tunnel discussed in this SDEIS. While this option was reviewed by a WSDOT employed consulting engineer, and subsequently dismissed for reasons unknown, it was never refuted or disproved. As such, this option must be included in the SDEIS.

2. On the *Fact Sheet*, page ii of the SDEIS, it is stated that the original viaduct was "built to last approximately 50 years …" No citation is given for this clearly fallacious and misleading statement. If it cannot be supported with an historical reference, it must be deleted.

I-018-002

3. Also on the *Fact Sheet* there is the heading **Public Hearings**. While you have indicated the dates of these, you have failed to mention the *Corridor Hearing* held on April 22nd, 2010, nor have you made any reference to the many documents submitted at that hearing. Similarly, you have also neglected to state that as of the publication of this SDEIS, WSDOT has failed to provide a *Corridor Hearing Summary* as required by the WSDOT *Design Manual*, in Section 210.07.

I-018-001

The lead agencies have studied various retrofitting concepts, and all of these concepts fail to provide a cost effective, long-term, solution that adequately addresses the risks to public safety and the weakened state of the viaduct.

The studies listed below have been focused on both the seismic vulnerabilities of the existing viaduct and various retrofit proposals that have been evaluated, including Victor Grays's concept:

- Retrofit Technical Analyses Table of Contents and Conclusions
- Seismic Vulnerability of the Alaskan Way Viaduct: Summary Report, Washington State Transportation Center (TRAC), July 1995
- Alaskan Way Viaduct: Report of the Structural Sufficiency Review Committee, June 2001
- Alaskan Way Viaduct Phase 1 Retrofit Option Report, American Society of Civil Engineers Review, July 2002
- Rebuild/Retrofit Alternative Report, Parsons Brinckerhoff, August 2002
- Rebuild/Retrofit 500, Parsons Brinckerhoff, April 2003
- Rebuild/Retrofit 500, Appendix B: Preliminary Deep Foundation Engineering Analyses, Existing Piles, Alaskan Way Viaduct Project, Shannon & Wilson, January 2003
- Alaskan Way Viaduct Summary: Safety and Service Limitations of the Alaskan Way Viaduct, 2005
- Proposed Retrofit of Alaskan Way Viaduct Using Fluid Viscous Dampers: Preliminary Phase, Miyamoto International, Inc., July 2006
- Evaluation of Gray's Retrofit Proposal, T.Y. Lin International Review, July 2006
- Additional Retrofit for Gray's Modified Proposal, T.Y. Lin International review of modified retrofit proposal, November 2006
- Report of the American Society of Civil Engineers Review

I-018-003

4. Considering the above matter, Comment 3, WSDOT must clearly enunciate in this forthcoming public document, the Final SEIS, that the *Design Manual*, at Section 210.07, Corridor Hearing, states, "A corridor hearing is a public hearing that is held ***before*** [emphasis added] WSDOT is committed to a preferred alternative …" Accordingly, the record should note that as of this date, while the SDEIS seems to suggest the deep-bore tunnel is a "preferred alternative", it cannot even proceed with a Record of Decision (ROD) until the *Corridor Hearing Summary* is published. To do otherwise makes a mockery of the State's own *Design Manual*.

5. The *Fact Sheet* on page iii lists **Permits, Approvals and Consultations**. Nowhere in this list do you describe the mandatory Value Engineering (VE) study pursuant to the WSDOT *Design Manual,* Chapter 310 and the attendant Federal mandate contained in Title 23, USC, Section 106. The Final SEIS should clearly note that this mandate is also required by the Office of Management and Budget issued *OMB Circular No. A-13, Value Engineering* dated May 21, 1993. In essence, nowhere in this SDEIS is it mentioned that such a study is even necessary. To date, WSDOT has erred by failing to note such a requirement. Thus, a correction needs to be included in the Final SEIS to this effect lest it be judged incomplete and imperfect.

I-018-004

6. Chapter 1 – *Introduction*, at Subsection 6 on page 4, where the question is stated, "**What is the purpose of the Alaskan Way Viaduct Replacement Project and why is it needed?"** It is stated that the viaduct is "… vulnerable and at the end of its useful life." No citation is given to such a sure assertion. Indeed, as noted in Comment 1, structural engineer Victor O. Gray, P.E., has made clear his opinion that also remains, to many engineers of like judgment, that there is, in fact, a lot of useful life left in the viaduct given appropriate remedial reconstruction. More troubling to any knowledgeable seismic engineer is the fact that the deep-bore tunnel, located nearly 150 feet below sea level, can rupture in an earthquake. If this should happen during a peak hour, as happed in the earthquake that hit Napier, New Zealand, in February, 1931 with its resultant *uplift* of well over 12 feet, the death rate will far exceed that which would exist if the current viaduct remained in its present, un-refurbished state. That the deep-bore tunnel will have far more fatalities than any above-ground alternative is not discussed. In essence, this statement in the SDEIS is clearly pure fiction. It must be corrected for the Final SEIS.

7. In Chapter 1, at page 4, under the heading **Purpose and Need for the Proposed Action** there are several bulleted items. Among these are the following in need of explanation. "Reduce the risk of catastrophic failure…" The Final SEIS must explain how a deep-bore tunnel accomplishes that goal if an earthquake from subduction tectonic plate activity, the kind that lifted Bainbridge Island out of Puget Sound, occurs.

Committee, December 2006
- Cost Comparison between Elevated Structure and Gray Retrofit, December 2006
- Cost Comparison between Elevated Structure and Gray Retrofit, with comments from Victor Gray, December 2006
- Seismic Vulnerability Analysis Report, Parsons Brinckerhoff, November 2007
- Alaskan Way Viaduct: Evaluation of Seismic Retrofit Options, KPFF Consulting Engineers, September 2008
- Stakeholder Advisory Committee Retrofit Presentation, July 17, 2008

These studies can be found on the project's website at: http://www.wsdot.wa.gov/Projects/Viaduct/libraryalternatives.htm

Retrofitting options cost almost as much as replacing the structure, but a new structure would have the added benefits of being much safer, more reliable, and would last longer. Replacing the viaduct is a better option than retrofitting when seismic performance, aesthetics, cost, and risk are considered. It is for these reasons that the lead agencies have evaluated replacement alternatives as the reasonable alternatives for this project.

The Fact Sheet has been updated in the Final EIS. Regardless of the original design life of the facility, the viaduct is now weak and vulnerable to catastrophic failure in an earthquake.

I-018-002

The April 2010 corridor hearing is listed in Appendix A, Public Involvement Discipline Report.

The corridor hearing summary in addition to the comments received at the meeting and the corresponding responses are available on the

I-018-005

8. In Chapter 3, Exhibit 2-1 shows the design concept of the deep-bore tunnel. The lower roadway of this figure shows the northbound (NB) traffic lanes and a very narrow right hand shoulder. It is obvious that no attention has been paid to the needs of the disabled (such as wheelchair users) in this design, let alone those of the parents of young toddlers who, in the event of an accident and in need of abandoning the lower tunnel, must have enough space to unbuckle their infants from their DOT approved car seats and then get them out of the car and into their strollers or perambulators so they can get to the escape corridor. With such a narrow shoulder it is obvious they, too, have been overlooked. In this regard, note that the described 2-foot shoulder is inadequate since the typical Metro Dial-Ride (DART) mini-bus has a handicapped (HC) access wheelchair (WC) ramp on its right side and that it needs 6 feet of clear space to deploy the ramp. Further, at its WC ramp end an additional 3 feet is required to allow the WC user to get off the ramp and turn left or right. (See the Federally adopted *Minimum Guidelines & Requirements for Accessible Design*, Subpart D – Technical, page 3, Figure 4./4.)

9. Continuing, the left (west) side of the tunnel shows a vertical concrete wall and, behind that wall, the proposed escape route. With stairways needed between the various levels, it is clear any person in a WC cannot get to any upper and assumed safe level. This raises a question that must be answered. Why are HC persons being treated differently from the normal person when it comes to an escape from, say, an inferno? Worse, how do they escape if there is catastrophic flooding – a guaranteed outcome in any major earthquake event?

I-018-006

10. In Chapter 3, page 12, left hand column, the last line has the statement, "… the City of Seattle vote in March 2007, made it clear that there was a lack of consensus surrounding a preferred alternative …" This is not true. Jan Drago, a city councilperson, especially designed the Seattle vote to lead to a double negative and thus, by its design, an alleged "lack of consensus". Regardless, what that vote did show was 72% of the voters ***did not want a tunnel***. That is ***not*** a lack of consensus. The Final SEIS needs to correct this obvious misrepresentation.

I-018-007

11. In Chapter 3, page 12, near the top of the right hand column, is found the sentence, "Travel lanes would be approximately 11 feet wide, with 2-foot wide shoulders on one side and a 6-foot-wide shoulder on the other side." See comment 8, above, for how this narrow shoulder is incapable of meeting the needs of the handicapped population. The Final SEIS needs to acknowledge that this population has been totally neglected in the tunnel design. It is critical that this admission be a part of the public record.

program website: http://www.wsdot.wa.gov/Projects/Viaduct/library-publiccomments.htm.

I-018-003

The EIS process has formal requirements set forth under the National Environmental Policy Act and the State Environmental Policy Act. The EIS documents do not document WSDOT's design requirements (such as the Value Engineering study) as set forth in WSDOT's design manual. WSDOT will continue to follow it's own process set forth in its design manual, but compliance with these requirements does not need to be documented in the EIS and does not bear on the completeness of the project's published EIS documents.

I-018-004

As indicated in the response to your first comment, there is an extensive list of documents that explain why the viaduct is vulnerable and why it needs to be replaced.

The proposed SR 99 bored tunnel would be a safe place for travelers. Engineers are designing the tunnel to withstand an earthquake, flooding or other disaster. The tunnel would also include the latest in state-of-the-art ventilation, fire detection and suppression, security and lighting systems. The bored tunnel would be designed to be safe in the case of earthquakes, rising sea levels, and flooding.

Geotechnical and structural engineers agree that tunnels can be designed as one of the safest places to be during an earthquake. Unlike structures located on the ground surface, tunnels are not as free to move or deform in response to seismic waves.

The proposed SR 99 bored tunnel is being designed to withstand an earthquake that only happens every 2,500 years on average (in the range of a 9.0 on the Richter scale) without collapsing. This is

I-018-007

12. As in Comment 11, above, on page 12 in the upper right column the statement reads, "All deviations ***will be approved*** (emphasis added) by Washington State Department of Transportation (WSDOT) and Federal Highway Administration to ensure that the roadway is built to be a safe facility for travelers. The phrase, ***will be approved,*** suggests some sort of future action by these agencies. This is both misleading and false. The fact is that the "deviations" have already been approved by both FHWA and WSDOT. Consequently, that makes it a fait accompli. It puts the lie to this assertion. Obviously, the Final SEIS must acknowledge this false statement and print, for the public record, a retraction.

13. In Chapter 3, page 12, near the middle of the right hand column there is a paragraph describing emergency access, etc. The sentence reads, "In an emergency, travelers would walk along the shoulders to reach a doorway into a secure waiting area, called a refuge area, located between the tunnel's levels." Note that here no recognition or acknowledgement of that segment of the population who use wheelchairs is found. These are the forgotten users who are blatantly ignored in this tunnel design. It continues with the sentence, "Staircases inside the refuge area would provide access to a walkway which would run the length of the tunnel and would be located between the roadway levels." Again, the needs of the handicapped are ignored. In fact, the ADA requirements are nowhere to be found. This is a disgraceful oversight that must be corrected in the Final SEIS if the deep bore tunnel is to gain any approval whatsoever. Absent such accommodation, the tunnel must be abandoned in favor of another option that can meet those particular needs.

14. Continuing, Chapter 3, page 12, near the bottom of the middle of the right hand column, there is the statement, "Refuge areas would contain emergency telephones. People who are unable to use the stairs to exit the tunnel could wait in the enclosed protected refuge areas for assisted rescue." Unfortunately, a good portion of the tunnel is well below sea level and, in an earthquake, it may be safely assumed there will be associated catastrophic flooding. Is it the intent of this design to allow innocent disabled travelers to drown in such an event? Is waiting for "assisted rescue" described anywhere in the ADA given alternatives to the tunnel? In an earthquake, where typically phone systems "go down," is it reasonable to rely on this single link to a safe exit? What happens if no one comes to the rescue? Where and what are the back-up systems? Who will manage them?

    The last sentence of this section states unequivocally, "Refuge areas and pathways to the refuge areas will meet the Americans with Disabilities Act (ADA)

considerably more stringent than the design requirements for the existing viaduct structure when it was built in the 1950's. It is important to mention that 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.

I-018-005

The Alaskan Way Viaduct Project is subject to compliance with the American Disabilities Act (ADA) so the final design of the project will meet all the necessary ADA requirements. Roadway shoulders are not subject to ADA requirements in areas where pedestrians are prohibited. Current project design allows for a 2-foot shoulder on one side and an 8-foot shoulders on the other side of the roadway in the bored tunnel. The 8-foot shoulder is a reasonable width for vehicles to pull off the road in case of emergency. Whether a wheelchair accessible van can unload entirely within the shoulder will depend on the type of wheelchair lift with which it is equipped.

Yes, to exit the tunnel in case of emergency one must use stairs. As explained in the 2010 Supplemental Draft EIS, people who are unable to use the stairs to exit the tunnel would wait in the enclosed, protected refuge areas (the part of the tunnel where the stairs are located) for assisted rescue. Refuge areas and the pathways to the refuge areas will meet ADA requirements.

Catastrophic flooding of the bored tunnel during an earthquake is highly unlikely because it will be designed to meet seismic standards, and the relatively soft, liquefiable soils found near the south portal will be improved during construction. Also, the alignment of the bored tunnel curves away from the central waterfront area and the aging seawall. If the Bored Tunnel Alternative is selected, the seawall would be replaced by the City of Seattle.

I-018-007

requirements." However, considering such design problems as found with 6-foot wheelchair ramps on common Metro DART buses that are deployed on the right side of the vehicle, in concert with only 2-foot shoulders, as noted in Comment 11, and the clear impossibility of deploying these ramps to even get handicapped citizens off the buses, particularly absent the ADA mandated 3-feet of landing space to maneuver a wheelchair, it is patently clear the ADA standards are not even close to being met. Rather, there has been no showing the tunnel can accommodate the handicapped traveler in an emergency. Accordingly, the Final SEIS must acknowledge that the deep-bore tunnel, unlike any other alternative, is unable to meet the needs of the wheelchair user (and also the parent with young toddlers who is similarly confounded due to inadequate shoulder widths). The typical wheelchair user is, as a consequence, placed at an enormous disadvantage. His travels in the deep-bore tunnel carry risks not equal to any other common traveler. He is unequal in this respect. (Incidentally, while I have used the Metro DART bus as a handicapped wheelchair design consideration, it should be recognized that these kinds of buses are also used by many other private and institutional agencies such as senior and congregate housing establishments, hotels, car agencies and the like.) And to close off this comment, it should be noted in the public record (the Final SEIS) that WSDOT, with the current designs showing tunnel shoulders of merely 2 feet and 6 feet on each side of the travel lanes, are clearly inadequate when contrasted against two recent WSDOT projects: the new Tacoma Narrows Bridge with its 10-foot shoulders and the $500 million retrofit of the Hood Canal Bridge where its previous shoulders were determined to be hazardous because they failed to meet the standards. The Final SEIS must address another key question; "How do first responders and tow-trucks get to an accident scene when shoulders are deficient in width?"

I-018-008

15. Chapter 2, page 19, in the middle paragraph of the left column states, "An additional 22,000 daily trips are expected to shift to city streets located just south of S. King Street between SR 99 and I-5 and about 5,000 daily trips are expected to shift to Alaskan Way along the central waterfront." As a year 2015 forecast, and recognizing the current congestion experienced on city streets, what assumptions were made in terms of standard traffic operations techniques to accommodate such an enormous overload? Was it assumed that most if not all of the current north and south oriented street curbside parking in the CBD was to be removed to accommodate this new influx of traffic that, with any other corridor alternative, would not be on these city streets? If curbside parking is to be removed along the north-south street system in the CBD to enhance capacity, what are the financial impacts to the city's parking meter revenue stream annually?

I-018-006

The text that is cited is taken out of context - the March 2007 election was but one factor that was used to describe the lack of consensus on the preferred alternative. None of the alternatives studied up to the March 2007 election, including the cut-and-cover tunnel, generated the level of public consensus necessary to be declared the preferred alternative. The voters did not reject a tunnel in general, they rejected a specific tunnel that would have resulted in significant transportation and socioeconomic effects.

I-018-007

The Alaskan Way Viaduct Replacement Project is subject to compliance with the Americans with Disabilities Act (ADA), so the final design of the project will meet all the necessary ADA requirements.

For the Bored Tunnel Alternative, the proposed tunnel is not a pedestrian facility, and as such people will not be allowed to leave their vehicles or walk through the tunnel except during emergency situations when directed to evacuate. Current project design allows for one 8-foot shoulder in the bored tunnel (in each direction), which is a reasonable width for vehicles to pull off the road in case of emergency. WSDOT believes that during an emergency evacuation situation, transit operators will be able to maneuver their vehicles sufficiently to allow deployment of wheelchair lifts, although they may need to encroach into the adjacent lane to do so. All traffic will be directed to stop during this type of emergency, so maneuvering into the adjacent lane will not present a traffic safety problem.

All design standards deviations proposed for the Bored Tunnel Alternative are contained in the Design Approval Package that was prepared by the project team and approved by WSDOT and FHWA. However, final design for the selected alternative will not occur until after the NEPA process is complete.

I-018-008

16. On page 39, and continuing the concerns expressed above in Comment 15, under the heading **Traffic Diversion from Toll Scenarios A, C, and E**, the data show "16,000 to 18,000 more vehicles are projected to travel on north-south downtown city streets west of I-5." Was any of this information made available earlier to both the "expert review panel" and the "stakeholders"? If not, why not?

17. Similarly, on page 39, below the "bulleted" section, there is the statement, "North of Seneca Street, the number of vehicles traveling on Alaskan Way each day is projected to increase by 6,000 to 7,000 vehicles." This is a huge increase over that described earlier. It is the equivalent of an additional travel lane on any arterial system. Was any of this information made available earlier to both the "expert review panel" (see SDEIS page 48) and the curiously named "stakeholders" (see SDEIS page 49 for the list)? Would this new data color any decision regarding the efficacy of the deep-bore tunnel option? This must be addressed in the Final SEIS.

I-018-009

18. On page 42 of Chapter 2, the Summary, there is the heading "**What issues are controversial?"** Missing entirely from this list is the handicapped access element along with the projected impacts from toll related traffic diversion and how they will impact the so-called Alaskan Way Promenade. This needs to be clarified in the Final SEIS.

I-018-010

19. Considering Chapter 3 – Alternatives Development, page 45, one of the bulleted items is named Tunnel. It considers a 3-lane cut-and-cover tunnel. Question: if this option had three lanes, why does the current deep-bore tunnel have only two lanes? After all, they serve the same traffic in the same corridor. In the Final SEIS please explain how three lanes (in that option) in each direction are now reduced to two lanes for the DBT option?

20. In Chapter 3 – Alternatives Development, page 44 on the left column, there is a section headed "**Reasons the Bypass Tunnel Alternative was dropped**." The bottom paragraph of this section states, in part, "… was found to not meet the projects purpose, which was to 'maintain or improve mobility, accessibility, and traffic safety for people and goods along the Alaskan Way Viaduct Corridor." But, this option had two (2) lanes in each direction, just like the deep-bore tunnel option. Please explain how the DBT with exactly the same number of traffic lanes is a better option for the stated "mobility, accessibility, and traffic safety" purposes? Surely you have another professed but so far hidden reason. What is it?

WSDOT has worked very closely with the Seattle Fire Department on developing safety measures and procedures to ensure that the bored tunnel meets applicable safety criteria during emergencies. To exit the tunnel in case of emergency, one must use stairs. As explained in the 2010 Supplemental Draft EIS and this Final EIS, people who are unable to use the stairs to exit the tunnel would wait in the enclosed, protected refuge area for assisted rescue. The refuge areas and egress corridor provide a safe environment for evacuees since they are ventilated separately with fresh air and are isolated from roadway traffic and emergencies with continuous walls, and it is accessible without needing to step over a curb.

WSDOT has developed a preliminary corridor operations plan that requires the designer of the facility to develop a detailed emergency response plan. It includes information on plans for emergency response and coordination with first responders including the Seattle Fire Department, Washington State Patrol, and the Seattle Police Department. The emergency response plan will include provisions for assisting mobility-impaired and incapacitated people.

The Bored Tunnel Alternative would have a state-of-the-art drainage and pumping system to remove water that might enter the tunnel. The tunnel design takes into account current reasearch on projected sea level rise over the 100-year design life of the facility. The City of Seattle is responsible for replacing the seawall and taking into account projected sea level rise in their design process.

I-018-008

Existing on-street parking restrictions were assumed for 2015 and 2030 analysis. Signal operations were optimized for 2015 and 2030 analysis. Operations at intersections under all three build alternatives analyzed in the Final EIS are expected to be as good as or better than operations

I-018-011

21. In Chapter 3 – Alternatives Development, page 49 on the left column, is a small section entitled "**2007 Advisory Vote Results**." The penultimate sentence in this part says that the cut-and-cover tunnel was "to use safety shoulders as exit-only lanes". It continues with the final sentence stating, "The citizens voted down both alternatives." The Final SEIS should note that the Seattle mayor called this option "tunnel light". But, of more than passing interest, WSDOT, by memorandum dated February 13, 2007 addressed to Douglas MacDonald, Secretary of Transportation, over the signatures of David Dye, P.E., Urban Corridors Office Administrator, Ronald Paananen, P.E., Project Director, SR 99 Alaskan Way Viaduct Replacement, John Milton, PhD., P.E., Project Director, SR 520 Bridge Replacement, and Mark Bandy, P.E., Urban Corridors Office Traffic Engineer, all recommended that the City of Seattle's surface tunnel hybrid proposal "… not be advanced for further study." Its shoulders were too narrow, among other problems noted by WSDOT engineers. The Final SEIS must note that even ***before*** the vote WSDOT had condemned this project option because of inadequate shoulders. Is there any more substantial evidence needed as to what any tunnel, especially one with insignificant shoulder widths, means for traffic safety. If WSDOT condemned "tunnel light" for safety reasons, The Final SEIS should explain how it is possible for the same engineers to proclaim the deep-bore tunnel, with its 2-foot shoulders on one side and 6-foot shoulders on the other, to be a safe design?

22. When WSDOT scuttled "tunnel light", as noted on Comment 21 above, what research did they rely on for that decision and the attendant memorandum of February 13th to Douglas MacDonald, Secretary of Transportation?

I-018-012

23. Chapter 3 – Alternatives Development, page 49 on the right hand column, there is a list of the **Stakeholder Advisory Committee Members**. Of this group, the top of the list is for those who represent ECONOMIC INTERESTS. In this list there is one for the International Longshore & Warehouse Union. However, the deep-bore tunnel has no access to any warehouse. How and why and for what reason was this particular member selected? Why was there no representation by the Teamsters Union – the very people who drive the trucks that travel this corridor? Moreover, this group has a list for CAUSE-DRIVEN ORGANIZATIONS. This list has the Cascade Bicycle Club but not the American Automobile Association. Why one and not then other? Also, on the list is Cary Moon of the People's Waterfront Coalition. Why was this anti-car, anti-arterial, anti-highway landscape architect put on the list but not one member from the Institute of Transportation Engineers? Was this list assembled to ensure no consensus at all? The Final SEIS must describe how the membership was selected.

under the 2030 Viaduct Closed (No Build Alternative).

The expert review panel and stakeholders listed on page 48 of the 2010 Supplemental Draft EIS were part of the 2008 Partnership Process. These groups were precursors to the current Supplement Draft EIS process and analysis. However, the 2008 Partnership Process did evaluate alternatives that increased volumes on Alaskan Way, including the I-5, Surface, Transit Hybrid alternative. This alternative increased volumes on Alaskan Way significantly over existing conditions. The Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS.

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The potential effects resulting from these analyses represent the conservative end of implementing tolls on the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

I-018-013

24. Continuing, Chapter 3 at page 50 tells us that the Stakeholder Advisory Committee was to "give feedback" but that it was not "convened as a decision-making body". With that kind of purpose, essentially "feedback", why were the above noted organizations with a direct interest in vehicular travel excluded – namely, the Teamsters Union, American Automobile Association, and the Institute of Transportation Engineers omitted? Indeed, would not the American Trucking Association have more to say than the Cascade Bicycle Club, an organization whose membership cannot even use the deep-bore tunnel or the viaduct?

25. Chapter 3 at page 52 in the middle column it is stated that the Stakeholder Advisory Committee membership "… saw the I-5, Surface, and Transit Hybrid as an attractive approach …" Will the Final SEIS comment that if the Stakeholder membership had included at least a few experts in vehicular travel needs, such as teamsters, transportation engineers, trucking association members and automobile association members, such a corridor selection would have been discarded at the very outset as being utterly impractical and unworkable? Did it not occur to anyone at WSDOT, the City, or the County that feedback from any anti-auto group was bound to be disingenuous if not invalid?

I-018-014

26. Chapter 3 on page 52 at the bottom of the middle column under the heading **2009 Recommendation from the Governor, County Executive, and Mayor** it notes the "support of diverse interests; and the willingness of the partners, with the Port of Seattle …" but, nowhere is the actual monetary support from the Port of Seattle described. Will the Final SEIS describe the actual required monetary support from the Port of Seattle? How much is it? How will the Port raise that sum? Will the amount from the Port be similar in size to its contribution for SR 519, which was $5.5 million of the SR 519 total cost of $84.35 million? How much higher will the King County property owner's ad valorem taxes increase, in terms of a percent of current Port taxes, for its requested deep-bore tunnel contribution?

I-018-015

27. Chapter 3 on page 53, on the right side is a caption reading, "**What were the six guiding principles for the Partnership Process?**" The first of these is, "Improve public safety". How does a deep-bore tunnel with substandard shoulder widths and a series of "design deviations" improve public safety? Given the research published in a paper entitled *Cross-sectional Accident Models on Flemish Motorways Based on Infrastructural Design* (Frank Van Geirt & Erik Nuyts, Provincial College of Limburg, Belgium) where wider shoulders were found to be statistically significant with respect to lower accident frequency, how can this objective be reached? Is it not a false statement? The Final SEIS must note this contradiction.

Please see the Final EIS, and Appendix C, the Transportation Discipline Report, for updated transportation analysis, including forecasts impacts due to tolling.

I-018-009

Like most projects, the Alaskan Way Viaduct Replacement Project is subject to compliance with the American Disabilities Act (ADA) so the final design of the project will meet all the necessary ADA requirements. Typically, roadway shoulders are not subject to ADA requirements, like sidewalks, because they are not pedestrian facilities. Specifically for this project, pedestrians would be prohibited in the tunnel so the shoulders would not be a pedestrian facility subject to the ADA. Current project design allows for 8-foot shoulders in the bored tunnel (one in each direction), which is a reasonable width for vehicles to pull off the road in case of emergency. Whether a wheelchair accessible van can unload entirely within the shoulder will depend on the type of wheelchair lift with which it is equipped. The 8-foot shoulder is wide enough for people with disabilities to use to access the emergency exits in the event of a tunnel evacuation.

Please refer to the Final EIS for information on tolling, which is discussed throughout the document. Appendix C, Transportation Discipline Report, addresses the effects of potential tolling. The project complements a number of other projects with independent utility that would provide other improvements such as transit enhancements and a new Alaskan Way Promenade and public space. These individual projects include the moving forward projects identified in 2007, as well as improvements recommended as part of the Partnership Process. Please refer to Chapter 2, Alternatives Development, of the Final EIS for a description of these projects.

I-018-010

The Tunnel Alternative from the 2004 Draft EIS has evolved into the Cut-

I-018-015

28. Continuing on from Comment 27, above, the next bulleted item states, "Provide efficient movement of people and goods now and into the future." However, Comments 16 and 17, above, pertain to the enormous diversion of prior viaduct traffic onto already congested city streets including Alaskan Way. How will congested city streets lead to the "efficient movement of people and goods"? Can this inconsistency be explained or clarified in the Final SEIS or should this item be deleted from the public record?

29. Also, continuing from Comment 27, the 5th bulleted item says, "Create solutions that are fiscally responsible." How does a deep-bore tunnel costing more than any other alternative, that is projected to consume over $1.4 million in electrical power for only lighting and ventilation, and untold millions for maintenance and tort-related damages, imply that this option is a fiscally responsible choice? This needs clarification in the Final SEIS since it appears to be questionable if not specious.

30. Considering Chapter 3, page 53, and the caption reading, "**What were the six guiding principles for the Partnership Process?**" It is patently clear that the dictates of Title 23, USC, Section 106, at Subsection (f), LIFE CYCLE COST ANALYSIS, would answer all of these bulleted items and, moreover answer the fundamental question considering the deep-bore tunnel and its appropriateness for the subject corridor. The Final SEIS must answer the question as to why WSDOT is assiduously avoiding this kind of study. Of special interest, this unique type of study is mandated by both Federal statute and by the WSDOT *Design Manual*. When will this document be prepared and made available to the public?

I-018-016

31. Chapter 3 at page 54 has the heading, **2006 Supplemental Draft EIS Elevated Structure**. It is appropriate at this time to recall WSDOT hired the Parsons Brinkerhoff (PB) firm to address an elevated structure located not on the existing Alaskan Way right-of-way but, instead, in Elliott Bay. For reasons unknown they looked at a site far out in the bay and not near the harbor line along the seaward side of the various pier heads. The reason the PB assessment was discarded was, among others such as water depths, was due to the height of the structure impacting flight paths to the two airports lying to the south. Can the Final SEIS address this as an alternative to the location of the elevated structure along the Alaskan Way right-of-way since it has all of the advantages of the deep-bore tunnel and none of the safety and capacity issues of the tunnel? If not, why not?

I-018-017

32. Chapter 3 at page 60 has a cross-sectional view of the Bored Tunnel Alternative. In this view the lower (NB) roadway has a wide shoulder on the left side of the

and-Cover Tunnel Alternative which is evaluated and compared to the Bored Tunnel Alternative in the Final EIS. The Bored Tunnel Alternative has been designed with 2 lanes in each direction in the tunnel section and would provide sufficient capacity to efficiently move people and goods to and through downtown Seattle.

The Bypass Tunnel Alternative was dropped because of the increases in travel times for through trips and increases in congestion as presented in the 2004 Draft EIS. For the current alternatives, information about travel times for transit and other vehicles has been updated in the Final EIS. Detailed information is provided in Appendix C, Transportation Discipline Report. This information assumes the access points proposed for the Bored Tunnel Alternative for both tolled and non-tolled conditions. The public and various agencies and decision-makers were presented with this information in the Supplemental Draft EIS to support decision-making.

I-018-011

The 2010 Supplemental Draft EIS and the Final EIS describe the traffic effects of the 6-lane Cut-and-Cover Tunnel Alternative (three lanes in each direction) and the 4-lane Bored Tunnel Alternative.

As your letter states, the Bypass Tunnel Alternative was dropped in 2006 because it didn't meet the project's purpose at that time, which was to "maintain or improve mobility, accessibility and traffic safety." Even though the 4-lane capacity of the Bypass Tunnel is similar to the Bored Tunnel Alternative, these alternatives vary greatly in their designs south of S. King Street and north of Pike Street and their construction effects. Both concepts were considered in the 2010 Supplemental Draft EIS as documented on pages 53 through 55; however, the Bypass Tunnel Alternative was dropped due to constraints in the Battery Street Tunnel and construction effects. The Bored Tunnel Alternative is the only alternative that replaces the Battery Street Tunnel, which has many

I-018-017

travel lanes and a narrow shoulder on the right. These are respectively 6 feet and 2 feet. However, the WSDOT *Design Manual*, at page 1140-9, states, "Shoulders on the left between 4 feet and 8 feet wide are less desirable. A shoulder in this width range might appear to a driver to be wide enough to stop out of the through traffic when it is not. This concern is repeated in the AASHTO *Policy on Geometric Design of Highways and Streets*, 2001 edition, page 459, where it states, "Shoulder space on the left side … is not intended to serve the same purpose as the right shoulder. The shoulder on the right, through customary use … is accepted by all drivers as a suitable refuge space for stops." It is remarkable that WSDOT is yet again, on this corridor, deviating from current, adopted standard engineering practice. Consequently, this leads to an obvious question that must be answered in the Final SEIS. Why is standard engineering practice being discarded in the tunnel design and, in terms of highway safety, what will be the adverse consequences from such a deviation?

I-018-018

33. Chapter 33 on page 63 has a small section titled, "**Viaduct Closed Scenario 2: Catastrophic and Complete Collapse of SR 99**." While this short section is of obvious interest, I have not seen any similar comments regarding the same consideration for the subject deep-bore tunnel option. Why is there no section describing something to the effect, "**Deep-Bore Tunnel Closed Scenario 2: Catastrophic and Complete Collapse of the Tunnel**." Importantly, while rosy assumptions are made for the deep-bore tunnel on the basis of who knows what, those assumptions are patently untrue if an earthquake of the kind that rocked Napier, New Zealand, in February, 1931, occurs. The Final SEIS needs to address such a scenario where there is a major schism on the Seattle fault line with a corresponding uplift.

I-018-019

34. Chapter 4, at page 77, shows the SR 99 Existing Bus Routes, including 11 routes that are destined to/from the CBD. This section describes their value. "Approximately 25 percent of transit riders entering or leaving downtown from the south currently use bus routes that travel SR 99. This demand is by 14,300 riders. With the deep-bore tunnel they are now thrust onto the city's already congested surface streets. Will the Final SEIS describe what the deep-bore tunnel option means in terms of rider inconvenience, delay, and frustration? Can such an assessment in any way countenance an approval for the deep-bore tunnel option? Should this not be included in the Final SEIS since King County may alter its opinion of the deep bore tunnel as having any viability?

design and safety deficiencies that serve to constrict traffic in this portion of SR 99. As indicated in the 2010 Supplemental Draft EIS and the Final EIS, the Battery Street Tunnel section of SR 99 is expected to carry more traffic than the other build alternatives that do not remove or fix this constraint. The Bypass Tunnel Alternative also has much greater construction effects than the Bored Tunnel Alternative.

I-018-012

The Stakeholder Advisory Committee of local community and business representatives was appointed by the Governor, King County Executive and Seattle Mayor to provide feedback on potential solutions for the viaduct's central waterfront replacement based on a set of guiding principles developed by WSDOT, King County and the City of Seattle. It was made up of 29 individuals that represented communities, economic interests and cause-driven organizations. The representatives (who each brought opinions about replacement alternatives to the table) were invited to participate as a sounding board that represented a wide-variety of perspectives.

Though the Committee was limited to the 29 participants, members of the public and other organizations were able to participate in the process by attending Committee or public meetings. During 2008, public meetings were held quarterly, more than 50 community briefings were made, and more than one thousand public comments were received.

I-018-013

In December 2007, the Stakeholders Advisory Committee was appointed by the Governor, King County Executive and Seattle Mayor to provide feedback on potential solutions for the viaduct's central waterfront replacement. It was made up of 29 individuals that represented communities, economic interests and cause-driven organizations. The purpose of this advisory committee, which met until December 2008, was to review, deliberate on and provide comments on the technical

I-018-020

35. Chapter 5 – *Bored Tunnel Alternative*, page 94, shows the proposed alignment and access to the several connecting streets, not the least those for the Port of Seattle's Terminals 37 and 46 via S. Atlantic Street. It is clear there is NO tunnel access for this major container terminal. With zero access to the tunnel why should the Port be a financial contributor to the project? Can this be explained in the Final SEIS? If not, why not?

36. Similarly, and looking at the north portal details on page 95, there is no access to the north of the CBD waterfront along the deep-bore tunnel project alignment at Terminal 91, used by some cruise ships and for automobile imports, nor the Grain Terminal, Terminal 86, nor the Bell Harbor Marina, Terminal 66, nor even the Port's offices at Pier 69 and the Bell Street Pier, Pier 66. Their respective vehicular traffic contributions to the deep-bore tunnel project are slight if not zero. Further, the Port's Shilshole Bay Marina and the Fishermen's Terminal all have negligible traffic associated with the deep-bore tunnel facility since none of them has any access to it whatsoever. Accordingly, and to repeat Comment 35, above, why should the Port be a financial contributor to the project? Would it be reasonable to assume that there is insufficient funding for the deep-bore tunnel project and so the Port has to be considered a "sugar daddy," to use a colloquial phrase? Will this not endanger the Port's reputation amongst its clients and cause them to question the legitimacy of their present fee structure(s)? Last, by making the Port a substantial tunnel contributor it extends a new tax to all King County property owners. This must be noted in the Final SEIS for the public record.

I-018-021

37. Exhibit 5-3 on page 94 shows an artists rendering of the South Portal Tunnel Operations Building. Does not this massive 7-story-tall building impinge on the skyline of the SR 99 right-of-way in a manner not unlike the existing viaduct? If the existing viaduct is considered to be an eyesore and a blot on Seattle's image, then does not this new structure do the same? Can the Final SEIS address the absurd argument regarding the Alaskan Way viaduct and its alleged visual impact to the Seattle CBD image from seaward? How can one be ugly and not the other?

I-018-022

38. Page 101, Exhibit 5-14, shows the **Travel Speeds PM Peak** (as an example) for three scenarios. Typically, traffic engineers and highway administrators use levels of service (LOS) and not travel speeds to describe peak-hour (and off peak) operations. Why were speeds used in this instance and not the commonly accepted statistics? (This argument also applies to the AM data, not discussed for brevity.)

39. Page 103, Exhibit 5-16, shows the **SR 99 Daily Vehicle Volumes** and provides an interesting contrast between *2015 Existing Viaduct* and *2015 Bored Tunnel*

work for the central replacement.

Organizations with a direct interest in vehicular travel were represented on the committee, including, but not limited to, the King County Labor Council, BINMIC, and the Seattle Marine Business Coalition. Speculating on the outcome of the Partnership Process if the committee had included different members is not the purpose of the Final EIS.

I-018-014

According to the Port of Seattle (http://www.portseattle.org/downloads/about/2011_Budget_14_Tax_Levy.pdf), in 2010, the Port used $13 million of tax levy to fund a Transportation & Infrastructure fund (TIF). In 2011, the Port anticipates using an estimated $8 million from the TIF to make a contribution toward the Alaskan Way Viaduct Replacement Project. Port allocations of their TIF are subject to a vote by the Port Commissioners, and not the general public. For 2011, the Port's tax levy will be $73.5 million. Therefore, the money for the viaduct accounts for approximately 11 percent of the 2011 tax levy. Since the millage rate is $0.2235, the amount allocated by the Port to the project, as a millage rate, is $0.0246 (~2.5 cents per $1000 of property value). Other property taxes to fund King County transit services as well as Washington State gasoline taxes collected a the time of fuel purchase would contribute financially to the Alaskan Way Viaduct Replacement Project.

I-018-015

The shoulder widths inside the bored tunnel have been modified since the 2010 Supplemental Draft EIS. The tunnel would have a 2-foot-wide-shoulder on one side and an 8-foot-wide shoulder on the other side. Please see our responses to other similar comments in your letter. In short, we believe that it correct to say that the Bored Tunnel Alternative would improve public safety compared to the existing viaduct structure that also has many aspects that deviate from current roadway standards. For example, much of the viaduct and Battery Street Tunnel does not

I-018-022

volumes. The viaduct has an ADT of 117,000 while along the waterfront the tunnel has an ADT of 86,600. (I presume trip diversion from tunnel-tolling is absent in the latter data.) Setting diversion issues aside and ignoring city street traffic impacts from such diversion, both discussed earlier, would not an assessment based on just these two disparate traffic volumes, for the same corridor, suggest the deep-bore tunnel option is a very poor financial choice? Will the Final SEIS discuss why a lot of money should be spent for a facility that carries less traffic than any elevated alternative, especially a new one located off Alaskan Way along the pier head line, in the style addressed in the earlier PB Elliott Bay study?

I-018-023

40. Chapter 5, page 115, has Exhibit 5-34 pictorially describing the interior of the tunnel along the central waterfront. Accompanying that picture is a section titled **Bored Tunnel and the Central Waterfront**. At the bottom of the middle column it says, "Exhibit 5-34 shows what the interior of the bored tunnel could look like." However, anyone who has traveled in the filthy, dingy, poorly maintained, Battery Street Tunnel may not appreciate such a description since there is a large gap between reality and dreams. Nonetheless, Figure 5-34 does portray the proposed substandard shoulders and assuredly their inability to accommodate handicapped travelers. The left wall of the tunnel portrays diagrammatically (schematically) persons on foot running to the escape exists. But, what about those in wheel chairs? How can they get out of their vehicles? And how do they rapidly get to the escape routes? Will the Final SEIS mention that the handicapped traveler, caught in a fiery accident in the tunnel, is to be sacrificed so that the concept of Figure 5-35, ironically, pedestrians strolling along a non-traffic jammed, sunny Alaskan Way promenade, can happen? Is this an acceptable trade-off? If so, how does it comport with the mandate for engineers in RCW 18.43.010 "… to safeguard life, health, and public property, and to promote the public welfare …"?

41. Exhibit 5-47 on page 126 is the *Generalized Subsurface Profile*. This is an important figure since it shows the bottom of the deep-bore tunnel at an elevation a little below 150 feet (from sea level). A tunnel this far below sea level, in an earthquake, can be expected to fracture at many of the segmented joints that are a part of the building process. This raises the obvious question. How does a handicapped person in a wheelchair expect to escape if (1) he cannot exit his/her vehicle due to the narrow shoulders and (2) if he/she is directed to the previously described "secure waiting area" and has to wait for a rescue? Rescue by whom – a diver? This consideration makes the tunnel an unacceptable option; it clearly relies on creating a sub-class of citizen, the handicapped.

have a roadway shoulder.

Please see Chapter 5 in the Final EIS for traffic comparisons of the tolled and non-tolled build alternatives. Please also see Chapter 5, Question 37 for a discussion of how the tolled and non-tolled build alternatives provide capacity to efficiently move people and goods to and through downtown Seattle. In short, all of the tolled and non-tolled build alternatives provide two through lanes in each direction on SR 99. As you state, if the build alternatives are tolled, some traffic would divert from SR 99 to city streets to avoid paying the toll. This will slow traffic on SR 99 near the stadiums and north of Denny Way, increase congestion at intersections near the off-ramps, and increase traffic volumes on city streets. Even with this traffic diversion and related local congestion, all of the tolled alternatives provide additional capacity beyond the local street system to reliably move traffic to and through downtown. Also, the ramps from SR 99 have queue bypass lanes that will allow transit to avoid some of the congestion.

If the build alternatives are tolled, effects to I-5 are expected to be minimal because it is already at capacity and may change travel times during peak commute times by up to 2 minutes. Effects to city streets associated with tolling would be more pronounced and are discussed in Chapter 5. Effects to city streets from the tolled build alternatives are expected to be comparable. Taken together, these results support the fact that all alternatives with or without tolls provide sufficient capacity to move people and goods, but there are tradeoffs in the way traffic is accommodated.

During the Partnership Process, the evaluation under guiding principle 5, fiscal responsibility, considered the capital and operating cost estimates of the scenarios. Costs were modified to account for contingency and risk, and a construction phasing plan was developed that allowed these costs to be escalated to year-of-expenditure dollars. Funding sources

I-018-024

42. Exhibit 5-47 also provides a hint of the steep grades in the deep-bore tunnel near the south portal. Unfortunately, and possibly as an oversight, not addressed in the SDEIS are the consequences of these steep grades. Likewise, also not documented in this document, is the fact that WSDOT has already sought and received permission from FHWA for what was titled "Design Deviation Number 3, SR 99 Length of Grade". Long grades are problematical since both traffic safety and vehicular capacity are compromised. (See Highway Research Board *Special Report 87,* Figure 5.5, *Average speed of typical truck over entire length of grade on two-lane highways* as a case in point.) The maximum permitted grade for this class of highway is 5 percent for no more than 900 feet. This design standard is not apparently met from a review of this small-scale figure. The Final SEIS must make note of this fact. Fundamentally, this design deviation cannot be considered minor or insignificant; it is substantial.

43. Chapter 5, the *Bored Tunnel Alternative*, at page 128 in the 2nd column, has the bulleted statement, "Improve traffic safety". A prudent engineer should take exception to this clearly misleading statement in consideration of the following facts. The deep-bore tunnel option has a series of abrogated designs including *Design Deviation Number 1*, SR 99 Shoulder Width (Inside and Outside), *Design Deviation Number 2*, SR 99 Left Off/On-Ramps, and *Design Deviation Number 3*, SR 99 Length of Grade, a reduction in vertical clearance from 16.5 feet to 15 feet *See Design Manual*, page 720-4, a reduction in *lane width* from 12 feet to 11 feet *See Design Manual*, page 1140-16 and, last, increasing the left-shoulder of the NB lanes from 4 to 6 feet in direct contravention of the WSDOT *Design Manual* and the ASHTO *Policy on Geometric Design of Highways and Streets* Reference, page 459 of the 2001 edition. All these disparate design changes must lead to the question, "What are the "interaction effects" and "main effects" (to coin the terms used in a statistical factorial analysis) that will result from these outwardly, non-connected actions?" They remain to be seen. To date, the SDEIS is bereft of any mention of these issues. In the case of narrow shoulders the research record is clear. For example, the most recent research on tunnel accidents was published in China. It is entitled, *Characteristics of Traffic Accidents in Chinese Freeway Tunnels*, Chang'an University, China, 2008. This research looked at four tunnels ranging in length from 0.12 to 1.8 miles. In two years (2003, 2004) there were 134 accidents that included 6 fatalities, 32 injuries and 96-property damage only types. Freeway style tunnels, like the subject deep bore tunnel, are assuredly dangerous places, the data suggests, even in tunnels shorter than the proposed Alaskan Way Viaduct replacement tunnel. To be complete and accurate the Final SEIS, a public record, must include this example.

and limitations of funds both committed and potential were considered. The anticipated design life of all SR 99 and seawall replacement concepts were considered, per applicable design standards. The state's total contribution to the project has been limited to $2.8 billion, including commitments already made to the Moving Forward projects. This threshold became a major consideration when viewing the costs of the SR 99 component and the need to find additional funding sources. In the end, the costs were weighed against the degree to which other guiding principles are met.

I-018-016

Several concepts were considered that would construct a bridge over Elliott Bay as an alternative to reconstructing the viaduct in its current location. However, these concepts were screened out for several reasons:

- A bridge over Elliott Bay would restrict navigation within Elliott Bay, which would affect both the Port of Seattle's container terminal operations and the Washington State Ferry operations at Colman Dock.
- Obtaining the necessary permits for in-water bridge construction would be extremely difficult.
- The bridge concept has visual quality impacts that are not consistent with the City's existing land use and shoreline plans.

I-018-017

Chapter 5, page 94-95 of the 2010 Supplemental Draft EIS discusses this issue. As the text states, for the bored tunnel, the deviation in shoulder width is required to minimize the diameter of the bored tunnel. All deviations would be approved by WSDOT and FHWA to ensure that the roadway is safely built for travelers. The total shoulder width is divided such that the 8-foot wide shoulder is always adjacent to the side of the tunnel that houses the emergency tunnel exits, secure waiting areas, and emergency walkway.

I-018-025

44. To continue with the stated concept of this SDEIS on page 128 that the deep-bore tunnel will "Improve traffic safety" it may be appropriate to also consider more local experience. For example, when considering the substandard roadway geometry of the deep bore tunnel, geometrics that clearly fail to meet the adopted highway safety standards, it is appropriate to recall a few fatal accidents that have taken place in the first few months of this very year, 2010. They include:

- January 10th, 2010 @ 5:30 p.m., a fatal accident on SR 18 caused entirely by the narrow shoulder and a disabled Dodge Neon struck by a motorcycle:
- January 20th, 2010, an evening peak hour collision on the Alex Fraser Bridge in Vancouver B.C. involving a disabled car in the northbound curb lane struck by a flatbed commercial vehicle, which, in turn, flipped it over causing it to strike a third vehicle. The resulting fire was so intense that the driver of the third vehicle, who was killed, could not be identified. The fire was so strong that the entire bridge had to be repaired and inspected before it could open to traffic.
- March 24, 2010, an early morning accident on SR 167 involving an automobile striking the rear end of a parked semi, again due to a narrow shoulder.
- March 29, 2010, 2:00 p.m. involving an automobile striking the rear of a parked car on the shoulder of I-5 that was being refueled from a gallon can by the driver.

With four fatal accidents in three months involving disabled cars parked on narrow highway shoulders, what would have happened if any of these had occurred in the subject Alaskan Way Deep Bore tunnel? This concern needs to be clearly stated in the Final SEIS due to its importance.

45. Chapter 5, the *Bored Tunnel Alternative*, at page 128 in the 2nd column, also has the bulleted statement, "Avoid major disruption of traffic patterns due to loss of capacity on SR 99." From all of the above examples of accidents in tunnels and accidents associated with major arterial facilities that have substandard shoulders, there will be unquestionably "major disruption" to traffic in the proposed tunnel, not the least due to the inability of first responders and tow-trucks to timely reach and clear accident scenes by virtue of minimal shoulder widths. Consequently, the Final SEIS must not attempt to hide or otherwise cover-up the potential failure of the deep-bore tunnel to meet this mandate, particularly when contrasted against above ground alternatives with improved geometrics per adopted standards.

I look forward to your addressing these comments in the Final SEIS.

Sincerely,

Christopher V. Brown, P.E.

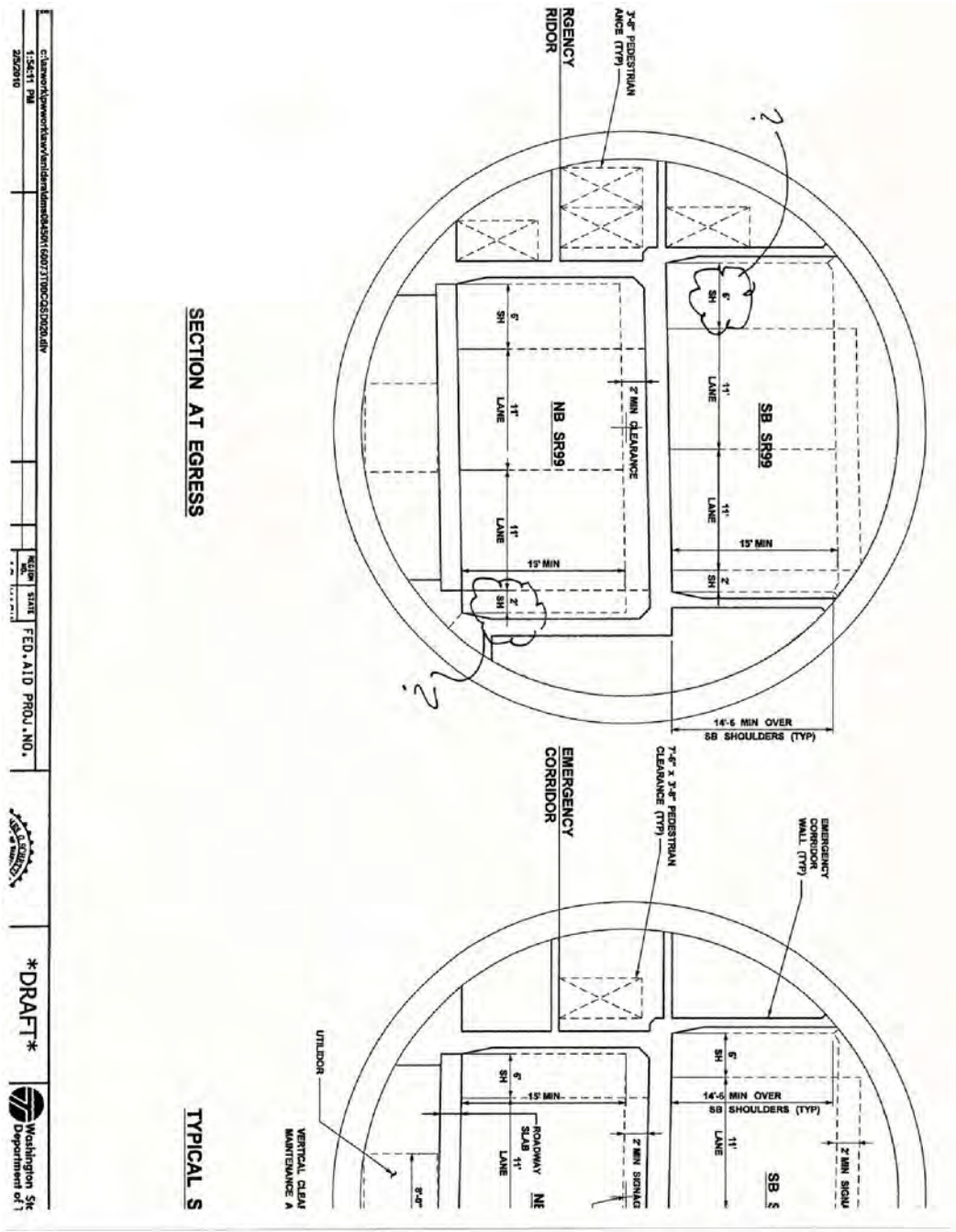
I-018-018

The suggested alternative regarding the catastrophic and complete collapse of the bored tunnel is not possible within the framework of NEPA. Since the bored tunnel has not yet been built, an alternative analysis that involves its failure is speculative. This analysis is appropriate for the existing viaduct because it has been constructed and its seismic vulnerabilities have been well documented.

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-018-019

Pages 109 and 110 of the 2010 Supplemental Draft EIS presents information on transit ridership, transit mode share, and transit travel times, including those in the south area of the project corridor. The project would include features such as a bus-only lane in the northbound off-ramp from SR 99 in the stadium area. Also, transit speed and reliability improvements that would be implemented in the south end would support transit operations during project construction.



With the Bored Tunnel Alternative, bus routes from West Seattle and south King County would exit to downtown farther south than the current access locations at Senca and Columbia Streets. While this routing change would expand the bus service coverage, it would also increase travel times for some riders.

I-018-020

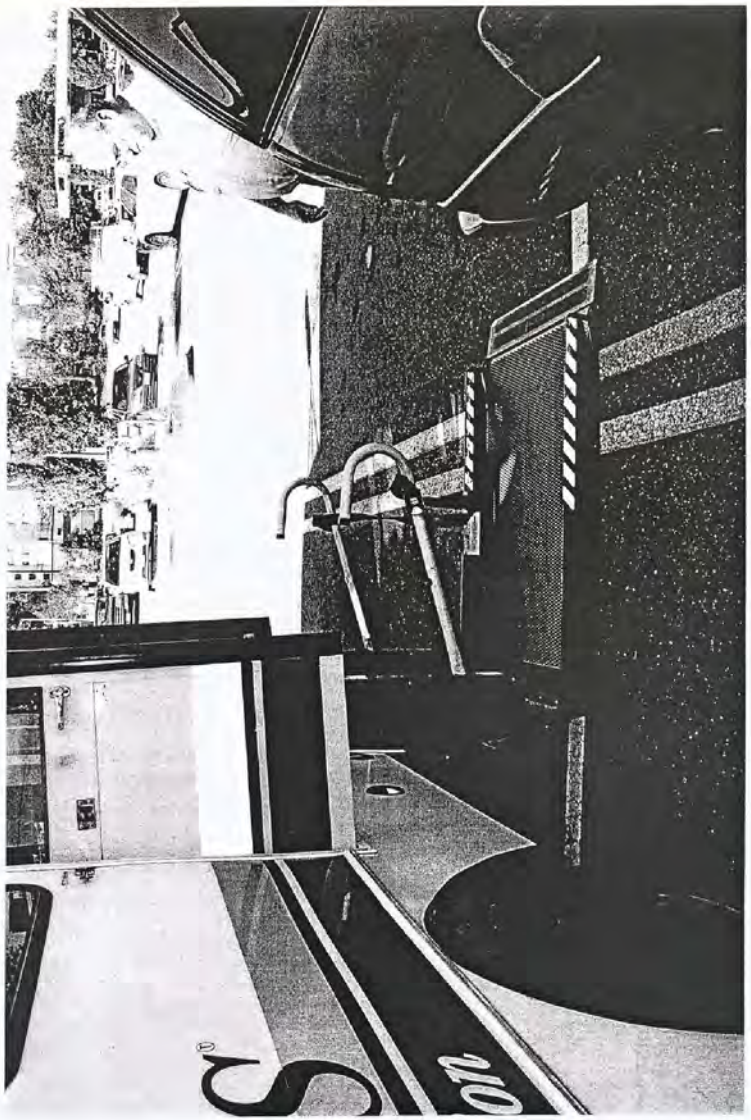
The Port of Seattle has been closely involved in project planning and is satisfied with access to the proposed bored tunnel from terminals near the south end of the project. Access to the south portal will be via the new construction as part of the S. Holgate to S. King Street Replacement Project. Freight traffic going northbound through the bored tunnel will access the south portal via eastbound S. Atlantic Street and then left on the new east frontage road.

Access from areas to the north will be provided by improvements along the Alaskan Way surface street along the central waterfront, including a new structure connecting to Elliott and Western Avenues, that are being led by the City of Seattle. A new ramp from the new overcrossing near the port entrance will allow freight a direct connection to northbound Alaskan Way.

The Port of Seattle is strongly supportive of this project as documented on their website: http://www.portseattle.org/community/development/regionaltransport.shtml

The Port is working with WSDOT, the City of Seattle, and King County to ensure that the project meets the Port's needs and can be funded. The Port Commission believes that the replacement of the Viaduct should achieve the best balance among retaining and creating jobs, sustaining regional economic vitality, and benefiting the environment.

In 2010, the Port used $13 million of tax levy to fund a Transportation &



Infrastructure fund (TIF). In 2011, the Port anticipates using an estimated $8 million from the TIF to make a contribution toward the replacement of the Alaskan Way Viaduct (SR99) project. The $8 million represents approximately 8 percent of the Port's 2011 tax levy and 0.4 percent of the total project cost. (http://www.portseattle.org/downloads/about/2011_Budget_14_Tax_Levy.pdf)

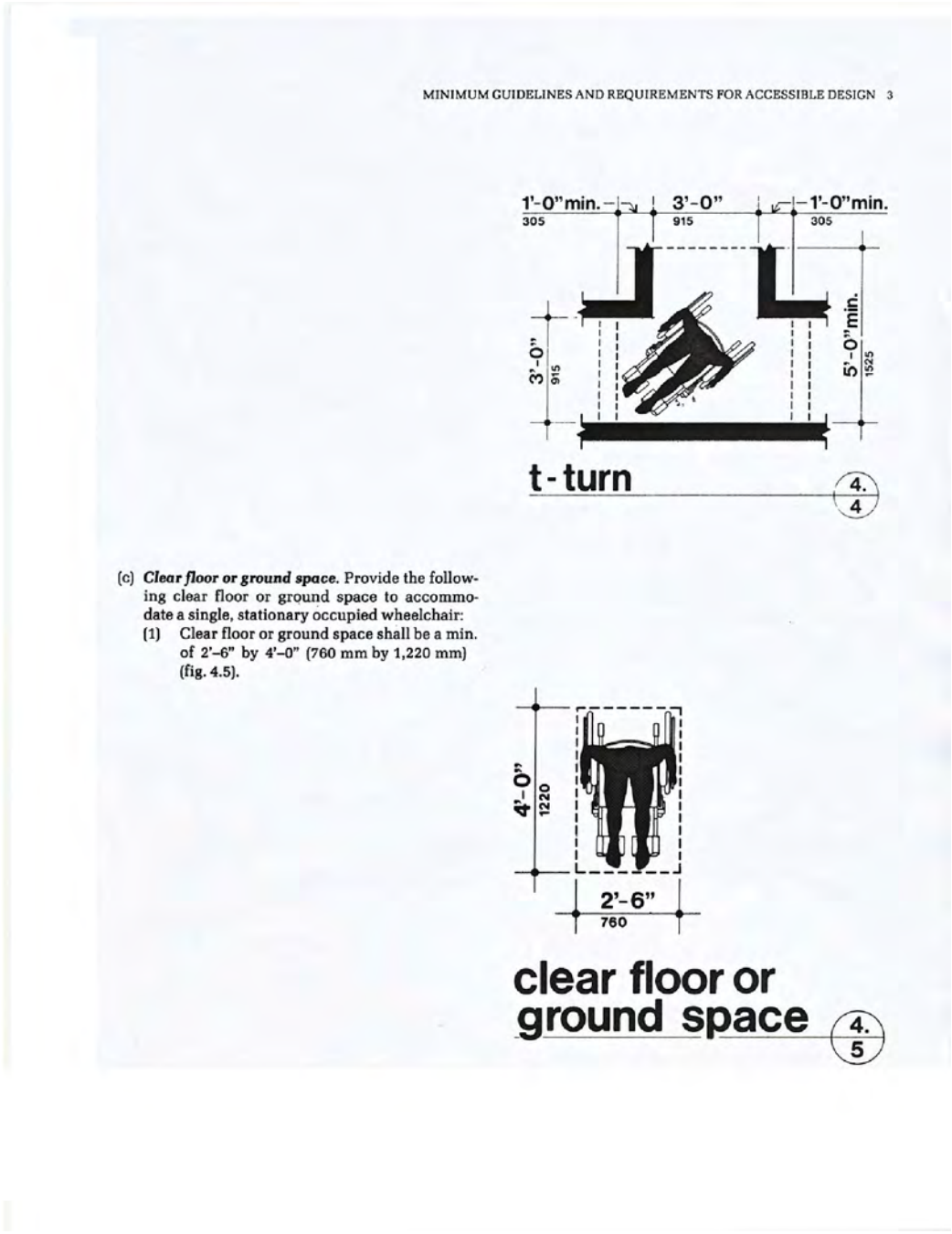
I-018-021

The south portal tunnel operations building is proposed to be constructed in a portion of Railroad Avenue South right of way under existing ramps. The building would be designed to fit into the surrounding neighborhood. Within this area, the dominant visual feature, as viewed from the sea, is Qwest Field. To compare the visual impact of a one-block building in the foreground of a large sports stadium to the visual impact of 7,600 linear feet of double-decker elevated freeway is disingenuous.

I-018-022

Level of service was analyzed and is provided in the Final EIS in addition to travel speeds. Please refer to Appendix C, Transportation Discipline Report for additional details. The differences in traffic volumes between S. King Street and just north of Seneca Street are expected to be lower with the Bored Tunnel Alternative becauseElliott and Western Avenue ramps and Columbia and Seneca street ramps would be removed. The volume difference (approximately 30,000 vehicles per day) would be expected to be absorbed on downtown city streets through the use of the exit ramps at the south and north portals. The through traffic volume on the Bored Tunnel Alternative, when compared to the through traffic volume on the existing viaduct, as represented by the traffic volume through the Battery Street Tunnel, is actually greater than the existing viaduct.

The Final EIS does not discuss the expenditure of money in relation to the capacity of the proposed facility. Refer to the Final EIS for a



discussion of the purpose of and need for the project, as well as cost information.

I-018-023

Please see the response to comment I-018-007 whcih addresses ADA compliance for the Bored Tunnel Alternative.

I-018-024

Protecting public safety is the highest priority for both FHWA and WSDOT. All build alternatives would improve traffic safety on SR 99 compared to existing conditions. All build alternatives would replace SR 99 with a facility that would improve upon existing geometrics and meet roadway design standards where feasible. For all build alternatives, there are specific areas where deviations from current roadway design standards would be needed, but all would replace SR 99 with a facility that is far closer to meeting full current roadway design standards than the existing facility. All deviations will be approved by WSDOT and FHWA to ensure that the roadway is built to be a safe facility for travelers. The deviations are carefully reviewed within these agencies by staff who are independent of the project teams.

For instance, the Bored Tunnel Alternative would replace the existing Battery Street Tunnel, which has narrow lanes, no shoulders, and abrupt curves. The Battery Street Tunnel would be replaced by the new bored tunnel, which would have two 11-foot lanes in each direction, a 2-foot-wide shoulder on one side and an 8-foot-wide shoulder on the other side, and the abrupt curves would be eliminated. These improvements would improve safety for drivers compared to existing conditions. These Battery Street Tunnel deficiencies would be only partially remedied with improvements proposed for the Cut-and-Cover Tunnel and Elevated Structure Alternatives.

The proposed grades in the bored tunnel were included in the

transportation analysis models and results indicate they are not expected to pose an impact to traffic traveling in the tunnel. Please see Chapter 5 of the Final EIS and Appendix C, Transportation Discipline Report, for the updated transportation analysis.

I-018-025

The lead agencies disagree that the roadway geometry of the bored tunnel is substandard. The Alaskan Way Viaduct Replacement Project design team used the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets, 2004*. This publication provides guidance on tunnel cross sectional geometry. The proposed bored tunnel meets the minimum cross sectional width of 30 feet between the tunnel walls. The bored tunnel would have two 11-foot travel lanes, a 8-foot west side shoulder, and a 2-foot east side shoulder.

As the 2010 Supplemental Draft EIS explains, the tunnel would be equipped with a ventilation, a fire detection and suppression system, and drainage. Video cameras would provide real-time information to the operators at WSDOT's 24-hour tunnel control center, which would allow them to respond quickly to emergencies.

Appendix C, Transportation Discipline Report, also addresses traffic safety issues.

The referenced bullet on page 128 of the 2010 Supplemental Draft EIS does not refer to the temporary loss of capacity on SR 99 due to traffic accidents. That type of loss of capacity is unavoidable for all the proposed build alternatives. Rather, the loss of capacity on SR 99 refers to what would happen should WSDOT choose to not pursue replacement of the viaduct (catastrophic failure or closed) with a new facility, in this case, the Bored Tunnel Alternative.

From: Mark Brown (REDMOND) [Mark.R.Brown@microsoft.com]
Sent: Friday, November 26, 2010 6:16 PM
To: AWV SDEIS Comments
Subject: comments on SDEIS

I-019-001 The SDEIS's rationale for not evaluating the impact of tolling is bogus. The Viaduct Closed alternative would, by its nature, not involve tolling (the tolling implementation would be prohibitively complex, comparable to Central London, and the cost of this alternative would not require tolling). The other alternatives will almost surely involve tolling because (a) tolling is straightforward to implement for those alternatives and (b) those alternatives are hugely expensive and the money must come from somewhere.

I-019-002 Even without tolling, your report shows that a large amount of current viaduct traffic will take surface roads because the tunnel lacks downtown exits.

I-019-003 So what will the impact of tolling be? By your own estimates, tolling will divert about *two-thirds* of current viaduct traffic to surface roads! Surely some mitigation will be required to cope with this diversion. This mitigation will be expensive – who will pay? The apparent answer is that *nobody* is prepared to pay, especially not the state given the results of the most recent election.

An honest report would point out these "inconvenient truths".

I-019-004 We should follow San Francisco's example and go with the Viaduct Closed option. Continued exploration of the tunnel option would be a waste of time and money.

Mark Brown
516 Malden Ave E
Seattle, WA

I-019-001

Currently, the Washington State Department of Transportation does not have the authority from the Washington State Legislature to toll State Route 99 (SR 99). As legislative action is required to toll this facility, the evaluation of the non-tolled Bored Tunnel Alternative in the 2010 Supplemental Draft EIS accurately reflects the current status of the project. However, if the Washington State Legislature decides to use authorize tolling, the potential effects of tolling do need to be evaluated and documented. Therefore, the Final EIS evaluates all the build alternatives with tolls and without tolls in Chapters 5 and 6.

I-019-002

Yes, the Bored Tunnel Alternative would result in some modification of travel patterns. For instance, traffic that currently uses the mid-town ramps at Columbia and Seneca Street are expected to instead use the new Stadium Area ramps near S. Royal Brougham. Traffic using the thse ramps to access downtown would disperse over several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues. Also, there would be an increase in vehicles along arterials near the waterfront due to the lack of ramps at Elliott and Western Avenues.

I-019-003

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

I-019-004

The Final EIS analyses the Bored Tunnel, Cut-and-Cover Tunnel, and Elevated Structure Alternatives. In addition, the Viaduct Closed (No Build

Alternative) is carried forward as required by environmental regulations to provide baseline information about conditions in the project areas if nothing were done. These alternatives are fully described in Chapter 3 of the Final EIS.

From: Kevin Burgess [kevindburgess@hotmail.com]
Sent: Monday, December 13, 2010 4:24 PM
To: AWV SDEIS Comments
Subject: tunnel

I-020-001

Thank you for providing the environmental impact statement on the future tunnel job downtown Seattle. It seems incomplete despite the hundreds of pages made available to the public. I'm wondering if this is what we should expect from the contractors who try and build this thing? The idea of a tunnel seems kind of ridiculous to me especially when you include all the things tied to our waterfront, which seem to be missing. example - more transit and more bike facilities and more peds facilities and a cool waterfront. I don't really care about some family in W. Seattle wanting to get to Green lake to walk around the lake traveling to get there via car... I just don't care that its easy for them since they are plenty of places to walk in W. Seattle as it is. Also, it seems kind of expensive to build this tunnel to appease a small group of polluters, I mean people who drive single occupancy cars along our waterfront. It just seems like a bad idea to build that infrastructure when we should be dismantling the viaduct and making improvements to what we have and making an attempt at getting people to stop driving these polluting vehicles. Oh, and investing in transit and bike and walking paths would be a good idea too. But a tunnel that carries a few rich people's cars to Green Lake or people who live in Magnolia to the Airport...I just don't care about their motoring habits. We need to make improvements in our environment and the tunnel does not help us out, it spends an terrible amount of money to help a small amount of people drive their single occupancy cars to Green Lake or the W. Seattle. Imagine what we could with 4 billion + all the overruns. man, we're missing a huge opportunity here. All parties involved except those asking questions (Mayor McGinn, Council Member OBrien) are lame and apart of the problem...Gov Gregoire and all the other DEMS insisting this is a good investment will not get my future votes despite me being very scared at today's republican party and all the media that seem to perpetuate so much mis-information (read Seattle Times). the politicians won't get my vote and DEMS..you need to step it up or you are going to lose votes, you've mostly lost mine.

Kevin Burgess
4430 Letitia Ave South
Seattle, WA 98118

I-020-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. The project compliments a number of other projects with independent utility that would provide other improvements such as transit enhancements and a new Alaskan Way Promenade and public space. These individual projects include the moving forward projects identified in 2007, as well as improvements recommended as part of the Partnership Process. Please refer to Chapter 2, Alternatives Development, of the Final EIS for a description of these projects.

From: Byram, Michael [michael.byram@soundtransit.org]
Sent: Friday, December 10, 2010 9:31 AM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-021-001 | The Bored tunnel is a great idea. Please do not change to anything else!

Michel R. Byram, P.E.

I-021-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list. At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Florence Cohn

Address 514 W Comstock

City Seattle **State** Wa **Zip** 98119

E-mail

Organization/Membership Affiliations (optional)

Choose a topic

☐ Overall Project
☐ All of the Alternatives
☐ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

What are your comments about the Project?

I-022-001 Would like to have seen more comparatives Tunnel and rebuilding Via Duct. The feel of Seattle with Viaduct gives the incomparable view of the perfect mix of Nature & City together. One cannot replace, bury tax or toll the AH!! Beauty factor of what we have in simplicity. Here's a suggestion - check out the Beijing Zoo Bridge.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
☐ Yes ☐ No
2. Have you previously participated in public meetings/comment periods related to the AWV project?
☐ Yes ☐ No
3. Did you find this Supplemental Draft EIS format easy to understand?
☐ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
☐ Yes ☐ No
5. Did you refer to the technical appendices?
☐ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-022-001

Chapter 2, Alternatives Development, of the Final EIS describes environmental documentation that occurred prior to the 2010 Supplemental Draft EIS. This included evaluation of the Rebuild Alternative, which was defined as replacing the viaduct in its existing location with a similar structure, in the 2004 Draft EIS. The lead agencies found that rebuilding the viaduct would not be a wise investment or long-term solution because the facility would not addresses the risks to public safety as it would not meet current safety standards.

Instead, elements of the Rebuild and Aerial Alternatives were incorporated into the Elevated Structure Alternative, which was analyzed in the 2006 Supplemental Draft EIS and the Final EIS. The Final EIS compares all the build alternatives.

Please refer to the Final EIS for current information.

SENT VIA EMAIL AND CERTIFIED MAIL 7007 2560 0000 6242 7992

Monday, December 13, 2010

To: awv2010SDEIScomments@wsdot.wa.gov
Subject: SDEIS Comment
From: Elizabeth A. Campbell

I-023-001

Until such time as a proper (legally permissible under SEPA) environmental impact statement is prepared for the Central Waterfront Viaduct Replacement Project and project a decision rendered thereunder, until such time as the environmental review for the Central Waterfront Project is completed and a record of decision is issued in that matter, then all of the alternatives to replace the Viaduct, the surface, the elevated, the tunnel, all should be proceeding to be reviewed and considered virtually in tandem and in equality with one another.

One should not be moving forward, appreciably ahead of the other two; one should not be receiving the majority of the resources and manpower of WSDOT, one should not be having contracts let for it, etc. The environmental review process is intended to inform the decision, not to ratify a decision.

In the matter of the Central Waterfront review, it has for the better part of two years now been intended to ratify the decision by first WSDOT, then by the governor and mayor of Seattle to build a deep bored tunnel to replace the Viaduct.

WSDOT, under the tutelage and supervision of the Federal Highway Administration has failed to ensure the integrity of the environmental review process for the Central Waterfront Project, by segmenting the original "Alaskan Way Viaduct and Seawall Replacement *Project*" and turning it into the "Alaskan Way Viaduct and Seawall Replacement *Program*", and then in turn reviewing with varying degrees of thoroughness the multiple projects spun off into the Program, one of which is the Central Waterfront project, the result of which has been, the avoidance of having to consider all reasonably foreseeable cumulative and indirect impacts of each of the projects with one another. WSDOT has failed to take the requisite "hard look" at all relevant environmental concerns for all the other projects associated with the AWVSR Program and specifically associated with the Central Waterfront Project.

I-023-001

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).

The 2010 Supplemental Draft EIS evaluated three build alternatives (Bored Tunnel, Cut-and-Cover Tunnel, and Elevated Structure) in addition to the No Build Alternative. Chapter 8 of the 2010 Supplemental Draft EIS provides a direct comparison of the three build alternatives. As discussed in the 2010 Supplemental Draft EIS, the document focused on the Bored Tunnel Alternative, since that alternative was new. However, the document clearly stated that the other two alternatives are being evaluated. As stated in the 2010 Supplemental Draft EIS and other public documents, the Bored Tunnel Alternative is the preferred alternative for replacing the viaduct along the Seattle's Central Waterfront. The Final EIS also evaluates the same three build alternatives in addition to the No Build Alternative.

Each of the projects comprising the Alaskan Way Viaduct and Seawall Replacement Program has established that they have independent utility as required under 23 CFR 771.111(f). If a project has independent utility, then it has been demonstrated that segmentation is not an issue. To have independent utility a project must:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
2. Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and
3. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

I-023-001 The current actions by FHWA and WSDOT in the Central Waterfront Project, and the implementation of their de facto decision to proceed with the construction of a deep bored tunnel, are all proceeding without the benefit of the statutorily required environmental review and analysis required by NEPA and CEQ regulations (40 CFR Parts 1500-1508) being completed, and without that of the Washington State Environmental Protection Act ("SEPA") (RCW 41.23C) environmental review being completed.

I-023-002 WSDOT's final actions include proceeding with all the acts necessary to construct a deep bored tunnel, the realignment and replacement of existing railroad tracks, moving existing roadways from their present locations, destruction of the historic Alaskan Way Viaduct ("Viaduct"), redevelopment of the Central Waterfront of Seattle, the facilitation of concomitant major private real estate development in the area that will be made possible by the elimination of the Viaduct, as well as engaging in activities that threaten the environmental integrity of the historic Pioneer Square district, and the economically important South of Downtown district ("SoDo") area of Seattle.

Each of the foregoing actions threatens to result in irreparable harm to environmental resources, to civic and cultural resources within the project's area, and to the interests of the public and taxpayers, generally. The environmentally destructive construction activities of the deep bored tunnel have also not been properly analyzed for their environmental impacts as a "connected action" with respect to areas which are not properly part of the Supplemental Draft Environmental Impact Statement ("SDEIS") and in violation of CEQ regulations in 40 CFR § 1508.35 mandating EIS scope.

The irreparable harm will also include, among other things, degradation of the irreplaceable historic and urban environments of Pioneer Square and SoDo, development that will be spawned as a result of the Viaduct being eliminated/tunnel being built, destruction of the historic and vital Alaskan Way Viaduct, which is statutorily a) a highway of statewide significance and b) an essential public facility, c) eligible for listing in the National Register of Historic Places. WSDOT has not addressed the substantial harm to the 100,000 plus daily users who traverse the SR 99 Alaskan Way Viaduct highway and corridor, and by extension the public in general, they will be harmed by the congestion, economic disruption, and the land development that this project represents. The harm results from the failure of WSDOT and the FHWA to take a "hard look" at each of the above listed subject areas in the SDEIS; they have been inadequately analyzed.

The lead agencies have taken a hard look at relevant concerns for projects beyond the Alaskan Way Viaduct Replacement Project and the possible cumulative effects of these and other projects is discussed in Chapter 7 of the 2010 Supplemental Draft EIS and Chapter 7 of the Final EIS, as well as the appendices.

I-023-002

The lead agencies (FHWA, WSDOT, and the City of Seattle) have followed all relevant NEPA and SEPA requirements since the beginning of the project in 2001. The public has been involved throughout the process and integral to the evolution of the project. This is described in Chapter 3 of the 2010 Supplemental Draft EIS and in Chapter 2 of this Final EIS. The Bored Tunnel has been identified as the preferred alternative in accordance with all NEPA and SEPA requirements.

The 2010 Supplemental Draft EIS and this Final EIS document the possible direct, indirect, and cumulative effects of the Bored Tunnel Alternative. The cumulative effects evaluation presented in the Final EIS discusses the possible combined effects of other past, present, and future actions in the nearby area. The cumulative effects evaluation includes an evaluation of possible effects of projects like the City of Seattle's Seawall Project or the Elliott/Western Connector. The Final EIS (and the EISs that proceed it) provide detail regarding possible effects to travelers on SR 99 during project construction. Additionally, effects to historic resources, traffic, and land use have all been evaluated and are discussed in the 2010 Supplemental Draft EIS and the Final EIS.

The environmental analysis does not indicate that irreparable harm would come to historic resources in the study area. During construction, historic buildings would be monitored for damage caused by vibration or settlement, and all damage caused by the project would be repaired. The Pioneer Square Historic District would experience traffic congestion but not the the degree that would threaten its historic character to the point

I-023-002

In addition there has been a prejudicial effect on the outcome of the Central Waterfront Project environmental review; to wit, the two original alternatives, both in 2006 and in 2009, and then again brought to the fore through the Alaskan Way Viaduct Stakeholder Advisory Committee in 2008, the surface and elevated replacement options. They have effectively been eliminated from "competition" in the environmental review process by the frontrunner status WSDOT has given to the deep bored tunnel – including but not limited to the final actions WSDOT is taking by proceeding with the construction of the tunnel since December, 2008.

There have been many public statements made by representatives of WSDOT, the Governor of Washington, and there are a considerable number of internal WSDOT documents and WSDOT presentations, that clearly demonstrate that WSDOT the lead agency and its co-lead agency, the FHWA, have made a final decision to proceed with the bored tunnel project; the documents indicate that they continue to take ongoing final actions, to let contracts and engage in construction activities as part of their intent to proceed with the construction of a deep bored tunnel to replace the Alaskan Way Viaduct, despite the NEPA and SEPA bars against such actions.

In conclusion I am also registering my objection to the SDEIS based on my belief that it is a ratifying document as opposed to a guiding document, that it was wrought improperly – i.e. undertaken on the basis that it is permissible to link it with the AWVSRProject SDEIS, a document and process that had expired, and that in order for it to be resurrected it had to have a Notice of Intent filed to that effect, that it was going to be resumed, not this other thing that WSDOT has done, claiming that it was permissible for it to unilaterally "claw back" as it were to the former environmental NOI of 2001 in essence and make that the basis for the present environmental review of the Central Waterfront Project, which has zero in common with the 2001-2006 environmental review related to the then Alaskan Way Viaduct and Seawall Replacement Project, including their purpose and need, their project size, the data sets and criteria used, and the assorted legal premises upon which they were/are conceived.

Elizabeth A. Campbell
3826 24th Ave W.
Seattle, WA 98199

of irreparable damage or "use" under Section 4(f). See the Final EIS for more discussion of the effects of the project on historic resources in Chapters 5 and 6. Appendix I, Historic, Cultural, and Archaeological Resources Discipline Report also contains details about how the project would affect such resources. Also see the Final Section 4(f) Evaluation. Chapter 8 in the Final EIS discusses the proposed mitigation to reduce effects to historic resources as well as the measures proposed to address any unavoidable effects.

The Elevated Structure and Transit Hybrid and the I-5, Surface and Transit Hybrid concepts considered were discussed in Chapter 3 of the 2010 Supplemental Draft EIS. These and other concepts were screened out for further evaluation in the EIS per requirements set forth in NEPA and SEPA. The reasons why these concepts were eliminated are discussed on pages 53 through 58 of the 2010 Supplemental Draft EIS. The updated Surface and Transit Scenario Year 2030 Analysis Results are included in Appendix W, Screening Reports, of the Final EIS.

The final decision about which alternative with which to proceed cannot be made until a Record of Decision is signed by the lead agencies. A Record of Decision follows publication of a Final EIS. Therefore, the decision to proceed with the Bored Tunnel Alternative is not final at this time. References to the NEPA Notices of Intent for this project are provided in the 2010 Supplemental Draft EIS.

From: jean.carlson@att.net
Sent: Sunday, December 12, 2010 3:56 PM
To: AWV SDEIS Comments
Subject: STOP THE TUNNEL!

I-024-001

WADOT,
Do they get to keep the machine when they are done or do we get to keep it and rent it out? The tunnel is a giveaway to giant contractors.

It's an economic disaster, dangerous, serves too few vehicles, threatens Pioneer Square and more and has an enormous negative environmental impact.

Quoting the latest Stranger, p.10, Dec. 9, 2010, a quote from Mayor Mike McGinn:
"This tunnel will cost $2.8 billion dollars but will move fewer cars than the Ballard Bridge." And that doesn't even cite the inevitable cost over-runs now Seattle's responsibility.
Jean Carlson
1419 McGilvra Blvd. E.
Seattle WA 98112

I-024-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. After construction is complete, the design-builder would keep the tunnel boring machine. Because the tunnel boring machine would remain with the design-builder after the project, WSDOT would not pay full price for the machine. Instead, the design-builder would discount the price of the machine so that WSDOT does not pay full price for equipment that the design builder could use again.

From: James Cavin [jrcavin@gmail.com]
Sent: Monday, December 13, 2010 11:16 AM
To: AWV SDEIS Comments
Subject: Comments on 2010 Supplemental Draft Environmental Impact Statement

I-025-001

Hello,
The bored tunnel alternative has the overriding advantage of minimal closures to the Highway 99 traffic corridor. I believe this is the overriding factor in considering all the alternatives.
I am concerned about the tolling scenarios and that "toll avoidance" behaviors will increase traffic levels on alternative routes. By decreasing the use of the tunnel, the expense and risks of building the tunnel become significantly less justified. If there are to be tolls, I urge you to more fully investigate tolling scenarios B and D which would extend the tolling area and perhaps make the savings to drivers of toll avoidance less attractive due to the longer distances and travel time needed to avoid paying a toll.

James Cavin
jrcavin@gmail.com

I-025-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

A detailed tolling analysis has been conducted and is described in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

From: dschap76@aol.com [mailto:dschap76@aol.com]
Sent: Sunday, November 14, 2010 1:41 PM
To: Alaskan Way Viaduct
Subject: AWV Feedback

Sent from: Cameron Chapman
Address:
City: Shoreline
State: WA
County: King County
Zip: 98177
Email: dschap76@aol.com
Phone:

Comments:

I-026-001

Hello, I like the nice design of north and south end of the viaduct. It looks better, nice and good designs of the bored tunnel and waterfront space areas with no viaduct. The waterfront looks bad, horrible, and ugly with the viaduct. I want the waterfront to look clean, better, good, nice, and beautiful space areas with the tunnel and no more viaduct. Will the tunnel be free to ride through or have tolls? I want to go through the beautiful tunnel with my Uncle CW. Will the tunnel be very strong during an earthquake? Will it be safe during an earthquake? What month will they begin construction the new tunnel in 2011? [redacted] Thank you. Have a nice day to you. Smile!

I-026-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Elevated Structure Alternative. WSDOT does not currently have the authority from the Washington State Legislature to toll SR 99. However, during the 2009 legislative session, the state legislature passed Engrossed Substitute Senate Bill 5768, which directed WSDOT to study the possibility of tolling this portion of SR 99 to provide up to $400 million in funding. Based on that direction, FHWA and WSDOT have evaluated both tolled and non-tolled versions of the build alternatives for this project. The results of that analysis are documented in this Final EIS. The Bored Tunnel will be designed to meet current seismic safety standards.

From: Kelly Charlton [kellycharlton@msn.com]
Sent: Tuesday, November 30, 2010 7:45 PM
To: AWV SDEIS Comments
Subject: Great Northern Tunnel -- Seattle

Dear Sirs,

I-027-001

Please do not forget that there has been a one mile long tunnel under downtown Seattle for more than 100 years.

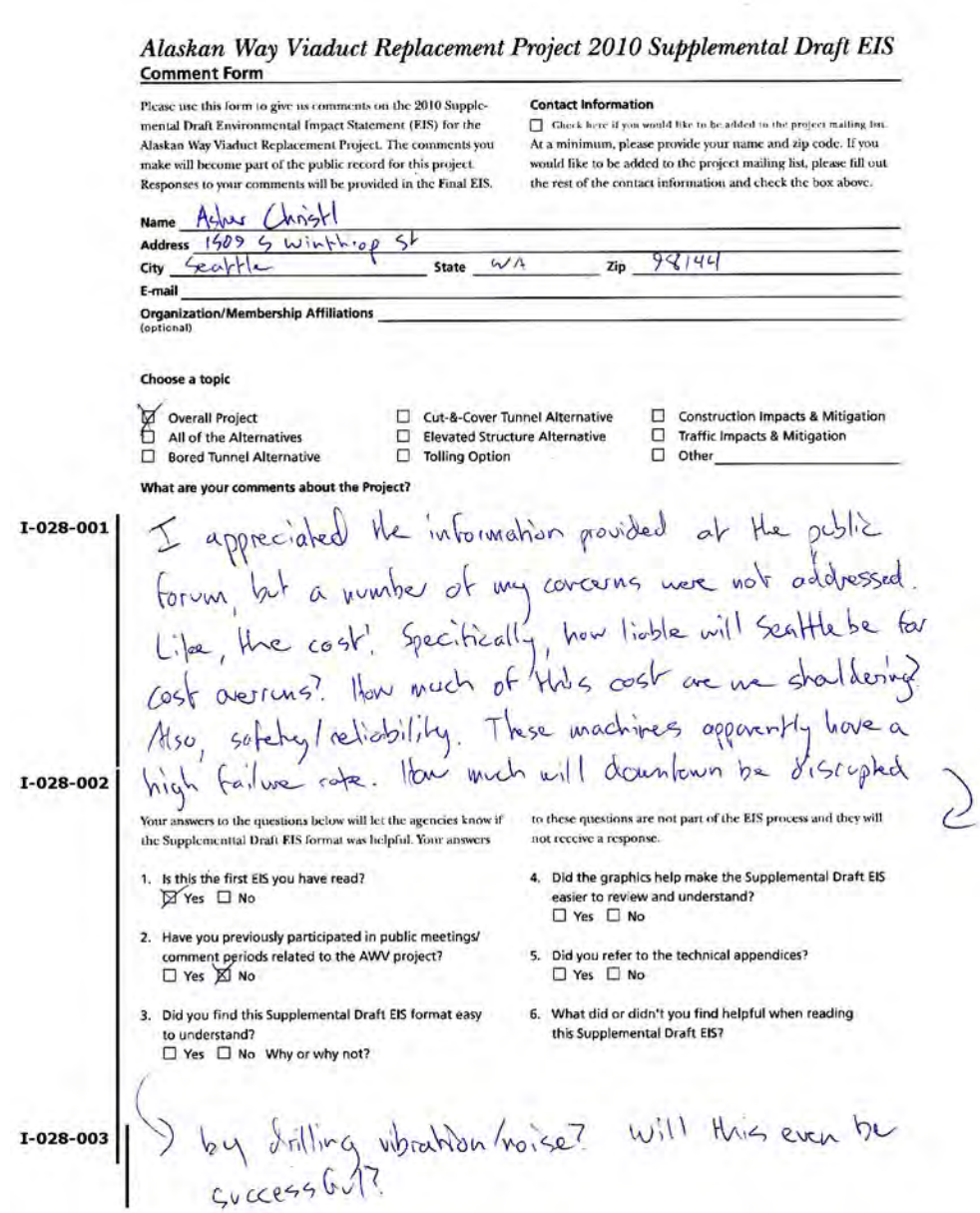
It is still in use every day under Seattle.

Great Northern Tunnel -- Seattle
http://www.historylink.org/index.cfm?DisplayPage=output.cfm&File_Id=4029

Best,
Kelly Charlton
206.920.6764
kellycharlton@msn.com

I-027-001

Thank you for your comment.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list.
At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Asher Christl
Address 1509 S Winthrop St
City Seattle State WA Zip 98144
E-mail
Organization/Membership Affiliations (optional)

Choose a topic

☒ Overall Project
☐ All of the Alternatives
☐ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

What are your comments about the Project?

I-028-001 I appreciated the information provided at the public forum, but a number of my concerns were not addressed. Like, the cost. Specifically, how liable will Seattle be for cost overruns? How much of this cost are we shouldering?

I-028-002 Also, safety/reliability. These machines apparently have a high failure rate. How much will downtown be disrupted by drilling vibration/noise? Will this even be successful?

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read? ☒ Yes ☐ No
2. Have you previously participated in public meetings/comment periods related to the AWV project? ☐ Yes ☒ No
3. Did you find this Supplemental Draft EIS format easy to understand? ☐ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand? ☐ Yes ☐ No
5. Did you refer to the technical appendices? ☐ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-028-003

I-028-001

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 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.

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

I-028-002

Construction noise and vibration effects are described in the Final EIS. Please refer to Appendix F, Noise Discipline Report, for additional information.

I-028-003

Project planning includes substantial contingencies to prevent cost overruns and careful monitoring will minimize the potential for unforeseen events.

From: Frank C [mailto:fwcoble@yahoo.com]
Sent: Wednesday, December 01, 2010 12:20 PM
To: AWV SDEIS Comments
Cc: Mike McGinn; richard.conlin@seattle.gov; sally.clark@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; bruce.harrell@seattle.gov; nick.licata@seattle.gov; tom.rasmussen@seattle.gov; Mike.obrien@seattle.gov
Subject: You are digging Seattle voters a grave.

(Quick reminder about tonights townhall meeting for any of you seattle council members that want a better Seattle. and save us from financial collapse)

I-029-001 In an article in Seattle PI Seismologist said a 7.3 earthquake would cause a 16 tital wave and fill the tunnel with water killing several hundred people.

I-029-002 Because of the tunnel construction there is no way to compact the the soil. You are going how many feet below the water table? How close to the seawall? With a 55 foot diameter tunnel boring machine. Nevermind the largest tunneling machine in the world built so far is only 51.02 feet in diameter. And a double decker tunnel adding to the stress on the soil and stuctural integrity. And you want to pass this off as a solution to the risk that the viaduct is.

I-029-003 Tunnel advocates have their heads in the sand or are living in a fantasy world. Christine Gregoires "spendaholic" policies need to come to an end. What is this? A deliverate attempt to bankrupt the system to bring in more socialism.

I-029-004 The price is in a fantasy too. New Jersey just shut down a tunnel project because it is going 5billion over budget. And isnt even on an

I-029-005 earthquake fault line. An earthquake on liquidfyable soil with a 55 foot double decker tunnel. Held together with plastic parts. It will crumble like an egg.

I-029-006 The solution is one that myself, Frank Coble has come with. A tunnel should exist from the battery street tunnel down to the water table down to about Union Street.

Then it should convert to a ground level street. But the twist is it should have a 16' concrete walls and concrete level above it that can used as a park. The concrete walls would act as a buffer when a

I-029-007 tidal wave hits Seattle. I will write more on this later. For now though proceeding now is a financial suicide mission we cannot afford. The hard headed politicans need to be replaced. It is common thought among voters that campaign money from downtown real estate holders and unions and developers that is driving this hasty poorly designed project. All politicians in favor of the tunnel please send me and local media your campaign contribution list.

Frank Coble

I-029-001

The average recurrence interval for large earthquakes on the Seattle Fault that are capable of generating large tsunamis is 3,000 to 5,000 years. This recurrence interval is longer than the ground motion return period required in the seismic design codes applicable to this project. Design of the proposed action will take into account earthquake-related issues based on seismic design codes and reasonably expected events that could occur during the life of the project.

I-029-002

These issues have been considered in the conceptual analysis of the project. The issues identified by this comment are discussed in the Final EIS Appendix P, Earth Discipline Report. The level of detail provided in the Earth Discipline Report is appropriate for environmental review purposes. Further studies will be completed during final design.

I-029-003

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

I-029-004

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

From: Frank C [mailto:fwcoble@yahoo.com]
Sent: Thursday, December 02, 2010 3:38 PM
To: mike.mcginn@seattle.gov
Cc: Mike Obrien; tom; Nick; Sally; AWV SDEIS Comments; Richard; tim Burgess; jean; Bruce Harrell; news; news; news; KIRO TV
Subject: Congradulations Mayor Mcginn to views on tunnel

I-029-007 to recap last nights town meeting. Mayor Mcginn was right on the money about the cost overruns.

I-029-008 And to repeat the part I said **"One of the best ways to get rid of the tunnel project is to come up with a better design."** to say its too late to redesign is stupid. Look at what just happened in New Jersey.

I-029-009 Siesmologists say that if a 7.3 hit seattle fault line that there would be a 16 foot tital wave. flooding the tunnel and killing several hundred people.Politicans trying to scare people about the viaduct risk need to shut up. How stupid do you think people are?

I-029-010 The risk to building a deep bore tunnel in the silt 70 feet below sealevel is insane. What the State and city council isnt telling everyone is that they cannot compact the soil which will case massive settling. If it was a private company trying to build it for themselves it would never pass code requirements. I could go on and on.

I-029-011 I will be brutally honest. Last nights lack of showing by city council members, Wsdot and the state makes it look like votes for the tunnel are being bought by tunnel boosters. I think there needs to be a full investivation into this.

I appreciate Mayor McGinn and Mike Obrien for their efforts to do the right thing even though a majority don't see it that way YET. A 55 foot wide tunnel boring machine under seattle is a fantasy. We need to go back to the drawing board and get better ideas

Frank Coble
206-992-7394

$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-029-005
The bored tunnel would be built to current seismic standards; it is being designed to withstand an earthquake that only happens every 2,500 years on average (in the range of a 9.0 on the Richter scale) without collapsing. Also, the surrounding soils would be improved and stabilized where necessary to better accommodate its construction. The tunnel structure would be constructed using concrete segments and components.

I-029-006
The Final EIS Chapter 2, Alternatives Development, describes the project's history and explains how the alternatives were developed. Use or extension of Battery Street Tunnel was considered early in project development but found not to be feasible. Please refer to the Final EIS for current information.

I-029-007
Please see response to comment I-029-004 above.

From: Frank C [mailto:fwcoble@yahoo.com]
Sent: Thursday, December 02, 2010 9:27 PM
To: AWV SDEIS Comments
Cc: mike.mcginn@seattle.gov; tom; Nick; Sally; editor; news@komo4.com; KING-TV, Ch. 5
Subject: Correction: Tunnel goes aprox 150ft below water table.

I-029-012

Nice job WSDOT not letting us see elevation views of the DEEP DEEP bore tunnel in your CDS and booklet. Good job trying to pull the wool over our eyes. (Are these the same people who built a tunnel too small for the buses?)

Are you kidding me. This thing goes what looks to be 150 ft at the bottom below the water table. I can't tell exactly because I dont know the exact elevations of the streets in reference but the video below looks like at least half to 2/3's of the length is below the water table. going as deep as 150 ft below the water table at the bottom of the tunnel.

I am sorry to tell you this but it is GAME OVER! these DEEEP tunnel boring machines will not work in these conditions.
We are going to have to go back to the drawing table. I say this humbly because I love this city, but the design I showed the mayor as far as I have seen in being a surface tunnel is the only viable solution. Especially given other data such as the potential for a tital wave during an earth quake.
http://www.youtube.com/watch?v=mWfwnkEbc4Q

I-029-008

The Final EIS Chapter 2, Alternatives Development, describes the project's history and explains how the alternatives were developed. Please refer to the Final EIS for current information.

I-029-009

Please see response to comment I-029-001 above.

I-029-010

The soil conditions in the project area as they relate to the Bored Tunnel Alternative are discussed in Chapter 5, Question 28, of the 2010 Supplemental Draft EIS. As the text states, soil conditions along the bored tunnel alignment generally consist of very dense and hard soils that have been compacted by the weight of glaciers. Since the net weight of the tunnel would likely be less than the soil that is removed, additional loads that could cause massive settling would not be placed on the soil by the tunnel structure.

I-029-011

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. Chapter 2, Alternatives Development, of the Final EIS describes the project's history and explains how the alternatives were developed. Please refer to the Final EIS for current information.

I-029-012

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. Chapter 2, Alternatives Development, of the Final EIS describes the project's history and explains how the alternatives were developed. The Bored Tunnel will be designed to meet current seismic safety standards. Please refer to the Final EIS for current information.

From: Frank C [mailto:fwcoble@yahoo.com]
Sent: Monday, December 13, 2010 11:57 PM
To: AWV SDEIS Comments
Subject: comments on viaduct alternative

I-029-013

Brace yourself Seattle taxpayers. If Christine Gregoire and Seattle council has their way, You are going to see a deep bore tunnel. Unfortunately it's going to be in your wallet. And the deadline for public comment on the viaduct replacement is December 13th. Email your public comments to awv2010SDEIScomments@wsdot.wa.gov
My view is taxpayers are like sheep being led to slaughter. To a tune of about 5 billion to 10 billion give or take a few bil. Make sure you are sitting down when you are reading this. In the next several months Seattle City Council and the State of Washington will decide whether or not to dig a deep bore tunnel over 200 feet below downtown Seattle.

After reviewing the plans Washington State Department of Transportation I called the tunnel contact Angela Freudenstien and asked, "How deep the tunnel is going to go below sea-level near the ferry?" In a bewildering tone she said, "Well, I don't know." Then she came back and said, "About 70ft" (Adding the 56ft bore diameter, that is about 120 feet below sea-level at the bottom. I had to do some research but about 2/3's of the length of the tunnel is below sea-level which is known as the water table. The deep bore tunnel goes anywhere from 100 to 150ft or better below sea-level. This is where the Brightwater tunnel got stuck in Lake Forest Park. It's only $1.9 Billion with no spending cap. Digging deep under the water table, the chances for problems go up dramaticly. Water pouring in, has to be sucked out. Pressure on the 400 ft long boring machine can be so great, they get stuck. And the rocks in the water table dull the blades. And just when you thought it couldn't get any worse, it does. 12 of the last 40 deep boring machines have failed. Not to mention the percentage is probably significantly higher digging into the water table.

Adding to the mess, the Seattle tunnel is designed to go anywhere from 25ft to 75ft from the seawall along the waterfront on "liquefiable soil". Which means it turns to quicksand in earthquakes. And the design of tunnel boring machines ring is twelve to 16 pieces of concrete that make one four foot ring of concrete. And get this. I'm not making this up. The rings are held in place by metal rods and plastic anchors. I said it, "Plastic."

You won't find that in WSDOT's plans. They only show several side elevation shots of the cut and cover tunnel and the viaduct replacement in relationship with the seawall. They show a few side shots of the deep bore tunnel. BUT, WSDOT was careful not to show a side shot of

I-029-013

Thank you for your comments, please see the responses to your previous emails.

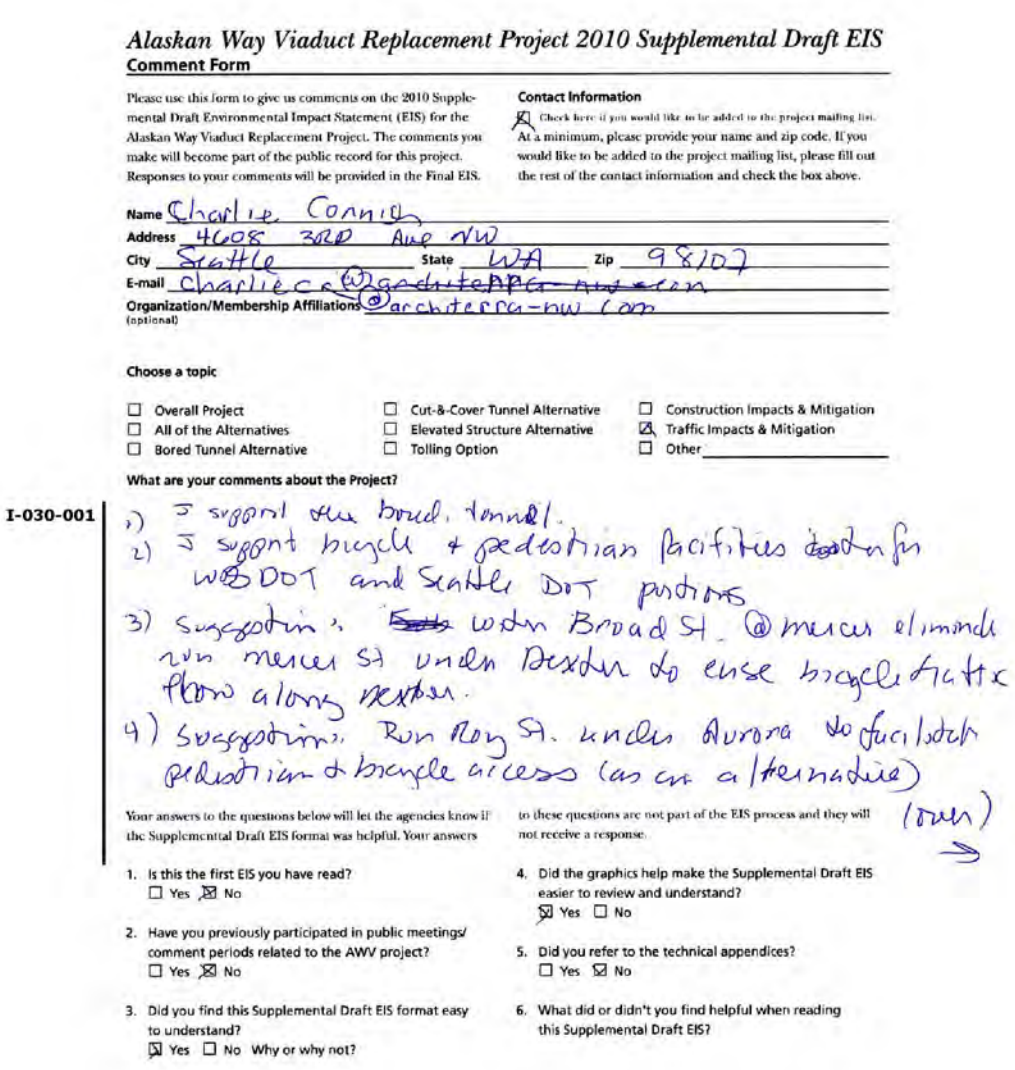
I-029-013

how deep the tunnel goes and how close it goes to the seawall. It was a very clever deception. To make matter worse seismologists warn that a 7.3 earthquake on the Seattle fault line would likely cause a 16 foot tidal wave that would fill the tunnel killing several hundred people. (Not even counting the likelihood that the tunnel would crack and fill with water.) The nincompoop's screaming the viaduct is falling need to wake up and smell the pork.

I hate the viaduct just as much as anyone with some eardrums and lungs left. However, WSDOT is going to have to quit whining and go back to the drawing board and start over. And be thankful they are not in prison for fraud. There are better ideas out there. If the tunnel is such a great idea then why is Chris Gregoire and Co. trying to put the tab on Seattle? And why did some of the biggest contractors in the business drop out? Maybe they saw the risk and saw the contract and knew we were screwed. And out of professional and legal reasons they can't warn us.

Mayor McGinn is a lawyer and knows how to read fine print of an ominous small print detail. What Christine Gregoire is trying to pull goes against state law. The city is not suppose to pick up the tab for cost overruns. And when you break the law, you go to jail. It doesn't matter who you are. City Council, Governer. Senator. Ted Stevens The whole process is reminding me of Bush and Cheney screaming "Weapons of mass deception." Even have the cute WSDOT style drawings to go along with it.

Okay you sleeping at the wheel voters, who have half a brain to see through this, "campaign money, 'yes vote' ridden, pork barrel pile of liquefied soil in everyone's pants" disaster, contact your Seattle City council at Seattle.gov. Contact state reps and scream, "I'm mad as hell about your band-aids for this sickening traffic. Including S.L.U.T. And I'm not going to take it anymore." Write your comments to WSDOT before December 13th deadline and give your comments to write me at fwcoble@yahoo.com. Also go to www.scatnow.com and sign initiative 101. Which will hopefully stop this dismal mess.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS
Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information
☒ Check here if you would like to be added to the project mailing list.
At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Charlie Connick
Address 4608 3RD Ave NW
City Seattle State WA Zip 98107
E-mail Charlie.c@architerra-nw.com
Organization/Membership Affiliations (optional) architerra-nw.com

Choose a topic

- ☐ Overall Project
- ☐ All of the Alternatives
- ☐ Bored Tunnel Alternative
- ☐ Cut-&-Cover Tunnel Alternative
- ☐ Elevated Structure Alternative
- ☐ Tolling Option
- ☐ Construction Impacts & Mitigation
- ☒ Traffic Impacts & Mitigation
- ☐ Other

What are your comments about the Project?

I-030-001

1) I support the bored tunnel.
2) I support bicycle & pedestrian facilities as in WSDOT and Seattle DOT portions
3) Suggestion: ~~Run~~ run Broad St @ Mercer eliminate run Mercer St under Dexter to ease bicycle traffic flow along Dexter.
4) Suggestion: Run Roy St. under Aurora to facilitate pedestrian & bicycle access (as an alternative) (over)

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
   ☐ Yes ☒ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project?
   ☐ Yes ☒ No
3. Did you find this Supplemental Draft EIS format easy to understand?
   ☒ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
   ☒ Yes ☐ No
5. Did you refer to the technical appendices?
   ☐ Yes ☒ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-030-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. For the Bored Tunnel Alternative, Broad Street would be closed and filled between Ninth Avenue N. and Taylor Avenue N. Mercer Street would become a two-way street and would be widened from Dexter Ave N. to Fifth Avenue N. The configuration of Roy Street would remain as it is today. As for bicycle and pedestrian facilities, a multi-use path would be located on the east side of Alaskan Way S, but the City of Seattle's Central Waterfront Project would determine the final design of the waterfront public space. Please see the Final EIS for details on the current configurations of the all proposed build alternatives, including the pedestrian and bicycle facilities.

I-030-001

to ~~a~~ widened Mercer. ~~A~~ Roy St underpass would be quieter and less intimidating to pedestrians & bicycles, as well as connect bicycle paths along Roy, either side of Aurora.

4) would like to see dedicated bicycle paths along Alaska Way, separate from pedestrian bicycle paths.

Place Stamp Here

WSDOT
Attn: Angela Freudenstein, Project Environmental Manager
AWV Project Office (Wells Fargo Building)
999 Third Avenue S., Suite 2424
Seattle, WA 98104 – 4019

Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☑ Check here if you would like to be added to the project mailing list. At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Catherine Costello
Address 425 16th Ave E
City Seattle State WA Zip 98112
E-mail Cmmcostello@yahoo.com
Organization/Membership Affiliations (optional) Huffington Post Member, Alternative Schools Coalition

Choose a topic

- ☑ Overall Project
- ☐ All of the Alternatives
- ☐ Bored Tunnel Alternative
- ☐ Cut-&-Cover Tunnel Alternative
- ☐ Elevated Structure Alternative
- ☐ Tolling Option
- ☐ Construction Impacts & Mitigation
- ☐ Traffic Impacts & Mitigation
- ☐ Other

What are your comments about the Project?

I-031-001

I am in favour of the removal of the antiquated, misconceived viaduct + the use of the surface street option. Jane Jacobs seminal research proves that once roads are removed, traffic evaporates. This happened recently in San Francisco when the Embarcadero Viaduct collapsed + was not replaced, leading to the resurgence of a beautiful waterfront à la Nice. In a 'green' city like Seattle we should be thinking of better designs to our infrastructure that have low cost + environmental impacts. A deep bore tunnel is environmental destructive, risky + financially implausible.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read? ☑ Yes ☐ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project? ☐ Yes ☑ No
3. Did you find this Supplemental Draft EIS format easy to understand? ☑ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand? ☑ Yes ☐ No
5. Did you refer to the technical appendices? ☐ Yes ☑ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

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I-031-001

Chapter 2, Alternatives Development, of the Final EIS describes the project's history and alternatives evaluated prior to the 2010 Supplemental Draft EIS. The 2004 Draft EIS included evaluation of the Surface Alternative. This alternative was eliminated because it reduced roadway capacity and didn't meet the project's purpose as identified in the 2004 Draft EIS.

From: cotter.cm@comcast.net [mailto:cotter.cm@comcast.net]
Sent: Thursday, November 04, 2010 6:54 PM
To: WSDOT Web Feedback
Subject: WSDOT Web Site Feedback

The following is the contents of a form submitted on 11/4/2010 6:53:43 PM

======My Contact information======
Name: Carol Cotter
E-mail: cotter.cm@comcast.net
Web site: http://www.wsdot.wa.gov/Contact/webfeedback.htm

===== My Question/Comment/Complaint =====

I-032-001

I suggest that Option 1/A (above) of having a $1-$4 toll (very low. ALL the time.) As we need to CUT DOWN THE TRAFFIC THROUGH THE CITY ON I5 -and on the main city streets! Please, do this!

Don't RUIN this project -and make it a Awful Replacement to the current 2 level highway. Consider our geography -and spread out the north-south traffic down through our city. We Must consider what we're dealing with.

(And, we can't all ride bicycles.
-Nor ride buses to the airport.

Nor can we all afford $5 3-4 times a year we need to go south (or north) through the city!

Carol Cotter
Edmonds, WA

I-032-001

Thank you for your comments on tolling. Updated information and analysis on tolling is discussed in Chapter 5 of the Final EIS and in Appendix C, Transportation Discipline Report.

From: Sanjay Das [aluminumfalcone@yahoo.com]
Sent: Friday, December 10, 2010 6:47 PM
To: AWV SDEIS Comments
Subject: Comments

Dear WSDOT:

I-033-001

It has come to my attention that, as part of the AEV replacement project, the existing Waterfront Streetcar line will be replaced by a line on 1st Avenue.

I AM STRONGLY OPPOSED TO THIS DECISION.

You are literally severing the Waterfront from streetcar service--between 1st Avenue and Alaskan Way, there is a 40% grade (5 inches of rise for 12 inches of run). Going uphill is nearly impossible for senior citizens or people with disabilities.

Streetcar service was discontinued in 2005 BUT METRO OR ANYONE ELSE HAS NOT DONE ANYTHING TO REPLACE THE BARN THAT WAS TORN DOWN WITH THE SCULPTURE PARK. The tracks, overhead and stations were simply left i n place waiting for the day streetcar service would be restored.

ASK YOURSELF--What will happen to the old 1920's vintage streetcars that ran the line if the streetcar line was replaced?

I suggest you rethink your decision to kill the waterfront streetcar.

-Anonymous

I-033-001

The waterfront streetcar line was eliminated on 2005. The City of Seattle is leading the evaluation of a new streetcar line along First Avenue between Pioneer Square and Seattle Center as part of the City's transit plan.

From: Shireen Deboo [shireen72@hotmail.com]
Sent: Tuesday, November 30, 2010 8:16 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: SDEIS alaskan way viaduct

I-034-001 I have a number of concerns regarding the findings of the EIS and about the proposed plan for the deep bore tunnel:

1. tunnel boring puts historic properties in Pioneer Square at risk. the tunnel off ramps dumping into Pioneer Square cast a role for the already fragile neighborhood that further signals to pedestrians that this is not a neighborhood they should frequent. If the State does not want to stand up for Pioneer Square, shame on the City for not protecting this unique, irreplaceable asset.

I-034-002 2. the tunnel alternative doesn't provide adequate access to downtown

I-034-003 3. tolling proposals, while understandable, will further push SOVs onto downtown streets

I-034-004 4. where is the transit??

I-034-005 5. why is there no street-level alternative?

I-034-006 I am not an expert on financing, policy, planning, or transportation. But I know that the finest minds in government and planning can do better than this. How can we talk about protecting and growing a "green" city and region, while proposing a project that shuns transit and sets aside an incredible opportunity to make a truly visionary choice for the future? Imagine how this money could be spent on enhancing rapid transit, making downtown streets more navigable, and protecting, preserving and improving dense, historic neighborhoods.

Thank you for addressing these concerns and for your work.

Shireen Deboo
1700 Bellevue Ave #402
Seattle, WA 98122

I-034-001

Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse onto several streets such as S. Royal Brougham Way, Alaskan Way, First Avenue, and Fourth Avenue. Please see the Final EIS Appendix C, Transportation Discipline Report for the transportation analysis. Because traffic in Pioneer Square is controlled by signals, it is not anticipated that the increased volume will affect the pedestrian character nor will it make it more difficult to walk to shops or restaurants. Pioneer Square has historically been an active place with a high volume of traffic.

I-034-002

Access to downtown with the Bored Tunnel Alternative would be different than it is today, but it would not be less adequate. For instance, rather than using the Seneca and Columbia street exits to enter central downtown, analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse into downtown using several streets, such as S. Royal Brougham Way, Alaskan Way, First Avenue, and Fourth Avenue.

I-034-003

Tolling is expected to divert a portion of traffic from SR 99 to city streets. A detailed tolling analysis has been conducted and is described in the Final EIS in Chapters 5 and 6. Chapter 8 describes potential strategies to reduce diversion caused by tolling. Also, please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

I-034-004

Chapter 1, Introduction, of the Final EIS includes the Purpose and Need for the project and one of several purposes is to provide capacity for automobiles, freight, and transit to efficiently move people and goods to

and through downtown Seattle. At both portals the project provides transit bypass lanes and overall the project would improve transit service through downtown Seattle. Final EIS Appendix C, Transportation Discipline Report, covers issues related to transit.

I-034-005

Chapter 2, Alternatives Development, of the Final EIS describes the project's history and alternatives evaluated prior to the 2010 Supplemental Draft EIS. The 2004 Draft EIS included evaluation of the Surface Alternative. This alternative was eliminated because it reduced roadway capacity and didn't meet the project's purpose as identified in the 2004 Draft EIS.

I-034-006

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would have severe adverse effects on Seattle. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provides a more in-depth comparison of tradeoffs for the three alternatives.

Additional King County Metro transit service will be provided as part of construction mitigation. Improvements to the speed and reliability of transit service will also be supported by the project and continue to be in place after construction is completed. While some added travel time would be incurred by buses under the Bored Tunnel Alternative, transit operations would still be maintained. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for

example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

4319 W. Dravus St.
Seattle, WA 98199

December 8, 2010

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Ms. Angela Freudenstein
Alaska Way Viaduct Replacement Project
Wells Fargo Building
999 Third Avenue, Suite 2424
Seattle, WA 98104-4019

Dear Ms. Freudenstein:

The purpose of this letter is to provide comments on the Supplemental Draft Environmental Impact Statement (SDEIS) for the bored tunnel alternative for replacing the viaduct.

I-035-001

1. The SDEIS is inadequate and incomplete in identifying the effects of tolling and the omission of mitigation measures that could and should be added to the final EIS, to avoid periodic paralysis of north-south traffic to and from northwest Seattle (including Magnolia, Interbay and Ballard). These failures are applicable to two periods: the long-term, beginning in December 2015 with the opening of the tunnel, and the construction period beginning at the same time and ending approximately 3 years later. During this 3 year period the viaduct will be torn down, a "new" Alaskan Way will be constructed east of the existing Alaskan Way, and Alaskan Way will be removed. Depending on the timing of the seawall replacement, large portions of Alaskan Way will be torn up during this period. According to the SDEIS, the width of Alaskan Way will be reduced from South King to Pike Streets. The extent of the reduction is not indicated. Alaskan Way is presently two lanes in each direction. It is frequently congested between South King and Pike Street. There are traffic lights at nearly every intersection. It provides access to the ferry terminal at the foot of Marion Street. Access to and from the ferry terminal is mentioned in the SDEIS, with the bland understatement that "it may take a little longer". There does not appear to be any consideration of the extent of the impact on the access to and from the Colman dock ferry terminal, during either the first phase (2016 -2018) or thereafter, and no consideration of how that might be mitigated. Also ignored in the SDEIS is the environmental impact resulting from the fact that 55-70 hazardous or flammable tanker trucks per day that use the viaduct will not be permitted in the tunnel, and will either use Alaskan Way or I-5. The latter already resembles a glacially moving parking lot during many hours of the day.

The viaduct provides northbound traffic access to downtown Seattle and access for southbound traffic from downtown Seattle to the Duwamish/Harbor Island/SR 519 area,

4851-1852-2888.02

I-035-001

Please see the Final EIS for updated analysis and discussion of the Bored Tunnel, the Cut-and-Cover Tunnel Alternative and the Elevated Structure Alternative. Also, the Final EIS Appendix C, Transportation Discipline Report, describes tolled and non-tolled transportation conditions in detail, as well as impacts expected during construction, including expected street closures, impacts to Colman Dock and possible construction mitigation strategies.

Access to the Duwamish/Harbor Island/SR 519 will not change as a result of the proposed project. With the Bored Tunnel Alternative, direct access to downtown Seattle will change. The Columbia Street and Seneca Street ramps will be removed and access will be replaced with the Stadium area ramps to the south.

Please see the Final EIS, Chapter 8, for discussions regarding project mitigation.

I-035-001 Seattle-Tacoma International Airport, and points south. The tunnel will have neither access. The WSDOT estimates that there will be an additional 5,500 vehicles per day

I-035-002 on Alaskan Way as a result. In addition, barring an unforeseen circumstance, tolls for using the tunnel will be approved by the Legislature. Based on WSDOT's recommendations the tolls will average $1.87, $2.16 or $2.44 per vehicle, depending on the scenario developed to test the effects of tolling. Use of an average toll is a poor predictor. The proposed toll of $4.00 during peak periods will cause the greatest diversion of traffic from the tunnel to downtown streets and Alaskan Way. WSDOT's estimate of the diversion of 6-7,000 vehicles per day to Alaskan Way doesn't provide the critical information affecting the capacity of Alaskan Way: the diversion during peak

I-035-003 hours to an already congested Alaskan Way. During the 3 year construction period beginning in December 2015, when the viaduct is closed and removed, the lane width of Alaskan Way is reduced, and the new Alaskan Way is being constructed, the SDEIS should address (1) the capacity of Alaskan Way to not only handle the existing traffic but also the estimated additional 12,000 or more vehicles per day, and (2) the capability of the new Alaskan Way, with its proposed 4 lanes in this segment, to provide adequate north-south traffic flow capabilities. The SDEIS offers no mitigation strategies to lessen the environmental impact during the 2016-2018 period. Without mitigation, motorists will be inconvenienced (and pollution increased). More importantly, businesses, including the operations of the Port of Seattle, will be strangled, with the attendant job losses and loss of tax revenues. This deficiency in the SDEIS must be corrected.

I-035-004 2. The SDEIS does not include any consideration of the westerly most portion of the Mercer West Project on the basis that this is a project that compliments all build alternatives. The achilles heal of the Mercer West Project consists of (1) the holding lanes at the intersection of 15th Avenue and West Mercer Way, which at times now exceeds the capacity, and (2) West Mercer Way, which is one lane in each direction. Unless West Mercer Way is widened, it will become a narrow funnel in both directions: westbound traffic from two-way Mercer, and eastbound from 15th/Elliot. Increased traffic on West Mercer Way getting to and from the north portal to the tunnel, from the tear down of the viaduct, and the relocation of Alaskan Way, cannot be ignored in evaluating the environmental impact of the bored tunnel. Also omitted is any consideration of whether the Ballard Rapid Ride transit route using West Mercer Way will add to the congestion, or whether that congestion will significantly affect the ability of Rapid Ride to achieve on time delivery of passengers. A consultant, hired by SDOT, is only now undertaking its work to address possible alternatives for this choke point. Its report will not be made until next April. A widening of West Mercer Way, which borders in part Kinnear Park, will likely be an engineering and cost challenge.

Thank you for your attention to the above comments on the SDEIS.

Very truly yours,

Stephen E. DeForest

4851-1852-2888.02

I-035-002

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation

System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

I-035-003

Chapters 3, Alternatives Description, and 6, Construction Effects, of the Final EIS updates the construction activities and durations for each alternative. With the preferred Bored Tunnel Alternative, the configuration of Alaskan Way S. will be designed and constructed by the Central Waterfront Project led by the City of Seattle. Mitigation measures are described in Chapter 8 of the Final EIS.

I-035-004

The West Mercer Project is an independent project being led by the City of Seattle, who is also a co-lead agency for the Alaskan Way Viaduct Replacement Project. The West Mercer Project is considered as part of the cumulative effects of viaduct replacement project. Your detailed comments on the West Mercer Project have been provided to the City.

From: Cheryl dos Remedios [mailto:cheryldosremedios@gmail.com]
Sent: Thursday, December 09, 2010 7:03 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: Protect Pioneer Square: SDEIS comments

Dear elected officials,

I-036-001 Please protect Pioneer Square.

· WSDOT has identified 13 buildings with historic significance that may be damaged during tunnel construction, including several that have direct ties to the Seattle arts community (see list below).

I-036-002 · Many Seattleites are dreaming of an open waterfront, but the same 4-lane road is being planned along the waterfront with –or- without the tunnel. In fact, the tunnel generates more traffic on the waterfront than the surface street/ transit/I-5 option.

· The tunnel will more than double traffic in Pioneer Square. For over a year, WSDOT has been aware that the volume of traffic in Pioneer Square "would not be acceptable" but offers no alternatives. The amount of traffic - combined with the scale of the interchange itself - would permanently alter the character of this historic district. In addition to the giant portal, likely changes include constant streams of traffic on previously quiet streets, no street parking, elimination and damage to trees, damage to buildings from traffic vibration, etc.

I-036-003 · My favorite oxymoron is "value engineering." This is what happens when the State runs out of money and all of the promises they make regarding aesthetics and other culturally important values get cut. All that's left is the mega-engineering. How are you planning to protect Seattle if this project is "value engineered?"

I-036-004 As you are reviewing the plans for the tunnels, please address the impacts on Pioneer Square. Tomorrow, I'll be chaperoning my daughter's class on a field trip to Pioneer Square via light rail to "look at the buildings and take the underground tour." Please be vigilant about the tunnel's impacts on Pioneer Square so that tomorrow's experience doesn't become a bittersweet memory for us all.

Thank you,

Cheryl dos Remedios
6220 S Norfolk St, Seattle, WA 98118

cheryldosremedios@gmail.com, 206.437.8357

I-036-001

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties. This protocol would apply to the list of buildings provided at the end of this comment letter.

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance

Buildings at Risk:
At least twelve buildings that are located within the Pioneer Square Historic District or listed on the National Register for Historic Places may be damaged during tunnel construction:

1 Yesler Building -- 1 Yesler Way
Maritime Building -- 911 Western Ave
Federal Building -- 900 First Ave
National Building -- 1000 Western Ave
Alexis Hotel/ Globe Building -- 1001 First Ave
Arlington South/ Beebe Building -- 1015 First Ave
Arlington North/ Hotel Cecil -- 1015 First Ave
Grand Pacific Hotel -- 1115 First Ave
Colonial Hotel -- 1123 First Ave
Two Bells Tavern -- 2313 Fourth Ave
Fire Station #2 -- 2334 Fourth Ave
Seattle Housing Authority -- 120 Sixth Ave N.

One additional building that is a Seattle landmark but not listed in the NRHP:
Watermark / Colman Building -- 1107 First Ave.

The 2 buildings most likely to experience damage (and be torn down):
Polson Building at 61 Columbia
Western Building at 619 Western

Here's what the Western Building website has to say: **"The Art Building of Seattle - Celebrating 100 years! More than one hundred artists work from studios in this six story building. 619 Western is one of the largest artist studio enclaves on the west coast if not the world. It has been a workspace for artists since 1979."**

And what does the S-DEIS have to say about the Western Building? "Mitigation measures to protect the building may not prevent the need for demolition to avoid the possibility of collapse."

of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

I-036-002
If the Bored Tunnel Alternative is selected, the final configuration of Alaskan Way would be determined by the City of Seattle's Central Waterfront Project.

Also, 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.

Updated analysis has been included in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis.
Through the Section 106 process for the Bored Tunnel Alternative, FHWA has concluded that the Western Building is the only property within the Pioneer Square Historic District with effects that rise to a level

that constitute a Section 4(f) use. The Western Building is a contributing building within the Pioneer Square Historic District. The Final Section 4(f) Evaluation contains additional discussion and is included in the Final EIS.

Because traffic in Pioneer Square is controlled by signals, it is not anticipated that the increased volume will affect the pedestrian character of the area nor will it make it more difficult to walk to shops or restaurants. Pioneer Square was historically an active place with considerable traffic and this will not affect its historic character or its integrity as an NRHP historic district. See the Final EIS Appendix I, Historic, Cultural, and Archaeological Resources Discipline Report, for a full discussion of project effects on Pioneer Square.

I-036-003

Your comment is noted. 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. Also, the bored tunnel design-build contract requires the design-builder to take a greater share of the risk than a traditional construction contract. More than 90 percent of the work will be performed for a fixed price.

I-036-004

The Final EIS addresses effects to Pioneer Square in Chapters 5 and 6. A more detailed discussion of effects to historic resources and districts is in Appendix I, Historic, Cultural, and Archaeological Resources Discipline Report, of the Final EIS.

From: Alex-jon Earl [alexjon@gmail.com]
Sent: Friday, October 29, 2010 11:40 AM
To: AWV SDEIS Comments
Subject: Regarding SDEIS:

Good morning,

Reviewing the SDEIS, I have a few questions based on the released documents:

I-037-001 | 1) Which intersections in Seattle will experience an increase in emissions, and to what degree?

I-037-002 | 2) What level of transit investment was studied in your process to arrive at the 1% value?

I-037-003 | 3) What structures within the Pike Place Market and along First Avenue are at risk?

I-037-004 | 4) What are the options for the location of tolling structures, including those on city property?

I-037-005 | 5) What is the specific estimated economic impact during construction to the primary retail areas of Downtown Seattle adjacent to the construction area like Lower Queen Anne, Pike Place Market, and the Retail Core?

Thank you,
AJ Earl

I-037-001

Intersections that could potentially experience an increase or decrease in emissions have not been identified. All intersections would meet the applicable air quality standards. Please refer to Appendix M, Air Quality Discipline Report, for additional detailed analysis.

I-037-002

Appendix C, Transportation Discipline Report, covers issues related to transit and explains the level of transit investment that was studied.

I-037-003

No structures in the Pike Place Market are at risk. Some buildings farther south on First Avenue may have soil improvement to prevent damage; these buildings are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

I-037-004

Toll structures would be located within the highway right-of-way. SR 99 would use "open road" tolling, similar to what is being used on SR 520, so the toll structures would consist of gantries above the roadway, not wide toll plazas used elsewhere.

I-037-005

These retail areas are outside of the area of direct effect during

construction and are not anticipated to be affected except for the increase in congestion during specific construction periods identified in the Transportation Discipline Report (Appendix C of the Final EIS). Retail sales will likely follow broader economic trends as the economy recovers from recession and private sector hiring returns to pre-recession levels rather than be affected by a specific construction project.

November 16th 2010

I-038-001 Comment on Bored Tunnel alternative for replacing viaduct:

I am a West Seattle resident and commute daily to north Elliot Bay. When I travel by car, I exit the viaduct on Western and head north on Elliot. I essentially do the reverse of this commute at the end of the work day. Placing a bored tunnel with no downtown exits will directly affect my commute in a
I-038-002 negative way according to the study whether or not I take the tunnel or travel on the waterfront. This scenario gets worse if tolling is implemented due to increased surface travel on the waterfront due to avoidance of tolls by commuters and predicted large exit ramp backups on SR99 at the south and north entrance points for the tunnel. I already experience the backups at rush hour at both the Senaca and Western exits and can easily envision a northbound backup on SR99 going from the stadiums to the West Seattle bridge.

I-038-003 I personally support the "3 x 3 Cut and Cover" alternative which maintains the Western Exit/Elliot entrance. The Cut and Cover alternative is cheaper to build, retains some downtown exits thereby decreasing potential increases in city surface traffic, and replaces the seawall at the same time. I have read the study on the impact of the tunnel and its alternatives and find some of the logic used to promote the bored tunnel flawed. The main opposition to the Cut and Cover proposal is the length of time it would disrupt the waterfront establishments during construction. The Bored Tunnel proposal claims it will minimally affect the waterfront, but this is only because the repair of the Seawall has been removed from the proposal. What is not mentioned is that the repair of the Seawall will still occur (between 2013 and 2015) and will therefore cause waterfront disruptions at that time. In addition it will cost an additional 2-3 hundred million dollars on top of the 2-3 billion dollar bored tunnel.

I-038-004 Q: How will ferry auto traffic be managed on the waterfront if Alaska way experiences the increases in auto traffic predicted by the study? Currently I avoid this route since there are already frequent delays in a commute involving passing in front of the downtown ferry terminals. The bored tunnel proposal will force more cars directly into this high congestion area.

I-038-005 It seems very shortsighted to replace the viaduct with not only a smaller capacity tunnel which is more expensive and predicted to increase city surface traffic congestion, but also one that doesn't address the seawall in cost or function. It is a poorly thought out solution to a problem and definitely does not take into concern the residents of West Seattle who depend on this route for access to and from northwest areas of Seattle.

Sincerely,

Kurt H. Edelmann, PhD
3738 SW 97th St Seattle WA 98126

I-038-001

The Bored Tunnel Alternative would permanently change travel patterns compared to the existing viaduct. Changes to travel patterns may permanently increase travel times for some routes such as between West Seattle and downtown. In the Final EIS Chapter 5, Permanent Effects, and Appendix C, Transportation Discipline Report, describe issues related to travel times and downtown access.

I-038-002

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

I-038-003

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Cut-and-Cover Tunnel Alternative. This alternative is analyzed in the Final EIS.

During construction, the Cut-and-Cover Tunnel Alternative would not just disrupt waterfront establishments, it would close SR 99 for the longest period of time: SR 99 would be closed in both directions for a period of 27 months. Southbound SR 99 would be closed for a total of 42 months and northbound SR 99 would be closed for 39 months. The Bored Tunnel Alternative would have lesser effects along the central waterfront area because much of the construction would occur underground, with the exception of during viaduct demolition.

The Final EIS discusses the Elliott Bay Seawall Project as an independent project that complements the Bored Tunnel Alternative in Chapter 2. The lead agencies recognize that the construction of two

large projects downtown could result in compounded construction effects, and they will be in close coordination with the City of Seattle as both these projects head into construction in a effort to minimize disruptions.

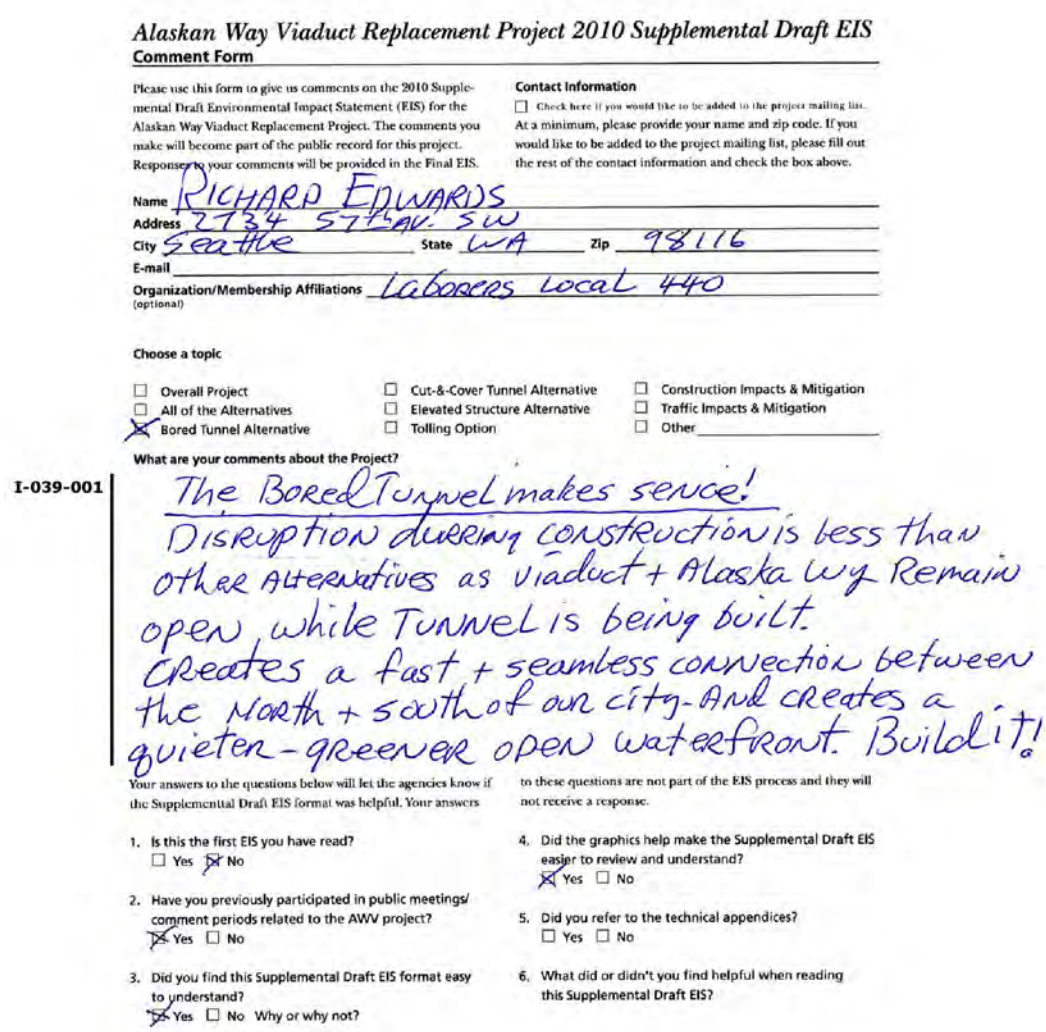
I-038-004

The proposed designs of the Bored Tunnel Alternative with Program elements, the Cut-and-Cover Tunnel Alternative and the Elevated Structure Alternative, evaluated in the Final EIS, all provide additional lanes on Alaskan Way south of Yesler Way with the purpose of improving traffic circulation and flow, especially in the vicinity of Colman Dock.

Please see the Final EIS, Appendix C, Transportation Discipline report for updated transportation analysis results.

I-038-005

Thank you for your comments. The Bored Tunnel Alternative would provide sufficient capacity to efficiently move people and goods to and through downtown Seattle. The seismic stability of a viaduct replacement along Seattle's central waterfront does not necessarily require that the seawall be rebuilt or replaced. The Cut-and-Cover Tunnel and Elevated Structure Alternatives include replacing the Elliott Bay Seawall because the alignments for these alternatives are located in close proximity to the failing seawall, which if not repaired, could compromise the seismic stability of the proposed cut-and-cover tunnel or elevated structures proposed. The Bored Tunnel Alternative proposes to construct a new tunnel inland; therefore, the failing seawall does not have the potential to affect the seismic stability of this alignment.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS
Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information
☐ Check here if you would like to be added to the project mailing list.
At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name RICHARD EDWARDS
Address 2734 57th AV. SW
City Seattle State WA Zip 98116
E-mail
Organization/Membership Affiliations (optional) Laborers Local 440

Choose a topic

- ☐ Overall Project
- ☐ All of the Alternatives
- ☒ Bored Tunnel Alternative
- ☐ Cut-&-Cover Tunnel Alternative
- ☐ Elevated Structure Alternative
- ☐ Tolling Option
- ☐ Construction Impacts & Mitigation
- ☐ Traffic Impacts & Mitigation
- ☐ Other

What are your comments about the Project?

I-039-001

The Bored Tunnel makes sence! Disruption durring construction is less than other Alternatives as viaduct + Alaska Wy Remain open while Tunnel is being built. Creates a fast + seamless connection between the North + south of our city. And creates a quieter - greener open waterfront. Build it!

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
   ☐ Yes ☒ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project?
   ☒ Yes ☐ No
3. Did you find this Supplemental Draft EIS format easy to understand?
   ☒ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
   ☒ Yes ☐ No
5. Did you refer to the technical appendices?
   ☐ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-039-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: Leif Espelund [leif.espelund@gmail.com]
Sent: Thursday, December 02, 2010 6:00 PM
To: AWV SDEIS Comments
Subject: Deep Bore Tunnel EIS comments

I-040-001 As outlined in the EIS, a large swath of traffic will avoid the tunnel due to tolls and a lack of exits. That means that the one purpose of the tunnel, to move automobiles, will be defeated. This fact alone should lead us to the obvious conclusion that the deep bore tunnel is a bad solution.

I-040-002 Stop this project. Go back to the preferred alternative from the stakeholders group: Surface/Transit/I-5. It is a better option for the present and the future of our transportation needs. And it saves money. Why wouldn't we choose this option?

--
Leif
(206) 334-8890
"People are broad-minded. They'll accept the fact that a person can be an alcoholic, a dope fiend, a wife beater and even a newspaperman, but if a man doesn't drive, there's something wrong with him."
- Art Buchwald

I-040-001

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation

System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

I-040-002

Some individuals, groups, and leaders have continued to support and show interest in developing and evaluating a surface and transit alternative. Because of this continued interest, the lead agencies analyzed the transportation effects of a surface and transit hybrid option to confirm the rationale for screening this option out. The results of this analysis were summarized in Chapter 3 of the 2010 Supplemental Draft EIS. The evaluation of the Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS. One finding indicates that travel times would increase for all trips during the AM peak hour and for most trips during the PM peak hour.

From: carlin f [mailto:carlinrae@hotmail.com]
Sent: Thursday, November 04, 2010 8:47 PM
To: Alaskan Way Viaduct
Subject: viaduct

Hello,

I-041-001 I am writing to say that I would NOT pay a $5 toll to travel the tunnel (and I live in West Seattle). Yes, I would sit in traffic on gridlocked I-5 instead of spending $10 to travel to North Seattle. I think a lot of people feel this way. $5 is a lot of money.

Thanks!

Carlin

I-041-001

Thank you for your comment. Please refer to Chapters 3, Alternatives Description, of Final EIS for updated tolling information and 5, Permanent Effects, for a description of transportation effects for each of the alternatives, with and without tolls.

From: falkenbury@w-link.net
Sent: Saturday, November 27, 2010 1:35 PM
To: AWV SDEIS Comments
Cc: falkenbury@w-link.net
Subject: Public comment

I-042-001

On page 173 of the summary of the EIS for the AlaskanWay Viaduct Replacement Project, under 'Other Cumulative Effects' there are four bullet points: public services and utilities, air quality, energy and greenhouse gas emissions and wildlife, fish and vegetation.

Missing is one of the most significant environmental degradations: the greenhouse gases emitted in the production of hundreds of thousands of square yards of concrete necesssary for such a project.

The production of concrete, worldwide, creates ten per cent of the green house gases. While this project represents a tiny part of the total concrete produced and may seemingly not rise to the point of significance, every bit of concrete produced simply adds to the problem and truly cannot be mitigated. Every project ever done by man could make a serious claim that it is so small that it has very little environmental impact, but we have come to understand that environmental damage is cumulative and not to be considered in isolation.

I-042-002

Further, the entire Alaskan Way Viaduct Project is a continuation of the idea that 'enough concrete will solve our transportation problems'. This has never been the case (no congested city has ever 'solved' its transportation problems by building another road; most studies indicate that more roads simply begat more travel).

Imagine if we solved the congestion in this corridor by traffic management and not building another four lanes of highway. Perhaps here, now, we can show that world how this can be done and avoid the release of more greenhouse gases in the production of more concrete.

The EIS should reflect the fact that environmental damage occurs with the production of every square yard of concrete.

submitted, Dick Falkenbury

7547 32NE
Seattle, WA 98115

(206) 527 1930

I-042-001

The build alternatives would result in indirect greenhouse gas emissions, which are not released by the project, but are nonetheless caused by the project. Greenhouse gases would be emitted during the production and disposal of materials used for project-related construction. For example, emissions would be released during the production of the concrete used in construction or the manufacture of the equipment used during construction. Indirect emissions are also known as embodied and lifecycle emissions. At this time, there is no consistent and standardized method for calculating the embodied and lifecycle emissions for transportation projects. There are no tools currently available for clearly and meaningfully discerning which emissions are attributable to a specific project and which emissions would have occurred without the project. However, as with all environmental disciplines, vendors that produce equipment and materials used in project construction are subject to regulation at their facilities.

I-042-002

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the project.

From: stevenf@kcha.org [mailto:stevenf@kcha.org]
Sent: Friday, November 05, 2010 1:53 PM
To: Alaskan Way Viaduct
Subject: AWV Feedback

Sent from: Steve Fisher
Address:
City: Seattle
State: WA
County:
Zip: 98146
Email: stevenf@kcha.org
Phone:

Comments:

I-043-001 Regarding the possible use toll on the tunnel, I've heard anything from $3-$5 per trip through the tunnel. Is that one or two way? I would personally NOT pay that much to use the tunnel. I would pay $1-$1.50 per trip (two way). It may take longer to pay off the $400,000,000, but more people would use the tunnel.

I-043-001

Thank you for your comment. The toll rates described are one-way tolls. Please refer to Chapters 3, Alternatives Description, of Final EIS for updated tolling information and 5, Permanent Effects, for a description of transportation effects for each of the alternatives, with and without tolls.

From: Fox, Willow [Willow.Fox@4culture.org]
Sent: Monday, December 13, 2010 11:52 AM
To: AWV SDEIS Comments; 'peter.hahn@seattle.gov'; 'mike.mcginn@seattle.gov'; 'richard.conlin@seattle.gov'; 'sally.bagshaw@seattle.gov'; 'tim.burgess@seattle.gov'; 'sally.clark@seattle.gov'; 'jean.godden@seattle.gov'; 'nick.licata@seattle.gov'; 'bruce.harrell@seattle.gov'; 'mike.obrien@seattle.gov'; 'tom.rasmussen@seattle.gov'
Subject: Maintain Pioneer Square's Historic Value

I-044-001

Dear members of the Seattle Waterfront/Tunnel project,

Please make the utmost effort to preserve the historic value of Pioneer Square. The tunnel project does not include exits directly into downtown, which will dramatically increase the volume of traffic expected to channel through Seattle's premier historical district. This will not change Pioneer Square for the better, it will no longer attract as many tourists and the currently intact historical fabric will be destroyed as each of these buildings are demolished or damaged during the course of the project. In particular, the Western Building is vital to the art community in Pioneer Square, which provides a large draw to the area and necessary economic support.

These buildings are located within the Pioneer Square Historic District or listed on the National Register for Historic Places:

1 Yesler Building -- 1 Yesler Way
Maritime Building -- 911 Western Ave
Federal Building -- 900 First Ave
National Building -- 1000 Western Ave
Alexis Hotel/ Globe Building -- 1001 First Ave
Arlington South/ Beebe Building -- 1015 First Ave
Arlington North/ Hotel Cecil -- 1015 First Ave
Grand Pacific Hotel -- 1115 First Ave
Colonial Hotel -- 1123 First Ave
Two Bells Tavern -- 2313 Fourth Ave
Fire Station #2 -- 2334 Fourth Ave
Seattle Housing Authority -- 120 Sixth Ave N.

Watermark / Colman Building -- 1107 First Ave.

Polson Building at 61 Columbia
Western Building at 619 Western

Sincerely,
~Willow Fox

Willow Fox
4CULTURE | Public Art
T 206 296.8681 | F 206 296.8629
101 Prefontaine Pl S Seattle, WA 98104
sign-up to receive (willow) public art calls by email

I-044-001

Because traffic in Pioneer Square is controlled by signals, it is not anticipated that the increased volume will affect the pedestrian character nor will it make it more difficult to walk to shops or restaurants. Pioneer Square has historically been an active place with a high volume of traffic. Analysis of traffic patterns for vehicles accessing ramps to and from SR 99 in the stadium area show that vehicles would disperse onto several streets such as S. Royal Brougham Way, Alaskan Way, First Avenue, Fourth Avenue, etc. Please see the Final EIS Appendix C, Transportation Discipline Report for the transportation analysis.

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

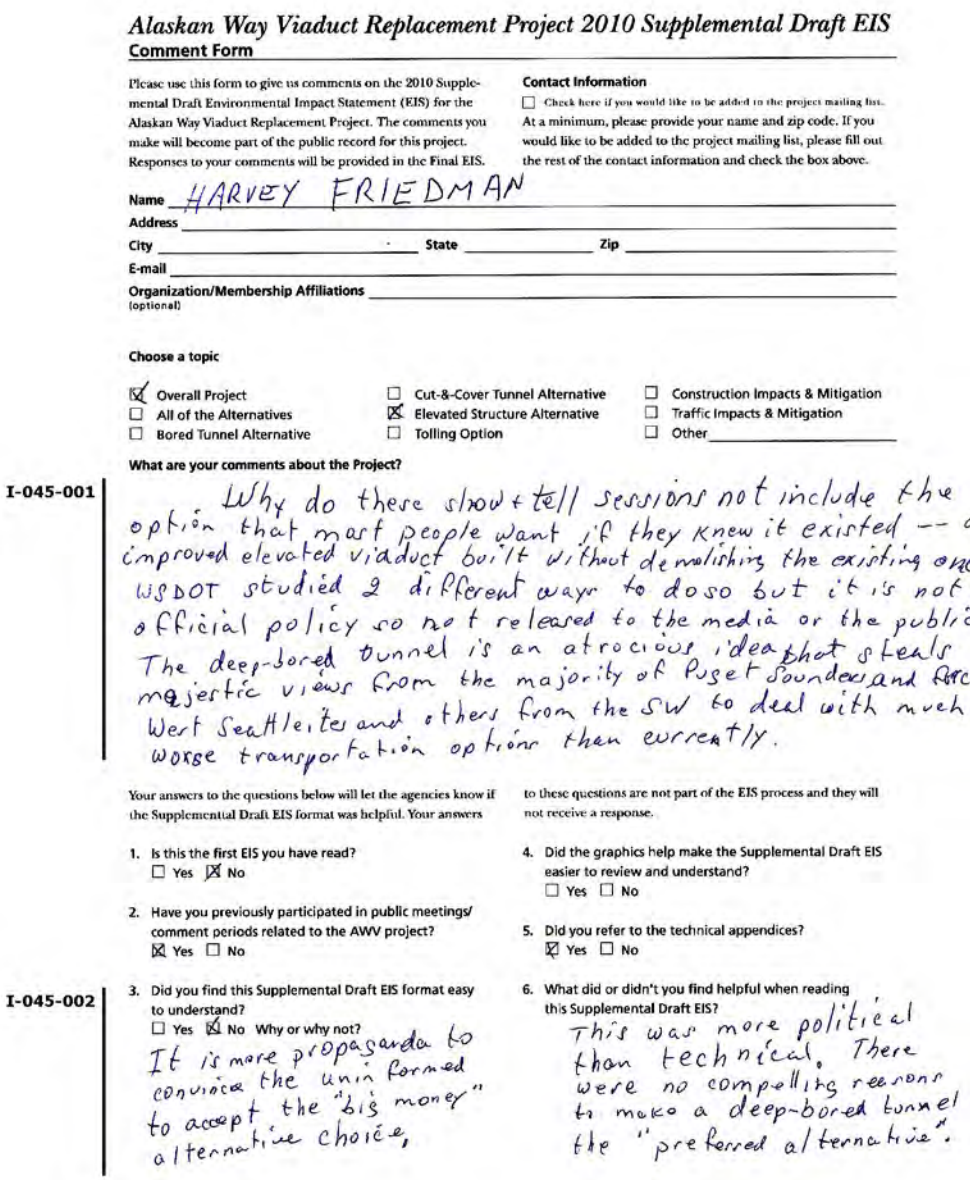
1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for

Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list. At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name HARVEY FRIEDMAN

Address

City State Zip

E-mail

Organization/Membership Affiliations (optional)

Choose a topic

☒ Overall Project
☐ All of the Alternatives
☐ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☒ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

What are your comments about the Project?

I-045-001

Why do these show + tell sessions not include the option that most people want if they knew it existed -- an improved elevated viaduct built without demolishing the existing one? WSDOT studied 2 different ways to do so but it is not official policy so not released to the media or the public. The deep-bored tunnel is an atrocious idea that steals majestic views from the majority of Puget Sound and forces West Seattleites and others from the SW to deal with much worse transportation options than currently.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
☐ Yes ☒ No

2. Have you previously participated in public meetings/ comment periods related to the AWV project?
☒ Yes ☐ No

3. Did you find this Supplemental Draft EIS format easy to understand?
☐ Yes ☒ No Why or why not?

I-045-002

It is more propaganda to convince the uninformed to accept the "big money" alternative choice,

4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
☐ Yes ☐ No

5. Did you refer to the technical appendices?
☒ Yes ☐ No

6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

This was more political than technical. There were no compelling reasons to make a deep-bored tunnel the "preferred alternative".

I-045-001

The lead agencies recognize that retrofitting highways, roadways, and bridges is often a viable option to counter earthquake threats. However, unlike other bridges and structures in the area, it isn't practical to retrofit the viaduct by only strengthening one or two structural elements. Fundamentally, such fixes transfer the forces from one weak point in the structure to another, and the viaduct is weak in too many places. The concrete frames, columns, foundations, and even the soil under the structure don't provide enough strength by today's standards. The lead agencies have studied various retrofitting concepts, and all of these concepts fail to provide a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct. The lead agencies also determined that retrofitting 20 percent of the viaduct as discussed for the Rebuild Alternative is not reasonable.

Chapter 2, Alternatives Development, of the Final EIS describes environmental documentation that occurred prior to the 2010 Supplemental Draft EIS, including evaluation of the Rebuild Alternative. Please see this discussion for the story of how the build alternatives evaluated in the Final EIS came to be.

I-045-002

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the three alternatives.

From: fnharvey [fnharvey@zipcon.net]
Sent: Monday, December 06, 2010 6:16 PM
To: AWV SDEIS Comments
Subject: my comments

I would like engineering responses to my comments please not the P. R. parrot style of which I give an example in Item H4 below. Thanks you.

A lot of what I have written is in the "Public Comments" section of the VIADUCT project library. Please excuse the length of this 6-item email message but I think it ties together well and some people are put off by attachments. I used URL's when I could.

I-046-001

H1.
This article I wrote generated more opposition to a tunnel and support for elevated AWV.

http://www.seattlepi.com/opinion/150363_firstpersondec1.html

H2.
Here is report of Governor Gregoire favoring an upgrade of the AWV section of SR99.Despite the crowing in http://ec2-72-44-60-181.compute-1.amazonaws.com/2009/12/27/seattle-city-hall/18780/Best-of-2009:-How-Jan-Drago-dragooned-a-Viaduct-solution/ , h

http://seattletimes.nwsource.com/html/localnews/2003510439_viaduct05m0.html

H3.
Despite the crowing in http://ec2-72-44-60-181.compute-1.amazonaws.com/2009/12/27/seattle-city-hall/18780/Best-of-2009:-How-Jan-Drago-dragooned-a-Viaduct-solution/ , here is how SDOT and clever consultants came up with scary video to change governor's mind after wasteful vote of March 2007. This is courtesy of Elizabeth Campbell's using the Public Disclosure Act to eventually get the pdf file in 2009.

go to http://www.scatnow.com/Documents
and grab
04262007-Clark-Rigsby-attach1SpecforVideo.pdf

H4.
Here is an exchange of what I wrote on the S Holgate to S King SDEIS in which the replier ignores what I wrote because there was nothing in the script that covered it. It might be a bit difficult to follow.

I-046-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Elevated Structure Alternative.

I-046-002

I think that WSDOT and its consultants interpret the federal rules for Environmental Impact Statement differently than I do.
In the FONSI, entry I-010-001 comments

Having read the environmental impact statement on the southern part of the AWV, I must comment about an inaccuracy that I noticed. While it is true that the visual impact or views while driving south on it won't be substantially different, going north is a whole other story. Under the EIS, side-by-side
traffic means that southbound traveling trucks and buses would obstruct the views of those traveling northbound.

Currently traveling north gives magnificent views (serendipitously provided by the original AWV designers) that are so spectacular that they merit "United Nations Heritage Drive" designation.
Starting at Holgate, we see the Coast Guard pier and the Pier 46 cargo containers and cranes to the west and soon the baseball field and football stadium to the east. As we get higher, we see the Olympic Mountains and Puget Sound with its tankers, ferries and pleasure craft to the west and to the east the varied architecture of the city. But the view doesn't stop here at S. King St. even tho the project does; to the west is even more of the Sound, mountains, and water traffic, and to the east more city, up close and personal. When passing the Ferry Terminal, we get a glimpse to the north of how ugly the city could become when development is allowed right to the water. True, after Pine Street, the views aren't so special, but the EIS was about the South End of the AWV, not the entire thing.

Clearly, the view is many times better when traveling on the viaduct, compared to surface, tunnel, or side-by-side, particularly heading north. Though not as extensive as the views discussed in the April 6, 2008 edition of the "Seattle Times Pacific Northwest Sunday Magazine" for rich condo buyers and businesses, the views that riding on the viaduct provides are DYNAMIC, offering a splendid slice of Seattle. Furthermore, this is public, not just for car/SUV users but open to anyone who can afford bus fare. Unlike land acquisition problems with monorail, this right-of-way is already in use; improving the elevated viaduct wouldn't require buying up lots of land. Visitors immediately recognize our
quality-of-life from traveling north on the viaduct. Even if transportation no longer depended on fossil fuels, (for examples, either a return to animal use, or some type of ground-effects hovercraft), the northbound view would still be spectacular and should not be given up to benefit greedy downtown interests.

Now that I've presented a case to maintain the views, let me discuss ways to do so.
1) depending on a positive outcome of the Miyamoto report, retrofit the existing viaduct all the way from the BatterySt. tunnel to S. Holgate St.
2) modifying Scenario D slightly, have the elevated structures at different heights with the northbound lanes higher than the southbound lanes and extend this the entire length of the existing viaduct. It would appear that this would satisfy all the federal highway safety standards and satisfy the majority of viaduct users including Seattle-dwellers, all 500000+ not just those living downtown.

I still think that demanding that the "South End" solution be applicable to any of tunnel, surface, or elevated side-by-side for the central waterfront and then

I-046-002

The S. Holgate Street to S. King Street Alaskan Way Viaduct Replacement Project is a separate project that is already under construction.

The views of Elliott Bay, Puget Sound, and the Olympic Mountains are prized by many. Views are currently enjoyed by motorists and passengers traveling on the upper deck of the existing viaduct. However, the views for motorists and pedestrians using downtown streets in the vicinity of the waterfront are interrupted by the existing viaduct structure. This structure is considered by some to be a substantial visual intrusion as well as a source of noise and shadow for the Pioneer Square Historic District and the Central Waterfront. Impacts to views are discussed in the Final EIS and considered in detail in Appendix D, Visual Quality Discipline Report.

I-046-002

claiming that the only solution that meets that criterion is what is described in the EIS, is removing the elevated double-deck viaduct by "stealth engineering".
---
that I made on the EA for the H2K section of the SR99 AWV, the response
---
In Chapter 3 of the EA (p. 59), under the question "How would the project affect views?", the text states that "views from the new SR 99 roadway would not be substantially different from the existing viaduct. Motorists traveling northbound would still experience panoramic views of the downtown
skyline." It goes on to state that for southbound SR 99 travelers, "the views of the stadiums and SODO area would improve somewhat with the new roadway configuration, because these views would no longer be blocked by the upper roadway".
---
to my comments implies that the only views worth seeing are those of the built environment. Any big city has a downtown skyline. The setting of Seattle on Puget Sound with the Olympic Mountains is what makes it so desirable. Did WSDOT use an AIA architect with no appreciation for the Sound and mountains to write the response to my comments?

Another attempt to explain is to consider the prohibition on building on migrating waterfowl resting wetlands. These areas are not necessarily in constant use year-round but are definitely to be maintained. Now the WSDOT reply to my complaint that the Draft Environmental Impact Statement
didn't address my concern that valuable views would be stolen from northbound users of the H2K section of the AWV. It is as if the WSDOT responders only considered the worms in the wetland and not the waterfowl that appear periodically. People are not waterfowl and can adapt when necessary but it seems to me that the users of the AWV, not just the landowners near it, should have a vote on whether to rebuild a safer, quieter AWV.
Let me give another example of why I think that there is a significant environmental impact. Suppose someone decided that the Space Needle must come down for an extension of the EMP and they argued that there was no significant environmental impact because people could still get around that area. I would claim that the views of those who wanted to get up to the restaurant or the observation deck
would be stolen because they couldn't do that anymore. Would the WSDOT responders still claim no significant environmental impact?
Concerning H2K, those adapters affected are the everyday commuters into downtown Seattle, the everyday commuters through downtown Seattle (who might not have a problem (unless claustrophobic) if they are traveling southbound), the everyday commuters out of downtown Seattle, the tradespeople (plumbers, electricians, roofers, HVAC folk, communications setup and repair workers, etc.) who use the AWV several times a day to go in, out, through Seattle, those living in the Puget Sound region who
bring visiting guests from Sea-Tac airport north on the AWV so that those visitors can appreciate the diversity of Seattle. All should have a vote on whether to have to permanently adapt or not.

The vote should be based on complete information, not just upon what the powers-that-be think will
convince the voting public to vote for or against what the p-t-b want as, for example the March 2007 vote limited to Seattle residents only in which only 2 of the 6 outcomes had meaning. None of the WSDOT engineers had the courage to correct the information released to the media about the rebuild. There were 2

I-046-002

ways to do the rebuild, quickly with a total shutdown for 3 years, or, with ongoing construction, demolition, and limited usage that could take 10 years. What the media reported was that the rebuild would involve total closure for 10 years - a gross canard.

Democracy only works when the electorate is informed. Slanting information to deceive the voters is unethical.
But, it is obvious why it was done. If folks knew that they could have a safer, quieter, elevated AWV for even the same amount of money that a deep-bored tunnel would cost, the vote would probably be 3-1 in favor of rebuild. Downtown developers using Jan Drago, Tayloe Washburn, and Tim Ceis as front voices, wanted to get rid of the elevated SR99 AWV so that they could make more profits. Their attitude was that if the smooth talking front people couldn't convince the public, then too bad for the public. This scheme was not new but had been going on for years. Even before the Nisqually earthquake of 2001, the parameters for the waterfront design charrette were that AWV wouldn't be there. Despite that, two entrants did include AWV; they definitely didn't receive honorable mention. As early as 2004, I suggested using quieter pavement as what one hears when going from King to
Snohomish county on I-5, and even acoustic tiles on the bottom of the upper deck. Because this might reduce noise so that only those with very sensitive hearing would complain, it wasn't even tried especially because the intent was too knock down the AWV anyway.

To come back to the FONSI, I think that replacing elevated SR99 AWV with a surface side-by-side highway has a significant environmental impact and that it would take an informed (all options, costs, timelines, honestly presented) vote of the entire region to allow you to claim no significant environmental impact.
Even if this vote shows that the majority don't care, it would still be a significant impact to me, but I would cease writing to you about it.

I-046-003

H5. Some reasons for not buying a deep-bored tuunel to replace AWV

A "done deal", spending public money for a less functional deep-bored tunnel to replace the elevated Alaskan Way Viaduct section of State Route 99, based on alleged fraud and deception should be re-examined and, if necessary, "undone".

There are several parts to the fraud and deception allegation.

1. That the majority supports the deep-bored tunnel is false. The majority in Puget Sound prefer an elevated SR99.

http://seattlepi.nwsource.com/saturdayspin/181511_bqweb10.html

The viaduct project website has exact breakdown of AWV usage. They measured with cameras at all entrances and exits and compared license plates. They also found that more than half of vehicles using AWV were licensed outside of Seattle city-limits.

http://www.wsdot.wa.gov/Projects/Viaduct/library-meetingmaterials.htm

I-046-003

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

I-046-003

Presentation was at August 28, 2008 meeting. Look at "Origin and Destination Information" presentation and at "Meeting Notes" for that meeting. "Public Comments" was also interesting.

The majority of AWV users, the true "stakeholders", want, preferably, a retrofit, and if not, then a rebuild that retains the Seneca and Columbia ramps.

http://www.westseattleherald.com/articles/2007/08/21/interact/opinion/opinion.txt

I-046-004

2. The Seattle Stakeholder Advisory Committee did not represent the stakeholders of SR99 but mainly greedy Seattle interests.

Following the disastrous (for tunnel advocates and mayor) vote, the "consulting group", Moore Iacafano Goltsman, Inc. (MIG) produced the "AWV stakeholder interview report" presented at the 13 December 2007 meeting in Seattle Town Hall. This report was glibly presented but EXTREMELY BIASED.

Point 1) They accepted the mayor's spin on the results of the March 2007 vote without comment.

Point 2) Their survey/poll of 69 "stakeholders" allowed all five original plans that WSDOT studied (chart on page 20 of the report), not the restricted vote that the mayor forced on Seattle voters.

Point 3) They did not get a fair representation of voters.
Most of the 69 stakeholders polled were already on record that any elevated solution would be a "deal breaker" by 5 to 1.

Why was not also considered the P.I.'s Saturday Spin question where results are at

"http://seattlepi.nwsource.com/saturdayspin/181511_bqweb10.html"?

This was open to anyone who read about it in the P.I. over several days, not restricted to a select few. Over 120 were passionate enough to vote; by a 30 to 1 margin, we saw either "fix it" (meaning retrofit) or "don't tear down the viaduct without rebuilding a better one". This is an exact opposite deal breaker than for the downtown interests but for twice as many people.

Point 4) If this was truly an unbiased study, they would have mentioned what most wanted before the mayor's vote -- a state-wide vote ranking all five choices. After all, we are discussing SR99, a solution to regional transportation in and through Seattle.

Despite this clear bias, the "Stakeholder Advisory Committee" was then picked as a proportionally-voting subset of those interviewed for the MIG report.

I-046-005

3. That the EXISTING AWV would be unsafe in a big earthquake does not mean that no elevated AWV could be built that would be safe. (see 5.)

I-046-006

4. That the AWV must be totally demolished before it can be rebuilt is false. WSDOT engineers have studied at least two different ways of having ongoing construction and demolition while the AWV is still being used.

http://www.wsdot.wa.gov/NR/rdonlyres/8A69CCB4-348F-487C-8E42-8032FE97452A/0/SDEISAppendixBAlternativesandConstructionMethods.pdf

I-046-004

Following the 2007 advisory vote rejecting both a cut-and-cover tunnel and elevated structure replacement, in 2008 WSDOT, King County and the City of Seattle assembled a Stakeholder Advisory Committee of almost 30 people, representing neighborhoods, business and freight interests, labor groups, and environmental and other cause-driven organizations. This group was charged with reviewing options for the Alaskan Way Viaduct's central waterfront section. As part of this process, the state, county and city determined that any solution would be grounded in the recognition of, commitment to, and integration across a set of six guiding principles:

- Improve public safety.
- Provide efficient movement of people and goods.
- Maintain or improve downtown Seattle, regional, the port and state economies.
- Enhance Seattle's waterfront, downtown and adjacent neighborhoods as a place for people.
- Create solutions that are fiscally responsible.
- Improve the health of the environment.

As we initially evaluated surface and elevated options, many of the stakeholders expressed concerns about how such options would affect the waterfront as a place for people and maintain mobility in and through downtown both during and after construction. The proposed bored tunnel was seen by many as the solution that would best balance all of these goals. In January 2009 the Governor, King County Executive, Seattle Mayor and Port of Seattle CEO announced their recommendation for replacing the viaduct between S. King Street and the Battery Street Tunnel – a bored tunnel alternative. The Washington State Legislature passed legislation that endorsed the bored tunnel and provided the budget authority necessary for its construction, and Governor Gregoire signed the bill into law. The Seattle City Council voted unanimously to

I-046-006 | http://www.wsdot.gov/Projects/Viaduct/library-environmental.htm

I-046-007 | 5. The WSDOT directed TV and youtube video showing the existing AWV collapsing appears not to be tied to a computer simulation with adjustable parameters but rather was just a SCARY propaganda movie illustrating how unsafe the combined AWV/seawall is.

It appears to be based on a vulnerability analysis (The 2007 Seismic Vulnerability Analysis Report is available on the WSDOT website at www.wsdot.gov/Projects/Viaduct/Library.htm and appears to imply that the AWV would not necessarily fail without the decrepit seawall failing first.) that apparently didn't use data from the 6.8 magnitude 2001 Nisqually earthquake directly.

What wasn't reported was that the design for a rebuilt SR99 elevated AWV would survive the magnitude 7.0 earthquake presumed in that video and even more intense temblors.

It appears fair to conclude that this video was political especially in light of

04262007-Clark-Rigsbyattach1SpecforVideo.pdf

a copy of which is on http://www.scatnow.com/Documents/

Rather the simulation video served to scare the governor, her advisors, and other key policy makers into feeling that any AWV elevated solution for SR99 would be too dangerous to consider.

This "done deal" must be undone.

H6. Here is my response to an early September 2010 Neal Pierce attack on AWV. Mine was most recent comment.

http://community.seattletimes.nwsource.com/reader_feedback/public/display.php?source_name=mbase&source_id=2012804409

authorize the Mayor to sign a memorandum of agreement that outlined the State and City's responsibilities for the viaduct replacement program, including the proposed bored tunnel.

I-046-005

Replacing the existing viaduct with an elevated structure along the waterfront is presented as a viable alternative in the Final EIS.

I-046-006

WSDOT has evaluated many construction approaches. In the Final EIS, the construction plan for the Elevated Structure Alternative does not demolish the entire viaduct before starting to rebuild the new structure. However, this alternative would have the longest construction duration, approximately 10 years. Chapter 3, Alternatives Description, of the Final EIS describes the construction activities for each of the alternatives.

I-046-007

The video showing the existing viaduct sustaining damage during an earthquake was meant to illustrate what could happen if the existing viaduct is not replaced. Its purpose was not to discredit elevated structures in general. The lead agencies know that an elevated structure constructed to current design and seismic standards would be able to withstand earthquakes that the existing viaduct would not be able to withstand. It is for this reason that the lead agencies have continued to analyze an Elevated Structure Alternative in the EISs for this project, including the Final EIS.

The Bored Tunnel Alternative has been identified as the preferred alternative, but the build alternative for this project will not be selected until the Record of Decision.

From: Tom Fucoloro [tfucoloro@gmail.com]
Sent: Monday, December 13, 2010 6:40 PM
To: AWV SDEIS Comments
Subject: EIS shows that the tunnel does not accomplish its goals

I-047-001

From a post I wrote at Seattle Bike Blog: http://seattlebikeblog.com/2010/12/07/is-this-even-a-better-waterfront/

So this is the dream view of the waterfront after the deep bore tunnel project? Really? And the only big difference between this vision and the surface/transit option is that there is a $2 billion tunnel underground that costs $7 round trip and will only reduce traffic by 47,000 vehicles per day? Oh, and there's basically no transit in this plan. And no I5 improvements.

I don't get it. I thought the big benefit of the tunnel was that we would have this beautiful new waterfront park. Sure, there's more space along the waterfront for a park (clearly the red space in the image is not yet designed). But there is also a big four to six-lane boulevard that is harder to cross on foot than the viaduct (the P.I. has more "before and after" pics here).

Look, I know some of you are really sick of talking about this tunnel. But I really, really don't understand what is good about it. No one has yet to give me one good reason, and I can't just let a mistake this large go. The best you get is, "The viaduct is ugly." People say this will keep traffic moving, but that's just not true. Without new alternatives (like improved transit service), the tunnel project will dump 65,000 more cars into downtown streets. That's not a solution that drivers should be embracing. For the price tag, you should demand better!

What is that price tag? Well, $2 billion to move 40,000 cars per day comes out to about $42,500 per car. I have crunched those numbers a bit before here, but let's put them in perspective another way. We could build Portland's entire bike infrastructure for the same cost we will be paying to move just 1,500 cars through the tunnel. For the cost of just 5,882 cars, we could complete the entire bike master plan.

Or think about it this way. If we spent even a fraction of that $2 billion on transit and biking, I bet we could get 40,000 cars per day off the road entirely. For example, 100,000 vehicles drive over the upper and lower West Seattle bridges every day (tens of thousands of which end up on the viaduct). What if there were light rail to West Seattle? How many thousands of people would take it instead of driving?

This is a giant investment in unsustainability. We cannot talk of big environmental dreams and waning ourselves off foreign oil if even forward-thinking Seattle invests this kind of money on a project that only encourages the movement of people and goods via vehicles. Like Martin at Seattle Transit Blog, I would rather build another viaduct with transit and money savings than build a tunnel. At least the investments in transit will provide more people with a viable alternative to driving.

I-047-001

The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS, which included the I-5, Surface, and Transit Hybrid. This approach was seriously considered, but was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region. The Surface and Transit Scenario Year 2030 Analysis Results is included in the Final EIS Appendix W, Screening Reports.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support that it has received from diverse interests. If the Bored Tunnel Alternative is selected, the final configuration of Alaskan Way and design of the public space along the central waterfront would be determined through the City of Seattle's Central Waterfront Project.

Overall project costs are included with the project description and are used for the analysis of economic impacts. Cost estimates for mitigation are included in the overall project costs. These estimates, along with other cost estimates, are refined as the planning and design process proceeds and details are developed. All cost estimates allow for escalation and inflation and include contingencies for unforeseen events. The project is included in the financially-constrained long range plan adopted by the Puget Sound Regional Council (the area's Metropolitan Planning Organization, or MPO). Cost estimates for the alternatives evaluated in the Final EIS are:

- Bored Tunnel – $1.96 billion
- Cut-and-Cover Tunnel – $3.0 to $3.6 billion
- Elevated Structure – $1.9 to $2.4 billion

I-047-001

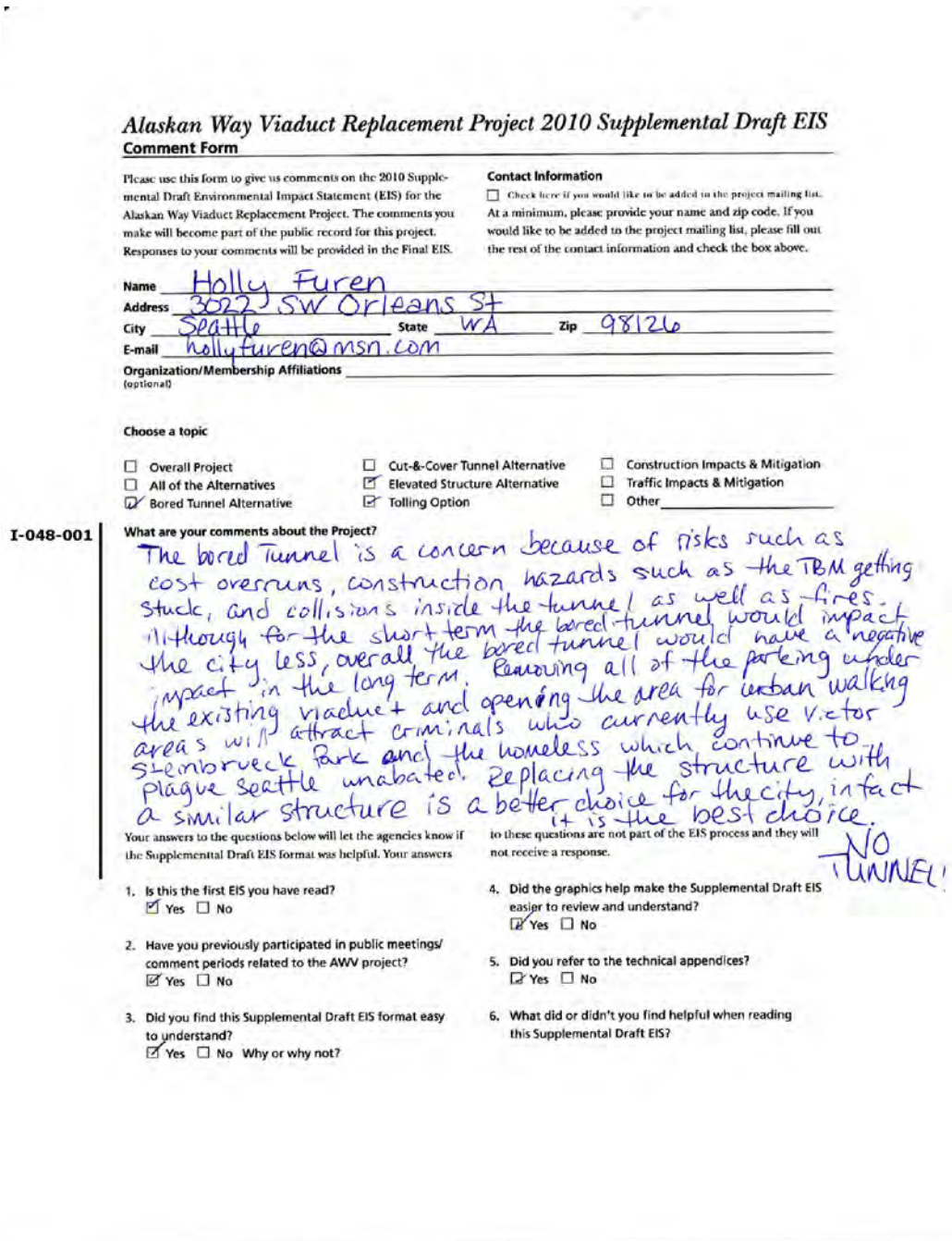
The state is taking public comments on the environmental impact statement until December 13. You can send your comments to awv2010SDEIScomments@wsdot.wa.gov.

If you have an argument that justifies even a fraction of the tunnel's cost, please comment. I really want to be convinced so I can stop stressing about it. And "Stop arguing and build the damn tunnel" or "It's a done deal, fuhgettaboutit" do not count as arguments.

We have stopped terrible highway projects that were "sure things" before. I now live a couple blocks from the almost-built Thomson Expressway. I can't thank the citizens who fought to stop that atrocity enough.

Tom Fucoloro
Journalist
SeattleBikeBlog.com
206.696.3059

These cost estimates do include different elements. The Bored Tunnel Alternative cost does not include replacing the seawall, improving the Alaskan Way surface street, or building a streetcar. Costs for the Cut-and-Cover Tunnel and Elevated Structure Alternatives do not include replacing the seawall between Union and Broad Streets.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list.
At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Holly Furen
Address 3022 SW Orleans St
City Seattle State WA Zip 98126
E-mail hollyfuren@msn.com
Organization/Membership Affiliations (optional)

Choose a topic

☐ Overall Project
☐ All of the Alternatives
☑ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☑ Elevated Structure Alternative
☑ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

I-048-001

What are your comments about the Project?

The bored Tunnel is a concern because of risks such as cost overruns, construction hazards such as the TBM getting stuck, and collisions inside the tunnel as well as fires. Although for the short term the bored tunnel would impact the city less, overall the bored tunnel would have a negative impact in the long term. Removing all of the parking under the existing viaduct and opening the area for urban walking areas will attract criminals who currently use Victor Steinbrueck Park and the homeless which continue to plague Seattle unabated. Replacing the structure with a similar structure is a better choice for the city, in fact it is the best choice. NO TUNNEL!

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
☑ Yes ☐ No

2. Have you previously participated in public meetings/ comment periods related to the AWV project?
☑ Yes ☐ No

3. Did you find this Supplemental Draft EIS format easy to understand?
☑ Yes ☐ No Why or why not?

4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
☑ Yes ☐ No

5. Did you refer to the technical appendices?
☑ Yes ☐ No

6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-048-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. 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 (such as the tunnel boring machine getting stuck) - something projects that experience cost overruns generally fail to do.

The lead agencies recognize that businesses along the central waterfront, Western Avenue, and Pioneer Square rely on the short-term parking in the area. The City of Seattle Department of Transportation (SDOT), in coordination with the project, has conducted parking studies as part of the process to develop mitigation strategies and better manage the city's parking resources. SDOT's studies identified a number of strategies to offset the loss of short-term parking in this area, including new or leased parking and the increased utilization of existing parking. See Chapter 8 of the Final EIS for more information about mitigation measures proposed for parking. If the Bored Tunnel Alternative is selected, the final configuration of the Alaskan Way surface street, including the pedestrian facilities, would be determined by the City of Seattle's Central Waterfront Project.

The tunnel will be equipped with ventilation, a fire detection and suppression system, and drainage. The tunnel ventilation system would be designed in accordance with National Fire Protection Association standards.

See the Final EIS for current project information.

From: Holly Furen [hollyfuren@msn.com]
Sent: Sunday, December 12, 2010 7:23 PM
To: AWV SDEIS Comments
Subject: Essay regarding the Alaska Way Viaduct Replacement
Attachments: Persuasive Research Final Draft.rtf; thesafechoice.rtf

I-049-001

On the same day that this essay was due for my English 102 college class, Governor Gregoire made the announcement that "the apparent best-value proposal to design and build the SR 99 bored tunnel. The tunnel is the preferred alternative for replacing the seismically unsafe Alaskan Way Viaduct along Seattle's waterfront" (WSDOT).

My essay was a persuasive research essay that was based on a community issue that we as students felt passionately about. I chose the bored tunnel option of the AWV replacement as the issue because from the start as a Seattle native, I have felt consistently that the bored tunnel is not the best option at all.

Through my research process I have learned much more about bored tunnels and the political agenda proposing the bored tunnel option as "the preferred alternative". During my research I was surprised that the WSDOT interviews I conducted all had similar results. Each interviewee attempted to refute that the bored tunnel was the only option being reviewed however, at all of the meetings, tours, and hearings I attended constantly they only discussed the bored tunnel. I did not see any consistent information to cover all options including a current structure replacement or the cut-and-cover options.

Regardless, I have maintained my conclusion that the bored tunnel is definitely not a good option and should not be considered an option at all. Most Seattle residents either don't realize the enormity of this issue or as usual they really don't care. They will only consider the problem when they attempt to travel in and out of the city once the bored tunnel is in place.

Unfortunately I feel that my final persuasive research essay is only a summary of the information I uncovered to dispute Governor Gregoire's statement made on Thursday, December 9th. I am submitting the attached essay to explain the issues not mentioned, looked at, considered, or strictly ignored along with other risks and issues that have been mentioned but not completely covered during my research process by all political parties involved. I am also including my previous essay that was an informational essay project earlier in the semester which details safety issues more in depth. Please consider the issues that I have uncovered to include in consideration of hopefully discontinuing this unsavory plan.

-Holly Furen
Seattle Resident

I-049-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS. The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would have severe adverse effects on Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provides a more in-depth comparison of tradeoffs for the build alternatives.

I-049-002

Furen 1

Holly Furen

Kingston

English 102

9 Dec 2010

No Tunnel

Information provided by the Washington State Department of Transportation contains a list of key benefits regarding the bored tunnel option to indicate why it is the preferred alternative to a cut-and-cover tunnel and the elevated structure to replace the existing structure that is known as the Alaska Way Viaduct or State Route 99. The benefits listed include, minimized disruptions during construction, improved safety, maintains SR 99 through Seattle, reconnected neighborhoods, more pedestrian and bicycle paths provided, and the waterfront of downtown Seattle is to be improved. While some of these benefits are justified, there are several issues that stand in the way of going forward with the proposed bored tunnel option which is not the best option to replace Seattle's Alaska Way Viaduct (AWV) such as costs, increased traffic, and safety issues both during construction and travel through the proposed tunnel.

While it is true that the current Viaduct causes dirt and noise that would be avoided with a tunnel replacement the construction phase is not without its disruptions. Placing the 99 way underground would indeed eliminate the unsightly viaduct that has been a part of Seattle's waterfront for the past 50 years, but it is also the most expensive choice of the proposed options.

I-049-002

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, the Bored Tunnel Alternative avoids substantial closure of SR 99 during construction and can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the alternatives.

Mr. Everett of the Federal Highway Administration stated that the quote attributed to him in this essay was inaccurate and taken out of context. The "contingency fund" as referenced in this essay is budgeted to cover risk. As for cost overruns, the lead agencies are managing this risk closely through careful cost estimating and contracting. Governor Gregoire has created a Program Oversight Committee of state and local elected officials to manage and resolve issues such as cost overruns, if they arise.

I-049-002

Costs continue to plague the proposed bored tunnel option. Seattle City and Washington State leaders lack the proper funding and have consistently avoided determining where funding will come from which has merely scratched the surface of cost concerns. Construction hazards such as sinkholes and most importantly the tunnel boring machine which could get stuck and cause delays are realistic risks that could lead to added costs. Traffic will be displaced to other areas that already suffer from traffic congestion, and adding tolls to the Viaduct will only increase traffic problems. Additionally, removing the Viaduct displaces parking around the city which cannot afford to lose these important features. Fires and collisions in a tunnel are much more difficult to clear, especially when there is lack of proper emergency vehicle lanes. Earthquakes are a constant threat to Seattle's region; a tunnel that runs underground alongside the water front is a serious risk to those who will be travelling in the tunnel, and also there are far too many political discrepancies and contradictions regarding the procedure of implementing the bored tunnel as the primary replacement choice.

Taxpayers should be concerned and subsequently outraged if cost overruns happen due to many unforeseen risks involved with the bored tunnel option and they likely will. A $415 million contingency fund that would have cushioned some of the overruns has already been drained since $255 million of the fund was given away in concessions to bidders in November of 2010. I asked Randy Everett of the Federal Highway Administration why a WSDOT worker said the contingency fund is a cushion for cost overruns. Everett claims, "The contingency fund is for paying for concessions and other costs that are considered important to the project." Everett also agrees that

I-049-002

since tolls have been the only answer to buffer the lack of funding, the only option then will be to foot the bill to Seattle area taxpayers, which will inevitably happen.

Other tunnel projects have proven to be extremely expensive. The "Big Dig" in Boston proved to be the most expensive after a $14 billion cost completed the project. Fortunately for Boston, they were able to secure its funding from the federal government. Boston first spent 4 years convincing the federal government through a relentless Tip O'Neill to convince Congress to approve the funding (Vanderwarker 13). Washington does not have the ability to request the kind of funding it needs from the Federal Government which has only committed a total of $339.8 million for the project (Web). With the state of the current economy of the United States, the federal government cannot afford to commit any extensive funding to projects for Washington State in that capacity.

Another cost factor is time. The bored tunnel approach extends construction time far longer than other alternatives. An estimate of 9.5 years is currently the time frame that has been focused on. Time length becomes costly because of inflation and potential delays. Delays alone could be the sole issue creating further cost overruns. Many delays have already occurred and the WSDOT is fully aware that if they are to come across a Native American burial site, the delays could prove to be tremendous.

A disturbing aspect about costs has come from one consultant firm involved in the advising on the AWV replacement project, specifically Bruce Agnew of the Discovery Institute. On December 22, 2008, Bruce Agnew initially concluded that, "Based on a survey of other tunnel projects, both in the U.S. and internationally, the reported AWV replacement cost is higher than might be expected." He adds, "The 9.5 year construction schedule also appears long when compared with other projects" (Web). Then on June 25,

I-049-002

2010 he contradicted himself by stating, "At 55 feet in diameter, the Puget Sound's deep-bore tunnel is in the higher range of tunnels around the world that have been completed largely on time and within budget." He goes on to list a handful of tunnel projects that were completed on time. However, the projects he lists are smaller projects. According to Mega-Projects & Risk, the difference between actual and estimated cost overruns is often 50 – 100%.

Both Governor Gregoire and City Councilman Mike Conlin have been vague about who will pay cost overruns. Basically their explanation is "we won't go over the budget." However in 2002 Professor Bent Flyvbjerg at Oxford did a study and found that 90% of the world's mega projects exceeded their original budgets and those tunnels were worse than most average costs at 33% over budget. He claims that you can't declare "no overruns." Although Flyvbjerg's estimation only a year prior was significantly lower, the fact that cost overruns are to be expected is where the concern stands. An expert in July of 2010 for the mayor claims "there is no way to predict the full cost" (Web). To merely attempt to stay within the budget is fundamentally unrealistic.

Seattle City counsil member Mike Conlin has flip-flopped on his support of the bored tunnel option; initially, he was a supporter for the surface street and now insists the tunnel to be the best idea is a political concern. When the current Mayor Mike McGinn challenged Conlin to a public debate, Conlin declined. Conlin seems to think there are fewer risks with the tunnel, and it creates a "great waterfront" and provides security and reliability to the transportation system. He appears to be very delusional about what the tunnel benefits are. I could not locate any straight answers from Conlin when asking a question regarding who should pay for any cost overruns. His only statement was that,

I-049-002 "the budget should be followed" (Web). When asked what will happen in the event of overruns he claimed, "We will just have to figure it out" (Web). He did not answer any questions directly as to whether he thinks that Seattle taxpayers should have to pay (Web).

I-049-003 To resolve the cost issue, toll booths are the option currently on the table for resolution. Initially Governor Gregoire agreed that toll booths were a problematic idea. However, all accounts show that the Governor agrees it is the one of the few resolutions to the cost issue. Toll booths remain to be a difficult resolution to covering costs, especially as they relate to traffic.

So far there is no answer regarding when toll booths will cease if they are implemented in this project. When installed, they are estimated to cost a driver $4.00 per trip into downtown Seattle on the new proposed Alaska Way route. Once the cost of the project is covered there is no definite plan to remove the tolls.

I-049-004 Additionally, toll booths will force drivers who have not budgeted for the extra expense of toll booth charges to avoid the tolls. Toll avoidance will increase traffic into other areas of the city such as the Interstate 5 route which already has traffic issues of its own. To burden high traffic areas with more traffic will create more frustration for drivers attempting to get into and around the city if they must compete with more traffic from those who are avoiding the tolls.

I-049-005 Although SR 99 will be maintained as a route through Seattle it will no longer be a great route to Seattle. The current design of the bored tunnel eliminates current ramps that stream traffic from the south end of the region into downtown where traffic will become spread out to already congested areas such as the lower Queen Anne

I-049-003

Toll structures would be located within the highway right-of-way. SR 99 would use "open road" tolling, similar to what is being used on SR 520, so the toll structures would consist of gantries above the roadway, not toll booths used elsewhere.

Long-range planning documents, such as the Puget Sound Regional Council's long-range transportation plan, Transportation 2040, have identified system-wide highway tolling as a funding source for future transportation projects as revenues from taxing gasoline continue to diminish. Ultimately, the state legislature must decide whether the state will continue to impose tolls on SR 99 even after the viaduct replacement is funded.

I-049-004

Yes, diversion is expected if the facility is tolled. A detailed tolling analysis is included in the Final EIS Appendix X, Tolling Re-evaluation Memo. Chapter 8 of the Final EIS discusses strategies that could be implemented to reduce diversion due to tolling. A Tolling Advisory Committee (TAC) will be established to consider such strategies and to advise the lead agencies. Initial recommendations from the TAC are expected in 2012.

I-049-005

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 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.

I-049-005

neighborhood that already has to contend with traffic attempting to exit the city via I-5 during rush hour as well as attracting visitors to the Seattle Center or through Pioneer Square toward the stadiums that struggle with traffic the most on a game day. Most of Seattle's stadiums and event centers are located in the same area as the proposed new exit and on ramps. When game days are in progress, commuters currently have the ability to avoid most of the event traffic by taking express ways and transit options rather than risk taking a longer route by traveling the stadium areas. Typically as it is currently with the Alaska Way Viaduct, the common bus-riding commuters will find that if they have to travel through downtown on a game day for either the Mariners, the Sounders, or the Seahawks, it can take up to an hour longer just to make it through routes that on a typical day may only take 10 to 20 minutes to exit the city. However, with the new proposed project, commuters do not have this ability. Matt Preedy of WSDOT claims that, "There will be commuter routes created to avoid event traffic" (Interview). He did not elaborate on what those routes would be and did not point out how it would be conducted. The way the map is shown, mid-town commuters will have to make a choice to put themselves in event traffic, go out of their way to enter the tunnel from the north end where there is an abundance of drivers trying to enter both the new north tunnel entrance along with drivers attempting to make it toward I-5, or just attempt to reroute to I-5. Currently 99 traffic routes moves fairly smoothly whereas the I-5 traffic is consistently a time constraint to get entrance on from downtown Seattle, even with alternative access points.

Drivers will be dealing with far more road rage as it will take commuters much longer to get to their destinations once traffic becomes displaced with lessened parking,

For event traffic, improved access to and from SR 99 near the north portal and added network redundancy across SR 99 would result in reduced congestion before and after Seattle Center events. In the Stadium area, the First Avenue S. ramps to and from the north (SR 99) would be removed but replaced by similar connections to and from the north of S. Royal Brougham Way and the East Frontage Road and ramps to from the south (SR 99) would be added. These roadway changes would likely improve circulation and reduce overall congestion levels at critical intersections near the stadiums during large events by providing more direct access to regional facilities such as SR 99 and I-5. In addition, due to less reliance on First Avenue S. for access to and from the north in the modified roadway network, traffic levels on First Avenue S. between S. Royal Brougham Way and S. King Street may be reduced before and after events.

I-049-005 newly imposed tolls, lack of on and off ramp options as well as sports game activities.

I-049-006 Consider this scenario; a mother with small children wants to visit the downtown area of Seattle. She is planning to take her children to the Seattle Aquarium and finds parking under the current structure of the Alaska Way Viaduct. She and her boys merely cross Alaska Way to get to the Aquarium. Now let's consider the scenario with the bored tunnel in place. 570 parking places that once existed underneath the Viaduct are now removed and a new city parking guide is in place. The mother finds the closest parking available is now ten blocks away in the Pacific Place building. She may consider cancelling the Aquarium trip should she not have the convenient parking. Most drivers are driving for convenience and without convenience Seattle may lose tourist revenue and create more traffic issues by removing crucial parking spaces currently residing under the Alaska Way Viaduct Structure.

I-049-007 City leaders who assume people will find a better ride on the current Metro transit system may not be aware that riders will become frustrated because some buses will pass them by at last stops where most commuters find that they can park and ride, such as under the West Seattle Bridge. When busses are overcrowded and standing room only during high traffic peek commuter times, riders that attempt the park and ride (or suffer living near the last stops to downtown) understand that there are days that they run the risk of being late to work due to busses passing them by, especially during winter months when there are fewer busses and more riders. On those freezing cold days it can literally take hours before a rider even gets a chance to get on a bus from Andover and Delridge or on Charlestown and Avalon. Most people are forced to find a ride or take a sick day,

I-049-006

The lead agencies recognize that businesses along the central waterfront, Western Avenue, and Pioneer Square rely on the short-term parking in the area. The City of Seattle Department of Transportation (SDOT), in coordination with the project, has conducted parking studies as part of the process to develop mitigation strategies and better manage the city's parking resources. SDOT's studies identified a number of strategies to offset the loss of short-term parking in this area, including new or leased parking and the increased utilization of existing parking. Although the mitigation measures would be most needed during construction, many of them could be retained and provide benefits over the longer term. Specific parking mitigation strategies have not yet been determined, but the project has allocated $30 million for parking mitigation. The parking mitigation strategies will continue to evolve in coordination with the project and community partners. Parking measures under consideration and refinement include:

- Encourage shift from long-term parking to short-term parking
- Provide short-term parking (off-street), especially serving waterfront piers, downtown retail, and other heavy retail/commercial corridors
- Implement electronic parking guidance system
- Provide alternate opportunities to facilitate commercial loading activities
- Develop a Center City parking marketing program
- Use existing and new social media and blog outlets to provide frequent parking updates
- Establish a construction worker parking policy that is implemented by the Contractor

Refer to the Parking Mitigation during Construction section in Chapter 6 of the Transportation Discipline Report (Appendix C of the Final EIS) for additional information.

I-049-007

and some employers even will force their employees to use up their vacation days. With the new system, the busses will become a difficult option to some commuters.

I-049-008

The safety benefits WSDOT claims are that the bored tunnel will be able to withstand earthquakes but other safety risks are not mentioned. Tunnels do have some issues to be aware of before the excavation process is started. "Tunnel excavations are at risk of various issues such as costs, construction time, safety, and the impact on surroundings" (Sejnoha). Not only are there many hazards that go along with tunnel excavation, "risk factors such as surface settlements that cause damage to structures and land above the compromised land" (Hashash), but also safety issues once the tunnel is completed. A main issue with regards to safety issues for drivers inside a tunnel is fires. Tunnels have proven to be extremely unsafe, especially in the cases where collisions may cause fires.

Even without a collision, a fire could occur in a driver's vehicle, such as in the case of a tragedy that struck in the Mont Blanc tunnel located in the Alps of Western Europe. A fire occurred that killed 39 people in 1999. The University of Manchester has conducted case studies of infrastructure fires. Their findings include that some drivers in the Mont Blanc disaster only made it a little over 300 feet before they were overcome by the smoke. Additionally Professor Colin Bailey indicated that the fire raged for two days. The incident closed the tunnel for three years; "No one wants to be trapped in a tunnel during a fire. Smoke and heat can build up quickly in such a tight space" (Vanderwarker 25). If a fire were to occur in a tunnel that replaced the current viaduct structure, then traffic would have to be diverted into the already overcrowded alternate routes that

I-049-007

The Final EIS identifies estimated travel time variations along major transit corridors for the project and alternatives. Relatively minor variations in travel times are estimated and the share of travel that would be met by transit would not vary in a major way. Transit reliability during inclement weather is not within the scope of this project.

I-049-008

The concerns raised here are discussed in the 2010 Supplemental Draft EIS. Chapter 6, page 131, discusses the soil improvements and stabilization measures that are necessary along the bored tunnel alignment to protect existing structures and utilities from settlement and to strengthen existing soil so that it can better accommodate tunnel construction.

Chapter 5, pages 95 and 123, of the 2010 Supplemental Draft EIS explain that in addition to emergency exits at least every 650 feet, the tunnel will be equipped with ventilation, a fire detection and suppression system, and drainage. The tunnel ventilation system would be designed in accordance with National Fire Protection Association standards. Video cameras would provide real-time information to the operators at WSDOT's 24-hour tunnel control center to allow them to respond quickly to emergencies. The control center would have direct lines to the Seattle Fire Department, Police Department and other emergency responders. Also, real-time traffic technology would minimize delays caused by collisions, stalled vehicles or other similar disruptions in the tunnel. If a collision occurs, incident detection systems would allow tunnel operators to view and respond to the incident. WSDOT's tunnel operators would have access to real-time information about the tunnel's safety systems. Access to the tunnel would be maintained at all times to ensure prompt emergency response times.

I-049-008

Seattle has. Not only does Seattle lose toll revenues that are desperately needed to fund the tunnel but traffic increases citywide as well.

There are risks associated with tunnel construction and function. Case studies of fire damage show not only how fires perform but also how drivers react. Current fire regulations provided by the National Fire Protection Association, an international non-profit advocate of fire safety, seem to be out of touch with the way drivers react in real life during a fire in comparison to research findings. Recent history of tunnel fires world-wide, such as the Mont Blanc disaster, confirm a concern of fire risks.

The NFPA research goes on to say that recent studies are limited to only a few test programs and do not have actual adequate information related to tunnel fire safety due to the size and structure of the tunnels in combination with the fire scenarios. They also claim that fire detection systems in tunnels are often unreliable (Web).

I-049-009

Also a huge risk factor is the Tunnel Boring Machine (TBM). TBM's are at risk of getting stuck while in the construction phase which is a serious risk of cost overruns. The Brightwater sewage treatment project, also in King County, has had delays due to two of the three TBM's used for the Brightwater project becoming damaged during the excavation process. The Brightwater delay should serve as a reminder that cost overruns remain a serious risk when using unpredictable technology.

Imagine that the world record holding TBM with a diameter of 55' gets stuck underneath a historic building. It would be highly unlikely that the TBM could be easily removed from above ground. More digging around the TBM to retrieve it out of the ground would have to occur causing further delays and costs to rise during the project.

I-049-009

The cost estimate for the Bored Tunnel Alternative includes $205 million to cover project risk, such as the the need to retrieve a stuck bored tunnel machine. 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. It is expected that this pool of money set aside for risk will cover the cost of tunnel boring machine maintenance and/or repair.

I-049-010

Improving the downtown waterfront is a benefit in order to reduce the noise and dirt. However, the urban space that will be created where Alaska Way currently is located could potentially attract additional problems such as use by the homeless and drug criminal activity. Such issues are what the city already has problems with in other urban spaces that are meant for the city visitors and residents to enjoy. Nearby the proposed urban pedestrian promenade is the tainted Victor Steinbrueck Park that sits close by to the popular Pike Place Market that is often affected by constant drug deals and violent crimes like the recent stabbing of three men in September of 2010 (staff). Seattle police continue to battle the crime that thrives at this particular park that historically has the highest crime rate in Seattle (Sullivan).

Political issues continue to arise throughout the planning process of the bored tunnel option of the Alaska Way Viaduct replacement project. Seattle City Mayor Mike McGinn has been against the proposed tunnel option from the beginning and was recently quoted by a Seattle area reporter that city council member Mike Conlin signed an environmental impact statement within an hour after the Mayor had gained approval from WSDOT which promised a week long extension for the Mayor to have adequate time for review (Shay 4). There is a dilemma between city leaders that is creating an uprising of distrust between them and additionally causes further delays of any potential AWV replacement option.

An opposition group known as Seattle Citizens Against the Tunnel also understands that the political agenda has been forcing the bored tunnel option into effect and has made attempts to stop the project and demand a more simple replacement of the current stacked road structure. SCAT members filed a complaint against WSDOT to

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Under the Bored Tunnel alternative the City of Settle is leading the project to rebuild and improve the Alaskan Way Surface Street between S. King Street and Pine Street. Generally, the new street would be located east of the existing Alaskan Way surface street where the viaduct is today to create a wider public space along the waterfront the new street would include sidewalks, bicycle facilities, parking/loading zones, and signalized pedestrian crossings at cross-streets

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). The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would have severe adverse effects on Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provides a more in-depth comparison of tradeoffs for the three alternatives.

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challenge the environmental review of the bored tunnel and its sufficiency. The group SCAT is dedicated to eliminate the bored tunnel option, even collecting signatures for an initiative number 101 to stop the bored tunnel project to avoid tolls on city drivers.

With all of the safety risks, traffic problems and cost issues the bored tunnel option should not be the preferred alternative and should not even be considered with all of the considerations of the effects the tunnel could have. Since even city leaders have discounted the bored tunnel option in the past they should stick to their instincts. A replacement of the current Alaska Way Viaduct structure, constructed with seismically sound materials and design, should suffice to replace the dilapidated Viaduct that could collapse with an earthquake strong enough to bring it down.

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Holly Furen

Kingston

English 102

11 Nov 2010

The Safe Choice

I-049-011

There are risks associated with tunnel construction and function. Fires cause damage to tunnel structures and vehicles. Case studies of fire damage show not only how fires perform but also how drivers react. Current fire regulations seem to be out of touch with the way drivers react in real life during a fire. There is a recent history of tunnel fires world wide that verifies a concern of the fire risk. Safety remains a risk of Seattle's Alaska Way Viaduct replacement of an option known as the bored tunnel, especially when it comes to issues with fire.

Initially tunnels appear to be a cost effective alternative to roadways in order to create an easy flow of traffic. Yet tunnels do have some issues to be aware of before the excavation process is started. "Tunnel excavations are at risk of various issues such as costs, construction time, safety, and the impact on surroundings" (Sejnoha). Not only are there many hazards that go along with tunnel excavation, "risk factors such as surface settlements that cause damage to structures and land above the compromised land" (Youssef), but also safety issues once the tunnel is completed. A main issue with regards to safety issues for drivers inside a tunnel is fires. Tunnels have proven to be extremely unsafe, especially in the cases where collisions may cause fires.

Even without a collision, a fire could occur in a driver's vehicle, such as in the case of a tragedy that struck in the Mont Blanc tunnel located in the Alps of Western Europe. A fire occurred that killed 39 people in 1999. The University of Manchester has conducted case studies

I-049-011

Protecting public safety is the highest priority for both FHWA and WSDOT. The proposed bored tunnel would include safety features:

- Safe travel lanes: Two 11-foot travel lanes with shoulders in each direction would ensure enough space for legal size trucks. Long curves would allow for safe sight distances.
- Tunnel control center: The tunnel would have a 24-hour control center that would allow quick response to changing conditions and emergencies. WSDOT's tunnel operators would have access to real-time information about the tunnel's safety systems. The control center would have direct lines to the Seattle Fire Department, Police Department and other emergency responders.
- Incident response: Real-time traffic technology would minimize delays caused by collisions, stalled vehicles or other similar disruptions in the tunnel. If a collision occurs, incident detection systems would allow tunnel operators to view and respond to the incident.
- Emergency exits and refuge areas: Safe and effective evacuation routes would be provided for motorists. Enclosed emergency walkways, which would have independent ventilation and fire control systems, would run parallel to both traffic levels in the tunnel. The walkways would be separated from the tunnel's roadways by concrete walls and fire-rated doors. Access to the walkways would be provided about every 650 feet. In an emergency, travelers would walk along the shoulders to reach an emergency doorway and a safe refuge area. A flight of stairs would connect the refuge area to the emergency exit walkway and the non-affected level of the tunnel. Travelers unable to evacuate using the stairs would be protected by staying in the safe refuge areas, which would be equipped with fire-rated doors and lighting, ventilation and fire suppression systems. Refuge areas would also be monitored by cameras, provided with an emergency phone, and would be large

I-049-011

of infrastructure fires, their findings include that some drivers in the Mont Blanc disaster only made it a little over 300 feet before they were overcome by the smoke. Additionally Professor Colin Bailey indicated that the fire raged for two days. The incident closed the tunnel for three years; "No one wants to be trapped in a tunnel during a fire. Smoke and heat can build up quickly in such a tight space" (Vanderwarker 25). If a fire were to occur in a tunnel that replaced the current viaduct structure, then traffic would have to be diverted into the already overcrowded alternate routes that Seattle has.

On a recent tour of the existing Viaduct, Washington Sate Department of Transportation's (WSDOT) Matt Preedy was questioned about fire safety expectations in the new bored tunnel. He explained that emergency exits are to be spread out every 600 to 650 feet. In relation to the Mont Blanc disaster, if you have to walk over 300 feet in the smoke of a car accident that has caught fire then a pedestrian might not make it. And later WSDOT's viaduct replacement team responded about the 600 foot emergency exits, Linea Laird (Director of Central and North End Projects) replied,

> "The bored tunnel would be designed to provide emergency access, evacuation routes, ventilation, and fire suppression systems in accordance with National Fire Protection Association standards and other codes and regulations. In the event of a fire or other emergency, the tunnel would provide a separate evacuation corridor with an independent ventilation system. There would be emergency exits approximately every 600 feet in the bored tunnel and up to every 1,000 feet near the tunnel portals. A fixed fire control system would be used to control and extinguish any fires that may occur in the tunnel" (E-mail).

enough to accommodate several people, including those with wheelchairs. Fire, police or WSDOT incident response vehicles would be dispatched to those waiting in the refuge areas.

I-049-011

What is this National Fire Protection Association? NFPA is an international non-profit advocate of fire safety. An undated study on their website listed under "latest news" indicates that:

> "Fire detection systems are an essential element of fire protection for road tunnels... Their role can make the difference between a manageable fire and one that gets out-of-control. As such, fire detection systems play a crucial role in ensuring safe evacuation and firefighting operations" (Web).

The NFPA research goes on to say that recent studies are limited to only a few test programs and do not have actual adequate information related to tunnel fire safety due to the size and structure of the tunnels in combination with the fire scenarios. They also claim that fire detection systems in tunnels are often unreliable (Web).

The opposition to the proposed bored tunnel option has reason to be concerned. One opposing group found these to be the most serious issues of tunnel safety hazards: "People do not behave as engineers would like them to" (Kohler). Assuming that we expect people to get out of their cars and go toward the exits is a likeable idea but is it realistic when people are in panic mode fighting their way out of a smoke filled tunnel? "Fires can "jump" from one vehicle to another and involve more vehicles (and therefore more fuel) than expected" (Kohler). This will escalate the smoke to develop at a more rapid rate as well.

> "Although the severity of fires is normally discussed in terms of fire size, the rate of fire growth is equally or even more important and must be evaluated. The height of the tunnel ceiling affects the rate of fire growth. Low ceilings increase heat (the ceilings in the Alaska Way deep bored tunnel are only going to be 16.5' high). Ventilation promotes

I-049-011

the spread of fire, and longitudinal ventilation can promote the spread of fire longitudinally in the tunnel" (Kohler).

It is uncertain that Washington State and Seattle City leaders as well as drivers who use the Alaska Viaduct route are aware of these concerns.

A brief history of recent Tunnel Disasters might let us consider the dangers and risks of tunnel traffic. First The Channel Tunnel that connects France to the UK. 3 fires have closed this tunnel in the past, most recently on September 11, 2008 a fire in the tunnel caused by a freight vehicle caused several people to be hospitalized for smoke inhalation and caused the tunnel to be shut down for two days (Web). Then there is The Tauren Tunnel located in Austria. On May 29, 1999 with 12 deaths and 47 wounded, this fire continuously burned for 15 hours before firefighters had a chance to fight the remaining 1000 degree heated fire. And that same year in The Mont Blanc Tunnel fire on March 24, 1999 caused 39 people to die because the smoke from the fire of the collision caused their engines to stop. Lack of oxygen will stop an engine. They were forced from their vehicles and the inability to see and breathe caused drivers a serious calamity. Additionally, cars blocked the path for fire engines to adequately reach the scene of the accident. And even though fire cubicles were installed to help protect other drivers, they were only built to withstand a few hours while some people had to wait up to fifteen hours to be rescued (Web). Although most of these tunnel disasters occurred in the late 1990's, they are still recent enough that tunnel projects might take consideration of these hazards.

Once these historical disasters had shed some insight to potential tunnel problems, groups had formed to focus on these serious hazards. In 2001 a European press release indicated that traffic safety in general for tunnels is a very significant issue. They point out that safety regulations only become known as mistakes of past accidents are learned. And that ongoing

I-049-011 research is needed to maintain the ability to understand tunnel safety, specifically toward issues with fires (Press Release). With all of the history of tunnels in regards to safety, fires have proven to be a serious risk factor.

When the options of replacing a stacked roadway are presented with a replacement of the structure as it currently stands that has proven to remain safe over 50 years and a bored tunnel which has potential risks, safety concerns should overrule potentially unsafe alternatives.

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From: Barak Gaster [seattlebarak@hotmail.com]
Sent: Tuesday, November 16, 2010 2:17 PM
To: AWV SDEIS Comments
Subject: NO - to Deep Bore Tunnel

Dear WSDOT,

I-050-001

I am a physician who works at the University of Washington and lives on Capitol Hill. I have lived in Seattle for 23 years. Over the past 23 years there is no other local political issue that I feel more strongly, more passionately, AGAINST than the proposal to dig a deep bore tunnel to replace the Alaska Way Viaduct.

Given the current state of the economy and the potential for cost overruns which could bankrupt our city, I feel very strongly that this project is a monumental mistake that has the potential to do great damage to the well-being of our city.

PLEASE PLEASE stop this project and proceed instead with either a surface option or a rebuild of the viaduct. Either option would be safer, more fiscally reasonable, and overall far better for our city.

Sincerely yours,

Barak Gaster, MD
1223 18th Ave E
Seattle WA 98112

I-050-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS.

After studying several retrofitting concepts, the lead agencies' found that rebuilding the viaduct would not be a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct. Elements of the Rebuild and Aerial Alternatives were incorporated into the Elevated Structure Alternative, which was analyzed in the 2006 Supplemental Draft EIS and the Final EIS. Because the project has evolved since comments were submitted in 2004, please refer to the Final EIS for current information.

As explained in the 2010 Supplemental Draft EIS and the Final EIS, the Surface Alternative does not meet the project's purpose and need to provide capacity to and through downtown Seattle. Because the project has evolved since comments were submitted in 2004 and 2006, please refer to the Final EIS for current information.

Although costs are an important part of project planning and decision-making, they are purposely not a major part of the environmental review process. As provided in CFR 1502.23 "For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations." Overall project costs are included with the project description and are used for the analysis of economic impacts.

From: Seth Geiser [sgeiser5@gmail.com]
Sent: Monday, December 13, 2010 4:39 PM
To: AWV SDEIS Comments
Subject: Comments for Alaskan Way Viaduct Replacement EIS

I-051-001 Others have stated concerns against the planned construction of a deep-bore tunnel to replace the Alaskan Way Viaduct, so I'll keep my comments concise:

1. The tunnel plan maintains an auto-dominated, car-first transportation system that is at odds with laws and policies aimed at reducing VMT and CO2 emissions.

I-051-002 2. In a time of financial cutback at every level of government, the tunnel plan is the highest-cost and highest-risk alternative.

I-051-003 3. Because high numbers of viaduct users will be displaced onto Seattle streets (either through lack of downtown exits or aversion to tolls), a surface plan that includes improved transit service and bike/ped amenities will be needed anyway.

I-051-004 4. The tunnel would be constructed in unstable soils, near water, underneath downtown towers, in proximity of an active faultline, at an unprecedented size, all for the purposes of maintaining travel times for single-occupancy vehicles over a mile-long corridor. That the criteria set forward within the EIS allowed this plan to be advanced as the preferred option should indicate that the project criteria need to be seriously reevaluated.

I-051-005 5. The integrity of the EIS as a useful tool to develop preferred alternatives and protect citizens from environmental, economic and social harm is at risk. The brokering of contracts and agreements prior to the draft EIS, let alone the FEIS, does a disservice to the citizens of the State and the principles of the SEPA.

In conclusion, I implore all of those in decision-making capacities to take a step back and seriously consider the costs and benefits of the tunnel plan. Surely, some combination of investments can be found that would meet our mobility needs without putting the city and State in danger of economic ruin.

-Seth Geiser

I-051-001

Estimates for the potential direct emissions of greenhouse gases under the build alternatives are provided in the Final EIS and Appendix R, Energy Disipline Report. All of the build alternatives would result in a decrease in greenhouse gas emissions, compared to the Viaduct Closed (No Build Alternative).

The study area evaluated includes areas likely to be affected by changes in greenhouse gas emissions as a result of the project. The greenhouse gas effects were estimated for roadways within the city center area, as well as in the region. The city center area is bordered by Prospect Street on the north, 15th Avenue on the east, S. Holgate Street on the south, and Elliott Bay on the west. The region includes all the traffic movements in King, Pierce, Snohomish, and Kitsap Counties.

I-051-002

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 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-051-003

If the Bored Tunnel Alternative is selected, the final configuration of Alaskan Way and the public amenities located along the central waterfront would be determined by the City of Seattle's Central Waterfront Project. However, the Bored Tunnel Alternative does include a reconfigured Alaskan Way between S. Atlantic Street to S. King Street, with a sidewalk on the west side and a minimum 25-foot wide multi-use path on the east side.

I-051-004

The bored tunnel design includes improving relatively soft, liquefiable soils found near the south tunnel portal, as well as improving and stablizing soil align the bored tunnel alignment, as needed. The alignment of the bored tunnel curves away from the central waterfront area and the aging seawall so most of its alignment is not adjacent to water, and the tunnel would be built to current seismic standards.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project’s identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99

during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the alternatives.

I-051-005

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). In addition, Section 1053 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), allows agencies to award a design-build contract before NEPA is complete. However, the design-builder cannot proceed beyond preliminary design until the Record of Decision is issued, and the design-builder cannot be involved in nor bias the NEPA process (Code of Federal Regulations, Title 23, Section 636 [23 CFR 636]).

Please see Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS as they provide a comparison of effects for the build alternatives.

From: Richard Geller [rgeller@u.washington.edu]
Sent: Wednesday, December 01, 2010 11:15 AM
To: AWV SDEIS Comments
Cc: 'mike.mcginn@seattle.gov'
Subject: Impact ferry schedules

12-01-10

I-052-001

Viaduct Project coordination must be done with the ferry system. Ferry Schedules must be adjusted in accordance with traffic delays that are a result of this project. Ferry commuters out of Fauntleroy making their way to work to downtown and other areas of Seattle will have their work start time adversely impacted by alternate routes and congestion on the West Seattle bridge. Starting work on time is usually a condition of employment.

It would be nice to hear back as to whether or not this project management issue has been addressed.

Ric Geller/Metro Vanpool commuter
Electrician Lead
University of Washington Facilities Services

I-052-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. Coordination with Washington State Ferries has been ongoing through the project. As planning and design of the project and construction staging progresses, coordination with Washington State Ferries will continue to take place to ensure that disruptions or degradations to access to and from the Seattle Ferry Terminal are minimized or avoided. At this time, adjusting ferry schedules to operations at the Fauntleroy Dock are not included in construction mitigation plans.

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.

Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list.

At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Robert W. Gonshi

Address _____

City _____ **State** _____ **Zip** 98117-5212

E-mail _____

Organization/Membership Affiliations (optional) _____

Choose a topic

- ☐ Overall Project
- ☐ All of the Alternatives
- ☒ Bored Tunnel Alternative
- ☐ Cut-&-Cover Tunnel Alternative
- ☐ Elevated Structure Alternative
- ☐ Tolling Option
- ☐ Construction Impacts & Mitigation
- ☐ Traffic Impacts & Mitigation
- ☐ Other _____

I-054-001

What are your comments about the Project?

I PREFERED THE ELEVATED STRUTURE ALTERNATIVE. THE BORED TUNNEL ALTERNATIVE IS ACCEPTABLE.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
   ☒ Yes ☐ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project?
   ☐ Yes ☒ No
3. Did you find this Supplemental Draft EIS format easy to understand?
   ☒ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
   ☒ Yes ☐ No
5. Did you refer to the technical appendices?
   ☒ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-054-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Elevated Structure Alternative.

From: S.A. Green [greest@yahoo.com]
Sent: Monday, November 29, 2010 9:15 AM
To: AWV SDEIS Comments
Cc: Rep. Maureen Walsh; Sen. Mike Hewitt
Subject: comments on SR 99 bored tunnel 2010 Supplemental Draft EIS

Regarding information from:
http://www.wsdot.wa.gov/Projects/Viaduct/2010sdeis.htm

I-055-001 The economic impact of this tunnel project will play out negatively in multiple ways.
While I support toll financing of costly highway projects, the tolls on this short project will divert significant traffic to parallel surface streets and I-5.

I-055-002 The state and local governments cannot afford this costly project at this time. Tunnel projects are notorious for going over budget and the budgeted amount for this project is already unaffordable.

I-055-003 I am also concerned that the after-project photos
http://www.seattlepi.com/local/gallery.asp?SubID=6223&page=1&gtitle=Seattle%20After%20the%20Alaskan%20Way%20Viaduct&pubdate=11/29/2010
do not show the Waterfront Streetcar.

I-055-004 I agree that the existing Alaskan Way Viaduct is unsafe and must be removed; it should be replaced with a pedestrian/bicycle/transit friendly surface boulevard, with double-track streetcar line, as was done when the similarly-designed Embarcadero viaduct was replaced in San Francisco. That arterial is highly successful.

Stanley Green, P.E.
College Place, WA

I-055-001

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

I-055-002

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 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-055-003

The waterfront streetcar line was eliminated in 2005. Both the Cut-and-Cover Tunnel and Elevated Structure alternatives include a streetcar along Alaskan Way. With the Bored Tunnel Alternative the City of Seattle is leading the evaluation of a new streetcar line along First Avenue between Pioneer Square and Seattle Center as part of the City's transit plan.

I-055-004

The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS, which included the I-5, Surface, and Transit Hybrid. This approach was seriously considered, but was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region. The Final EIS Appendix W, Screening Reports, includes the Surface and Transit Scenario Year 2030 Analysis Results.

From: Tom Griga [tom.griga@gmail.com]
Sent: Friday, December 10, 2010 11:46 AM
To: AWV SDEIS Comments
Subject: minimal environmental benefits from the tunnel

Hello,

I-056-001

I would like to add my opposition to the proposed deep bore tunnel. As a Seattle resident I am embarrassed that this supposedly progressive city has a 2 billion dollar plan to simply move some cars underground. Here are some of my problems with the tunnel:

- money invested in fossil fuel based automobile transport instead of public transit
- adds no benefit to reducing carbon emissions
- removes existing downtown exit, an expensive bypass of the city
- the waterfront park area will be blocked for pedestrians by a boulevard with more traffic than there is currently
- since the tunnel is tolled more traffic will be diverted to downtown with no real plan to deal with that additional traffic
- the proposetunnel is planned to move much traffic and is very expensive.

I favor options that included improved existing surface roads, improved public transit and improvement to the existing I-5

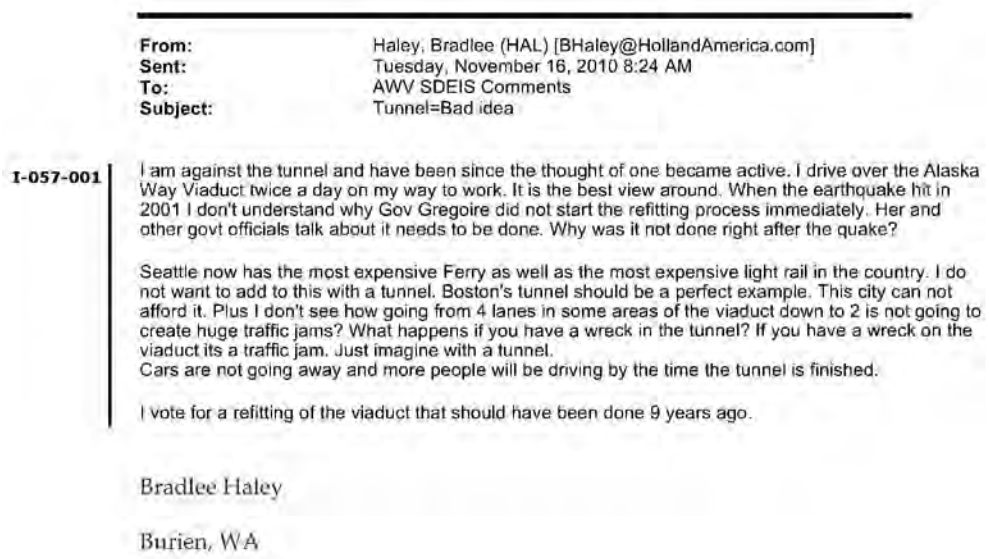
Thank You,

Tom Griga
505 14th Ave E Apt 202
Seattle WA 98112

I-056-001

The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS, which included the I-5, Surface, and Transit Hybrid. This approach was considered, but was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region. The Final EIS Appendix W, Screening Reports, includes the Surface and Transit Scenario Year 2030 Analysis Results.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the three alternatives.



From: Haley, Bradlee (HAL) [BHaley@HollandAmerica.com]
Sent: Tuesday, November 16, 2010 8:24 AM
To: AWV SDEIS Comments
Subject: Tunnel=Bad idea

I-057-001

I am against the tunnel and have been since the thought of one became active. I drive over the Alaska Way Viaduct twice a day on my way to work. It is the best view around. When the earthquake hit in 2001 I don't understand why Gov Gregoire did not start the refitting process immediately. Her and other govt officials talk about it needs to be done. Why was it not done right after the quake?

Seattle now has the most expensive Ferry as well as the most expensive light rail in the country. I do not want to add to this with a tunnel. Boston's tunnel should be a perfect example. This city can not afford it. Plus I don't see how going from 4 lanes in some areas of the viaduct down to 2 is not going to create huge traffic jams? What happens if you have a wreck in the tunnel? If you have a wreck on the viaduct its a traffic jam. Just imagine with a tunnel.
Cars are not going away and more people will be driving by the time the tunnel is finished.

I vote for a refitting of the viaduct that should have been done 9 years ago.

Bradlee Haley

Burien, WA

I-057-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. The lead agencies recognize that retrofitting highways, roadways, and bridges is often a viable option to counter earthquake threats. However, unlike other bridges and structures in the area, it isn't practical to retrofit the viaduct by only strengthening one or two structural elements. Fundamentally, such fixes transfer the forces from one weak point in the structure to another, and the viaduct is weak in too many places. The concrete frames, columns, foundations, and even the soil under the structure don't provide enough strength by today's standards. The lead agencies have studied various retrofitting concepts, and all of these concepts fail to provide a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct. The lead agencies also determined that retrofitting 20 percent of the viaduct as discussed for the Rebuild Alternative is not reasonable.

The preferred Bored Tunnel Alternative is a safe alternative. Emergency exits will be provided every 650 feet in the tunnel. WSDOT's tunnel operators would have access to real-time information about the tunnel's safety systems. The control center would have direct lines to the Seattle Fire Department, Police Department and other emergency responders. Also, real-time traffic technology would minimize delays caused by collisions, stalled vehicles or other similar disruptions in the tunnel. If a collision occurs, incident detection systems would allow tunnel operators to view and respond to the incident.

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Response to the
Draft Environmental Impact Statement (DEIS)

Dear Ms. Freudenstein, Mr. Paananen and Mr. Hahn,

I-058-001 As a both a Seattle resident and a Washington State taxpayer, and thus a stakeholder in the Alaskan Way Viaduct replacement project, I am very concerned about the preferred alternative's ability to meet the fundamental project goals and the failure of the draft Environmental Impact Statement to accurately assess its impacts. As a reminder, below are the six goals of the project listed in the report:

- *Improve public safety*
- *Provide efficient movement of people and goods now and into the future*
- *Maintain or improve downtown, regional, port, and state economies*
- *Enhance Seattle's waterfront, downtown, and adjacent neighborhoods as a place for people*
- *Create solutions that are fiscally responsible*
- *Improve the health of the environment*

I-058-002 The DEIS process did not adequately consider reasonable alternatives in its analysis because:

1. **The DEIS was conducted assuming no tolls would be collected, while over 20% of the project's planned funding comes from tolls.** Thus, the environmental impacts found to result from the preferred alternative in the DEIS are inaccurate and are not acceptable grounds on which to move forward with the project.

I-058-003

2. **The less expensive surface/transit alternative was not considered in the most recent DEIS because it reduced vehicle capacity, (not passenger capacity) while the preferred alternative has the same effect.** The initial goal of the Alaskan Way Viaduct replacement project was to provide better access to people and goods. The language in the most recent DEIS was changed, stating 'vehicle capacity' as the primary objective of the project. This falsely narrows the scope of consideration since it does not consider other transportation strategies such as transit improvements or demand management strategies such as tolling. Furthermore, if the 'vehicle capacity' criteria is used as in the current DEIS and reduced vehicle capacity is unacceptable, the preferred alternative doesn't fulfill the project criteria since it reduces capacity by 1/3.

I-058-004

3. **There is no alternative considering the benefits of tolling existing facilities to manage demand and fund future replacement.** Often overlooked is the fact that the I-5 corridor, freight's primary route through Seattle, is underutilized and also close to the end of its useful life and subject to failure in a seismic event. Tolling this corridor would cut congestion and provide better access to freight on an existing facility, help pay for future replacement costs, and leave money left over for transit and street improvements to mitigate the removal of the Alaskan way viaduct.

I-058-001

The goals you list below are not the identified purposes and needs for this project. The goals you site were identified as the state goals of concepts considered in the 2008 Partnership Process. The goals from the Partnership Process were taken into account and are reflected in the project's Purpose and Need statement presented in the Chapter 1 of the 2010 Supplemental Draft EIS and the Final EIS. A discussion of how the project purpose and need is met by the proposed build alternatives is provided in the Final EIS.

I-058-002

Legislative action is required to toll this facility, the evaluation of the nontolled Bored Tunnel Alternative in the 2010 Supplemental Draft EIS accurately reflected the current status of the project. The 2010 Supplemental Draft EIS evaluated the potential effects of three toll scenarios in Question 6 of Chapter 9. The possible effects of tolling have been further analyzed in the Final EIS for all alternatives. The potential effects of tolling are evaluated and documented so that the project has disclosed potential effects if the Washington State Legislature decides to use tolling to fund a portion of the project.

I-058-003

Because many people expressed interest in developing and evaluating a surface and transit hybrid, the lead agencies completed additional traffic analysis to confirm the rationale for screening out this concept for further analysis in the EIS. The additional analysis confirmed the rationale for not evaluating this concept further, see pages 53 through 58 of the 2010 Supplemental Draft EIS. Details of that traffic analysis were provided in Attachment A of Appendix C to the 2010 Supplemental Draft EIS. In addition, Appendix W, Screening Reports, of the Final EIS includes the updated Surface and Transit Scenario Year 2030 Analysis Results.

Changes made to the project's purpose and need statement in 2010 did

I-058-005 The preferred alternative does not meet the fundamental goals of the Alaskan Way Viaduct replacement project for the following reasons:

1. **The preferred alternative jeopardizes public safety.**
   - The preferred alternative does not guarantee the safety of buildings in Seattle's historic core, and predicts the potential collapse of the Western Building which houses one of Seattle's largest and most diverse artist communities, and the Polson Building, a valuable historic asset providing affordable office space to Pioneer Square. The unprecedented scale of the bored tunnel, as well as Sound Transit's recent experience with sinkholes above the much-smaller light rail tunnel on Beacon Hill, are indicative of the seriousness of this risk.
   - The preferred alternative will increase the number of collisions between cars and pedestrians or bicyclists by diverting more traffic onto city streets without a mitigation plan. The DEIS predicts that the tunnel, when tolled, will divert 2/3 of the traffic (74,000 cars) currently utilizing the viaduct onto city streets. More car traffic means an increased incidence of accidents involving vulnerable road users.

I-058-006

2. **The preferred alternative does not provide adequate access of goods and people into and out of downtown.**
   - The viaduct's vital function is providing access into downtown. Most trips on the viaduct today begin and end in the city center; the current DEIS finds that 42% of trips are coming and going to downtown neighborhoods, and an analysis in the 2008 stakeholder process showed that 80% of trips on the viaduct are short trips that start and end within Seattle city limits. The preferred alternative provides no replacement for these trips.
   - According to the EIS, The preferred alternative, if tolled, will handle only 1/3 of the current viaduct's current capacity. The remaining traffic will be rerouted onto city streets, causing congestion throughout downtown and particularly in the Pioneer Square and South Queen Anne neighborhoods where the tunnel portals would be located. This will reduce mobility throughout downtown for people and goods instead of improving it.
   - The project includes no funding for transit and compromises access to downtown for non-vehicle-owning individuals through increased bus travel times through a congested downtown, failing to maintain or provide quality transportation alternatives.

I-058-007

3. **Compromised access and increased congestion will be detrimental to downtown businesses and bad for Seattle's economy.**
   - Compromised access and congested roads will mean harsher economic conditions for already stressed downtown businesses that depend on a high volume of patron traffic.
   - The port, the city, and the state have already made a large investment in facilities to ease freight access to I-5 and I-90. Fewer access choices means the preferred alternative has limited benefit for freight.

I-058-008

4. **Compromised access and increased congestion will degrade downtown's pedestrian environment, establishing Seattle's streets as places for cars.**
   - An additional 40,000 to 45,000 car trips will be added to Downtown Seattle's street network, which is geographically limited by right of way constraints to a few narrow north-south arterials. These arterials are already beyond capacity at peak hours, and to meet Seattle's complete mobility goals some motor vehicle right-of-way will need to be dedicated to new

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. Chapter 2, Alternatives Development, of the Final EIS discusses changes made to the purpose and need between 2006 and 2010.

I-058-004

WSDOT does not have the authority from the state legislature to impose tolls on I-5. Long-range planning documents, such as the Puget Sound Regional Council's long-range transportation plan, Transportation 2040, have identified I-5 as a facility to be tolled in the future. However, unless the legislature authorizes WSDOT to toll I-5, the tolls proposed for the viaduct replacement will be imposed solely on SR 99.

I-058-005

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

I-058-008

pedestrian and bicycle facilities. The preferred alternative should seek to reduce vehicles travelling through downtown to support this goal by maintaining current capacity and/or providing robust transportation alternatives.

I-058-009

5. **The preferred alternative is financially risky.**
   - At 54' in diameter, (60' as proposed by the best value bidder) the deep bore tunnel will be the largest of its kind ever attempted. Seattle's geology is known to be highly unpredictable due to its glacial origins, and similar bored tunnel projects in the region have experienced difficulties due to this fact. (King County's stalled Brightwater project, or Sound Transit's sink-hole problems around its Beacon Hill station. Megaprojects like the tunnel have been shown worldwide to run an average of 40% over budget, which has been provided for by a contingency fund. However, this fund has already been largely dispersed as a bonus to the winning team. At time when the state government is posting record deficits (the third highest of any state in the US) and the city of Seattle is struggling to fun basic social services, it is highly irresponsible of either government to take such a financial risk when safer, less invasive and less expensive options have been shown in a lengthy alternatives analysis process to achieve similar goals.

I-058-010

6. **By perpetuating auto-dependent transportation systems and land use, the preferred alternative is detrimental to the health of the environment.**
   - According to the theory of 'induced demand', added road capacity generates additional trips because drivers who would otherwise have chosen not to drive in a given condition perceive the road's capacity to be higher and thus choose to drive. This is compounded the effects of increased development at the end of the added capacity due to the same perception. The same theory predicts that if the perceived capacity is reduced, trips will evaporate as drivers choose alternate routes, or choose not to drive in a given condition. If we assume this theory to be true, perhaps the additional 40,000 to 45,000 car trips projected for downtown streets will be less in reality if no steps are taken to mitigate their impact. This would mean either that fewer car trips in general will pass through Seattle's north-south street and highway system, or that significantly more car trips than today will bypass downtown Seattle altogether. Since the preferred alternative makes no provisions for improving alternative transportation to and from downtown, both scenarios mean that downtown businesses will lose out and development patterns inside city limits and beyond will shift to become increasingly decentralized and more auto dependent. Such an effect would undermine the work Seattle has undertaken toward encouraging denser sustainable development in its existing urban centers, and thus will have a largely detrimental impact on the social and natural environment of the Puget sound region.

Regards,

Jeff Hammerquist

Jeff Hammerquist
1423 E. Olive St.
Seattle, WA 98122
hammerquist@gmail.com

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does

occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

Yes, if the new facility is tolled, traffic diversion is expected. Mitigation for this effect is being considered. 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 a Tolling Advisory Committee established by WSDOT.

I-058-006

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.

New transit service is an essential part of the Alaskan Way Viaduct and Seawall Replacement Program, because it would provide a reliable and efficient way for Seattle residents to get to and from downtown.

Added King County Metro transit service would be provided as part of construction mitigation. Also, improvements to the speed and reliability of transit service would be supported by the project and would continue following construction completion. While some added travel time would be incurred by buses under the Bored Tunnel Alternative, transit operations would still be maintained. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit LRT and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

Updated analysis has been included in the Final EIS. A detailed tolling analysis has been conducted and is described in the Final EIS. Please

refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts.

I-058-007

The Bored Tunnel Alternative, if selected, would result in changes to traffic patterns, but not compromised access to downtown. For example, traffic accessing downtown would use the Stadium area ramps and disperse over several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues, instead accessing downtown via the existing Columbia and Seneca ramps.

If the new facility is tolled, traffic diversion is expected and could cause noticeable congestion. 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 established by WSDOT.

I-058-008

The Bored Tunnel would change access points on SR 99 for drivers heading to and from downtown. Downtown access to and from the south would be provided via the Stadium Area ramps. An advantage of this configuration is that the access location is better able to accommodate traffic flows than the current Columbia and Seneca Street ramps. In addition, drivers would be able to distribute from Alaskan Way to the downtown grid using any of several cross streets, including S. Jackson Street, S. Main Street, Yesler Way, Columbia, Marion, Madison and Spring Streets, rather than be concentrated to single locations at Columbia and Seneca Streets.

There are several planned enhancements associated with the Bored Tunnel Alternative that would improve pedestrian connections. Please see the Final EIS, Appendix C Transportation Discipline Report.

I-058-009

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 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-058-010

Traffic modeling analysis and forecasting presented in Appendix C of the Final EIS illustrate that similar levels of traffic would continue to use the SR 99 with the Bored Tunnel Alternative. The Bored Tunnel Alternative

provides more capacity than the current Battery Street Tunnel.

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.

Updated analysis has been included in the Final EIS. A detailed tolling analysis has been conducted and is described in Chapter 7 of Appendix C, Transportation Discipline Report.

From: Sydney Hammerquist [shammerquist@me.com]
Sent: Monday, December 13, 2010 11:09 PM
To: AWV SDEIS Comments
Subject: Response to DEIS

Dear Ms. Freudenstein, Mr. Paananen, & Mr. Hahn,

I-059-001

I am a King County resident and Washington state taxpayer concerned with the preferred alternative's ability to meet the fundamental project goals.

There is one point which is reason enough to reconsider another viaduct replacement plan in place of the current preferred plan.

The fact thar the tunnel will be the largest of it's type ever attempted is a RED flag. Add to that the fact that the cost overrun budget was GIVEN AWAY, and we have a financial disaster waiting to happen.

Please consider these concerns when reviewing the DEIS and all other decisions on this subject.

Respectfully,

Sydney Hammerquist
Sammamish, WA 98074
Sent from my iPhone

I-059-001

The purpose and need statement is included in Question 5 of Chapter 1, Introduction, in the Final EIS. Chapter 2, Alternatives Development, of the Final EIS describes the history of the project, including how the purpose and need statement was updated and alternatives development. Although costs are an important part of project planning and decision-making, they are purposely not a major part of the environmental review process. As provided in CFR 1502.23 “For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations.” Overall project costs are included with the project description and are used for the analysis of economic impacts.

From: edspooner@centurytel.net [mailto:edspooner@centurytel.net]
Sent: Thursday, November 18, 2010 10:42 AM
To: Alaskan Way Viaduct
Subject: AWV Feedback

Sent from: Phillip Hanson
Address: 27115 Wax Orchard Rd.
City: Vashon
State: WA
County:
Zip:
Email: edspooner@centurytel.net
Phone:

I-060-001

Comments:
I think the viaduct replacement, deep bore tunnel is an awful idea. The decision process used to decide in favor of the tunnel is based primarily on how to redevelop the waterfront NOT on how to best provide a north/south transportation corridor. There is currently one and a half north/south routes between Lake Washington and the waterfront. I-5 and SR 99 from just south of the West Seattle bridge and north to approx. 70th street. No wonder Seattle traffic is always, at best, miserable. Scrap the tunnel and figure out a way to extend SR99/Aurora Ave. northbound into a thoroughfare. Also you can fix the mercer mess by running Mercer St. straight into 520 so you don't have to get on I-5 to get onto 520. Tank You Phil Hanson

I-060-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would have severe adverse effects on Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provides a more in-depth comparison of tradeoffs for the three alternatives.

From: Phil Hanson [edspooner@centurytel.net]
Sent: Monday, December 13, 2010 11:35 PM
To: AWV SDEIS Comments
Subject: Viaduct Replacement

I-060-002

I am NOT a fan of the deep bore tunnel. I believe that the tunnel option is a flawed decision because the primary criteria is the redevelopment of the Seattle waterfront, not a heavy use, critical transportation north-south corridor. Seattle/regional traffic is awful because there is only one N/S arterial I-5. Everybody in a car going in any direction has to get on I-5 to get there. It's crazy!. I think the tunnel money could be much better spent expanding SR 99/Aurora Avenue in both directions. And while I am here I also think you should make Mercer Street the beginning of both 520 and I-90. That way you don't have to get on I-5 to access those east/west routes.

Fortunately I do not have take the viaduct very often but I have considered it's collapse with me on it. I feel that I would have a better chance of surviving "the big one" in a viaduct collapse(who knows, maybe I'll be on a section that doesn't collapse) than being entombed for eternity in a deep bore tunnel.

I-060-002

The lead agencies identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs, as outlined in Chapter 1 of the Final EIS, and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives.

Your comment about making Mercer Street the beginning of both 520 and I-90 is noted. However, connecting Mercer Street with 520 or I-90 is not within the scope of this project.

All of the build alternatives being considered would be designed to current seismic standards.

From: Brad Harris [bradharr206@gmail.com]
Sent: Sunday, November 28, 2010 2:32 PM
To: AWV SDEIS Comments
Subject: AWV - Deep Bored Tunnel

I-061-001 I am writing to express my opposition to the Deep Bored Tunnel as a replacement for the Alaskan Way Viaduct. The DBT project is ill-conceived and has the potential to cause great harm to Seattle, by wasting precious financial resources, causing needless disruption from construction, and contributing to environmental degradation. These negative impacts would not be mitigated by a completed DBT that will provide neither increased capacity nor better service to/under downtown Seattle.

I-061-002 The DBT is only expected to carry 46,000 vehicles under the central city every day, but WSDOT does not address where the remaining 64,000 vehicles currently using the AWV will go. Without a plan for enhanced transit or freight capacity, it is obvious that these vehicles will shift to the already over-crowded city streets and I-5.

I-061-003 WSDOT's Supplemental Draft Environmental Impact Statement does not adequately address the impact of tolling on future traffic patterns, and yet tolling is widely assumed as a requirement to fund the DBT.

I-061-004 The construction of the DBT puts historic structures at risk; the SDEIS does not adequately address these concerns.

I-061-005 I urge the WSDOT and state officials to pursue an alternative solution that will accomplish the following:

- Exploit and enhance existing road capacity to move freight currently relying on the AWV.
- Improve transit options for commuters currently using single occupancy vehicles and who rely on the current AWV.
- Implement current technology and design standards to improve traffic flow on surface streets through Seattle's core.

Thank you for the opportunity to comment on this important matter. I look forward to your reply addressing these concerns.

Sincerely,

Brad Harris
1000 Union Street, Apt 312
Seattle, WA 98101
206-550-1237
bradharr206@gmail.com

I-061-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS. The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would have severe adverse effects on Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provides a more in-depth comparison of tradeoffs for the three alternatives.

I-061-002

Chapter 7 of Appendix C of the Final EIS provides updated numbers regarding volumes of vehicles expected to use the Viaduct. With this latest tolling analysis, about 57,000 vehicles would use the tunnel daily. Effects of diversion are also discussed in this chapter. However, 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.

Updated analysis has been included in Chapter 5, Permanent Effects, of

the Final EIS. Appendix C, Transportation Discipline Report, for also contains additional detailed analysis.

I-061-003

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

I-061-004

The project has undertaken extensive study to evaluate risk to historic buildings, as discussed in Appendix I, Historic, Cultural, and Archaeological Discipline Report, of the Final EIS. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

I-061-005

The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS, which included the I-5, Surface, and Transit Hybrid. This approach was seriously considered, but was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region and hence did not meet the project's purpose. The Final EIS Appendix W, Screening

Reports, includes the Surface and Transit Scenario Year 2030 Analysis Results.

From: Nancy Hartunian [nancy@thestranger.com]
Sent: Tuesday, November 16, 2010 2:57 PM
To: AWV SDEIS Comments
Subject: No deep bore tunnel please

I-062-001

Dear WSDOT,
Please accept my statement of strong opposition to the proposed deep bore tunnel.
It is clearly a mistake that our city cannot afford to make.

Most sincerely,

Nancy Hartunian
nancy@thestranger.com
1535 11th Ave, 3rd floor
Seattle, WA 98122
206-323-7101 ex. 3004

I-062-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: Alex Haslach [haslach@gmail.com]
Sent: Tuesday, November 16, 2010 4:31 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: STOP THE DOWNTOWN DEEP BORE TUNNEL

I-063-001 There are a number of problems with the proposed tunnel project that cannot be ignored.

1. No access to Downtown Seattle

I-063-002 2. Cost overruns not adequately planned for, and City of Seattle does not have the money to afford to pay differences between estimates and actual costs.

I-063-003 3. Potential damage to existing downtown structures, especially on 1st avenue and in Pioneer Square.

I-063-004 4. Tolls are so expensive that many travelers will skip the tunnel entirely, rendering the project pointless

I-063-005 5. No additional funding for public transit systems

I-063-006 6. Finally, and most importantly, as a resident of Downtown Seattle this project will provide me with NO APPRECIABLE BENEFITS WHATSOEVER, while imposing MANY ONEROUS COSTS AND CONSEQUENCES. I oppose this tunnel project and I strongly urge the leadership of Seattle to do the same!

I-063-001

Access to downtown would be provided via the Stadium area ramps. With the Bored Tunnel Alternative, traffic using the Stadium area ramps would disperse over several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues to access downtown. Please refer to Final EIS Appendix C, Transportation Discipline Report for additional detailed analysis.

I-063-002

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 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-063-003

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

I-063-004

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with

cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

I-063-005

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the

Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently WSDOT is providing funding for King County on the S. Holgate Street to S. King Street Viaduct Replacement Project to provide additional transit service hours to help mitigate the effects of construction. This program is ongoing and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system. WSDOT will also work with the County to identify funding sources for the service originally contemplated in the January 2009 agreement.

I-063-006

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

RECEIVED

DEC 14 2010

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Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project's mailing list.

At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Sylvia Haven

Address 10418 12th Ave NE

City Seattle State WA Zip 98125

E-mail

Organization/Membership Affiliations (optional) none

Choose a topic

☒ Overall Project
☐ All of the Alternatives
☐ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

What are your comments about the Project?

I-064-001

If seems very foolish to embark on a 2 billion+ project with so many unknowns. It is way too soon to sign a contract. The city council needs to answer many questions before a formal contract is finalized.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have ~~read~~ heard of?
   ☒ Yes ☐ No

2. Have you previously participated in public meetings/comment periods related to the AWV project?
   ☒ Yes ☐ No

3. Did you find this Supplemental Draft EIS format easy to understand?
   ☐ Yes ☒ No Why or why not?

   It was summarized at a Town Hall meeting

4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
   ☒ Yes ☐ No

5. Did you refer to the technical appendices?
   ☐ Yes ☒ No

6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

   There was no indication as to what traffic mitigation would be if people took alternate routes to avoid tolls.

I-064-001

Thank you for your comment. Section 1503of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), amended Title 23, Section 112(b)(3) to allow agencies to award a design-build contract before NEPA is complete. However, the design-builder cannot proceed beyond preliminary design until the Record of Decision is issued, and the design-builder cannot be involved in nor bias the NEPA process (Code of Federal Regulations, Title 23, Section 636 [23 CFR 636]). The lead agencies are meeting all procedural requirements for contracts on this project.

From: Jenny Hayes [pajamas70@yahoo.com]
Sent: Monday, December 13, 2010 3:22 PM
To: AWV SDEIS Comments
Subject: comments on 2010 Supplemental Draft EIS

I-065-001

I'm writing to urge you to consider non-deep-bore-tunnel alternatives. As Cary Moon's letter states:

"A version of I-5/ Surface/Transit alternative that includes an urban, four-lane waterfront street should be included in this EIS so that decision makers who care about mobility for people and freight AND Seattle's new waterfront have lower cost, lower risk alternative to consider."

I am sure you have many comments so I will keep this brief, but I do hope you will strongly consider such an alternative. I and many others are in favor of something like this, especially considering the HUGE costs and risks associated with the tunnel option -- something which just doesn't seem to make sense.

Thank you for considering my comments.

Jenny Hayes
Seattle (Ballard)

I-065-001

The Final EIS Chapter 2, Alternatives Development, describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS, which included the consideration of the I-5, Surface, and Transit Hybrid. This approach was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region and, therefore, did not meet the project's purpose and need. The Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS.

From: Sandy Hereld [shereld@drizzle.com]
Sent: Sunday, December 12, 2010 6:09 PM
To: AWV SDEIS Comments
Cc: peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: Feedback on the tunnel (awv2010SDEIS)

I-066-001

After years of rumors and controversy, it was nice to see real plans for the tunnel. Until I read them, and was horrified to see what a fiasco this whole thing appears to be.

I don't know which part is more ridiculous:
a) the idea that the tunnel doesn't include exits into Seattle, and yet, the state is still expecting us to pay overages for it.
b) The idea that in a peak oil world, the state is assuming that car mileages (as opposed to a more rational person mileage) will just continue to go up, no matter how big a toll you place on the tunnel.
c) THE LACK OF TRANSIT
d) the lack of street level improvements, since we know much of the current Viaduct traffic will not go into the tunnel (either because of the toll, or because they would have exited in Seattle).

I also heard that the tunnel may destabilize untold historical buildings in the Viaduct area.

Please, please give up the idea of a crazy expensive and untried tunnel. Instead, improve transit, so we can keep moving the same number or more people, even if fewer cars. Fix the local streets to improve throughput.
Save a whole bunch of money. Take down the viaduct, and call it good.

Thanks!
Sandy

I-066-001

If the Bored Tunnel Alternative is selected, it will provide access into downtown Seattle, but the access will be in a different location than exists today. Traffic would use the Stadium area ramps to access downtown and disperse over several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues to get into the central part of downtown Seattle.

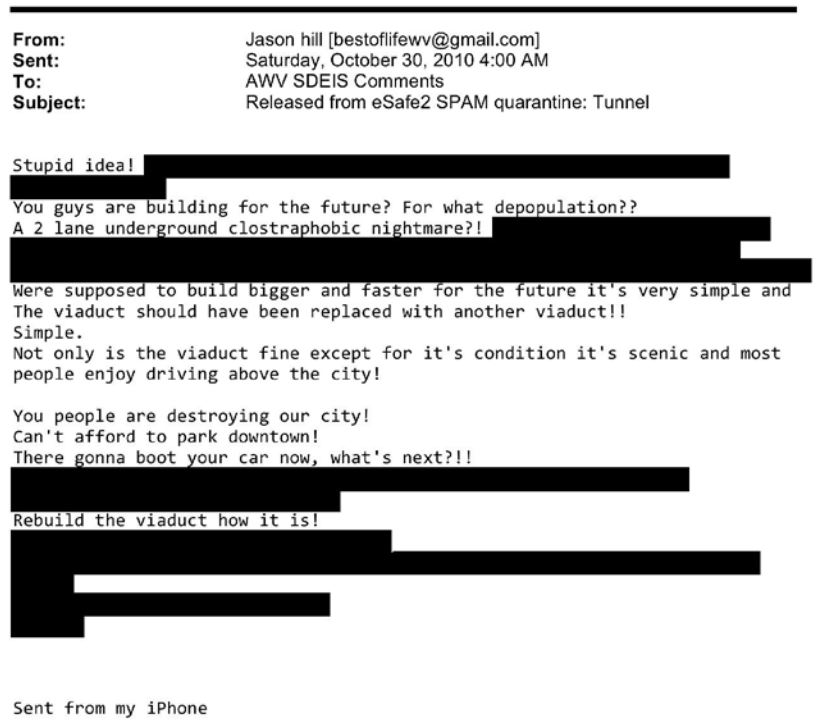
Chapter 5 of the Final EIS does present estimated person throughput in 2030 for all the build alternatives. Person throughput is similar to assessing vehicle volumes, though the output focuses on the number of people traveling through the transportation network at specific locations, called screenlines, rather than vehicle volumes.

Additional King County Metro transit service will be provided as part of construction mitigation. While some added travel time would be incurred by buses during construction, transit operations would still be maintained. Improvements to the speed and reliability of transit service will also be supported by the project and continue to be in place after construction is completed. The project would not support ongoing transit expansion after construction is completed as that is the responsibility of the transit agencies, not WSDOT. However, following construction of this project, transit service enhancements by transit agencies are expected in downtown Seattle; for example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

If the new facility is tolled, traffic diversion that would affect downtown surface streets is expected. 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). See Chapter 8, Mitigation, of the Final EIS for a discussion of the work of the TAC.

I-067-001



From: Jason hill [bestoflifewv@gmail.com]
Sent: Saturday, October 30, 2010 4:00 AM
To: AWV SDEIS Comments
Subject: Released from eSafe2 SPAM quarantine: Tunnel

Stupid idea! [redacted]
You guys are building for the future? For what depopulation??
A 2 lane underground clostraphobic nightmare?! [redacted]
Were supposed to build bigger and faster for the future it's very simple and
The viaduct should have been replaced with another viaduct!!
Simple.
Not only is the viaduct fine except for it's condition it's scenic and most
people enjoy driving above the city!

You people are destroying our city!
Can't afford to park downtown!
There gonna boot your car now, what's next?!!
[redacted]
Rebuild the viaduct how it is!
[redacted]

Sent from my iPhone

I-067-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Rebuild Alternative. After studying several retrofitting concepts, the lead agencies' found that rebuilding the viaduct would not be a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct. Elements of the Rebuild and Aerial Alternatives were incorporated into the Elevated Structure Alternative, which was analyzed in the 2006 Supplemental Draft EIS and the Final EIS. Because the project has evolved since comments were submitted in 2004, please refer to the Final EIS for current information.

Due to profanity, portions of this comment were redacted.

Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list.

At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Khristaffer "Kriss" Hiserer; 2ND

Address 239 ne 178th Street

City Shoreline State WA Zip 98155-3538

E-mail Radil Adventure @Yahoo, Com AFH

Organization/Membership Affiliations (optional) He is Manager House in Ketchen office

Choose a topic

I-068-001

- ☐ Overall Project
- ☒ All of the Alternatives
- ☐ Bored Tunnel Alternative
- ☒ Cut-&-Cover Tunnel Alternative
- ☐ Elevated Structure Alternative
- ☐ Tolling Option
- ☐ Construction Impacts & Mitigation
- ☒ Traffic Impacts & Mitigation
- ☐ Other ______

What are your comments about the Project?

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
   ☒ Yes ☐ No
2. Have you previously participated in public meetings/comment periods related to the AWV project?
   ☐ Yes ☒ No
3. Did you find this Supplemental Draft EIS format easy to understand?
   ☒ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
   ☒ Yes ☐ No
5. Did you refer to the technical appendices?
   ☒ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?
   Yes I wouldn't thinked of all so them

I-068-001

Thank you for attending the public hearing and reading the Supplemental Draft EIS.

From: Christopher Hoffman [user320@gmail.com]
Sent: Saturday, December 11, 2010 8:19 AM
To: AWV SDEIS Comments
Subject: Alaska Way Viaduct Replacement

I-069-001

I looked over the information about this several billion dollar project. While I am all in favor of replacing our crumbling infrastructure I cannot support this project. As global climate change should be the world's number one priority this project seems as though it were designed to contribute to the problem. The tunnel will not serve the transit which currently operates on the viaduct and will lengthen transit travel times.
It will not provide access to downtown which will cause numerous problems. With 40,000 cars diverted onto the downtown street grid the tunnel is essentially a surface alternative without improvements to transit or to I-5 and comes with a couple billion dollar higher price tag than the surface transit plan which did make those improvements.

Please do not mortgage my future to build such a bad project.

I-069-001

With the Bored Tunnel Alternative, traffic and transit 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.

Added King County Metro transit service would be provided as part of construction mitigation. Also, improvements to the speed and reliability of transit service would be supported by the project and would continue following construction completion. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit LRT and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

In addition, the project would provide a northbound transit-only lane on SR 99 from S. Holgate Street to near the off-ramp at S. Dearborn Street and transit-only lanes would be provided in both directions on Aurora Avenue, from south of Harrison Street through the Denny Way intersection.

Please refer to the Final EIS Appendix C, Transportation Discipline Report, for additional detailed analysis.

December 3, 2010

Angela Freudenstein
Alaskan Way Viaduct Replacement Project
Wells Fargo Building
999 Third Avenue, Suite 2424
Seattle, WA 98104-4019

Dear Ms Freudenstein:

I-070-001

Re: Comments to the 2010 SDEIS SR-99 Alaskan Way Viaduct Replacement Project. Erroneous statement in Appendix P **Earth Discipline Report**: 4.4 Geologic Hazards Page 34 and 35, quote: "The City of Seattle has developed regulations for environmentally critical areas and associated maps (Seattle 2002)

1. On December 11, 2006 the Central Puget Sound Growth Management Hearing Board ordered the City of Seattle to comply with RCW 36.70A.040(2), 170(1) and 130(1), after finding that the City of Seattle had erroneously failed to designate geologically hazardous areas using the Best Available Science. City Officials had fail in their duty and obligation to protect the public, all the while advocating for a bored tunnel and other structures within these hazardous zones – without fully disclosing their location or the implications to the dangers to the public.

2. On February 27, 2007 The Mayor of Seattle proposes a Council Bill to the City Council that requires Seattle to designate the Seattle Fault Zone, Elliott Bay Tsunami and Lahars as Geologic Hazards. Issues raised in the Final Order and Decision of the Central Puget Sound Growth Management Hearing Board.

3. The records show that on April 2, 2007 the City of Seattle Amended the Environmentally Critical Areas Ordinance 122050 Related: Clerk file 309864 to designate the Seattle Fault zone area, areas susceptible to tsunami inundation and Volcanic hazards. This was to Complied with the order of Dec 11, 2006 by the Central Puget Sound Growth Management Hearing Board. (April 2, 2007, Critical Area Amended Ordnance 122050 Attached).

I-070-001

The bored tunnel is north of the Seattle Fault Zone (as defined by the 2007 Seattle Fault Zone map). Geologic explorations have not shown evidence of an active fault splay through the tunnel alignment therefore the bored tunnel will not be designed for fault rupture.

The average recurrence interval for large earthquakes on the Seattle Fault that are capable of generating large tsunamis is 3,000 to 5,000 years. This recurrence interval is longer than the ground motion return period required in the seismic codes applicable to this project.

Final design of the proposed action will take into account earthquake-related issues based on applicable seismic design codes and reasonably expected events that could occur during the life of the project.

I-070-001

a. Excerpts from The Pacific Northwest Center for Geologic Mapping Studies show that "The City of Seattle now has the most detailed Geologic map and digital database in the country", (ESS document and 2007 Seattle Fault Map are Attached)

b. The 2007 City of Seattle Fault Zone Map and USGS Map clearly shows the Northern Seattle Fault Zone *approximately 1 miles further north than the 1999 Johnson Map in the 2010 DEIS Appendix P WSDOT is using in its plans for the Bored tunnel.*

c. " WSDOT "APPENDIX P Earth Discipline Report, October 2010" quote "…surface rupture of this fault zone occurred as recently as 1,100 years ago with as much as 22 feet of vertical displacement…Also, fault splays in the northern portion of the zone appear to be the most recently active and capable of rupturing the ground surface, resulting in several feet of vertical offset."

4. The WSDOT Bored Tunnel will now be located in and across a very dangerous Seattle Fault Zone as defined by the USGS and Seattle Fault Map 2007 which is the latest and best Best Available Science is consistent with the Growth Management Hearing Board's imperative that the City use the Best Available Science when making decisions and planning projects.

5. WSDOT has failed to follow RCW 36.70A.040 and 170 the Best Available Science by not using the most up-to-date Seattle Fault Maps. The State is ignoring the City of Seattle 2007 Amended Critical Areas Ordinance that now also includes volcanic hazard areas.

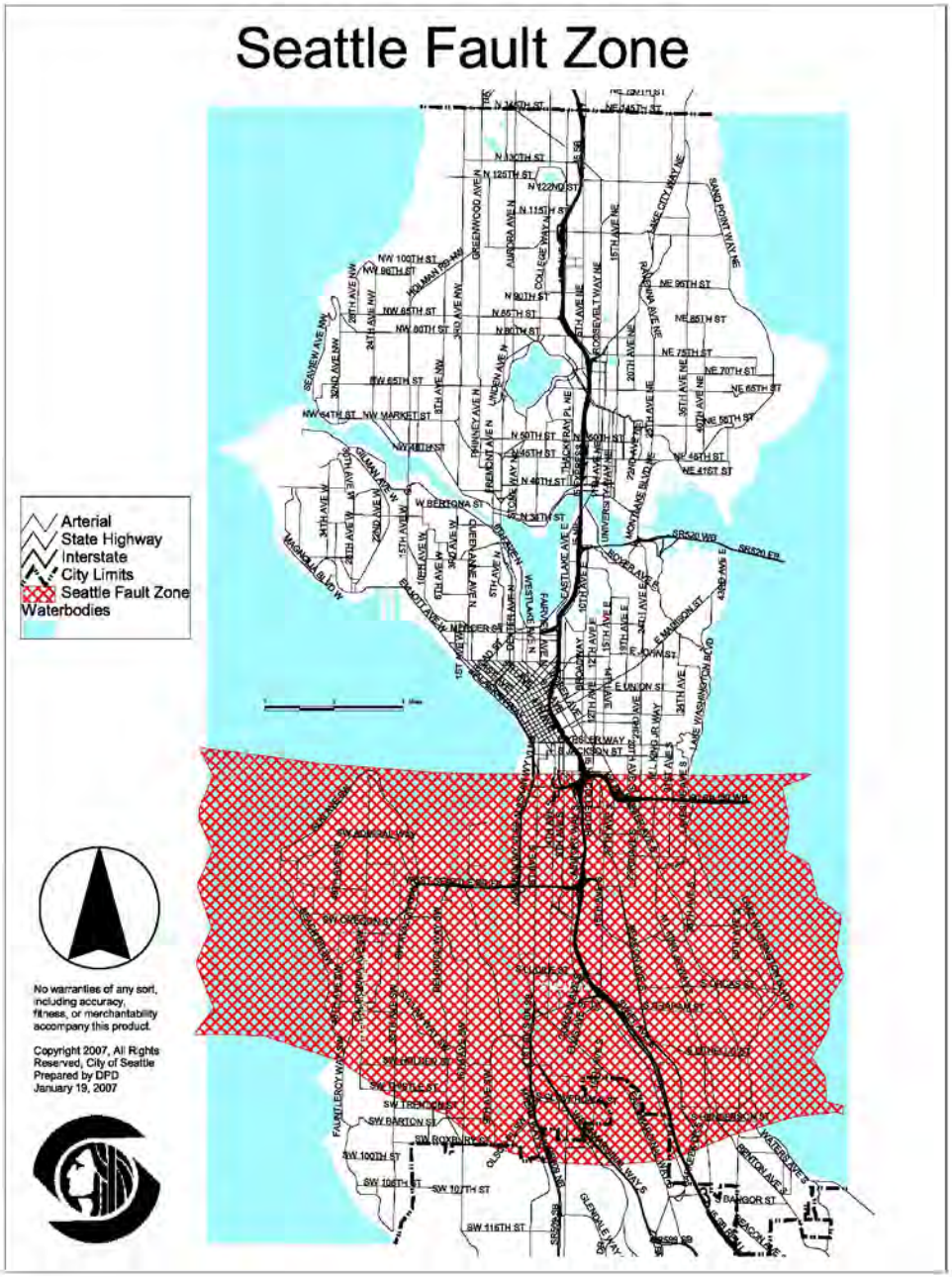
6. The State has a duty and obligation to protect the public from potential injury or damage that may occur if development is permitted in geologically hazardous areas without protections and designs standards that are appropriate for such things as Earthquake Fault Zones or Tsunamis Hazard Areas. (2003 Tsunami Hazard Map of the Elliott Bay is listed on in page 37, October 2010) quote: "…a 7.3 to 7.6 earthquake caused from a rupture of the Seattle Fault may result in a wave that would inundate much of the waterfront in excess of 6 feet...

I-070-001 In summary, I believe there is a lack of oversight and concern for the public's safety by our public officials, both State and the City of Seattle. It should be noted that the City and State are partners in support for the Waterfront tunnel and both have tried for reasons yet to be known to ignore these seismic hazards and there locations in the 2010 SDEIS.

Sincerely,

Eugene Hoglund
3503 30th Ave West
Seattle WA 98199

cc:
Mike McGinn, Mayor, City of Seattle


Seattle Fault Zone
Arterial
State Highway
Interstate
City Limits
Seattle Fault Zone
Waterbodies
No warranties of any sort, including accuracy, fitness, or merchantability accompany this product.
Copyright 2007, All Rights Reserved, City of Seattle
Prepared by DPD
January 19, 2007

From: Kathe Holmes [golfnholmes@msn.com]
Sent: Thursday, November 04, 2010 11:23 PM
To: AWV SDEIS Comments
Subject: viaduct

I-071-001 I don't think the tunnel is a good idea. It seems like there will be less access to cars (fewer lanes), therefore making traffic more congested. I think the viaduct could be rebuilt in a more esthetic way. It is a Seattle landmark.

I-071-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. After considering the Rebuild Alternative, which proposed to replace the existing viaduct with a similar rebuilt one, in the 2004 Draft EIS, the lead agencies determined that it would not be wise to make such a substantial investment to build a roadway that would not meet today's safety standards. Instead, the lead agencies have analyzed replacing the viaduct with an elevated structure as one of the proposed build alternatives in the Final EIS. The Elevated Structure Alternative as presented in the Final EIS would replace the viaduct with an aerial structure, but its design would meet current safety standards for lane and shoulder widths. Please see the Final EIS for more details about the components of the Elevated Structure Alternative and to learn how it compares with the other proposed build alternatives.

From: Uncle Vinny [unclevinny@gmail.com]
Sent: Monday, December 06, 2010 1:17 PM
To: AWV SDEIS Comments
Subject: Do not dig a tunnel under downtown Seattle

I-072-001 * Cost -- the city has no money, the county has no money, the state has no money and the Federal government is deeply in debt. Let's not plan to build something if we can't pay for it!

I-072-002 * Function -- According to the SDEIS, 1/3 of the current viaduct traffic would not use the tunnel because it doesn't have the downtown exits they need. Another 1/3 would drop out if there were tolls, and given the budget constraints it's likely tolls will be necessary. So, is a $4 billion tunnel that handles 1/3 of the viaduct's traffic a good plan?

I-072-003 * Risk -- The tunnel would pass beneath Pioneer Square and its fragile buildings, but the state
I-072-004 has been unable to find an underwriter to insure them in case of building damage. The history of large public projects shows that it is a virtual certainty that there will be significant cost overruns. The ground hasn't even been broken and already the cost buffer is being eaten up.

* Politics -- The Gregoire/Sims/Nickels creation of the bored tunnel alternative was a faith-based leap, and we have now had a chance to analyze the plan they hoped would work out. It won't.

I-072-005 * Climate Change -- We should be spending our resources on transportation projects that make it easier for people to use mass transit. The bored tunnel makes no accommodation for mass transit whatsoever, pushing us in an automobile direction when we should be going exactly the other direction.

What to do instead? Find ways to overcome any problems with the surface/transit option. It's far cheaper, and the risks far more manageable. Please, it's not too late to kill this budding catastrophe.

Vince Houmes
740 Bellevue Ave E #503
Seattle, WA 98102

I-072-001

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 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-072-002

If the Bored Tunnel Alternative is selected, traffic patterns would be altered. For instance, traffic would use the Stadium area ramps to access downtown Seattle and disperse from there along several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues.

Additionally, if the new facility is tolled, there would be traffic diversion. 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). See Chapter 8, Mitigation, of the Final EIS for a discussion of the work of the TAC.

I-072-003

The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the *Secretary of the Interior's Standards for Rehabilitation of Historic Properties*.

The Bored Tunnel alignment is some distance from Pioneer Square's areaways and no impacts on them are anticipated. The areaways are included in the monitoring program; instrumentation has already been installed in First Avenue areaways. The areaways are discussed in more detail in Chapters 4 and 6 of Appendix I of the Final EIS.

I-072-004

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 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-072-005

The scope of the project did not include transit development in the project corridor. High capacity transit development for the region is identified by Sound Transit in its Long-Range Plan and includes expanded light rail service operating in the Downtown Seattle Transit Tunnel. King County Metro is gradually implementing enhanced RapidRide bus service in the project corridor but the routes would use existing major transit corridors in downtown Seattle.

From: Hrobertekc@aol.com
Sent: Thursday, December 02, 2010 8:22 PM
To: AWV SDEIS Comments
Subject: Handicapped Escape plan for the SR99 Bored Tunnel Plan

I use a wheelchair and drive a van with a side deployed ramp to do all my commuting.
Please inform me as to what accomodations are budgeted for in the bored tunnel design for:

SAFTY QUESTIONS:

I-073-001

S1.
Ability to exit from my vehicle in case of emergency or catastrophic closure of the bored tunnel while I am trapped in it; Is there a wide enough shoulder to deploy a four foot side ramp from my van with an additional 3-4 feet at the end of the ramp to maneuver a wheelchair in an attempt to get to safety? If not what is the plan for wheelchair bound drivers like myself?

S2.
Will there be ramps or elevators for handicapped people to use to get up out of the tunnel? If elevators, will they have their own generator or battery power supply in case electrical power to them is disrupted by a tunnel fire, earth quake or other disaster?

It is one thing to build in escape routes for able bodied folks using steps and narrow shoulders. It's A MUCH BIGGER design effort to build in a method for the ever increasing numbers of senior and other disabled members of the population to be able to escape from a tunnel. What's the plan?

FINANCIAL QUESTIONS:

I-073-002

F1.
I live in Sammamish; I understand that the Port has agreed to help fund the tunnel. Did we get a chance to vote on that?
F2.
How much a year and for how many years will that Port contribution add to my property taxes? Please stat that figure in terms of additional property tax per $1000 of property value.
F3.
What other tax impacts will affect me as a non Seattle resident for this bored tunnel design?

Thank you for your consideration and answers to my concerns! Please do add these to other public input concerns that have been documented from previous hearings etc.

I-073-001

The Alaskan Way Viaduct Replacement Project is subject to compliance with the Americans with Disabilities Act (ADA), so the final design of the project will meet all the necessary ADA requirements. However, the proposed bored tunnel is not a pedestrian facility, and as such travelers will not be allowed to leave their vehicles or walk through the tunnel other than during emergency situations when directed to evacuate. Current project design allows for one 8-foot shoulder in the bored tunnel (in each direction), which is a reasonable width for vehicles to pull off the road in case of emergency. WSDOT believes that during an emergency evacuation situation, transit operators will be able to maneuver their vehicles sufficiently to allow deployment of wheelchair lifts, although they may need to encroach into the adjacent lane to do so. All traffic will be directed to stop during this type of emergency, so maneuvering into the adjacent lane will not present a traffic safety problem.

WSDOT has worked very closely with the Seattle Fire Department on developing safety measures and procedures to ensure that the tunnel meets applicable safety criteria during emergencies. To exit the tunnel in case of emergency, one must use stairs. As explained in the 2010 Supplemental Draft EIS and this Final EIS, people who are unable to use the stairs to exit the tunnel would wait in the enclosed, protected refuge area for assisted rescue. The refuge areas and egress corridor provide a safe environment for evacuees since they are ventilated separately with fresh air and are isolated from roadway traffic and emergencies with continuous walls, and it is accessible without needing to step over a curb.

WSDOT has developed a preliminary corridor operations plan that requires the designer of the facility to develop a detailed emergency response plan. It includes information on plans for emergency response and coordination with first responders including the Seattle Fire Department, Washington State Patrol, and the Seattle Police

Department. The emergency response plan will include provisions for assisting mobility-impaired and incapacitated people.

I-073-002

According to the Port of Seattle (http://www.portseattle.org/downloads/about/2011_Budget_14_Tax_Levy.pdf), in 2010, the Port used $13 million of tax levy to fund a Transportation & Infrastructure fund (TIF). In 2011, the Port anticipates using an estimated $8 million from the TIF to make a contribution toward the Alaskan Way Viaduct Replacement Project. Port allocations of their TIF are subject to a vote by the Port Commissioners, and not the general public. For 2011, the Port's tax levy will be $73.5 million. Therefore, the money for the viaduct accounts for approximately 11 percent of the 2011 tax levy. Since the millage rate is $0.2235, the amount allocated by the Port to the project, as a millage rate, is $0.0246 (~2.5 cents per $1000 of property value). Other property taxes to fund King County transit services as well as Washington State gasoline taxes collected a the time of fuel purchase would contribute financially to the Alaskan Way Viaduct Replacement Project.

From: John Hughes [jrjasdip@gmail.com]
Sent: Friday, December 10, 2010 10:43 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-074-001

One of the stated goals of the SR99 tunnel project is to "provide efficient movement of people and goods now and into the future". Unfortunately, the proposed deep-bore tunnel design fails to achieve this goal for the employees working in, and the residents of, Magnolia, Ballard, and other communities who presently enjoy relatively easy access to the Southbound on-ramp from Elliott Avenue and Northbound off-ramp to Western Avenue. The lack of any similar access points, combined with the predicted additional vehicular traffic traveling through downtown via Alaskan Way and other alternative routes, directly indicates that the present design will fail to meet this objective.

I do not support the present deep-bore tunnel design proposal.

John Hughes
Zip code 98199

I-074-001

It is recognized that some changes in travel routes will occur with the Bored Tunnel Alternative for some neighborhoods north and west of the study corridor. Please refer to the Transportation Discipline Report, Appendix C of the Final EIS for more information regarding traffic conditions for the Bored Tunnel Alternative.

From: Cindy Hunt [Cindy.Hunt@wildtangent.com]
Sent: Tuesday, November 16, 2010 12:39 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: No to the tunnel

Hello,

I-075-001

I live downtown just off Dexter and work in Redmond. I do not want increased traffic congestion in my neighborhood and the inevitable speeding, road rage, noise and dirt that accompany it.

As a Seattle citizen, I want transit and smarter access to Seattle, not worse. I want to walk safely downtown after I get off work and not deal with crazy driving from people AND tourists either avoiding the tunnel, in a rush, or unable to find an exit. Please, don't make my walking dangerous and unpleasant.

As a taxpayer, I want this project to be fully paid for. I want a back-up plan in case something goes wrong, like the bore gets stuck.

In short, I the alternative to the current viaduct to make my life better, and as I read it having a tunnel will make my life worse--- and more expensive.

I don't want a whizz-bang cool tunnel, I want the viaduct rebuilt/built better.

Thank you for listening.

Cindy Hunt Ritzman
WildTangent Mktg. Creative Director
www.wildtangent.com
425.497.4530 (office)
cindy.hunt@wildtangent.com

I-075-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Rebuild Alternative. After studying several retrofitting concepts, the lead agencies found that rebuilding the viaduct would not be a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct. Elements of the Rebuild and Aerial Alternatives were incorporated into the Elevated Structure Alternative, which was analyzed in the 2006 Supplemental Draft EIS and the Final EIS. Because the project has evolved since comments were submitted in 2004, please refer to the Final EIS for current information.

With the preferred Bored Tunnel Alternative, additional King County Metro transit service will be provided as part of construction mitigation. Improvements to the speed and reliability of transit service will also be supported by the project and continue to be in place after construction is completed. While some added travel time would be incurred by buses under the Bored Tunnel Alternative, transit operations would still be maintained. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

From: mpj [m-p-j@comcast.net]
Sent: Thursday, November 04, 2010 11:57 PM
To: AWV SDEIS Comments
Subject: sr99 tolling

Angela Freudenstein

I-076-001 when i was young there was a toll on us10 across lake washington it was a happy day when it ended then there was a toll on the new floating bridge, oh happy day when the booths were removed same for hood canal all these were for specific amounts and then ended. i think the toll on the old floating bridge was .25 and the toll on the new floating bridge was .35, hood canal was more but seldom used by myself.

it appears from the description that new "electronic tolling" will be a permanent feature and as such offers no hope of eventually being removed this is not typical of "bridge" project funding in my experience and i think should be reconsidered.

I-076-002 i live in a modest house and commute each day to an equally modest job and drive from georgetown to ballard in the morning and back every evening one of the good things is the spectacular view of downtown and the bay that i am treated to each morning i will be saddened by the loss of it. this loss does not appear in any assessment of the alaskan way viaduct replacement and it bothers me that it goes not. i remember when the viaduct was new and it was a great improvement to driving through downtown and across the regrade to get aurora ave.

I-076-003 this project offers little more than a parkway on the waterfront and greatly increased property values for those few who own real estate between 1st and railroad and no improvement to compensate for my loss.

I-076-004 i make my lunch each day. i do not spend 5 to 10 on a snack truck or a diner i am not low income or a minority but if i was i would be insulted by the assessment that there will be no impact me and that i can go get a prepaid transponder the assumption being that i am without a checkbook or debit card. it is stated that i will pay $4 or $5 each way each day that is $50 per week or $240 per month that is more than 1/2 my total household food budget.

this assessment makes the callus judgment of offering me an opportunity to pay to go to work and to pay to go home and if i don't like it i can drive around because it will save those who do pay 2 minuets in travel time but i will and i will spend a few cents in gas and 10 or 15 minuets extra each way to do it.

M. Jacobs

I-076-001

Long-range planning documents, such as the Puget Sound Regional Council's long-range transportation plan, Transportation 2040, have identified system-wide highway tolling as a means to control congestion and a funding source for future transportation projects as revenues from taxing gasoline continue to diminish. Therefore, consistent with the region's long-range transportation planning strategy, it is possible that the state legislature will continue to impose tolls on SR 99 even after the viaduct replacement is funded.

I-076-002

The visual quality effects of the removal of the viaduct for both the Bored Tunnel (preferred alternative) and the Cut-and-Cover Tunnel Alternative are described in both the Final EIS text as well as Appendix D, Visual Quality Discipline Report. The evaluation of effects covers both the views from the SR 99 roadway (the existing viaduct) as well as views toward the roadway for the Elevated Structure Alternative.

The evaluation and discussion of these effects on today's views from the existing viaduct were also covered in the Supplemental Draft EIS (October 2010) and its Appendix D, Visual Quality Discipline Report, for the Bored Tunnel Alternative which would remove the viaduct.

I-076-003

Any enhancement in property values that may occur would take place after the construction period. And because construction would be completed several years in the future, it is difficult to predict events and condition at that time. Economic conditions are often one of the strongest influences on market values, and these conditions may vary greatly from one year to another. If for example, the Seattle area economy continues to decline substantially as the viaduct is being replaced, completion of the project would likely have less immediate influence on the price of real estate. Because of all the considerations that go into the purchase of

property, the EIS does not speculate on how the project might influence the value of land or buildings in the area.

I-076-004

The effects of tolling upon low-income communities is discussed in Final EIS Appendix H, Social Discipline Report. The discussion includes both the effects of choosing to pay a toll to use SR 99 and the effects of choosing an alternate non-tolled route.

From: BarbaraPJames@comcast.net [mailto:BarbaraPJames@comcast.net]
Sent: Monday, November 15, 2010 7:06 PM
To: AWV SDEIS Comments
Subject: Seismic Activity

I-077-001 | If an above ground viaduct cannot safely withstand seismic activity, how safe can a below earth surface tunnel be in an earthquake? This is nightmarish!

Barbara James

I-077-001

Final design of the proposed action will take into account earthquake-related issues based on applicable seismic design codes and reasonably expected events that could occur during the life of the project.

From: Ron Jay [mailto:ron@processhealing.com]
Sent: Wednesday, December 08, 2010 3:09 PM
To: Alaskan Way Viaduct
Subject: viaduct

I-078-001

I have said it before and I will say it one last time. With the sea wall needing to be replaced, to me it only makes sense
to do the cut and cover.

This would take care of two problems at one time and would allow the viaduct to remain in operation while doing the other work.

The deep bore tunnel is the most ridiculous non-solution to this problem. It will not be nearly large enough to handle the volume of traffic as we see it today.

I know our state and city officials will beat this up until the next earthquake takes the via duct down and kills hundreds of people.

Signed, No faith in our leaders

I-078-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Cut-and-Cover Tunnel Alternative.

From: jeff [9000rpm@gmail.com]
Sent: Thursday, November 04, 2010 10:47 PM
To: AWV SDEIS Comments
Subject: Viaduct Feedback

I-079-001

Please simply retrofit the Viaduct. It is a vital corridor through Seattle. I-5 is terrible as it is and clearly a tunnel will only make matters worse.

A tunnel with limited access points? A tunnel with far fewer lanes than the current Viaduct?

It's stupid to spend hundreds of millions to get less than what we have.

Thank you for the opportunity to vent since my opinion (which happens to be shared by many) means nothing in this matter.

Jeff

I-079-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Rebuild Alternative. After studying several retrofitting concepts, the lead agencies' found that rebuilding the viaduct would not be a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct. Elements of the Rebuild and Aerial Alternatives were incorporated into the Elevated Structure Alternative, which was analyzed in the 2006 Supplemental Draft EIS and the Final EIS. Because the project has evolved since comments were submitted in 2004, please refer to the Final EIS for current information.

From: Stuart Jenner [stuartjenner@comcast.net]
Sent: Tuesday, December 14, 2010 11:09 AM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

Hi,

I-080-001 I am concerned about whether there is sufficient detail on bus availability to replace some of the auto traffic for cars going into and out of downtown Seattle. Where will park and rides be located, what funding is needed to pay for them at the start and also to increase the number of spots over time? Already the Tukwila parking structure of Sound Transit is routinely filled. It seems impossible to complete an EIS without having a plan for the single occupancy vehicle traffic that will not be using the new tunnel, either because of the tolls or because it doesn't permit easy access to where they are going in downtown Seattle itself.

I-080-002 I am also hoping bus modeling will include considerations of what happens when the transit tunnel is converted from bus/rail to rail only. This will push buses onto the surface streets. Will there be room for viaduct-replacement buses as well at the bus stops along the streets?

Thank you,

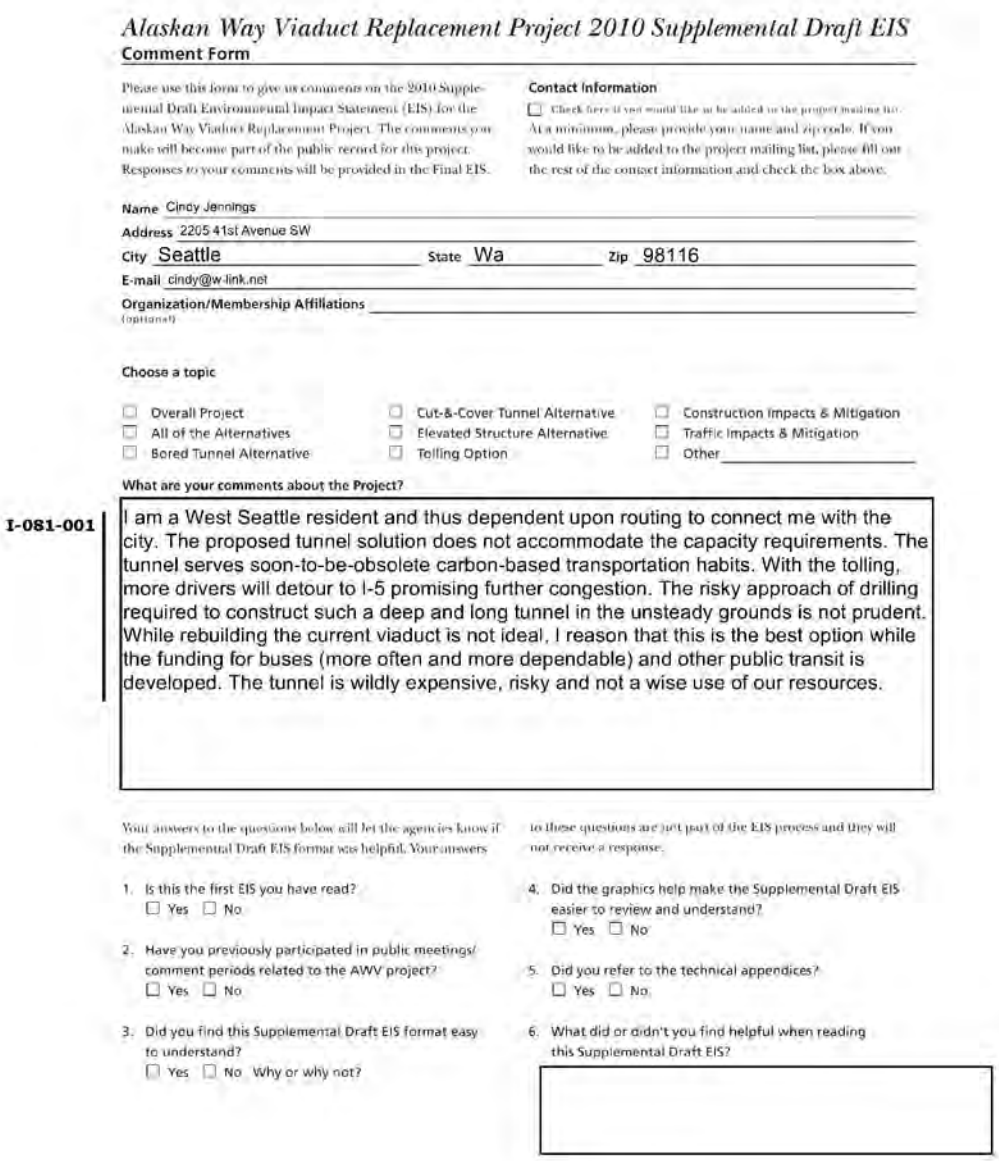
Stuart Jenner
200 SW 178th
Normandy Park, WA 98166

I-080-001

Travel forecasts conducted to support the Final EIS incorporated estimated 2030 transit service levels as well as facilities identified in transit plans. These facilities include planned park-and-ride developments. The Final EIS includes estimated effects on transit, including travel times along major transit corridors and shares of total travel that would be accommodated by transit. Overall, relatively small variations in travel times on major corridors and transit mode shares would be anticipated as a result of the project.

I-080-002

The travel forecasting for 2030 conducted for the Final EIS assumed that the Downtown Seattle Transit Tunnel would have light rail operations only. By 2030, buses would no longer operate in the tunnel.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS
Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list. At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Cindy Jennings
Address 2205 41st Avenue SW
City Seattle State Wa Zip 98116
E-mail cindy@w-link.net
Organization/Membership Affiliations (optional)

Choose a topic

☐ Overall Project ☐ Cut-&-Cover Tunnel Alternative ☐ Construction Impacts & Mitigation
☐ All of the Alternatives ☐ Elevated Structure Alternative ☐ Traffic Impacts & Mitigation
☐ Bored Tunnel Alternative ☐ Tolling Option ☐ Other

What are your comments about the Project?

I-081-001

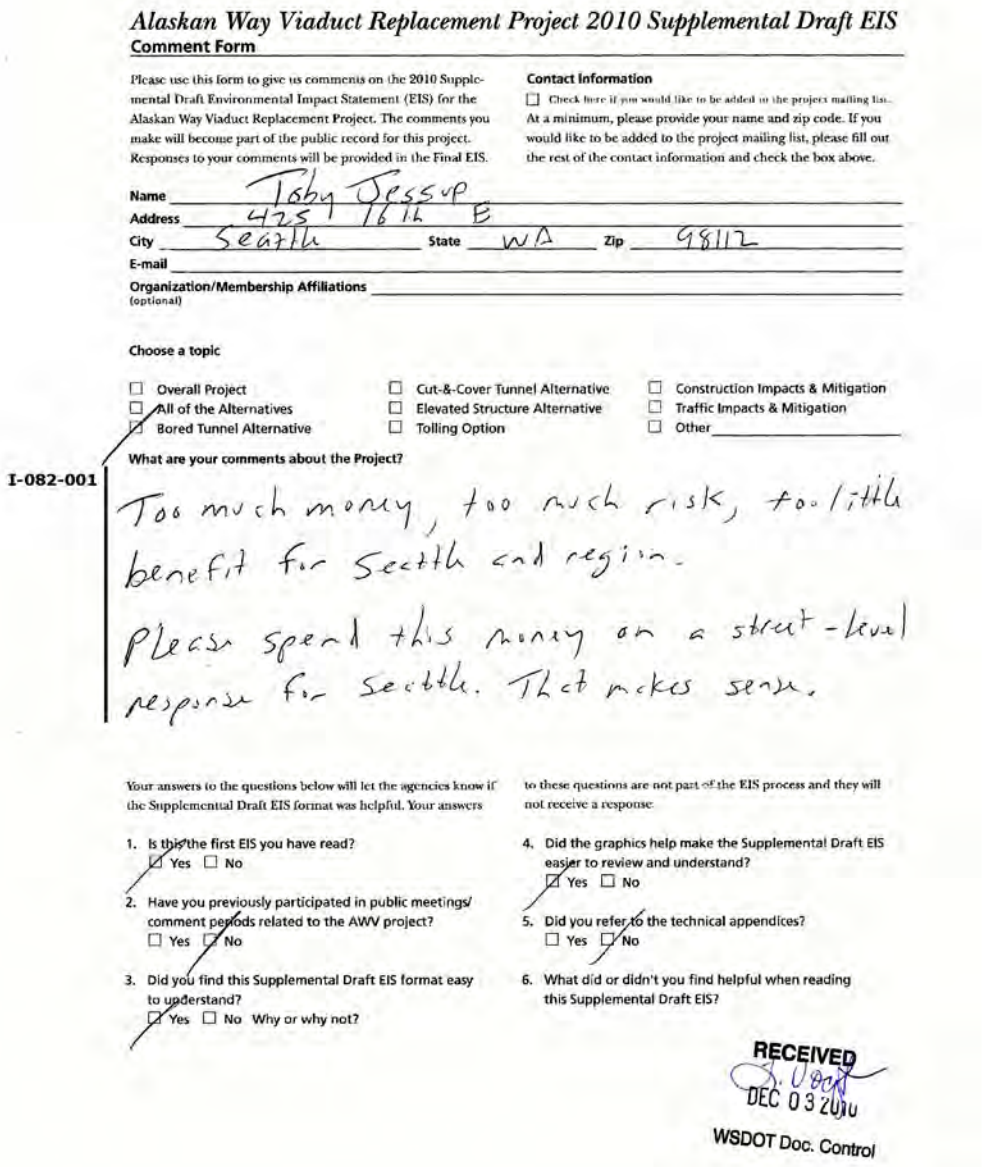
I am a West Seattle resident and thus dependent upon routing to connect me with the city. The proposed tunnel solution does not accommodate the capacity requirements. The tunnel serves soon-to-be-obsolete carbon-based transportation habits. With the tolling, more drivers will detour to I-5 promising further congestion. The risky approach of drilling required to construct such a deep and long tunnel in the unsteady grounds is not prudent. While rebuilding the current viaduct is not ideal, I reason that this is the best option while the funding for buses (more often and more dependable) and other public transit is developed. The tunnel is wildly expensive, risky and not a wise use of our resources.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read? ☐ Yes ☐ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project? ☐ Yes ☐ No
3. Did you find this Supplemental Draft EIS format easy to understand? ☐ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand? ☐ Yes ☐ No
5. Did you refer to the technical appendices? ☐ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-081-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Rebuild Alternative. After studying several retrofitting concepts, the lead agencies' found that rebuilding the viaduct would not be a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct. Elements of the Rebuild and Aerial Alternatives were incorporated into the Elevated Structure Alternative, which was analyzed in the 2006 Supplemental Draft EIS and the Final EIS. Because the project has evolved since comments were submitted in 2004, please refer to the Final EIS for current information.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

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Contact Information

☐ Check here if you would like to be added to the project mailing list.
At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Toby Jessup
Address 425 16th E
City Seattle State WA Zip 98112
E-mail
Organization/Membership Affiliations (optional)

Choose a topic

☐ Overall Project
☐ All of the Alternatives
☑ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

I-082-001

What are your comments about the Project?

Too much money, too much risk, too little benefit for Seattle and region.

Please spend this money on a street-level response for Seattle. That makes sense.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
   ☑ Yes ☐ No
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   ☐ Yes ☑ No
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   ☑ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
   ☑ Yes ☐ No
5. Did you refer to the technical appendices?
   ☐ Yes ☑ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

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WSDOT Doc. Control

I-082-001

Chapter 2, Alternatives Development, of the Final EIS describes the project's history and alternatives evaluated prior to the 2010 Supplemental Draft EIS. The 2004 Draft EIS included evaluation of the Surface Alternative. This alternative was eliminated because it reduced roadway capacity and didn't meet the project's purpose as identified in the 2004 Draft EIS.

After the purpose and need statement was updated in 2009, design concepts were reevaluated and screened to determine the alternatives to be evaluated in the 2010 Supplemental Draft EIS. Again, the Surface Alternative was screened out because it did not meet the purpose and need for the project. Chapter 3 in the 2010 Supplemental Draft EIS provides the reasons why this alternative was eliminated from further consideration.

From: justforfun40s [justforfun40s@yahoo.com]
Sent: Friday, November 05, 2010 1:17 PM
To: AWV SDEIS Comments
Subject: tunnel funding

I-083-001 Build any type of tunnel that you want, just make sure it is paid for with tolls. I will never use it and should not have to pay for it. My family is paying $150 a month for the Tacoma Narrows bridge. We should not have to pay for someone else's tunnel. Be consistent.

Jim

I-083-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. Your preference for tolling is noted.

From: Annie [annie@scaneastwest.com]
Sent: Wednesday, December 01, 2010 2:56 PM
To: AWV SDEIS Comments

I-084-001

PLEASE QUIT TALKING ABOUT THIS PROJECT AND GET ON WITH IT BEFORE MANY LIVES ARE LOST.

I have lived in this city my entire life and about to turn 60. We (Seattleites) have always suffered from a lack of strong leadership and short sighted people. I-90 is a perfect example.

Seattle is one of the few cities in the United States that has the opportunity to have a 5 star downtown waterfront location for tourism to help our economy. We also have MAJOR traffic congestion problems which our current mayor is making even more of a mess with his love for bicycles--not to mention driving business from downtown Seattle by increasing parking rates. I understand the "feeding the meter" issue but surely there could be another method. I cannot figure out why he doesn't make bike riders register to help pay for all the infrastructure that has been put in place to accommodate them.

We have some of the most successful businesses on the planet in our region and some of the WORST politicians--QUIT talking and get this tunnel constructed--as it is it will take years to complete. Why do we have to wait for some tragedy to occur before we build, bore, or renovate.

Anna Johnson

I-084-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

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Contact Information

☐ Check here if you would like to be added to the project mailing list.

At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Paul Johnson
Address 10655 34th Ave SW
City Seattle **State** WA **Zip** 98146-1713
E-mail [redacted] paulj1026@yahoo.com
Organization/Membership Affiliations (optional) Retired

Choose a topic

- ☐ Overall Project
- ☒ All of the Alternatives
- ☐ Bored Tunnel Alternative
- ☐ Cut-&-Cover Tunnel Alternative
- ☐ Elevated Structure Alternative
- ☐ Tolling Option
- ☐ Construction Impacts & Mitigation
- ☐ Traffic Impacts & Mitigation
- ☐ Other

What are your comments about the Project?

I-085-001

In 2001 the Nisqually earthquake raised awareness of the need to replace the existing structure. In the minds of some, that urgency seems to have eased – or disappeared. That urgency is still there. In addition, we now have the opportunity to take advantage of a very competitive bidding atmosphere. Please keep this project on schedule as shown in the EIS!!

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

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   ☒ Yes ☐ No
5. Did you refer to the technical appendices?
   ☐ Yes ☒ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-085-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: Rick Jordison [rjblackbutte315@gmail.com]
Sent: Saturday, November 20, 2010 9:48 AM
To: AWV SDEIS Comments
Subject: sr99 bored tunnel

I-086-001 Why should the tax payers foot the bill for this tunnel? They say it will be $3 billion but it will almost certainly cost up to $10 billion, and for what? Yes it will be nicer, and more quiet down at the waterfront, but the big benefit will be for a handful of property owner who will reap a tenfold return on their investment. Why don't we get them to kick in a big chunk?

I-086-001

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 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.

From: Dan Jurich [mailto:hapylif2@yahoo.com]
Sent: Monday, November 08, 2010 11:53 AM
To: AWV SDEIS Comments
Subject: Comments on the Alaskan Way Viaduct

To whom it may concern,

I-087-001

I would like to comment on the Alaskan Way Viaduct replacement. First, my wife and I both think that the deep bore tunnel option is a great alternative for the replacement of the viaduct. It would greatly open up the area and greatly increase the beautiful view of the waterfront area by not having to try to peer through the massive gray columns of another bridge.By removing the bridge and not replacing the existing structure, we think it would really clean up the area and make the waterfront much more accessible. We also think that it would allow for even more " tourist-friendly" businesses to come in and revitalize the waterfront. One other thing that we think is important is that the Deep Bore Tunnel will massively decrease the noise levels in the area and create a much more serene and beautiful setting.

This project will also be terrific fir job creation and economic stimulus by infusing a billion plus dollars into the area. We also would like to see some increased parking in the area as it does get pretty congested down there - especially during tourist season. As for my wife and me, we like to take the light rail from Seatac to Pioneer Square or something and just walk down to the waterfront.

We hope that you will continue with your plans for the Deep Bore Tunnel, as we believe that it makes the most sense and has the most advantages in the long run. The cost overrun issue sounds like it has been mitigated by the lower than estimated bid. Please don't delay as costs are always going up.

Thank you ,

Dan and Ramona Jurich

I-087-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: jkins7@juno.com
Sent: Thursday, November 04, 2010 6:13 PM
To: AWV SDEIS Comments
Subject: Replacement of the Alaskan Way viaduct

Dear Leaders,

I-088-001 I am not convinced that you all really want to hear from the public on this tunnel project. I believe we (Seattlelites) have already made our desires well known that we do NOT want a tunnel. Why don't you come up with a surface street option. The travelers will already need to find alternate routes during the demolition of the viaduct. (Side note: What a shame that the Viaduct can not be replaced or repaired, it is such a joy to travel into the city and see the fantastic view, it is awesome and a good tourist attraction.) Can't we learn from History not just to want what we want and do it without exploring what

I-088-002 side effects our hasty actions could have? What if by drilling the tunnel the seawall is compromised and we end up loosing our waterfront? Just a thought. Thank you for letting me express my view point.

Sincerely, Jan Keating

I-088-001

The 2004 Draft EIS included evaluation of the Surface Alternative. This alternative was eliminated because it reduced roadway capacity and didn't meet the project's purpose as identified in the 2004 Draft EIS.

Some people and groups feel the viaduct could be replaced by a combination of improvements to surface streets, I-5, and additional transit service. The Surface and Transit Hybrid approach was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region and, therefore, did not meet the project's purpose and need. Please see Chapter 2, Alternatives Development, in the Final EIS, which describes the alternatives screening process and a brief discussion of why the Surface and Transit Hybrid was not carried forward for further evaluation. Also, the Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS.

I-088-002

The alignment of the Bored Tunnel Alternative is not along the seawall and tunnel boring activities would occur at a distance from the seawall. Additionally, before tunnel boring begins, soil improvements and stabilizing measures will occur where needed to strengthen the existing soil along the bored tunnel alignment to better accommodate tunnel construction and prevent potential construction effects. The distance of the boring from the seawall and the soil improvement measures would make seawall damage from tunnel boring unlikely.

From: Morgan Keuler [mkeuler@gmail.com]
Sent: Monday, December 13, 2010 3:50 PM
To: AWV SDEIS Comments
Subject: No Tunnel

I-089-001

Based on your own estimates the deep bore tunnel would not be effective and has the potential to be disastrously expensive. Please don't repeat the Big Dig at our end of I-90. I strongly support a surface transit option.

Freeways can be torn down for the better:
http://www.infrastructurist.com/2009/07/06/huh-4-cases-of-how-tearing-down-a-highway-can-relieve-traffic-jams-and-help-save-a-city/

I-089-001

Chapter 2, Alternatives Development, of the Final EIS describes the project's history and alternatives evaluated prior to the 2010 Supplemental Draft EIS. The 2004 Draft EIS included evaluation of the Surface Alternative. This alternative was eliminated because it reduced roadway capacity and didn't meet the project's purpose as identified in the 2004 Draft EIS. The Surface and Transit scenario developed in 2008 was rejected for similar reasons.

Some people and groups feel the viaduct could be replaced by a combination of improvements to surface streets, I-5, and additional transit service. After the purpose and need statement was updated in 2009, design concepts were reevaluated and screened to determine the alternatives to be evaluated in the 2010 Supplemental Draft EIS. The Surface and Transit Hybrid concept was screened out because the lead agencies determined it lacked the capacity to serve the long-term needs of the region and it does not meet the project's purpose and need to provide capacity to and through downtown Seattle. The Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS.

From: Wknedlik@aol.com
Sent: Monday, December 13, 2010 4:21 PM
To: AWV SDEIS Comments
Cc: Stone, Craig; Hammond, Paula; Dye, Dave
Subject: 2010 SDEIS Comment on SR 99 - Alaskan Way Viaduct and Seawall Replacement

Ms. Angela Freudenstein:

I-090-001 This submission respecting the SR 99 - Alaskan Way Viaduct and Seawall Replacement project is made on behalf of the State Route 99 Users Alliance and of the undersigned as a participant in the Alliance.

The current SDEIS is not only largely incomprehensible and thus meaningless for purposes of analyzing the quintessential issue of tolling as identified therein, at this late stage in the planning process, but that core impenetrability and hence worthlessness in turn undermine potential for necessary examinations of other key fundamentals, including but not limited to the pivotal consideration of whether the bored-tunnel alternative for AWV replacement may well be literally counterproductive as to a transportation investment of several billion dollars in planned expenditures, rather than merely representing some point arrayed along a marginal-to-poor continuum as to costs versus benefits, due to agency planning done to date in patent defiance for our state's highly specific legal requirement for the Washington State Department of Transportation to cooperate, fully, in order to facilitate systematic development of financially prudent regional transportation plans "based on a least cost planning methodology that identifies the most cost-effective facilities, services, and programs" (as mandated by RCW 47.80.030), and in order thereby to allocate limited revenue resources for all state transportation projects in an optimal fashion that reduces congestion, fosters freight transport essential for a sustainable economy here, and increases personal mobility vital for enjoyment of freedoms guaranteed to state citizens (among other pivotal considerations).

I-090-002 With the project having been designed *ab initio* on extremely questionable assumptions based on reducing potential throughput in the SR 99 corridor by fully a third by reducing six lanes to four (after expenditure of several billion dollars), a substantial risk exists, but is not adequately analyzed in the SDEIS, that tolling will instead reduce actual throughput by another third by reducing utilization in this vital corridor to approximate that of a two-lane tunnel due to planned imposition of tolling (also after expenditure of several billion dollars).

I-090-003 No further expenditures should be made until WSDOT has both complied with all of its statutory duties under RCW 47.80.030 in order to ensure genuine cost effectiveness (which it has not done to date due to its clear defiance for state law so far and ongoing), and also undertaken an adequate tolling analysis in order to avoid actual waste of finite transportation funding (which again it has not done due either to other misfeasance or else to still-more-serious wrongdoing).

I-090-004 That such gargantuan legal-and-logical gaps continue within the SDEIS, presently, at this rather late stage, implicates not simply utter incompetence by those purporting to act upon behalf of state citizens, but actual bad faith toward state citizens in a process being denounced from all points along the political spectrum, including concerns as to throughput versus costs expressed in recent days by Honorable Mike McGinn in his capacity as the elected Mayor of Seattle

Respectfully yours.

Will Knedlik

I-090-001

Thank you for commenting on the 2010 Supplemental Draft EIS. Impacts related to tolling are discussed in Chapter 9 and Appendix C of the 2010 Supplemental Draft EIS. Updated information regarding tolling effects to the proposed build alternatives is provided in the Final EIS. The tolling analysis completed for this project has been comprehensive and meets overarching requirements associated with transportation planning in Washington State.

I-090-002

To evaluate the effects of changing the lane configuration, access points and alignment of SR 99, traffic volumes were analyzed throughout the transportation system located in the study area. The analysis captured combined traffic volumes on I-5, SR 99, and local streets at specific locations called screenlines. Results of the analysis for the Supplemental Draft EIS show that for all screenlines assessed, the 2015 Existing Viaduct and the 2015 Bored Tunnel carry about the same amount of traffic, which demonstrates that the Bored Tunnel Alternative would accommodate a similar number of vehicles compared to the viaduct even though the lane configuration and access points would change.

Please see the Final EIS, Appendix C, Transportation Discipline report for updated transporation anlaysis, including updated tolling analysis.

I-090-003

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects

due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

I-090-004

FHWA, WSDOT, and the City of Seattle appreciate your comments and input on this project.

From: Connie Knudsen [connieflateboe@gmail.com]
Sent: Wednesday, November 10, 2010 8:50 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-091-001

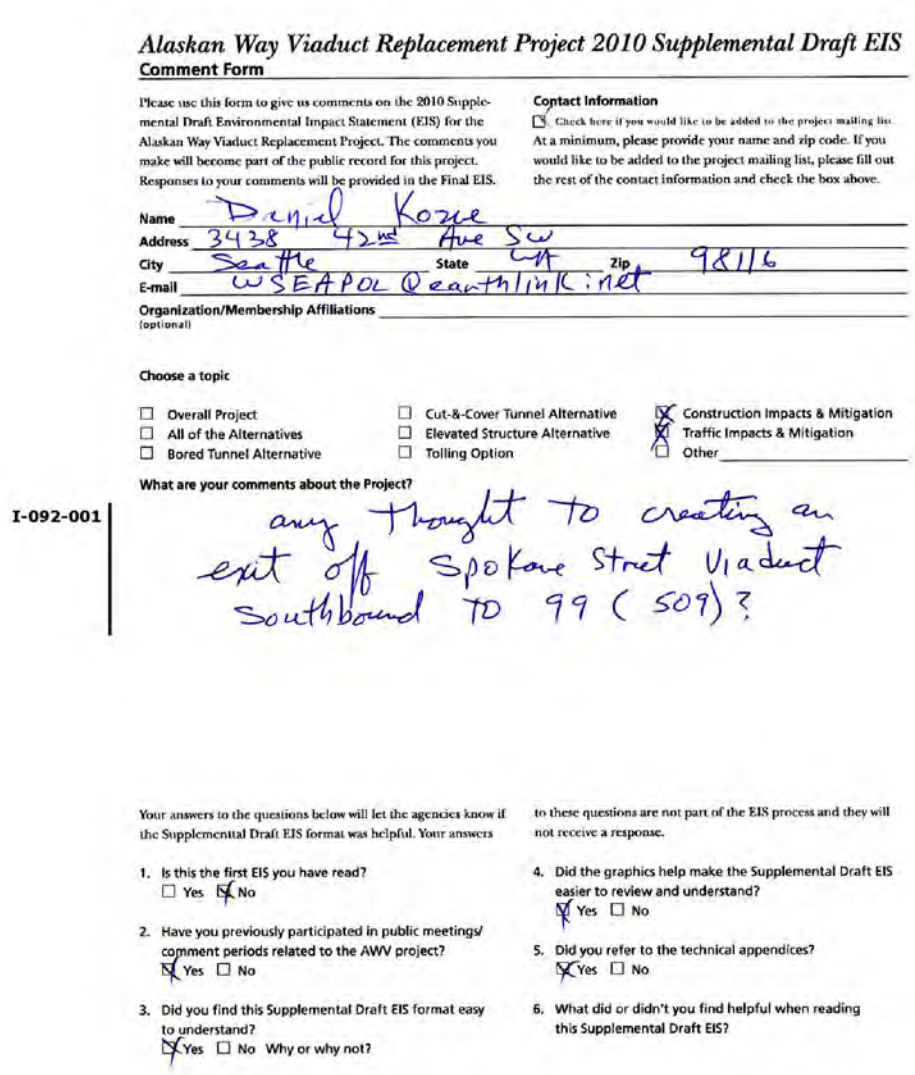
FIX THE VIADUCT.
A TUNNEL THROUGH THIS AREA IS A DISASTER WAITING TO HAPPEN.
A GROWING POPULATION OF SENIOR CITIZENS IS NOT GOING TO RIDE BIKES DOWNTOWN,
OR TAKE SOUND TRANSIT TO SEATAC.

FIX WHAT IS THERE.

Constance Knudsen
fifth generation Seattle resident
Ballard

I-091-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Rebuild Alternative. After studying several retrofitting concepts, the lead agencies found that rebuilding the viaduct would not be a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct. Elements of the Rebuild and Aerial Alternatives were incorporated into the Elevated Structure Alternative, which was analyzed in the 2006 Supplemental Draft EIS and the Final EIS. Because the project has evolved since comments were submitted in 2004, please refer to the Final EIS for current information.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list. At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Daniel Kozie
Address 3438 42nd Ave SW
City Seattle State WA Zip 98116
E-mail WSEAPOL@earthlink.net
Organization/Membership Affiliations (optional)

Choose a topic

- ☐ Overall Project
- ☐ All of the Alternatives
- ☐ Bored Tunnel Alternative
- ☐ Cut-&-Cover Tunnel Alternative
- ☐ Elevated Structure Alternative
- ☐ Tolling Option
- ☒ Construction Impacts & Mitigation
- ☒ Traffic Impacts & Mitigation
- ☐ Other

What are your comments about the Project?

I-092-001

any thought to creating an exit off Spokane Street Viaduct Southbound TO 99 (509)?

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read? ☐ Yes ☒ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project? ☒ Yes ☐ No
3. Did you find this Supplemental Draft EIS format easy to understand? ☒ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand? ☒ Yes ☐ No
5. Did you refer to the technical appendices? ☒ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-092-001

The Alaskan Way Viaduct Replacement Project limits are between approximately S. Royal Brougham Way and Aloha Street. The Spokane Street Viaduct is outside of the limits of this project.

From: Kevin K. [whereiskev@yahoo.com]
Sent: Monday, December 13, 2010 10:11 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS comments

I-093-001

I believe the 2010 SDEIS is written with significant bias toward the deep bore tunnel.

For example, the report says: "Once the viaduct is removed, views to and from the waterfront that are currently obstructed by the structure would be substantially improved". My question is FOR WHOM ?? A few dozen rich people with an office or condo on a lower floor facing the water ?? Anyone on an upper floor will see past an elevated structure. Yet this argument is made to distract us from the fact that more than 110,000 residents and visitors who enjoy this view every day now (from their vehicle) would have this taken away !!

I-093-002

The report also leads us to believe that removing the viaduct will create an open space for all to enjoy. Really? With no significant additions to parking, will even a fraction of us board public transportation to enjoy that open space? On weekdays? And what will prevent this space from becoming a larger version of Victor Steinbrueck Park with proportionally larger numbers of homeless and panhandlers?

Even if the cost of the tunnel were the same as an elevated structure, I would choose an elevated structure.

If you are still a government for the people, I urge you to bring this to us in one well thought out, multiple-choice question: Do you prefer: a) an elevated structure, b) a cut-and-cover tunnel, c) a deep bore tunnel ? Don't rely on some independent survey. The general public has not seen a side-by-side comparison of the 3 options due to lazy reporting. Only an impending public vote will force the pros and cons of all 3 to be exposed and considered equally at the dinner table.

Thank you for listening,

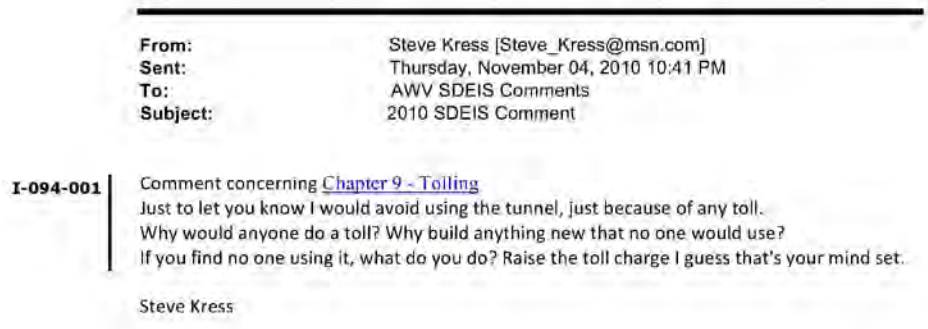
Kevin Krantz
3510 SW Admiral Way
Seattle, WA 98126

I-093-001

It is true that with the Bored Tunnel Alternative, drivers on SR 99 would no longer enjoy the panoramic views that are available from the existing structure. However, the views from the waterfront to the east would no longer be obstructed by a very large concrete highway structure. Similarly, the views from downtown Seattle, including the Pike Place Market and its many viewpoints to the west such as the Victor Steinbrueck Park, would no longer include the intrusion of this busy highway in the extensive views toward the west of Elliott Bay, the islands, and the Olympic Mountains.

I-093-002

The 2004 Draft EIS, 2006 and 2010 Supplemental Draft EISs, and Final EIS acknowledge that the proposed project may result in opportunities for redevelopment created by removing the viaduct. This may occur under both the Bored Tunnel and Cut-and-Cover Alternatives. It is also acknowledged that substantial changes would occur in the relationship between the waterfront and upland properties leading to the downtown core. To the extent that the existing viaduct has been perceived as a barrier to waterfront uses, new development on vacant or under-used property or redevelopment may take place around the new Alaskan Way surface street. However, no development within the existing viaduct right-of-way is proposed as part of the proposed project. It is anticipated that any potential new development would be consistent with zoning designations for this area. This includes public open space. 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 how the project began and the alternatives development process, which included key decision points and public involvement. Please refer to the Final EIS for current information.



From: Steve Kress [Steve_Kress@msn.com]
Sent: Thursday, November 04, 2010 10:41 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-094-001

Comment concerning Chapter 9 - Tolling
Just to let you know I would avoid using the tunnel, just because of any toll.
Why would anyone do a toll? Why build anything new that no one would use?
If you find no one using it, what do you do? Raise the toll charge I guess that's your mind set.

Steve Kress

I-094-001

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

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In advance of construction, WSDOT funded Intelligent Transportation

System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

From: Chris LaRoche [laroche.chris@gmail.com]
Sent: Tuesday, November 16, 2010 2:02 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Cc: not you
Subject: NO TUNNEL!!!

Hello WSDOT, Mayor McGinn, and the Seattle City Council,

I-095-001 Before I give you my public feedback on the tunnel, I ask you this: If you are so adamantly for it, why don't you debate the issue publicly? I will send you a long list of very good reasons why this tunnel is a very bad idea, just as hundreds of others (most of them much more reputable than I), but as far as they know, these issues are falling on deaf ears. And deaf ears in city hall is not what your constituents want.

PLEASE DEBATE.

I-095-002 Now, my feedback on the tunnel: IT'S A HORRIBLE IDEA.

-It's a waste of tax payer money that could be better spent improve public infrastructure, like increased bus service.

-You are ignoring the potential overrun costs. YOU ARE IGNORING THEM, PRETENDING THEY DON'T EXIST. Are you policy makers or in kindergarten?

I-095-003 -It won't serve traffic needs, instead pushing an additional 100,000 cars on the streets of downtown Seattle.

I-095-004 -In the face of impending global climate change, spending billions and billions of dollars for a tunnel used uniquely for Single Occupancy Vehicles is foolish, to say the least. Not only will construction alone contribute substantially to Seattle's CO2 emissions, it spits in the face of even mild predictions of the global situation 30 years from now (rising sea levels, etc).

I-095-005 I could go on and I. I don't want to read a rebuttal to my pionts, I want you to DEBATE THE ISSUE IN A PUBLIC FORUM.

Thank you,

Chris LaRoche

I-095-001

We understand that members of the public may prefer different ways to discuss the project and share their comments. The program team often holds open-house style public meetings to share information and gather feedback. In addition, we attend community events to hear from the public, frequently provide briefings to community organizations and encourage people to submit questions or comments to the program team. A more comprehensive explanation of our public involvement efforts can be found in Appendix A, Public Involvement Discipline Report of the Final EIS. In terms of elected officials, there are many mechanisms for their involvement and discussion of the project as well including the Seattle City Council Special Committee on the Alaskan Way Viaduct and Seawall Replacement Project and Central Waterfront Planning and the Program Oversight Committee.

I-095-002

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 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-095-003

For all screenlines assessed in the Supplemental Draft EIS, the 2015 Existing Viaduct and the 2015 Bored Tunnel carry about the same amount of traffic, which demonstrates that the Bored Tunnel Alternative would accommodate the similar number of vehicles even though the lane configuration and access points would changes. As shown in Exhibit 5-7 of the Supplemental Draft EIS, daily vehicle volumes for the 2015 Bored Tunnel are expected to be within about 1 percent of vehicle volumes for the 2015 Existing Viaduct.

Please see the Final EIS and Appendix C, Transportation Discipline Report.

I-095-004

The Final EIS estimates the potential direct emissions of greenhouse gases under the build alternatives.

The study area evaluated includes areas likely to be affected by changes in greenhouse gas emissions as a result of the project. The greenhouse gas effects were estimated for roadways within the city center area, as well as in the region. The city center area is bordered by Prospect Street on the north, 15th Avenue on the east, S. Holgate Street on the south,

and Elliott Bay on the west. The region includes all the traffic movements in King, Pierce, Snohomish, and Kitsap Counties.

The design has taken into account what is reasonably expected to occur for the life of the project.

I-095-005
Please see the response to your comment I-095-001.

From: Carl Leon [carl@wingrider.net]
Sent: Friday, November 05, 2010 7:58 AM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-096-001 I'm certain that it is entirely too late for my comment to be considered, however I would like to say that I am very disappointed with the planned loss of the viaduct. On the periodic occasions that I have to travel past Seattle, the viaduct has always been my highly preferred route over either I-5 or surface streets.

I-096-002 Even if the viaduct is closed completely, I believe it should remain in place as a significant historical structure.

Respectfully,
Carl Leon
12704 2nd Ave NW
Seattle, WA 98177

I-096-001

The lead agencies appreciate receiving your comments. Many drivers enjoy the views from the existing viaduct. Neverthless, the lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives.

If interested, please see the Final EIS for more information about the Elevated Structure Alternative and how its effects compare to the other build alternatives.

I-096-002

The viaduct structure has been determined to be eligible for listing in the National Register of Historic Places. However, it has been determined that its removal will benefit the surrounding area, including the Pioneer Square and Pike Place Market historic districts. The demolition of the viaduct and Battery Street Tunnel has been mitigated through development of a HAER (Historic American Engineering Record) report with an extensive history and photographs. This will serve as permanent documentation, on file with the Library of Congress, of the viaduct and its history. A website, a walking tour podcast and other educational tools have also been developed.

From: Levine, Barron S [LevineB@bsd405.org]
Sent: Monday, December 06, 2010 10:29 AM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-097-001

To whom it may concern;
Just a quick note to express my concern over the proposed tunnel. I don't really have any data to add to what seems like a mountain already against this idiotic idea. I will use my vote as the only leverage I have. I will not vote for any city officials who support this idea.
I believe if we had a vote most aside from the elitist few would reject this .
Thanks for listening

Barry Levine
seattle

I-097-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the project.

From: Arthur Lewellan [lotilivo@peoplepc.com]
Sent: Wednesday, December 01, 2010 12:53 PM
To: AWV SDEIS Comments
Cc: Arthur Lewellan
Subject: Supportive comment for the 'stacked' 6-lane Cut/cover Tunnel option...

I-098-001

The 'stacked' SIX-LANE cut/cover *(as depicted in the SDEIS)* is the only sensible tunnel option.

All studies indicate the cut/cover tunnel displaces the least traffic onto surface streets -- principally Alaskan Way and Mercer Street & Place, plus cross-streets in South Lake Union, Denny Triangle, Queen Anne and Belltown. Redirecting Interbay-bound traffic (*35,000 vehicles daily*) from the Elliott/Western access to SR99 in Lower Belltown, to the DBT north portal and Mercer to Elliott, is "absolutely detrimental" to traffic management. The Lower Belltown access to SR99 is the shortest, straightest, most suitably commercial corridor with the least hillclimb and stoplights (7-9 stoplights vs 12-13 via Mercer and 15-16 via Denny Way). More important, the displaced traffic presents deplorable hazards to public health and safety alongside detrimental impacts to district economies.

Reconnecting the grid at Aurora and Harrison, Thomas and John Streets is desirable, but equally or even more ideal by retaining the Battery Street Tunnel (BST). Furthermore, retaining the BST access ramps in Lower Belltown reduces overall displaced traffic onto surface streets by several thousands.

Cut/cover tunnel advantages include:

- better, faster access in a tunnel emergency
- better ability to reroute/redirect traffic in emergency
- **avoids insane risk** posed by DBT construction and long-term maintenance
- creates more construction jobs
- rebuilds seawall at same time
- better utility access
- etc etc

The deep-bore tunnel (DBT) offers neither best engineering nor least environmental impact to the urban environment.

I-098-002

Evidence suggests Washington State Department of Transportation (WSDOT) intentionally rigged studies against the cut/cover tunnel to favor the elevated replacement option prior to the March 2007 voter referendum, and more recently to favor the DBT. The general public knows next to nothing about the cut/cover tunnel aside from its construction disruption to Alaskan Way which is essentially unavoidable with any replacement for that segment of SR99. I suspect it is possible to reduce cut/cover construction time by several years and construction impacts likewise dramatically reduced. The cut/cover construction technique WSDOT chose to study (a huge, 6-block trench between Spring and Main Streets, followed by two similarly huge trenches to the portals at Pike and King Streets) is highly questionable. Even if the cut/cover construction disruption cannot be avoided, the long-term benefit of managing traffic much more capably than the DBT makes the cut/cover the only sensible tunnel option.

I-098-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Cut-and-Cover Tunnel Alternative.

I-098-002

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). The purpose and need statement is included in Question 5 of Chapter 1, Introduction, in the Final EIS. Chapter 2, Alternatives Development, of the Final EIS describes the history of the project, including how the Purpose and Need was updated and alternatives development.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the alternatives.

Please refer to the Final EIS for current information. FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Cut-and-Cover Tunnel Alternative.

It is no pleasure for me to question WSDOT competence on this project. The public dutifully demands full disclosure from its planning agencies and expects the same from its mainstream media. The DBT poses too much RISK. Period. Mayor Mike McGinn should be fully exonerated for his opposition to the deep bore tunnel fiasco worse than the Boston Big Dig.

Art Lewellan
Author "The Seattle Circulator Plan"
(blacklisted in Seattle)

PS: I believe the I-5 Columbia River Crossing project is likewise questionable engineering and support a fair reconsideration of Concept #1 released earlier this year but abruptly dismissed by that project stakeholders. The public should learn how a design for Hayden Island with NO RAMPS is ideally possible with 'off-island' access from North Portland.

From: Jordan Lock [jordalexlock@gmail.com]
Sent: Tuesday, November 16, 2010 3:48 PM
To: AWV SDEIS Comments
Subject: I oppose the deep bore tunnel viaduct replacement

Dear WSDOT,

I-099-001 I am writing to express my deep concern and opposition to the proposed deep bore tunnel to replace the existing viaduct for state 99. For the state of Washington to undertake such a massive infrastructural project, a tunnel at an unprecedented scale under historic Seattle buildings, I believe the risk and expense far outweighs the supposed benefits of an exit-less tunnel that bypasses downtown. Am I correct in my understanding that the current draft of the Environmental Impact Statement doesn't include the toll charges expected effect on the tunnel's use with increased traffic diverted to city streets? It seems like a dreadful oversight to draft an environmental impact statement without taking the anticipated 'real life' conditions into account. I am concerned that this deep bore tunneling solution has been too quickly adopted by the various departments of transportation and levels of government without more thoroughly exploring a surface/transit option, one that would undoubtedly be less expensive and would move Seattle and the state in, what I believe, would be a more ecologically responsible direction. With the anticipated tolling of the tunnel likely pushing a large percentage of 99's traffic onto Seattle's downtown streets, a comprehensive surface transportation plan will need to be implemented regardless; I feel the current tunnel plan does not adequately examine this component of its proposal and an entirely surface proposal with supplemental transit has been largely ignored/unexplored.

I-099-002

I-099-003 In addition, for the current proposal to place the burden of any possible cost overruns on Seattle residents/property owners without the public ever voting on the deep bore tunnel (the most expensive of all possible options), which is a **state** highway, is highly objectionable. City residents should not be financially responsible for cost overruns of a state highway, particularly when there is significant opposition amongst Seattle residents.

I ask that you please take the following steps before moving forward.

I-099-004 1. draft a thorough plan for a surface/transit option to replace the existing viaduct with an accompanying Environmental Impact Statement.

I-099-005 2. re-draft the Environmental Impact Statement for the proposed deep bore tunnel that realistically reflects the anticipated use of the tunnel with expected tolls in place.

I-099-006 3. ensure access to Seattle's downtown in any proposed option (likely with increased transit)

I-099-007 4. show how the state will pay for each option, including all construction cost overruns and waterfront/surface rehabilitation.

I-099-008 5. show how Seattle's historic buildings and districts (Pioneer Square) will be protected.

I-099-009 I understand that there is concern for the existing viaduct's structural integrity and its removal would be a part of either option (tunnel or surface/transit). Using the existing viaduct's current condition is no excuse for not doing due diligence toward drafting a more realistic Environmental Impact Statement for the deep bore tunnel based on anticipated use (with tolls in place) and a thorough exploration of a surface/transit option.

I-099-001

Currently, the Washington State Department of Transportation does not have the authority from the Washington State Legislature to toll State Route 99 (SR 99). As legislative action is required to toll this facility, the evaluation of the non-tolled Bored Tunnel Alternative in the 2010 Supplemental Draft EIS accurately reflected the status of the project; note, however, that Chapter 9 does discuss tolling effects. If the Washington State Legislature decides to use tolling to fund a portion of the project, the potential effects of tolling do need to be evaluated and documented. The possible effects of tolling are analyzed in this Final EIS. Please see Chapter 5 and Appendix C, Transportation Discipline Report.

I-099-002

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

I-099-010 The public vote that took place regarding the replacement of the existing viaduct voted down proposals for a reconstructed elevated highway as well as the "cover"-style tunnel proposal. In such tempestuous economic times, the public and the government needs to explore all possible options and select an option that makes the most economic and environmental sense. I personally believe that the currently proposed deep bore tunnel is the furthest from being most economical or most environmental and if put to a public vote I believe a majority of Washington and Seattle residents would agree.

Thank you,

Jordan Lock
jordalexlock@gmail.com

2703 NE 92nd
Seattle WA 98115

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

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Chapter 2, Alternatives Development, of the Final EIS describes the project's history and alternatives evaluated prior to the 2010 Supplemental Draft EIS. The 2004 Draft EIS included evaluation of the Surface Alternative. This alternative was eliminated because it reduced roadway capacity and didn't meet the project's purpose as identified in the 2004 Draft EIS.

I-099-003

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.

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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-099-004

Because there has been continued interest in a surface and transit hybrid option, the lead agencies evaluated the transportation effects of such an alternative in the 2010 Supplemental Draft EIS. Attachment A to the 2010 Supplemental Draft EIS and Final EIS Appendix W, Screening Reports, contain all the results from the transportation analysis for the surface and hybrid concept. One of the findings is that the surface and transit hybrid option would increase travel times for all but one trip modeled during the AM peak hour and for most trips during the PM peak hour as compared to proposed build alternatives. Chapter 2 of the Final

EIS describes the history of the project, environmental documentation, and alternatives development process.

I-099-005

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

I-099-006

Under the Bored Tunnel Alternative the function of the downtown ramps at Columbia and Seneca Street will be replaced by new ramps to Alaskan Way at King Street. Traffic analysis indicates that this arrangement will 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.

I-099-007

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

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-099-008

Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS discusses protection of historic buildings and districts. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

I-099-009

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). The Final EIS Chapter 1, Introduction, includes the Purpose and Need and Chapter 2, Alternatives Development, describes the history of the project and alternatives development.

The alternatives considered in the Final EIS, in addition to the Viaduct Closed (No Build Alternative), are a four-lane bored tunnel, a six-lane elevated structure, and six-lane cut-and-cover tunnel. The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would have severe adverse effects on Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provides a more in-depth comparison of tradeoffs for the alternatives.

The analyses regarding how tolls might be implemented as part of the proposed action are preliminary in nature and will be further refined should the state legislature authorize tolls on the SR 99 Bored Tunnel. The potential effects resulting from these preliminary analyses represent the upper end or worst case scenario of implementing tolls on the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from SDOT, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

As part of the Bored Tunnel project and related projects, WSDOT and

partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the city's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County and these strategies can form the blueprint for future strategies. FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Surface Alternative. As explained in the 2010 Supplemental Draft EIS and the Final EIS, the Surface Alternative does not meet the project's purpose and need to provide capacity to and through downtown Seattle. Because the project has evolved since comments were submitted in 2004 and 2006, please refer to the Final EIS for current information.

I-099-010

Over time, more than 90 potential replacement options have been assessed.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the

other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the three alternatives.

From: Jeff Long [jeffl@pcf.com]
Sent: Wednesday, December 08, 2010 4:35 PM
To: AWV SDEIS Comments
Subject: Alaskan Way Tunnel

Dear Sir or Madam,

I-100-001

This email is to encourage the imminent commencement of the Alaskan Way tunnel boring project. As a native Seattle-ite, I have seen in my lifetime our local political process become crippled. The problem? Lack of strong leadership.

In no area is this more profound than in the utter chaos that our traffic has become. City, county and state leaders have been unwilling to commit to what our region deserves. The result? Gridlock.

I wholeheartedly demand that the tunnel project begin now and that the process be conducted in the most expedient manner possible. Capital is inexpensive and citizenry needs work. More than that, we need to move through our city.

The "Seattle process" has become synonymous with "do nothing." Please correct that.

Sincerely, Jeffrey Long

--

Jeffrey Long
Pacific Coast Feather Company
(206) 336-2347

I-100-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: Helen [helenontheroad@gmail.com]
Sent: Saturday, November 06, 2010 2:11 PM
To: AWV SDEIS Comments
Subject: Public Comment: Alaskan Way Viaduct Replacement Project

I-101-001

As a resident of Seattle, I'd like to add my comment to the issue of a deep bore tunnel project to replace the Alaskan Way viaduct.

Having lived in West Seattle for 9 years, I fully appreciate the convenience and beautiful vistas offered by the current viaduct and my first reaction to the tunnel was despair at losing a viaduct I'd come to rely on, but **we must all think beyond on narrow and immediate self-interest and act for a greater and long-term good**.

It is with the intent to inspire the most inclusive and expansive thinking of our state's transportation officials that I offer **five reasons the tunnel is a NOT a good idea for Seattle:**

1. The tunnel won't have down town exits, making it useless for a great number of commuters
2. The tunnel will be tolled, prompting many motorists to avoid the cost of the tunnel and use toll-free surface streets instead, resulting in less income for the project and a whole lot of money spent for not as much traffic
3. Given our need to reduce carbon emissions to avoid more catastrophic climate change, a mega investment for carbon-emitting vehicles is not a wise or strategic use of our scarce resources
4. Seattle will almost certainly be saddled with cost overruns that could further devastate our economy
5. A mere 1 meter sea leavel increase anticipated from melting ice caps will put the tunnel underwater

I advocate that we put our collective money into building a carbon-neutral infrastructure that will actually help more of us and be a good investment in our future!

Sincerely,
Helen Lowe
Seattle WA

I-101-001

With the preferred Bored Tunnel and Cut-and-Cover Tunnel Alternatives, the southbound on-ramp at Columbia Street and the northbound off-ramp at Seneca Street will be removed. Traffic patterns are expected to alter slightly with removal of these ramps, and the Alaskan Way surface street is expected to carry additional traffic to and from the central business district. To provide similar capacity levels as currently exists today, six lanes of traffic on the Alaskan Way surface street are necessary south of Yesler Way. With the Elevated Structure Alternative, additional lanes proposed on portions of Alaskan Way are for the purpose of improving traffic circulation and flow, especially in the vicinity of Colman Dock. The Bored Tunnel Alternative does not include the Alaskan Way surface street as part of the project. Overall, it is expected that traffic that diverts to use surface streets and I-5 will distribute based on available capacity of these various roadways. At this time, there are no plans to substantially increase capacity along I-5 through the downtown core. Appendix C, Transportation Discipline Report, addresses traffic safety issues. Please refer to the Final EIS for current information.

The analyses regarding how tolls might be implemented as part of the proposed action are preliminary in nature and will be further refined should the state legislature authorize tolls on the SR 99 Bored Tunnel. The potential effects resulting from these preliminary analyses represent the upper end of implementing tolls on the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while

minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from SDOT, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the city's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County and these strategies can form the blueprint for future strategies.

Although costs are an important part of project planning and decision-making, they are purposely not a major part of the environmental review process. As provided in CFR 1502.23 "For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations." Overall project costs are included with the project description and are used for the analysis of economic impacts.

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.

From: Erik Macki [macki@seanet.com]
Sent: Tuesday, November 16, 2010 3:23 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: Public Feedback on the Deep-Bore Tunnel Project

Importance: High

Dear Mr. Hahn and WSDOT team,
Dear Mayor McGinn, dear Council Members Conlin, Bagshaw, Burgess, Clark, Godden, Licata, Harrell, O'Brien, and Rasmussen,

I-102-001

I am writing to provide feedback on the Deep-Bore Tunnel Project and the SDEIS as a part of the public comment period through December 13.

First as a general comment, I personally remain confused about the rationale of a project whose purpose is to ferry drivers from north of Seattle underneath Seattle to south of Seattle, considering that the current Alaskan Way Viaduct has no fewer than seven exits into downtown Seattle itself. It seems odd for Seattle to paying for a road whose purpose is to get drivers through, and not into, Seattle. The Mayor has communicated fairly cogent arguments to the public against the tunnel project, but the members of the City Council and certainly the state and WSDOT have not done so other than speak in platitudes and generalizations (not borne out by the new SDEIS, in fact, I might add). As a result, I would like to remind the City Council that their support of the project will haunt them at election time if Seattleites end up paying for its very likely cost overruns, if Pioneer Square is damaged, and particularly if downtown becomes swamped with 40,000 or more extra cars per day, as the SDEIS says it will.

I-102-002

My first comment on the SDEIS specifically is that the tunnel CANNOT destroy any structure in Pioneer Square. The value to future generations of an intact Pioneer Square far outweighs any transportation benefit from the tunnel project, and the SDEIS indicates that at least TWO important buildings (and others) are at risk of COLLAPSE from the Deep-Bore Tunnel Project, to say nothing of subgrade flooding and other issues thorughout downtown caused by the new tunnel structure. No responsible representative of the people of the City of Seattle who is at all mindful of our history and heritage can rightfully condone a project that so directly endangers a cornerstone of our history. Once news of these impacts to Pioneer Square become more widely known, the furor will be deafening. Why not avoid the furor in advance by sufficiently addressing this issue in advance?

I-102-001

Chapter 1, Introduction, of the Final EIS describes the Purpose and Need for the project and one of several purposes is to provide capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle. All of the alternatives have been evaluated based on their ability to meet the Purpose and Need. Appendix C, Transportation Discipline Report, addresses the importance of the viaduct as a transportation corridor. It also covers issues related to capacity, local access, mobility, and transit service for each build alternative. Please refer to the Final EIS for current information.

I-102-002

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be

I-102-003

My second comment on the SDEIS is that the project must provide ACTUAL ACCESS TO THE CITY OF SEATTLE and not merely bypass Seattle. As currently planned, the Deep-Bore Tunnel Project does not even remotely do this, either by means of actual downtown exits or by means of improved public transit into and out of downtown. In fact, the existing plan merely shifts 40,000 cars onto downtown streets, which--if you really think about it--obviates any need for the tunnel in the first place. The current plan is shockingly myopic and not tenable as a transportation improvement project.

I-102-004

My last comment on the SDEIS is that no one has yet shown how to pay for the VERY LIKELY cost overruns. For instance, if damage is incurred to Pioneer Square, how will the repair of Pioneer Square be paid for? If the seawall caves in, how will the damage to downtown Seattle be paid for? If 40,000 extra cars are driving on Seattle's streets downtown, how will the added costs for maintenance and upkeep and traffic mitigation be paid for?

The SDEIS underscores how poorly thought-through the Deep-Bore Tunnel Project is, how poorly funded it is, and how damaging to Pioneer Square it will be. It's hard for me grasp why anyone, after reading the SDEIS, can think the tunnel project in its current form remains a good idea. The project needs serious and fundamental rethinking to address these three issues.

Sincerely,

-Erik Macki
1516 NE 98th St., Seattle, WA 98115

done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural, and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

I-102-003

With the Bored Tunnel, access to downtown would be provided via ramps located at Alaskan Way and Dearborn Street in the Stadium area. Traffic using the Stadium area ramps would disperse over several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues to access downtown. 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.

Updated analysis has been included in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis.

I-102-004

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 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.

From: Molly Magai [mollymagai@gmail.com]
Sent: Monday, December 13, 2010 10:00 AM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: Tunnel comment

I-103-001

Hi folks - I'd just like to let you know that although the tunnel seems to be going forward, I'd really like it if it would stop. We have a lot of valuable older buildings downtown that are going to be damaged or destroyed. In particular the arts community in Pioneer Square will be decimated. This might move the arts out of Pioneer Square for good.

I also think this is a project we can't afford.

--
Molly Magai
http://mollymagai.com
http://sparkoid.com

I-103-001

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the

alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural, and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

From: bill maguire [wpmgroup@cablespeed.com]
Sent: Tuesday, November 30, 2010 10:21 PM
To: AWV SDEIS Comments
Subject: Question

I-104-001 | How and what entity is paying for the viaduct.

Bill Maguire

I-104-001

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 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.

From: Thomas Marshall [tomasaurus@gmail.com]
Sent: Tuesday, November 16, 2010 2:25 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: Hwy 99 viaduct tunnel EIS feedback

Dear WSDOT, Mayor and City Council,

I-105-001 I'm really concerned when I see the Hwy 99 tunnel replacing the viaduct will place 50,0000 vehicles into Pioneer Square. Those drivers are avoiding the toll or just trying to get to work downtown. Either way the tunnel project needs to accommodate this by adding another downtown exit or other mitigation for Pioneer Square's streets.

I-105-002 It's also troubling that public transit isn't a part of this project. I would think as we approach peak oil that any huge transportation project should plan for more public transit. They way people commute will change as single-driver cars become more expensive to run.

I-105-003 I also think that since we'll have a few years without the viaduct or tunnel as the viaduct comes down and the tunnel is dug perhaps we try the surface street option during those years and then reconsider whether the tunnel is worth the cost and risk to historic buildings.

Sincerely,
Thomas Marshall
Columbia City, Seattle

I-105-001

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.

Because operational effects of the built alternative would be substantially better than the Viaduct Closed (No Build Alternative), long-term transportation mitigation measures are not anticipated. However, a number of mitigation measures in place during construction could have benefits over the longer term. Refer to Chapter 8 Mitigation in the Final EIS for details.

Updated analysis has been included in the Final EIS. A detailed tolling analysis has been conducted and is described in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts.

I-105-002

The project includes elements that support public transit. These elements include transit speed and reliability improvements that would be available during and after project construction. In the south area, there would be a bus-only lane in the northbound SR 99 off-ramp. In the north area bus-only lanes would be provided on Aurora Avenue that will support transit operations in the South Lake Union area.

I-105-003

With the Bored Tunnel Alternative, the viaduct would remain in operation while the bored tunnel is constructed. There would be a closure of SR 99 for several weeks to connect the bored tunnel with SR 99 at the surface, but that would be the only closure associated with this alternative.

Chapter 2, Alternatives Development, of the Final EIS describes the project's history and alternatives evaluated prior to the 2010

Supplemental Draft EIS. The 2004 Draft EIS included evaluation of the Surface Alternative. This alternative was eliminated because it reduced roadway capacity and didn't meet the project's purpose as identified in the 2004 Draft EIS.

From: Cedar McKay [cedar@aliandcedar.com]
Sent: Tuesday, November 16, 2010 2:52 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: Tunnel

I-106-001

I live, vote, and pay taxes in Seattle.

Seattle must not be held responsible for tunnel cost overruns! This tunnel is essentially a Seattle bypass, and does little to help Seattle. Seattle shouldn't pay for something that benefits those who explicitly want to bypass our city! Not a single downtown exit, even!

Even better, scrap the whole tunnel idea, use some of the money we save to improve surface transit and public transportation, and save the rest! A tunnel is expensive, unnecessary, and fiscally risky. We can do better.

best,
John McKay
Seattle

I-106-001

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 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.

The Bored Tunnel Alternative would not bypass Seattle. This alternative would have ramps in the Stadium area that would provide access to the downtown business core; 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. Also with this alternative, Alaskan Way would be reconfigured as part of a separate project led by the City of Seattle. This project would result in different access opportunities to downtown.

The lead agencies analyzed the transportation effects of a surface and transit hybrid option to confirm the rationale for screening this option out for further analysis. The results of this analysis are summarized in Chapter 3 of the 2010 Supplemental Draft EIS. One finding indicates that travel times would increase for all but one trip modeled during the AM peak hour and for most trips during the PM peak hour. The evaluation of the Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS.

From: Rainer Metzger [rmetro@gmail.com]
Sent: Monday, December 13, 2010 4:28 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-107-001 It is very concerning that the EIS study does not include the effects of tolling the tunnel. A full and complete study of the traffic effects on downtown streets resulting from tolling must be done. The state must also address the added traffic to downtown streets by providing funding for environmentally responsible solutions.

I-107-001

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

From: Scott Meyer [edgeplot@gmail.com]
Sent: Monday, December 13, 2010 2:58 PM
To: AWV SDEIS Comments
Subject: Deep Bore Tunnel EIS Comment

To Whom It May Concern,

I-108-001

I would like to express that I do not support the deep bore tunnel as a valid replacement for the Alaska Way Viaduct. The focus of the tunnel is entirely too car-oriented and is not in keeping with state, county or city goals of sustainability, urbanism, and modern transit solutions. It is clear from the EIS - and equally clear from information lacking in the EIS - that the deep bore tunnel is risky to construct and could compromise buildings in downtown Seattle and in particular in Pioneer Square. The tunnel lacks transit options and connections to downtown, which is ridiculous: the main purpose of any such road under a major city should clearly be to connect people to the city, and not to bypass the city where all the jobs and shopping are located. Furthermore, the portals are simply too big and will destroy the function and character of the neighborhoods where they would be constructed. Perhaps most importantly, the impositions of fees to use the tunnel will force half or more of the intended tunnel onto downtown surface streets instead, which will defeat the need for the tunnel in the first place and will actually make regional traffic worse instead of better. For these reasons and more I cannot and will not support the deep bore tunnel.

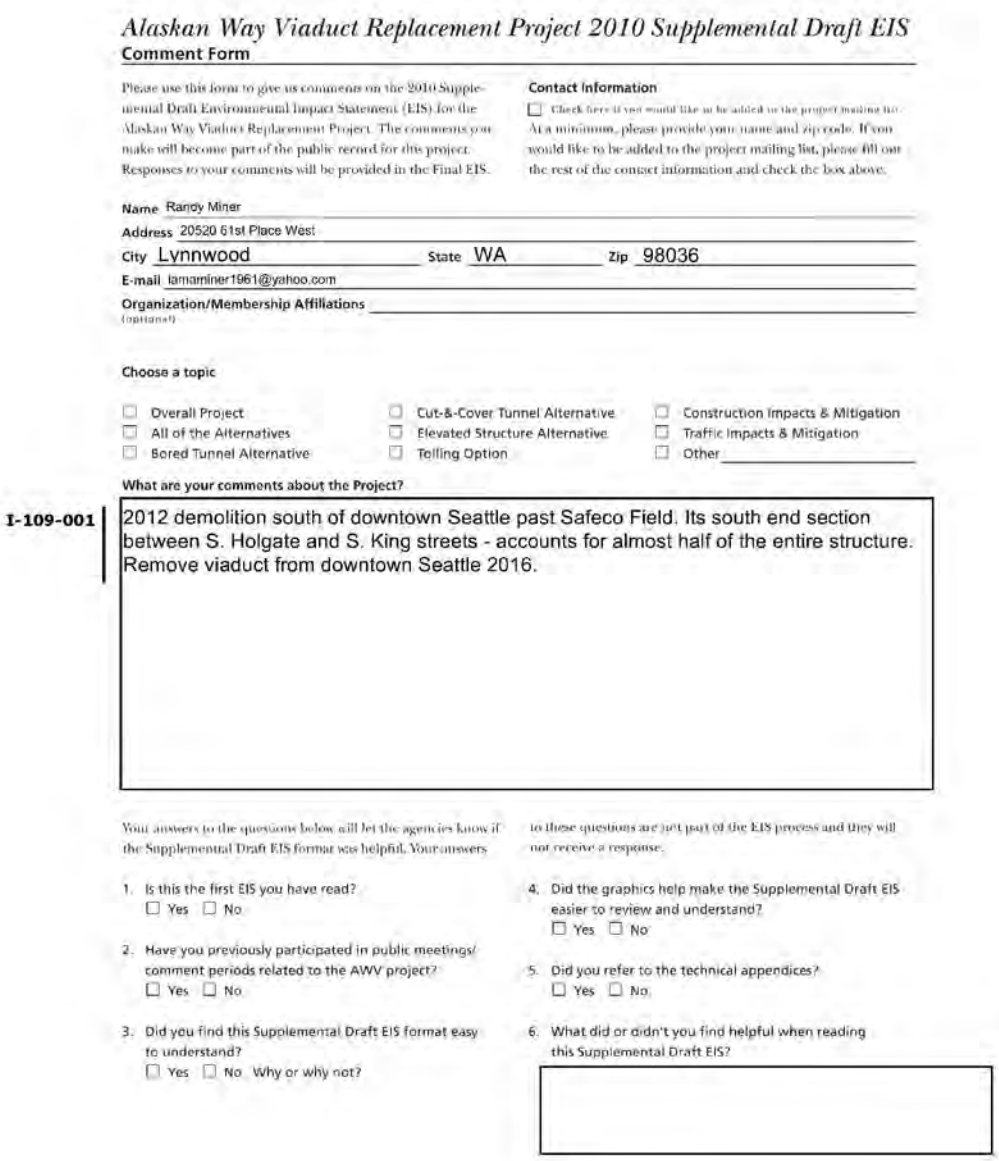
Sincerely,

Scott Meyer
206-355-1122

I-108-001

The Final EIS Chapter 1, Introduction, describes the Purpose and Need for the project and one of several purposes is to provide capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle. All of the alternatives have been evaluated based on their ability to meet the Purpose and Need. Appendix C, Transportation Discipline Report, addresses the importance of the viaduct as a transportation corridor. It also covers issues related to capacity, local access, mobility, and transit service for each build alternative. Please refer to the Final EIS for current information.

The buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes the monitoring of potentially affected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties. The potentially affected buildings that have been identified for monitoring and the monitoring plan are discussed in Chapter 6 of Final EIS Appendix I, Historic, Cultural and Archaeological Discipline Report.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS
Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list. At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Randy Miner
Address 20520 61st Place West
City Lynnwood State WA Zip 98036
E-mail lamaminer1961@yahoo.com
Organization/Membership Affiliations (optional)

Choose a topic

☐ Overall Project
☐ All of the Alternatives
☐ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

What are your comments about the Project?

I-109-001

2012 demolition south of downtown Seattle past Safeco Field. Its south end section between S. Holgate and S. King streets - accounts for almost half of the entire structure. Remove viaduct from downtown Seattle 2016.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read? ☐ Yes ☐ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project? ☐ Yes ☐ No
3. Did you find this Supplemental Draft EIS format easy to understand? ☐ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand? ☐ Yes ☐ No
5. Did you refer to the technical appendices? ☐ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-109-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: John Mollman [john.mollman@hotmail.com]
Sent: Monday, December 13, 2010 3:02 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-110-001

If the entire analysis in this EIS is predicated on there being no tolling on the new roadway while such tolling is required to pay for the project how does the state expect the public to have any confidence whatsoever in their ability to plan or manage the tunnel project? What credibility those who are pushing the tunnel project had has been lost by this blatant shell game.

Any legitimate EIS and the analysis behind it need to be based on the real financial, environmental, and political conditions under which the project will be undertaken. To do otherwise makes a mockery of the entire project.

John Mollman
220 N 57th St.
Seattle, WA
98103

I-110-001

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

From: jordan west monez [jordanwestmonez@gmail.com]
Sent: Monday, December 13, 2010 11:35 PM
To: AWV SDEIS Comments
Subject: Do not build a bored tunnel

I-111-001

To whom it may concern,
The replacement of the failing Viaduct with a tunnel is too shortsighted and too expensive for Seattle to invest in. This ridiculous idea of yet again drastically changing the city waterfront, while putting in a high-cost, high-risk system that will not have the capacity that the Viduct currently does, that does not invest in future technologies like rail, is a mistake and should be seen as one by those in charge of our city funds. Even if Washington did get behind this project, which it looks like won't happen, it should still be looked at as an overpriced and unnecessary investment in our infrastructure. If "most of the trips" on 99 will go to other routes, why do we need the bored tunnel in the first place?

As a citizen of Seattle, I do not want to allow the tunnel option to go through, and think that more forward-thinking solutions should be found for the transportation problem on the waterfront. Thank you for your time and consideration.

Sincerely,

Jordan Monez
Seattle, WA
December 2010

I-111-001

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the alternatives.

From: Brian Moss [brian.mft@earthlink.net]
Sent: Wednesday, November 17, 2010 1:06 PM
To: AWV SDEIS Comments; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov; mike.obrien@seattle.gov; tom.rasmussen@seattle.gov
Subject: NO ON TUNNEL

I-112-001

Portland completely removed their highway running through downtown next to the river. Experts predicted doom and chaos. Now people go to study Portland for its wisdom and progressive planning/design. NO TUNNEL. NO HIGHWAY of any kind; instead effective mass transit. Too much to hope for I'm afraid.

Brian

I-112-001

Chapter 2, Alternatives Development, of the Final EIS describes how the project began and the alternatives development process, which included key decision points and public involvement. Please refer to the Final EIS for current information.

From: Eva Nachmanson [enachmanson@gmail.com]
Sent: Monday, December 13, 2010 3:41 PM
To: AWV SDEIS Comments
Subject: The Supplemental Draft Environmental Impact Statement (EIS) for the SR 99 bored tunnel

Dear WSDOT,

I-113-001
I-113-002

This comment is to express my oppisition to the proposed SR99 broed tunnel. While there are many arguments against it, I will suffice to say that there does not appear to have been enough evaluation of traffic impacts with a tolled tunnel and the impacts on other surface streets. I am also very worried about potential cost overruns and delays - I would encourage you to look at this tunnel in Sweden for example: http://en.wikipedia.org/wiki/Hallands%C3%A5s_Tunnel. Construction started in 1992, and is now expected to be finished in 2015 with cost overruns 10 times the intitial expected cost. While the SR99 project is obviously very different, I think the Hallandsas project should be a warning when planning to drill through any area with difficult unstable soil conditions such as in Seattle.

For addditional comments, I concur with the comments you have received from the "People's Waterfront Coalition" and encourage you to consider them and other comments against the project.

Plese feel free to contact me if you have further questions about this comment.

Best Regards

Eva Nachmanson
6701 1st Ave NW
Seattle, WA 98117

I-113-001

A detailed tolling analysis has been conducted and is described in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts.

I-113-002

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

Comments from the People's Waterfront Coalition have been received and responded to in this Final EIS.

From: Neha Nariya [neha@SEATTLEPACIFICHOTEL.COM]
Sent: Tuesday, December 14, 2010 12:08 AM
To: AWV SDEIS Comments
Subject: Comments on Seawall Replacement Construction

Hello,

I-114-001

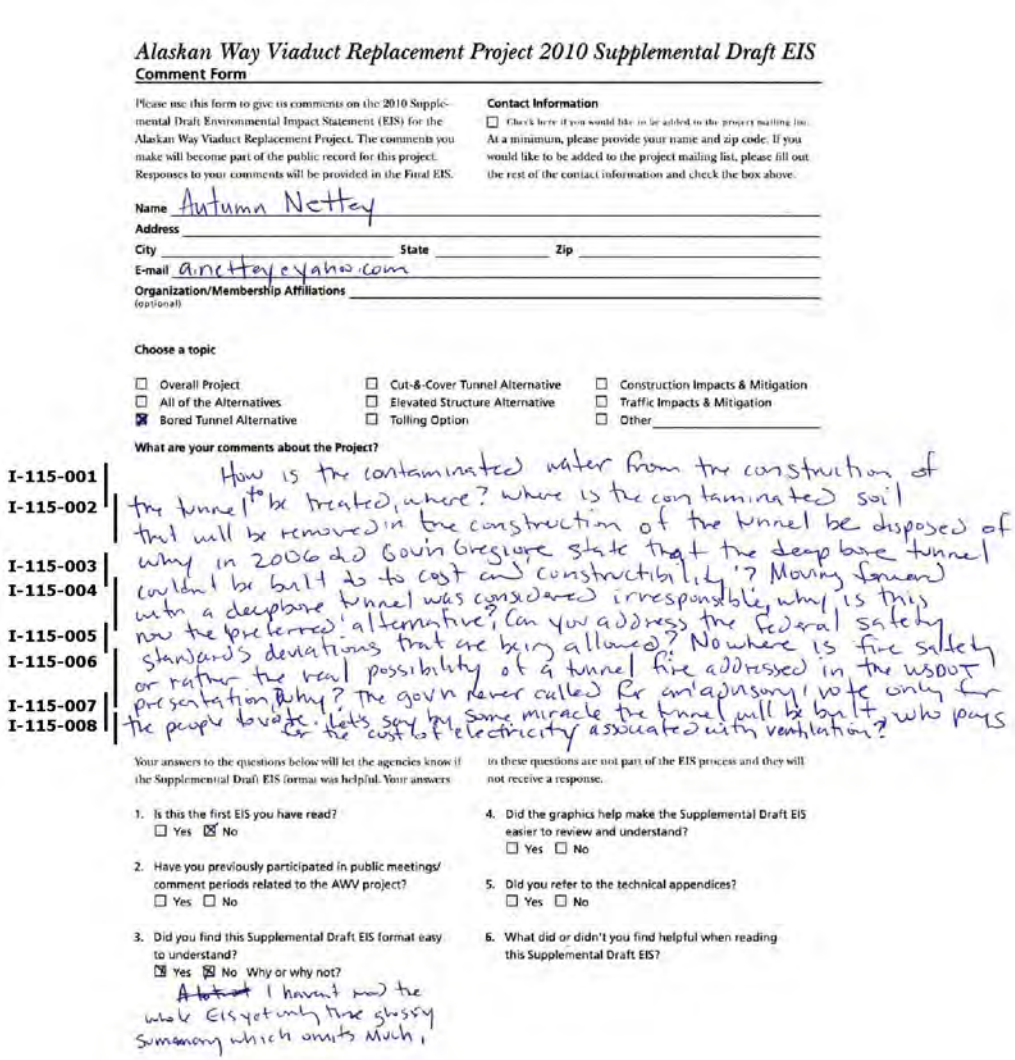
My name is Neha Nariya and I would like to make a comment about the current construction work proposal for the Seawall Viaduct Replacement on the North side of the tunnel. Due to the construction project's location, access to local businesses on 6th Ave and Aurora will be limited, causing business activity in the area to suffer greatly. As the project currently stands, the closure of Broad street has already eliminated access to our businesses and business has clearly declined as a result. We would like to request that some sort of stop light is implemented on Aurora to turn left either on Harrison Street or Thomas Street from Northbound Aurora. The safety issues arising from implementing the requested stop sign can be circumvented by installing up the appropriate signs in the current tunnel and on ramps from Denny. If a light is introduced at either of those intersections, it will also help to not only maintain access to our businesses, but also begin to put that area of Seattle on a continuous grid. Doing so will acclimate people to the part of Aurora becoming a local city road after the contruction is finished. If a stop light is not put in our block, business will suffer greatly during the 5 year construction period. We are local family owned business that is trying to run a successful business and also help create revenue base for the Seattle economy in terms of sales tax and jobs. If we become isolated by the construction as we will without a stop light at one of those intersections, we will inevitably have to lay off employees as we will not get enough exposure nor have the access that our guests would need to sustain our current level of business activity. In addition to our request for a stop light we would also like to ask that the alleyways be clear of all construction between Harrison and Thomas on the blocks between 6th Avenue and Aurora Ave N.

Thank you,
Neha Nariya

I-114-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. As the project progresses, more localized mitigation measures will be developed as construction details are refined. Some localized mitigation measures might include construction of temporary traffic signals. A traffic management plan will be prepared to ensure that construction effects on local streets, property owners, and businesses are minimized. Temporary access limitations and any required changes to access during construction will be mitigated to the extent practicable and in conjunction with the affected businesses and residents.

If built, the Bored Tunnel Alternative at the north portal includes a signalized intersection at Aurora Avenue and Harrison Street, as requested in this comment.



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Contact Information

☐ Check here if you would like to be added to the project mailing list.
At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Autumn Nettey
Address
City State Zip
E-mail a.nettey@yahoo.com
Organization/Membership Affiliations (optional)

Choose a topic

☐ Overall Project
☐ All of the Alternatives
☒ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

What are your comments about the Project?

I-115-001, I-115-002: How is the contaminated water from the construction of the tunnel to be treated, where? Where is the contaminated soil that will be removed in the construction of the tunnel be disposed of
I-115-003, I-115-004: why in 2006 did Govn Gregoire state that the deep bore tunnel couldn't be built to to cost and constructibility? Moving forward with a deepbore tunnel was considered irresponsible, why is this now the preferred alternative, Can you address the federal safety
I-115-005, I-115-006: standards deviations that are being allowed? Nowhere is fire safety or rather the real possibility of a tunnel fire addressed in the WSDOT
I-115-007: presentation. Why? The govn never called for an advisory vote only for
I-115-008: the people to vote. Lets say by some miracle the tunnel will be built, who pays for the cost of electricity associated with ventilation?

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
☐ Yes ☒ No

2. Have you previously participated in public meetings/ comment periods related to the AWV project?
☐ Yes ☐ No

3. Did you find this Supplemental Draft EIS format easy to understand?
☒ Yes ☒ No Why or why not?
~~A total~~ I haven't read the whole EIS yet only the glossy Summary which omits Much,

4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
☐ Yes ☐ No

5. Did you refer to the technical appendices?
☐ Yes ☐ No

6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-115-001

The Final EIS discusses the handling, treatment (as applicable), and discharge of surface water from the construction of the tunnel in Appendix O, Surface Water Discipline Report, Chapter 6. Additional information regarding the handling of potentially contaminated material is presented in Appendix Q, Hazardous Material Discipline Report. In general, any water discharged to surface conveyances will need to comply with applicable Ecology NPDES, King County, City of Seattle, and Port of Seattle permit requirements.

I-115-002

As discussed in Section 6.8 of Final EIS Appendix Q, Hazardous Materials Discipline Report, water quality treatment for shallow dewatering could consist of storing the water to allow particles to settle or reducing suspended particles by adding chemical flocculants (i.e., chemicals that promote flocculation by causing colloids and other suspended particles in liquids to clump together into a mass, called a floc). Groundwater containing contaminants at concentrations greater than the MTCA Method A cleanup levels could also be treated to meet the requirements for local discharge, depending on the contaminants and their concentrations. Local discharge after treatment could include (1) reinjection into the aquifer, (2) discharge to surface water, (3) discharge to a publicly owned treatment works (POTW), or (4) off-site disposal at a private TSD facility. Dewatering water that is reinjected would conform to Washington's Water Quality Standards for Groundwater.

Spoils handling and disposal is also discussed in Section 6.8. Potential disposal options depend upon type and level of contamination. Options include reuse, for soils with concentrations less that MTCA method A cleanup levels, land reclamation facilities (in accordance with the facility's permit requirements), Resource Conservation and Recovery Act (RCRA) Subtitle D landfills, and RCRA Subtitle C landfills. Potential

effects from spoils management would be mitigated by developing and implementing construction plans that address contaminated media and pollution prevention, logistical planning, and establishing budget that reflects the costs for managing and disposing of contaminated media.

I-115-003
Chapter 2 of this Final EIS describes the development of the Bored Tunnel Alternative.

I-115-004
The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the alternatives.

I-115-005
All design and safety standards deviations proposed for this project are contained in the Design Approval Package that was prepared by the project team and approved by WSDOT and the Federal Highway Administration (FHWA). It is not uncommon for large projects located in highly urbanized areas to propose deviations.

I-115-006
The potential effect of a tunnel fire is discussed in Final EIS Appendix K, Public Services and Utilities.

I-115-007

In December 2006, Governor Gregoire called for an advisory vote for Seattle residents. The Seattle City Council responded by authorizing a vote and placing the Elevated Structure Alternative and a Surface-Tunnel Hybrid Alternative on the ballot. On March 13, 2007, the citizens of Seattle voted down both alternatives.

I-115-008

Additional energy use due to tunnel ventilation is discussed in Final EIS Appendix R, Energy.

From: Joshua Newman [joshua@oreza.org]
Sent: Monday, December 13, 2010 10:38 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

Dear Angela Freudenstein,

I-116-001 Thank you for proving that the tunnel is an expensive, inappropriate, and poor solution to the problem of the Alaska Way Viaduct. Your analysis shows that dollars to people moved, Washington State would be hard pressed to find a more expensive solution, or one that forces roughly 50,000 cars a day onto the surface streets of downtown, without providing any mitigation for those cars.

Stop advancing the Deep Bore Tunnel now, the state nor the city can afford it. Look to the Surface/I-5/Transit solution WSDOT and SDOT have already created.

Thank you,
Joshua Newman
Seattle, WA
206-963-2397

--
Never laugh at live dragons.
-- B. Baggins

I-116-001

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 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.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would have severe adverse effects on Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provides a more in-depth comparison of tradeoffs for the three alternatives. Appendix C, Transportation Discipline Report, addresses traffic impacts including congestion on surface streets downtown. Please refer to the Final EIS for current information.

Chapter 2, Alternatives Development, of the Final EIS describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS, which included the I-5, Surface, and Transit Hybrid. This approach was seriously considered, but was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region. WSDOT conducted further analysis as documented in the Surface and Transit Scenario Year 2030 Analysis Results, which is included in Appendix W, Screening

Reports, of the Final EIS.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support that it has received from diverse interests.

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.

John Niles
4005 20th Ave West, Suite 111
Seattle, Washington 98199

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.

From: Atara Noiade [drnoiade@yahoo.com]
Sent: Friday, December 10, 2010 12:20 PM
To: AWV SDEIS Comments
Subject: ferry commuter access to 1st Ave

I-118-001

Congratulations on moving forward on the viaduct! In your design, please consider the current convenience of ferry pedestrian commuter access to 1st Ave via the walking bridge which is directly over Marion at Alaska and Western from the Bainbridge ferry terminal. If possible please work around this access. Thank you for your consideration, Atara Noiade, Bainbridge Island

I-118-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. During construction demolition of the existing Alaskan Way Viaduct would eliminate the pedestrian overpass that currently connects Colman Dock to First Avenue. Until an alternate structure is constructed (as part of the project), pedestrians would need to cross at the street level.

From: orrshouse@aol.com
Sent: Wednesday, December 01, 2010 12:43 PM
To: AWV SDEIS Comments
Subject: Viaduct Replacement

I-119-001 After observing traffic yesterday morning at bout 9:30 am moving slowly northbound along the viaduct and being completely jammed eastbound on the West Seattle Bridge, I am more convinced than ever that a tunnel with less capacity than the viaduct currently carrys is a terrible option.

I-119-002 Further, the removal of northbound egress for lower Queen Anne, Magnolia and west Ballard residents inherent in the tunnel design is only going to worsen congestion on surface streets for those who now exit on the Western Avenue ramp heading for those destinations.

What are you traffic engineers thinking?

Stan Orr
Magnolia resident
(206) 284-1793

I-119-001

The evaluation of the effects of changes in the lane configuration, access points, and alignment of SR 99, traffic volumes were analyzed throughout the transportation system located in the study area. The analysis captured combined traffic volumes on I-5, SR 99 and local streets at specific locations called screenlines. For all screenlines assessed for the Supplmental Draft EIS, the 2015 Existing Viaduct and the 2015 Bored Tunnel carry about the same amount of traffic, which demonstrates that the Bored Tunnel Alternative would accomodate a similar number of vehicles compared to the viaduct even though the lane configuration and access points would change.

Please see the Final EIS, Chapter 5 Appendix C, Transportation Discipline Report for updated transportation analysis.

I-119-002

The analysis shows that the removal of the mid-town and Western Avenue ramps in general would maintain or slightly improve the intersection traffic operations as compared to the 2015 Existing Viaduct. 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 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.

Updated analysis has been included in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis.

From: Robert Ortblad [r.ortblad@comcast.net]
Sent: Monday, November 22, 2010 1:28 PM
To: AWV SDEIS Comments
Cc: Rubstello, Patty; Howard, Charlie; Bandy, Mark; Paananen, Ron; Everett, Randolph (FHWA); marquardtn@soundtransit.org
Subject: 2010 SDEIS Comment-Supplemental Draft Environmental Impact Statement

COMMENTS

Alaskan Way Viaduct Replacement Project

Supplemental Draft Environmental Impact Statement

I-120-001

Bored Tunnel Toll - a better alternative

By 2015 Seattles hourglass geography will funnel about 400,000 cars north or south on ether SR99 or I-5. A proposed $2 toll on SR99 will divert up to 50% or 45,000 cars from SR99 to I-5 or worse to downtown surface streets. This would cause a traffic nightmare on I-5 and downtown.

A simple solution to avoid this traffic nightmare is to completely eliminate the diversion incentive by placing a balancing toll on I-5. A modest exit toll to downtown Seattle of $.50 on both SR99 and I-5 would raise more revenue than a $2 average toll on only SR99, be more equitable, and avoid major diversion problems.

An exit only toll is an equitable solution that allowed drivers to pass through the Seattle on SR99 and I-5 for free, and charges only drivers that exist to downtown. This would help the mobility intent of the interstate highway and provide the City of Seattle with the ability to manage downtown congestion.

Gateway/exit reads north of Mercer St. and south of Yesler St. on both SR99 and I-5 would be required. Four gateway readers would charge the toll, and four exit readers, and a little software would credit through traffic. Cars existing the city would not be charged.

A $.50 toll to enter Seattles downtown is less than the cost of eight minutes of parking. London currently charges $15 to enter its city center, San Francisco is proposing $6, and New York is proposing $8.

Thanks for the chance to comment,

Bob Ortblad, P.E.
1905 15th Ave East
Seattle, WA 98112

I-120-001

At this time, WSDOT does not have the authority from the state legislature to impose tolls on SR 99 or I-5. If the legislature grants this authority, WSDOT, along with other agencies, will work to optimize the bored tunnel's toll configuration in order to minimize diversion to city streets while maintaining efficient traffic flow on SR 99 and generating revenue. It is possible that exit tolls are part of the strategy yet to be developed. The Final EIS assumes the implementation of a specific tolling strategy for the sake of effects analysis and to test the revenue-generating capacity of a tolled facility. A Tolling Advisory Committee (TAC) will develop strategies to optimize tolling and is expected to provide initial recommendations in 2012. See Chapter 8, Mitigation, in the Final EIS for more information about the work of the TAC.

From: Donald F Padelford [dfp07@dfpnet.net]
Sent: Sunday, December 12, 2010 6:03 PM
To: AWV SDEIS Comments
Cc: dfpSeattle@gmail.com
Subject: 2010 SDEIS Comment

I-121-001 I don't pretend to have made a thorough study of the proposed SR99 viaduct (and Battery Street Tunnel) deep-bore replacement tunnel, but I do have some comments.

First, I am generally in favor of the project as planned.

Second, a bit of analysis. Starting from the south (SoDo), extending along the central waterfront (existing viaduct), through the existing Battery Street Tunnel (BST), and then north starting at approximately the Seattle Center, the current highway has 3, 3, 2 and 3 lanes (each direction), with a number of exists and entrances in the central city. The proposed replacement tunnel will have 3, 2, 2, and 3 lanes, with no exits or entrances in the central city. Therefore the proposed highway will lose 1 lane each direction and all exits/entrances in the central city.

Third, the project as originally presented to the public retained the BST, presumably connected to Alaska Way in the central city. If the BST were reduced to 1 lane each direction, then this would provide lanes in the following configuration 3, 3 (1 surface along Alaska Way, 2 deep-bore), 3 (2 deep bore, 1 BST), 3, or 3, 3, 3, and 3.

I-121-002 Given various tolling options it is unclear to me whether the deep bore tunnel will carry the same number of vehicles as the BST. This, combined with other factors, makes the congestion/mobility effects of the proposal unclear, although some capacity will certainly be lost.

I-121-003 What is clear is that it would be wise to retain the possibility to use the BST if, once all these effects shake out, it proves desirable. Thus my comment and recommendation is to keep that option open for possible future use of the BST, and to design the project that possible future

I-121-001
FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

Please see the Final EIS, Appendix C, Section 5.4 for detailed description of roadway connectivity and access for the three build alternatives carried forward, the Bored Tunnel (Preferred Alternative), the Cut-and-Cover Tunnel Alternative and the Elevated Structure Alternative, including detailed descriptions of new ramps connections, number of through lanes and access to the Battery Street Tunnel.

I-121-002
Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

The Bored Tunnel Alternative has been designed with 2 lanes in each direction in the tunnel section and would provide sufficient capacity to efficiently move people and goods to and through downtown Seattle.

I-121-003
If the Bored Tunnel Alternative is selected, the Battery Street Tunnel would be decommissioned because the alignment of the bored tunnel is different than the current Alaskan Way Viaduct alignment. If retained, the Battery Street Tunnel would not have anything to connect to on its south end since the old viaduct would be removed.

If either the Cut-and-Cover Tunnel Alternative or Elevated Structure Alternative is selected, the Battery Street Tunnel would be retrofitted for

I-121-003 implementation in mind, so as to avoid the extraordinary cost of future retrofitting. I think everyone would agree that keeping the right of way of the Interurban in place would have been highly desirable had we had the foresight to have done this.

Donald F Padelford
POB 2846
Seattle, WA 98111
206-262-1155

improved seismic safety and upgraded with safety improvements, such as a new fire suppression system.

From: Susan Parker [sf.parker@earthlink.net]
Sent: Thursday, December 02, 2010 9:05 AM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-122-001
I-122-002
I-122-003

In the first place, we, the people were not given a vote on replacing the viaduct. However several unofficial votes indicate that the majority of us would prefer a viaduct replacement. Instead we are getting a costly tunnel which does not even handle the number of vehicles which use the viaduct at this time. It will not provide access to downtown, and it will be tolled, so will cost more to use. Not having the elevated road will however increase the property values of the waterside condo's and the developers who build and manage them. The rest of us will be stuck with traffic jams and/or paying to go through a tunnel with possible traffic jams.

Personally, I will never use the tunnel and I resent having to pay for it.

Susan Parker M.A
sf.parker@earthlink.net

"The Future Depends on What we do in the Present" Mahatma Gandhi

All Creatures Great and Small click to give free food www.thecanimalrescuesite.com

I-122-001

In 2007 an advisory vote was held in Seattle, calling for an up-down vote on a cut-and-cover tunnel and an elevated structure to replace the viaduct. Both received a majority "no" vote. In 2008 WSDOT, King County and the City of Seattle assembled a Stakeholder Advisory Committee of almost 30 people, representing neighborhoods, business and freight interests, labor groups, and environmental and other cause-driven organizations, to review options for the Alaskan Way Viaduct's central waterfront section. As we initially evaluated surface and elevated options, many of the stakeholders expressed concerns about how such options would affect the waterfront as a place for people and maintain mobility in and through downtown both during and after construction. The proposed bored tunnel was seen by many as the solution that would best balance all of these goals. In 2009, following this process, the Governor, then-King County Executive, then-Seattle Mayor and Port of Seattle CEO recommended the bored tunnel as the replacement.

I-122-002

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. The capacity north and south of the Bored Tunnel portals is similar to the Existing Viaduct's capacity in those same locations and the Bored Tunnel provides greater capacity than the existing Battery Street Tunnel.

Updated analysis has been included in the Final EIS. A detailed tolling analysis has been conducted and is described in the Final EIS. Please refer to Chapter 7 of Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts.

I-122-003

Any enhancement in property values that may occur would take place

after the construction period. And because construction would be completed several years in the future, it is difficult to predict events and condition at that time. Economic conditions are often one of the strongest influences on market values, and these conditions may vary greatly from one year to another. If for example, the Seattle area economy continues to decline substantially as the viaduct is being replaced, completion of the project would likely have less immediate influence on the price of real estate. Because of all the considerations that go into the valuation of property, the EIS does not speculate on how the project might influence the value of land or buildings in the area.

Nov 17, 2010

EIS comments from Richard Pauli Seattle November, 2010

I-123-001

Summary Conclusion:

This 2nd draft EIS statement is not properly derived from any baseline definition of our dynamically changing environment.
The final EIS should address environment change, the rate of change, the risk to considering the climate models and the timeline of change plotted against the lifetime of the project.

The entire Bored Tunnel project is at risk of being terribly embarrassed by missing science.
The Bored Tunnel EIS draft failed to define existing conditions for the environment. A crucial missing element. Also missing is:

- current reference to recent climate change research - 2007 IPCC is outdated.
- current references to recent science on projected sea level rise to the year 2100.
- citations to current science - such as the UW Climate Impacts group
- no statement of the duration of the life of the tunnel (100 or 200 years?)

Totally missing from this EIS is any statement of how the environment will impact the project.

========== ==========

I am shocked and dismayed to see crucial considerations missing from the EIS statement for the Bored Tunnel. This EIS is unsatisfactory from the start. To start my concerns are over the very definition of environment seems to be missing from the document. Our regional environment is no longer as stable as it once was.

Significant changes in environment now and to come will further redefine the existing conditions that make up the current environment to such a high degree that environment can only be defined dynamically. Your process questions as posed by the WAC 197-11-96 Environmental checklist and other documents all incorrectly presume the environment is not changing. And the predicted effects are falsely predicated on a stable environment.

The first two sentences of your EIS release to the Web page states:

Environmental analysis is conducted and Environmental Impact Statements (EIS) are published in accordance with the National and State Environmental Policy Acts (NEPA and SEPA), so the public and decision-makers have sufficient information to make an

I-123-001

Regarding the comments related to adequate NEPA analysis, WSDOT concurs that vulnerability due to climate change is an important consideration during the NEPA process. WSDOT has developed project-level guidance which was issued in 2009 and revised in October 2010. WSDOT's internal guidance which is posted online at: http://www.wsdot.wa.gov/Environment/Air/Energy.htm.

Our staff actively participates in state and federal working groups to stay current with emerging issues. As a result, WSDOT's guidance document represents the current state of the practice, which is subject to frequent changes as new tools, legislation, and scientific understanding evolve. WSDOT is committed to answering questions about greenhouse gas emissions and climate impacts of our proposed projects as part of our compliance with the NEPA and SEPA. At the project-level, our work focuses on two main topics:

- Evaluating emissions related to our proposed projects, and
- Assessing the projects' vulnerability to changes in climate forecasted for the Pacific Northwest.

The Final EIS contains updated information on climate change projections for the region and how they were considered.

As the commenter recommended, WSDOT relies on information provided by Climate Impacts Group at the University of Washington. In addition to our project-level analysis, WSDOT is working with other state agencies to develop the state's climate response strategy. See details online at: http://www.ecy.wa.gov/climatechange/adaptation.htm.

The project design staff has considered available climate change information and has updated the analysis in the Final EIS.

I-123-001

informed decision about a project. This is a methodical process with technical experts conducting analysis and preparing reports, which includes extensive review cycles to ensure thorough and accurate analysis. http://www.wsdot.wa.gov/Projects/Viaduct/eis.htm

In the Second Supplemental Draft EIS we see a comprehensive outward facing impact statement based on information that was known to you at the time the document was authored. However, you fail to consider of the significantly powerful and dangerous changing climate. **Missing from your EIS is any consideration of the changing regional environment; missing is any discussion of an extensive review calendar which would reflect not only the changes but the changing rate of change and missing is a commonly known timeline of predictable change expected in the next two decades and beyond. Our environment today differs from that of 3 years ago, and our environment will differ even more in the future. The changes are open ended and not at all stable, and are not at all regarded in this EIS draft.**

Some of the currently measured , scientifically predicted and even risky prospective changes to our environment will include sea level changes to Puget Sound, sea water acidification (PH drops), changes to sea life and climate changes that will increasingly include destabilizing weather, temperature and moisture swings.

These are core considerations of environment, which no longer has the stability that it did only 5 and 10 years ago when much of this engineering was begun. A sufficiently responsible EIS would address these issues.

Specifically, climate change and destabilization has already struck the area with anomalous weather events such as extreme rainfall, heat waves and storms.

========== California considerations ==========

Climate change is starting to come into general EIS language in California (2006, California passed into law the California Global Warming Solutions Act of 2006 (commonly referred to as AB-32)) see http://www.awma.org/files/CCIC/0509.pdf pp 10

> Since an analysis of the no-project baseline is required in many EIRs/EISs, one must consider the possibility that the future will be affected by climate change. Examples of expected changes due to the global warming include:
>
> 1. Change in water availability and quality.
> 2. Increase in the frequency and severity of extreme weather events such as storms, heat waves,
> and flooding.
> 3. Changes in cloud cover and rainfall patterns.
> 4. Increases frequency and severity of ozone exceedances due in part to changes in photochemistry.
> 5. Sea level rise.

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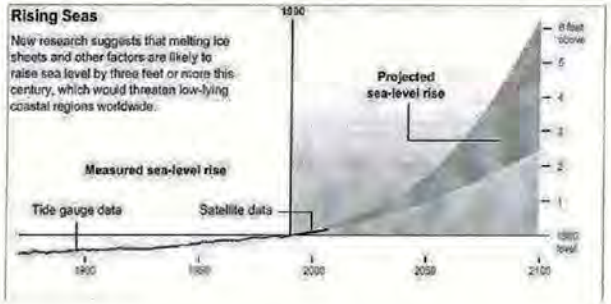
6. Increased intrusion of seawater into estuaries due to sea level rise.
7. -snip – Many, many other effects.....

For projects that don't affect climate change but are affected by climate change the "fair argument" criterion is subtler. Clearly, any effect of climate change specifically mentioned in AB-32 such as rises in sea level and changes in snow pack should be addressed, but it is not yet clear to what extent climate change impacts not mentioned in AB-32 should be dealt with. It is expected that California agencies will canonize likely consequences of climate change that fall under its purview. For example, it is expected that the California Department of Water Resources (DWR) will formalize a list of foreseeable water quality issues associated with varying degrees of climate change.

=======Sea Level Rise projections ==========

"For example, the record-breaking "once in one thousand years" rains that drove the recent Nashville flood is part of the long-term trend of increasing heavy precipitation events in the Southeastern United States that has been fully documented and firmly attributed to climate change. " http://climatesignals.org/



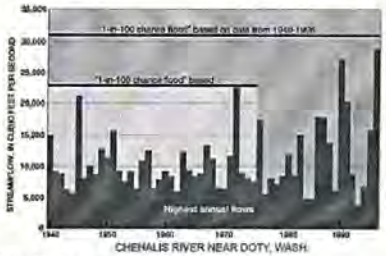
Streamflow data that have been collected since 1975 on the Chehalis River near Doty indicate that the estimated streamflow of **"1-in-100 chance flood" is higher than it was 20 years ago.**

The earlier flood designation was accurate on the basis of the data that were available at the time; more large floods happened after 1975 than from 1940-1975.

The change in the flood designation after 20 years of additional data collection highlights the importance of continued river monitoring.

I-123-001

Annual peak flow data for 1995 and 1996 are provisional and may change.



http://pubs.usgs.gov/fs/FS-229-96/
http://pubs.usgs.gov/fs/FS-229-96/pdf/FS_229-96.pdf
======

Unlike any other time in recorded history, we are in the early phases of devastatingly disruptive environmental change. This is well known and clearly outlined in both International IPCC documents and in US govt regional reports from Global Change.gov. The key phrase of which is: **Historical weather patterns are no longer a reliable predictor of the future.**

An EIS that fails to account for a changing environment, fails to deliver on its core mandate.

> "The discipline reports present the detailed technical analyses of **existing conditions and predicted effects** of the Bored Tunnel Alternative."

Instead it should have a best-effort statement of the current science concerning the rate of climate change. This should cover the expected duration of construction and for the life of the projects. Or it should provide a clear statement that the tunnel is immune to any expected climate change and ocean changes that affect the environment. A statement of risk for the increasing rate change must include the range of possible sea level rise now extending beyond 1 meter (50 inches) by the year 2100. Some respected academic studies predict 27 feet.

> In a new study "Does the Agulhas Current amplify global temperatures during super-interglacials?" (Turney & Jones 2010), the authors use 263 estimates from ocean sediments and ice to reconstruct temperatures around the globe during the last interglacial. Globally, the world was around 1.9°C warmer than pre-industrial temperatures. In polar regions, temperatures were more than 5°C warmer while tropical warming was not so pronounced (similar to warming patterns today). Global warming of 1.9°C is roughly the amount of warming expected in the more optimistic IPCC emission scenarios (to put this in perspective, we're currently tracking above the most pessimistic

I-123-001

scenario). So the last interglacial gives us an empirical window into what our best-case future will look like.

During the last interglacial, sea levels were 6.6 to 9.4 metres higher than current sea levels. Large parts of the Antarctic and Greenland ice sheets melted, with the southern part of Greenland having little or no ice. When we look at accelerating ice loss from the Greenland and Antarctica and wonder about its future trajectory, the past gives the answer. Metres of sea level rise.

There's a degree of uncertainty over the time frames involved. But several peer-reviewed studies, using independent methods, indicate we'll experience roughly 80cm to 2 metres sea level within this century (Pfeffer 2008, Vermeer 2009). The driving question from this study remains: can 6 to 9 metres sea level rise be considered safe?
http://skepticalscience.com/What-constitutes-safe-global-warming.html

And recent runs of climate models suggest that projections to the year 2100 have potential to occur by the year 2050. These are all climate model event risks, the time-line risks and the climate models are not statements of certainty, but since they are products of climate science the risk they describe needs to be addressed in an EIS statement. And as prescribed in the mission statement for the Tunnel EIS this should provide for a review cycle that stays current with climate science and updates the latest climate change projections for a dynamic revision of the EIS document.

How can you have an EIS statement that is locked onto any one point in time to define the environment?

Describing a Regionally Changing environment:

In this region, the 100 year floods are "so common in the US that the term has begun to lose it's meaning" Environmental Science and Technology by Manahan. And the 500 year flood is not uncommon in other parts of the US. I see no mention of this in the EIS. How will the project be protected from extreme flooding? Last winter, Seattle had 13 inches of rain in 2 days. This increases risk of flooding. The bored tunnel is essentially two large open holes to a road running below sea level - all this situated at the bottom of a large hill In a heavy rain, the simple act of clogged drains uphill could easily cause horrible flooding down hill.

How can we proceed to design this without a stable understanding of our environment or a more full understanding of our unstable environment?

If the EIS is not the proper place to address this issue, what is?

If the engineering is sufficient to meet all these environmental concerns - then where is that shared?

I-123-001

I refer you to the US Govt document on regional climate changehttp://www.globalchange.gov/. Current as of 2009 http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts/regional-climate-change-impacts/northwest

* Declining springtime snowpack leads to reduced summer streamflows, straining water supplies.
* Increased insect outbreaks, wildfires, and changing species composition in forests will pose challenges for ecosystems and the forest products industry.
* Salmon and other coldwater species will experience additional stresses as a result of rising water temperatures and declining summer streamflows.
* Sea-level rise along vulnerable coastlines will result in increased erosion and the loss of land. Climate change is expected to exacerbate many of the stresses and hazards currently facing the coastal zone. Sea-level rise will increase erosion of the coast and cause the loss of beaches and significant coastal land areas. Among the most vulnerable parts of the coast is the heavily populated south Puget Sounds region, which includes the cities of Olympia, Tacoma, and Seattle, Washington.

http://www.globalchange.gov/images/cir/pdf/northwest.pdf

from p 137 of the regional impact climate assessment document:

Among the most vulnerable parts of the coast is the heavily populated south Puget Sound region, which includes the cities of Olympia, Tacoma, and Seattle, Washington. Some climate models project changes in atmospheric pressure patterns that suggest a more southwesterly direction of future winter winds.
Combined with higher sea levels, this would accelerate coastal erosion all along the Pacific Coast.
Sea-level rise in the Northwest (as elsewhere) is determined by global rates of sea-level rise, changes in coastal elevation associated with local vertical movement of the land, and atmospheric circulation patterns that influence winddriven "pile-up" of water along the coast. **A mid-range estimate of relative sea-level rise for the Puget Sound basin is about 13 inches by 2100. However, higher levels of up to 50 inches by 2100 in more rapidly subsiding (sinking) portions of the basin are also possible given the large uncertainties about accelerating rates of ice melt from Greenland and Antarctica in recent years (see Global and National Climate Change sections).**

An additional concern is landslides on coastal bluffs. **The projected heavier winter rainfall suggests an increase in saturated soils and, therefore, an increased number of landslides. Increased frequency and/or severity of landslides is expected to be especially problematic in areas where there has been intensive development on unstable slopes. Within Puget Sound, the cycle of beach erosion and bluff landslides will be exacerbated by sea-level rise, increasing beach erosion, and decreasing slope stability.**

http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts/climate-change-impacts-by-sector/transportatoin

I-123-001

Historical weather patterns are no longer a reliable predictor of the future.

Sea-level rise and storm surge will **increase the risk of major coastal impacts, including both temporary and permanent flooding of airports, roads, rail lines, and tunnels.**
Flooding from increasingly intense downpours will increase the risk of disruptions and delays in air, rail, and road transportation, and damage from mudslides in some areas.
The increase in **extreme heat will limit some transportation operations and cause pavement and track damage.** Decreased extreme cold will provide some benefits such as reduced snow and ice removal costs.
Increased intensity of strong hurricanes would lead to more evacuations, infrastructure damage and failure, and transportation interruptions.

Extreme heat can cause deformities in rail tracks, at minimum resulting in speed restrictions and, at worst, causing derailments. **Air temperatures above 100°F can lead to equipment failure (see maps page 90). Extreme heat also causes thermal expansion of bridge joints, adversely affecting bridge operations and increasing maintenance costs. Vehicle overheating and tire deterioration are additional concerns.** Higher temperatures will also increase refrigeration needs for goods during transport, particularly in the South, raising transportation costs.

Increases in very hot days and heat waves are expected to limit construction activities due to health and safety concerns for highway workers. Guidance from the U.S. Occupational Safety and Health Administration states that concern for heat stress for moderate to heavy work begins at about 80°F as measured by an index that combines temperature, wind, humidity, and direct sunlight.

Perhaps the design and engineering addresses concerns over climate change - but since these are so large, constantly changing and will affect the project so extensively, this should be addressed in the EIS document.

How do you evaluate climate change? Should that be in the EIS?
Insured losses from catastrophes? Since insurance is not longer regarding extreme weather events from climate change as unforeseeable events, how will you protect against loss?
? Insurance is only willing to cover unforeseen risks - do you know what level is climate events regarded as foreseeable risk?
When there are foreseen disruptive weather events, how do you expect insurance to cover the project?

http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts/climate-change-impacts-by-sector/society

City residents and city infrastructure have unique vulnerabilities to climate change.
Climate change affects communities through changes in climate-sensitive resources

I-123-001

that occur both locally and at great distances.
Insurance is one of the industries particularly vulnerable to increasing extreme weather events such as severe storms, but it can also help society manage the risks.

If there are societal impacts that are triggered by changing environment, should these be addressed in an EIS statement? Or specified and then excluded?

City residents and city infrastructure have unique vulnerabilities to climate change. Over 80 percent of the U.S. population resides in urban areas, which are among the most rapidly changing environments on Earth. In recent decades, cities have become increasingly spread out, complex, and interconnected with regional and national economies and infrastructure.319 Cities also experience a host of social problems, including neighborhood degradation, traffic congestion, crime, unemployment, poverty, and inequities in health and well-being.320 **Climate-related changes such as increased heat, water shortages, and extreme weather events will add further stress to existing problems. The impacts of climate change on cities are compounded by aging infrastructure, buildings, and populations, as well as air pollution and population growth. Further, infrastructure designed to handle past variations in climate can instill a false confidence in its ability to handle future changes**. However, urban areas also present opportunities for adaptation through technology, infrastructure, planning, and design.

More frequent heavy downpours and floods in urban areas will cause greater property damage, a heavier burden on emergency management, increased clean-up and rebuilding costs, and a growing financial toll on businesses and homeowners. The Midwest floods of 2008 provide a recent vivid example of such tolls. **Heavy downpours and urban floods can also overwhelm combined sewer and storm-water systems and release pollutants to waterways.313 Unfortunately, for many cities, current planning and existing infrastructure are designed for the historical one-in-100 year event, whereas cities are likely to experience this same flood level much more frequently as a result of the climate change projected over this century.**

Cities are also likely to be affected by climate change in unforeseen ways, necessitating diversion of city funds for emergency responses to extreme weather.313 There is the potential for increased summer electricity blackouts owing to greater demand for air conditioning.325 For example, there were widespread power outages in Chicago during the 1995 heat wave and in some parts of New York City during the 1999 heat wave. In southern California's cities, additional summer electricity demand will intensify conflicts between hydropower and flood-control objectives.164 Increased costs of repairs and maintenance are projected for transportation systems, including roads, railways, and airports, as they are negatively affected by heavy downpours and extreme heat190 (see Transportation sector). Coping with increased flooding will require replacement or improvements in storm drains, flood channels,

I-123-001 levees, and dams.
from http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts/regional-climate-change-impacts/northwest

Does the Bored Tunnel project call upon scientific studies of any sort? Can you accept the US Govt regional document on climate change?

I-123-002 *If electricity shortage triggers brown outs - shouldn't this be considered in the plan?*

I-123-003 **Everyone who has studied Washington State history knows the story of the most famous bridge failure- nicknamed Galloping Gerty. A marvelous piece of engineering collapsed due to unforeseen and until then unrealized harmonic stresses that caused the breakup.**

The bored tunnel has the benefit of foreknowledge and forwarding of destabilising and potentially catastrophic events that represent real risk.; You do not want the bored tunnel to take on the moniker of the Underground Galloping Gerty. Potential failures made worse by the fact that there now are more than ample warnings for this situation.

I-123-004 *Has the bored tunnel engineering considered known climate risk? What climate model will you be using in your engineering design?*

What is the lifetime of the tunnel? What is the latest projected sea level rise and where does this intersect with the tunnel usage date range?

Does the Army Corp adopt and accept the gov regional climate change documents? What does the Corp say about global warming?

Conclusion

This 2nd draft EIS statement is not properly derived from any baseline definition of our dynamically changing environment.
The final EIS should address environment change, the rate of change, the risk to considering the climate models and the timeline of change plotted against the lifetime of the project.

Thank you for addressing the specific questions in this document.

Links and references provided on request

I hope that the final draft and final filing of the EIS statement will address these issues.

Thanks

Richard Parks

Nov. 17, 2010

I-123-002

The Final EIS Appendix K, Public Services and Utilities, discusses the potential effect of disruption to electrical service.

I-123-003

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. The engineers also considered the possible threat of tsunamis during the design process.

I-123-004

The lead agencies acknowledge that the effects of climate change may alter the function, sizing, and operation of the facility. Climate projections for the Pacific Northwest are available from the Climate Impacts Group at the University of Washington, and WSDOT is working with other state agencies to develop the state's climate response strategy.

Climate change experts indicate that Washington State is likely to experience some or all of the following effects over the next 50 years:

- Increased temperature (extreme heat events, changes in air quality, glacial melting)
- Changes in volume and timing of precipitation (reduced snow pack, increased erosion, flooding)

- Ecological effects of a changing climate (spread of disease, altered plant and animal habitats, negative impacts on human health and well-being)
- Sea-level rise, coastal erosion, salt water intrusion

The design horizon for the bored tunnel is 100 years. The project team considered the information on climate change with regard to preliminary design, as well as the potential for changes in the surrounding natural environment. The design process will continue to examine all project features to provide greater resilience and function with the potential effects brought on by climate change.

The U.S. Army Corps of Engineers is not one of the lead agencies for this project. The project team does not know whether the agency adopts and accepts the regional climate change documents or what the agency says about global warming.

From: Mark Perotti [sparkymark@speakeasy.net]
Sent: Tuesday, November 30, 2010 9:53 PM
To: AWV SDEIS Comments
Subject: Bored Tunnel Alternative

To Whom It May Concern:

I-124-001 My chief concern about the bored tunnel alternative is the risk of a stuck boring machine. I recognize that a substantial sum of money would be set aside to dig down and replace or repair the boring machine should it become stuck. Here's the rub - what's the chance it would happen a second or third time? I'd be one of the Seattle taxpayers on the hook with everyone else. Does anyone have any idea how homogeneous the soil is along the proposed tunnel path?

I-124-002 Secondly, I have a hard time with the numbers. Let's say the toll is $3.50 one way and $4.50 the other. That's $8 bucks a day to travel the tunnel. $8 x 250 workdays = $2000 additional dollars out of pocket for anyone who wants to drive this way. That may not sound like a lot of money to you but it's a heck of a lot to me and most of the people in my neighborhood. And if I understand correctly, these fares extend into perpetuity.

I-124-003 Is the cut and cover option completely dead?

Sincerely,
Mark Perotti

I-124-001

WSDOT is managing the risk associated with construction uncertainty by providing incentives to the design-builder. For the bored tunnel design-build contract, WSDOT allocated a total of $60 million that would be used for items such as unplanned repairs to the boring machine. Any money that is not used for unplanned items, WSDOT and the design-build team will split. Therefore, the design-builder has an incentive to ensure the boring machine operates successfully.

Yes, the lead agencies know how homogeneous the soils are along the bored tunnel alignment. Exhibit 5-47 in the 2010 Supplemental Draft EIS illustrates that the soil along the alignment primarily consists of glacial sand, gravel and silt, and glacial clay and silt.

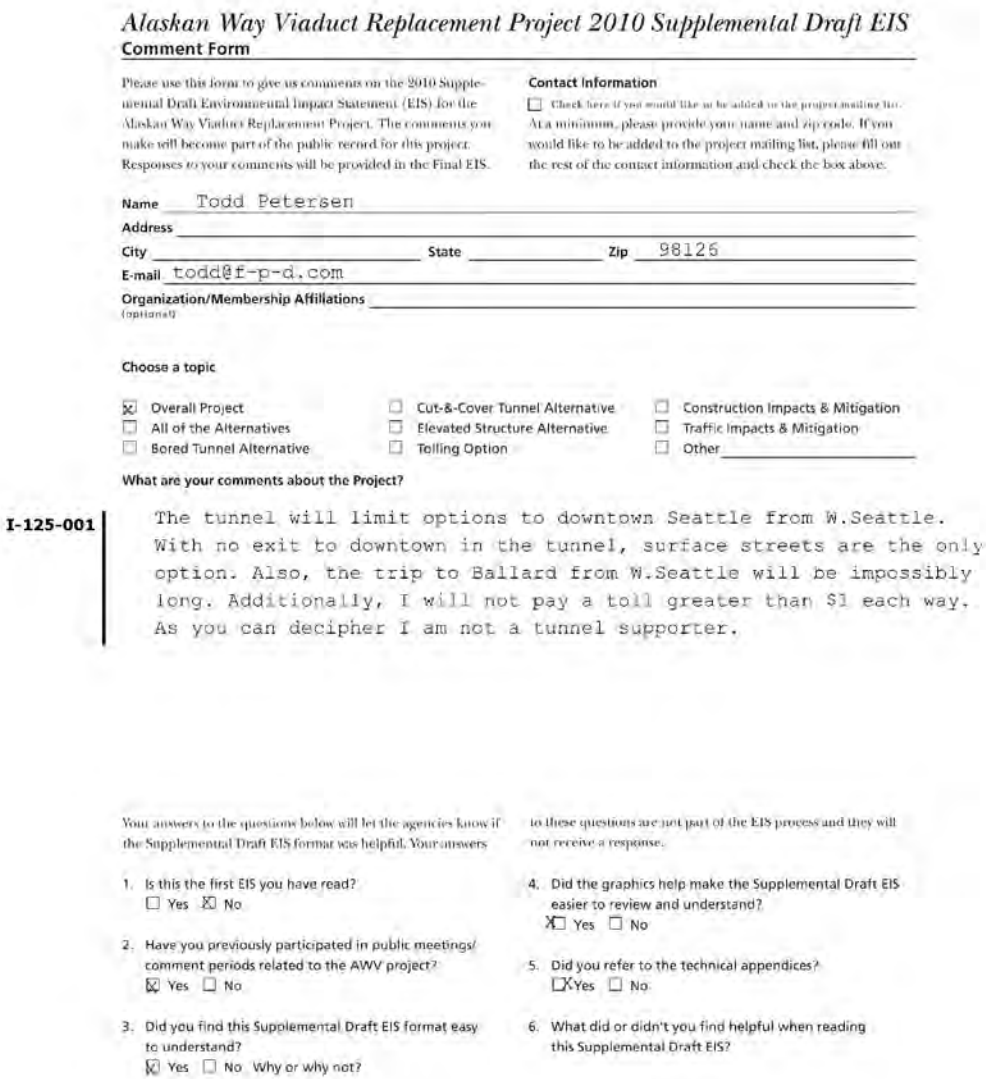
I-124-002

Long-range planning documents, such as the Puget Sound Regional Council's long-range transportation plan, Transportation 2040, have identified system-wide highway tolling as a funding source for future transportation projects as revenues from taxing gasoline continue to diminish. If the state legislature authorizes WSDOT to place a toll on SR 99, it would decide whether to continue to impose tolls on SR 99 even after the viaduct replacement is funded.

I-124-003

The Cut-and-Cover Alternative is currently being considered. However, the lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5

(Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the three alternatives.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS
Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list. At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Todd Petersen
Address
City State Zip 98126
E-mail todd@f-p-d.com
Organization/Membership Affiliations (optional)

Choose a topic

☒ Overall Project
☐ All of the Alternatives
☐ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

What are your comments about the Project?

I-125-001

The tunnel will limit options to downtown Seattle from W.Seattle. With no exit to downtown in the tunnel, surface streets are the only option. Also, the trip to Ballard from W.Seattle will be impossibly long. Additionally, I will not pay a toll greater than $1 each way. As you can decipher I am not a tunnel supporter.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read?
   ☐ Yes ☒ No
2. Have you previously participated in public meetings/ comment periods related to the AWV project?
   ☒ Yes ☐ No
3. Did you find this Supplemental Draft EIS format easy to understand?
   ☒ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand?
   ☒ Yes ☐ No
5. Did you refer to the technical appendices?
   ☐ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-125-001

It is recognized that some changes in travel routes will occur with the Bored Tunnel Alternative for some neighborhoods in the south (including West Seattle) as well as communities north and west of the study corridor. However, 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. Options to access downtown will be different. Please refer to the Transportation Discipline Report (Appendix C) of the Final EIS for more information regarding traffic conditions for the Bored Tunnel Alternative.

WSDOT
Attn: Angela Freudenstein, Project Environmental Manager
AWV Project Office (Wells Fargo Building)
999 Third Avenue S., Suite 2424
Seattle, WA 98104 – 4019

From: j. petrait [jergins@gmail.com]
Sent: Tuesday, November 16, 2010 1:31 PM
To: AWV SDEIS Comments
Subject: Deep concern over the deep bore tunnel

Hi. After having sifted through the draft EIS, I have some comments.

I-126-001 First, where is the transit? This was supposed to be part of the project, but there's little to no mention of transit in these documents.

I-126-002 The cost of this is phenomenal. And I don't mean phenomenal in a good way. This massive cost, with concerns over overruns, along with Seattle being on the hook for those overruns, makes me deeply skeptical of this project. As a Seattle resident that doesn't want this tunnel, I'm offended that I might have to pay for it if it goes over budget.

I-126-003 Pioneer Square sinking, losing historic buildings? Have we thought this through? And the
I-126-004 massive portals at the north and south end, destroying more land, adding to greenhouse gases, once again cutting the city off from the water (Sodo) and cutting lower queen anne off from south lake union? This is a waste of money, does nothing to cut emissions, does nothing to get people onto transit. And with $4 tolls you know cheap Seattleites won't be using the tunnel. They'll take surface streets just because they think they'll be saving money, not considering the traffic they'll get stuck in.

To spend this much without so much as one exit in downtown, four billion for a bypass, are we crazy? Can we just stop this now?

Thanks,

Jason Petrait
Georgetown and Seattle resident
(206) 384-0829

I-126-001

The focus of the project scope is replacement of an elevated highway. However, the project would include elements that support public transit. These elements include transit speed and reliability improvements that would be available during and after project construction. In the south area, there would be a bus-only lane in the northbound SR 99 off-ramp. In the north area bus-only lanes would be provided on Aurora Avenue that will support transit operations in the South Lake Union area.

I-126-002

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 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-126-003

Extensive studies of the buildings, the soils and the construction methods indicate that Pioneer Square buildings will not sink. Settlement damage is anticipated to occur to only two buildings at the beginning of the tunnel: the Western and Polson Buildings. Final EIS Appendix I, Historic, Cultural, and Archaeological Resources, discusses the steps to protect these two buildings. It also describes the steps that have been take to evaluate risk and minimize damage along the entire tunnel alignment. Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The construction process includes extensive monitoring of each building and structure before, during, and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

I-126-004

Eleven properties would be partially or fully acquired for the Bored Tunnel Alternative, as discussed in Chapter 5, Permanent Effects, of the Final EIS. When acquiring property, WSDOT would follow the amended provisions of the Uniform Relocation Assistance and Real Property Acquisition Polices Act of 1970. This act implements federal and state constitutional guarantees that private property will not be taken or damages for public use without just compensation. As described in Chapter 3, Alternatives Description, the Bored Tunnel includes a westerly extension of Dearborn Street in the south portal area. This improvement would increase east-west connectivity between the historic

Pioneer Square and Greater Duwamish MIC neighborhoods and enhance the accessibility to existing land uses, such as the sports stadiums, ferry terminal, and waterfront businesses. In the north portal area, surface streets would be reconfigured and improved, including connecting John, Thomas, and Harrison Streets so that they intersect with Aurora Avenue and provide pedestrians and vehicles access across this street. The connections would extend from Sixth Avenue N. to Dexter Avenue N. Pedestrian sidewalks would be maintained along both sides of Aurora Avenue.

The analyses regarding how tolls might be implemented as part of the proposed action are preliminary in nature and will be further refined should the state legislature authorize tolls on the SR 99 Bored Tunnel. The potential effects resulting from these preliminary analyses represent the upper end of implementing tolls on the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from SDOT, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide

reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the city's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County and these strategies can form the blueprint for future strategies.

Additional King County Metro transit service will be provided as part of construction mitigation. Improvements to the speed and reliability of transit service will also be supported by the project and continue to be in place after construction is completed. While some added travel time would be incurred by buses under the Bored Tunnel Alternative, transit operations would still be maintained. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

The Bored Tunnel Alternative would not bypass Seattle. This alternative would have ramps in the Stadium area that would provide access to the downtown business core; 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. Also with this alternative, Alaskan Way would be reconfigured as part of a separate project led by the City of Seattle. This project would result in

different access opportunities to downtown.

The Final EIS and Appendix C, Transportation Discipline Report, contain current information related to local access and transit service for each build alternative.

From: George Pollow [pollow@mindspring.com]
Sent: Tuesday, November 16, 2010 6:40 PM
To: AWV SDEIS Comments
Subject: Alaskan Way Viaduct Replacement Project

Dear Ms. Freudenstein,

I-127-001

I think that this is the wrong thing to do. You will be building this tunnel on an earthquake fault. In addition, it would create a big traffic jam and both ends of the tunnel and there would be not access/regress along the route. Why not spend whatever is necessary to make the current viaduct safe. I am sure that it would cost a lot less.

Sincerely yours,

George Pollow
4120 248th CT SE
Issaquah, WA 98029-5754

I-127-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Rebuild Alternative. After studying several retrofitting concepts, the lead agencies found that rebuilding the viaduct would not be a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct. Elements of the Rebuild and Aerial Alternatives were incorporated into the Elevated Structure Alternative, which was analyzed in the 2006 Supplemental Draft EIS and the Final EIS. Because the project has evolved since comments were submitted in 2004, please refer to the Final EIS for current information.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.

Appendix C, Transportation Discipline Report, covers issues related to travel times and downtown access. Please refer to the Final EIS for current information.

From: Gary Powell [gwpowell@gmail.com]
Sent: Wednesday, November 17, 2010 3:19 PM
To: AWV SDEIS Comments
Subject: Released from eSafe1 SPAM quarantine: Alaskan Way Viaduct Replacement Project

Dear Sir/Madam:

I-128-001 The proposed tunnel plan does not adequately address the issue of ocean level rising due to global warming. A mere 5ft rise over the next twenty years will fully submerge this entire project, negating any transit from using it at all.

I-128-002 The proposed tunnel plan does not have adequate reserve funding to retrieve and repair one of the tunnel boring machines. We have seen that these things can get stuck, as has the one at the Brightwater sewage tunnel being dug for King County. If the boring machine gets stuck underneath one of the major buildings downtown, it will need millions in reserve to extract and repair the machine.

I-128-003 The proposed tunnel plan does not mitigate the downtown traffic in Seattle. The addition of the estimated $4 toll will cause 50% of the current Viaduct traffic to exit to the surface streets. This plan does not address how this additional surface traffic will impact the city.
It does not provide alternatives for this traffic and does not address how the traffic will effect the bus transit on 3rd Ave.

I-128-004 The proposed tunnel plan while mentioning the possible effects on building in Pioneer Sq, and downtown, does not provide adequate funds to insure against this damage.

I-128-005 The proposed tunnel also does not address the carbon impact from digging the tunnel and the possible options instead of this project.

Sincerely Yours,
Gary Powell
16613 SE 11th St
Bellevue, WA 98008

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powellg@gmail.com
"Come gather 'round people wherever you roam. And admit that the waters around you have grown. And accept it that soon you'll be drenched to the bone. If your time to you is worth savin'. Ahh you better start swimmin' or you'll sink like a stone. For the times they are a-changin'" Bob Dylan

I-128-001

The lead agencies acknowledge that effects of climate change may alter the function, sizing, and operation of the facility. The project's design has taken into account current research on projected sea-level rise over the 100-year design life of the facility. The sea level is projected to rise approximately 1 foot over the design life of the facility. The design process will continue to examine all proejct features to provide greater resilience and function with the potential effects brought on by climate change.

I-128-002

The cost estimate for the Bored Tunnel Alternative includes $205 million to cover project risk, such as the the need to retrieve a stuck bored tunnel machine. 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. It is expected that this pool of money set aside for risk will cover the cost of tunnel boring machine maintenance and/or repair.

I-128-003

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. If the facility is tolled, diversion is expected and the lead agencies acknowledge that an acceptable solution to minimize the amount of diverted traffic in order to optimize operation of the transportation network should be sought. Strategies for optimization will be developed by the Tolling Advisory Committee (TAC). See Chapter 8, Mitigation, of the Final EIS for a discussion of the work of the TAC.

The possible effects of tolling have been further analyzed in this Final EIS for all alternatives. Additional detail on tolling effects can be found in Chapter 7 of the Final EIS Appendix C, Transportation Discipline Report.

I-128-004

Project financial planning includes measures to prevent damage to buildings and repair or restoration if that is necessary.

I-128-005

The Final EIS and Appendix R, Energy Discipline Report, discuss energy and greenhouse gases. The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the three alternatives.

From: Spencer Rarrick [spencer.rarrick@gmail.com]
Sent: Monday, December 13, 2010 5:57 PM
To: AWV SDEIS Comments
Subject: Re: Viaduct Tunnel

I-129-001 | If there is money available for transportation, I would much rather see it go towards improving our public transportation infrastructure.

I-129-001

Additional King County Metro transit service will be provided as part of construction mitigation. While some added travel time would be incurred by buses during construction, transit operations would still be maintained. The project would not support ongoing transit expansion after construction is completed. Improvements to the speed and reliability of transit service will also be supported by the project and continue to be in place after construction is completed. Following construction of this project, transit service enhancements by other agencies are expected in downtown Seattle; for example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

From: Kriss [klwraupach@yahoo.com]
Sent: Thursday, December 02, 2010 4:15 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

Dear Sir and/or Madame:

I-130-001 Since the document for review online is broken down into more than 100 small pdf's, this makes a coherent online review of these documents essentially impossible.

I-130-002 I am opposed to this tunnel for the following reasons:

1. Public Access to Views Denied
   Every day thousands of motorists enjoy the amazing views of the Bay and Olympics beyond. This view will be taken away from far more public than will be provided without the viaduct. Public access to these views will be significantly diminished.

I-130-003 2. Increased Value of Private Property
   Property, with views now blocked by the viaduct, will greatly increase in value. The public will not gain in this benefit.

I-130-004 3. Lack of Improved Accessibility to Downtown Seattle
   The proposed tunnel has no off ramps into downtown!! What's the point of making any highway 'improvements' if not to 'improve' ease of access to a major downtown city? I really fail to see the point of this tunnel at all.

I-130-005 4. Repair
   The pilings on the viaduct can be repaired at far less cost and far less impact. It was done in the Bay Area in California.

I-130-006 5. Cost Over Runs
   Significant cost over runs on these types of projects are endemic. I see no provisions for dealing with this issue in any realistic way.

Sincerely yours,

Kristina L.W. Raupach
1723 SW Henderson Street
Seattle, WA 98106
260-352-6066

I-130-001

We apologize for any inconvenience in accessing the 2010 Supplemental Draft Environmental Impact Statement on the website. The document is very large and must be broken into sections for ease of downloading. The document was also available upon request from the project office in the form of a CD or a printed copy. In addition, copies were available at Seattle-area neighborhood service centers and libraries.

I-130-002

It is true that with the Bored Tunnel Alternative, drivers on SR 99 would no longer enjoy the panoramic views that are available from the existing structure. However, the views from the waterfront to the east would no longer be obstructed by a very large concrete highway structure. Similarly, the views from downtown Seattle, including the Pike Place Market and its many viewpoints to the west such as the Victor Steinbrueck Park, would no longer include the intrusion of this busy highway in the extensive views toward the west of Elliott Bay, the islands, and the Olympic Mountains.

I-130-003

Any enhancement in property values that may occur would take place after the construction period. And because construction would be completed several years in the future, it is difficult to predict events and condition at that time. Economic conditions are often one of the strongest influences on market values, and these conditions may vary greatly from one year to another. If for example, the Seattle area economy continues to decline substantially as the viaduct is being replaced, completion of the project would likely have less immediate influence on the price of real estate. Because of all the considerations that go into the purchase of property, the EIS does not speculate on how the project might influence the value of land or buildings in the area.

I-130-004

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.

Updated analysis has been included in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis.

I-130-005

The lead agencies recognize that retrofitting highways, roadways, and bridges is often a viable option to counter earthquake threats. However, unlike other bridges and structures in the area, it is not practical to retrofit the viaduct by only strengthening one or two structural elements. Fundamentally, such fixes transfer the forces from one weak point in the structure to another, and the viaduct is too weak in too many places.

Additionally, the lead agencies have studied various retrofitting concepts, and all of these concepts fail to provide a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state of the viaduct.

I-130-006

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 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.

From: bill reed [billreed@gmail.com]
Sent: Friday, November 05, 2010 10:55 AM
To: AWV SDEIS Comments
Subject: I love the tunnel.

I-131-001 Please dig the thing and get that eye sore out of the visible city. I believe the removal of Hwy 99 from the top of Seattle will greatly improve our city while repairing a deadly commuter pathway. Thank you and be patient with the continual attacks. I hope that they can improve the process.

Sincerely,
William Reed

I-131-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: Maryann Rogers [mrogers@gmail.com]
Sent: Tuesday, November 16, 2010 4:37 PM
Subject: Seattle's Historical Buildings

I-132-001 | I have a deep and abiding love of Seattle's historical architecture, and I live in a historic building myself. I read the Supplemental Draft Environmental Impact Statement on the deep bore tunnel. Two historic buildings could collapse and several others could be severely damaged. That's it, once you've destroyed a historic building, **it's gone forever**. You can't get it back. It's not worth the risk.

Truly,
Maryann

I-132-001

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the

alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural, and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

From: Danielle Rose [daniellenrose@gmail.com]
Sent: Tuesday, December 14, 2010 8:11 AM
To: AWV SDEIS Comments
Subject: Re: AWV Supplemental DEIS

To whom it may concern:

I-133-001

This is to express my concern over the analysis and political decision making that has occurred leading up to and during the supplemental draft EIS process. I believe that the analysis is insufficient, and that the city, state, and county are making an illogical and backwards decision in pursuing the deep bore tunnel. The supplemental draft EIS is based on analysis that does not account for the enormous impact tolling will have on the performance and revenue generating strength of the tunnel and downtown streets.

As a citizen of Seattle I have been taught to speak up and believe in the public process, and a Master's student in Transportation Planning, I have been taught that interpretation of models is the most challenging task in forecasting transportation demand and planning for the future. I know you are aware of a study by UW students that used Urban SIM to model the impact of the tunnel, and found it to be almost entirely unnecessary, serving very very few cars in the overall scheme of mobility in Seattle.

I have seen other cities- Portland, San Francisco, to name a few, that have defied tradition by removing outdated viaducts and not replacing them, and the cities have not crumbled or ground to a halt. I support this alternative. As a cyclist, as a walker, as a transit rider, as a taxpayer, as a car-less individual, I support a surface-transit option, and I have yet to hear anyone I know support any other option.

I support investment in the overall mobility of downtown Seattle, which includes improving I-5 and light rail to Ballard and West Seattle. I support innovative thinking that will look to the future, pursuing the changes we hope to see, as stated in our Comprehensive Plan and city bylaws to reduce VMT, reduce carbon emissions, and reduce single-occupancy vehicle travel into the downtown core, and throughout the entire city. And I ask you, how will the tunnel help us get where we need to be? It is not the option we should be pursuing. There should be alternatives presented during the supplemental DEIS phase. Please consider inter-generational equity, fiscal responsibility, and environmental protection and do not build a deep bore tunnel under Seattle.

Sincerely,

--
Danielle Rose

Master of Urban Planning Candidate 2011
University of Washington
College of Built Environments
818.437.0292

I-133-001

Thank you for submitting your comments and being a part of the public process associated with this project. The 2010 Supplemental Draft EIS does discuss possible effects related to tolling (see Chapter 9 of the 2010 Supplemental Draft EIS and information presented in Appendix C, Transportation Discipline Report). This information was taken into account in the determination of a preferred alternative. See the Final EIS for updated information about the effects of tolling the build alternatives.

We do not think that our transportation analysis indicates that the tunnel is unnecessary. With or without tolls, the bored tunnel will serve tens of thousands of trips each day. The Final EIS and Appendix C provide the most current information about the preferred Bored Tunnel Alternative and the trips it will serve.

We acknowledge your support of a surface and transit option. We are aware that cities like Portland and San Francisco have removed viaducts. We have considered these ideas and through that process have learned that the Alaskan Way Viaduct serves a very different need in our local and regional transportation system than these facilities in other cities and that a surface-transit option will not meet the needs identified for this project. The rationale for not evaluating a surface and transit option is explained in Chapter 3, pages 54 - 58, of the 2010 Supplemental Draft EIS. Also, WSDOT conducted further analysis as documented in the Surface and Transit Scenario Year 2030 Analysis Results, which is included in Appendix W, Screening Report, of the Final EIS.

Thank for your indicating your support in investments for mobility in Seattle. This project will continue to support local and regional mobility goals. Additional support for these goals will be provided by investments planned as part of the Alaskan Way Viaduct and Seawall Replacement Program, that includes improvements to transit, Alaskan Way (for

automobiles, pedestrians, and bicyclists), and other improvements as discussed in the 2010 Supplemental Draft EIS and the Final EIS.

From: Dan Ruuska [danruu@comcast.net]
Sent: Wednesday, December 01, 2010 1:23 PM
To: AWV SDEIS Comments
Subject: Seattle-Fault Tsunami Would Flood Seattle-Waterfront Tunnel Through Its Below-Sea-Level South Portal

Dear WSDOT:

I-134-001

This testimony 1) addresses impact of a Seattle-Fault tsunami on public safety of the proposed SR 99 Seattle waterfront tunnel, and 2) asks who is responsible -- State of Washington or City of Seattle -- for providing that public safety.

As currently planned by WSDOT, the base of the tunnel's south portal would be located BELOW sea level NEAR the shore of Elliot Bay WITHIN the northern zone of the active Seattle Fault. Should a Seattle-Fault earthquake and tsunami occur, seawater from Puget Sound would drain into the south portal, flood the below-sea-level tunnel, and drown travelers inside.

The plans fail to highlight key geologic changes that occurred during the last Seattle-Fault earthquake 1100 years ago. The north side of the fault -- where the tunnel's south portal would be -- dropped about 3-6 feet, the south side of the fault rose about 20 feet, and the mouth of the Duwamish River moved from Tukwila to Seattle (http://www.washington.edu/burkemuseum/waterlines/).

The plans do not fully describe the tsunami danger. http://nctr.pmel.noaa.gov/animations/seattle_cap.gt, a NOAA Center for Tsunami Research animation of a simulated magnitude 7.3 earthquake along the Seattle Fault, shows how tsunami seawater from Elliot Bay would inundate the south portal. Suddenly the top of the south-portal structure would be under 6 or more feet of seawater, plus about 3-6 feet more if the land drops as before, and the portal's entry/exit roadways would be under tens of feet of seawater. That seawater would flow into the deep-bore tunnel through the south portal, and fill up ALL of the tunnel except for the hundred yards above sea level near the north portal (http://www.wsdot.wa.gov/Projects/Viaduct/boredtunnelportals.htm; http://www.wsdot.wa.gov/NR/rdonlyres/B4053BEE-A1F1-4D32-A37E-4053FB7E29A7/0/2010SDEISAppendixP.pdf, pp. 37-38; http://www.wsdot.wa.gov/NR/rdonlyres/CDE7BF6D-94D8-468C-9A7F-E2504A609CBD/0/05_Chapter5SDEIS2010.pdf, p. 126).

WSDOT asserts, "The proposed SR 99 bored tunnel would be a safe place for travelers. Engineers are designing the tunnel to withstand an earthquake, flooding or other disaster" (http://www.wsdot.wa.gov/Projects/Viaduct/boredtunnelsafety.htm). That safety claim is not true in regard to tsunami safety. The tunnel's "basic design" invites tsunami seawater to rapidly flood the southern 97% of the 1.7-mile-long tunnel. The "state-of-the-art safety systems" (http://www.wsdot.wa.gov/Projects/Viaduct/centralwaterfront.htm) do not include anything to prevent tsunami seawater from quickly flooding the tunnel and

I-134-001

The average recurrence interval for large earthquakes on the Seattle Fault that are capable of generating large tsunamis is 3,000 to 5,000 years. This recurrence interval is longer than the ground motion return period required in the seismic codes applicable to this project. Final design of the proposed action will take into account earthquake-related issues based on applicable seismic design codes and reasonably expected events that could occur during the life of the project.

I-134-001 drowning travelers en masse. Victims would experience the south portal and tunnel as a drain for and extension of Elliot Bay.

I-134-002 Instead of designing "inherent tsunami safety" into the tunnel, WSDOT appears to have assigned responsibility for tsunami safety to the City of Seattle -- by forcing Seattle to build and fund a safety fix for a tsunami-unsafe WSDOT tunnel. According to http://www.wsdot.wa.gov/Projects/Viaduct/boredtunnelsafety.htm, "The City of Seattle is responsible for replacing the central waterfront seawall. As they design its replacement, they are taking into account rising sea levels [long-term rising due to global warming plus short-term rising due to local tsunamis] in order to provide effective protection for waterfront and public facilities, such as the proposed bored tunnel." Will the City of Seattle be required to provide -- and pay for -- a seawall/dike system to prevent tsunami seawater from ever draining into the below-sea-level south portal and tunnel?

The new SR 520 floating bridge will be engineered and built to withstand an 11-foot-high Lake-Washington tsunami wave generated by a Seattle-Fault earthquake (http://www.seattlepi.com/local/335189_seismic12.html). Shouldn't the SR 99 waterfront tunnel be engineered and built to withstand a Puget-Sound tsunami generated by the very same Seattle-Fault earthquake -- by elevating the south portal so that tsunami seawater cannot ever reach it?

Daniel R. Ruuska
2223 N. 60th St.
Seattle, WA 98103
danruu@comcast.net

I-134-002

The Elliott Bay Seawall needs to be rebuilt or replaced because it is deteriorating and vulnerable to earthquakes. However, the seismic stability of a viaduct replacement along Seattle's central waterfront does not necessarily require that the seawall be rebuilt or replaced. It is for this reason that replacement of the seawall was removed from the Alaskan Way Viaduct Replacement Project's purpose and need. If the Bored Tunnel Alternative is selected, seawall replacement will be undertaken by the City of Seattle because the alignment of the bored tunnel would be inland so the failing seawall would not have the potential to affect the seismic stability of its alignment.

The City of Seattle's Elliott Bay Seawall Project focuses on the replacement of the aging seawall and enhancement of the critical marine habitat along Seattle's waterfront. Providing a system to prevent seawater from entering the tunnel as a result of a tsunami is not proposed as part of that project.

The bored tunnel would be designed to current seismic standards that would allow it to withstand earthquakes. Should a tsunami occur, most of the southern portion of the bored alignment (south of Marion) could be inundated with several feet of water. Water that enters the tunnel would be removed by state-of-the-art drainage and pumping systems. The inundation of several feet of water should not structurally damage the facility nor would it cause catastrophic flooding in the tunnel.

From: Leslie Sacha [LeslieSacha@comcast.net]
Sent: Tuesday, December 14, 2010 12:25 AM
To: AWV SDEIS Comments
Cc: Mike.Mcginn@seattle.gov; lesliesacha@comcast.net
Subject: 2010 SDEIS Comments EIS in inadequate

I-135-001

The October 2010 Supplemental EIS continues to avoid all of the important issues associated with this project.

Since the first EIS was prepared and the tunnel option was first presented, the EIS documents have distorted, misrepresented and failed to adequately present and analyze the elevated viaduct replacement option.

The first EIS (the nouveau "coffee table" look) first visually presented the replacement option as a grotesquely oversized structure that would dwarf the waterfront in a bad Photoshop presentation that so skewed the scale of the project that is seemed more like a fake postcard sold in tourist shops or on the cover of a sleazy tabloid.

Discussions of the tunnel option have failed to make it clear that a considerable portion of "superstructure" will still remain, mainly the large structure in front of the Pike Place Market. This is the part of the elevated structure that most people don't like and it will still be remain. The tunnel portion starts south of the Pike Place Market. The tunnel will also be noisier in the vicinity of the tunnel because of the grade going up and down to the tunnel. Many people think that the viaduct limits access between the core downtown and the waterfront. In fact this access is limited by steep natural topography between 1st Avenue and Alaskan Way,not by the elevated tunnel. Nor will it be remedied by a tunnel.

For some absurd reason, the replacement option is always shown with visual "blinders" across the water side of the elevated viaduct that would totally block the view of anyone driving on the Viaduct. Perhaps this is misleading presented as a noise reduction measure (as if that would really is necessary or helpful in mitigating noise).

I-135-002

The EIS has never recognized that the view from existing elevated Viaduct structure should be considered of national significance under NEPA/FHWA rules and should be preserved as a national treasure. The view of the cityscape from the elevated viaduct is the only view that most people ever really get of Puget Sound and the Olympics on a regular basis. The viaduct truly provides the "people's view'--affordable to almost anyone. Given the dearth of public viewpoints along the waterfront (all Port public access on the waterfront are essentially closed off during cruise ship season following 9/11 restrictions), it is a travesty that the public is loosing this view. An elevated viaduct structure could be designed and made of materials to reduce noise and vibrations; the visual impact could be lessened by design and good lines; and the access under the elevated structure could be vastly improved at the time of new construction. This perspective has not been evaluated.

I-135-003

The tunnel option has been touted as superior because - it is claimed- that traffic will continue to use the elevated structure during tunnel construction. This is misleading given the extensive disruption of underground utilities required before the tunnel can be built (which would mostly be avoided with a replacement option) together with the fact that demolition still must occur. More important, the EIS has failed to investigate and present options that take advantage of the readily available technology and practices whereby major portions of the viaduct could be constructed offsite and rapidly transported and placed in large (pre-constructed segments) within a much compressed timetable. Certainly construction and transportation techniques used in construction of the Hood Canal bridge and the other floating bridge provides excellent departure point for construction logistics..

I-135-001

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). The Final EIS Chapter 1, Introduction, includes the Purpose and Need and Chapter 2, Alternatives Development, describes the history of the project and alternatives development process. The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the three alternatives. Appendix F, Noise Discipline Report, explains the noise levels modeled for the Bored Tunnel Alternative and the change compared to existing conditions. Visual effects are explained in Appendix D, Visual Quality Discipline Report. Please refer to the Final EIS for current information.

I-135-002

The scenic views from the existing viaduct were acknowledged in the 2010 Supplemental Draft EIS in Chapter 4, Question 13, and are acknowledged in the Final EIS in Chapter 4. An Elevated Structure is considered in the Final EIS. Though the existing viaduct provides positive views for drivers, the structure itself affects the overall look of the area and contributes to what many consider to be negative views for those on the ground near the structure, for instance.

The visual quality effects of an Elevated Structure Alternative are fully discussed in the Final EIS Appendix D, Visual Quality Discipline Report.

I-135-004

However the major deficiency of the EIS and project proposal is the tremendous relative cost of the tunnel option in comparison to the cost of the replacement option. This cost has become even more ludicrous as the federal, state and local economy falters and the extent of neglect of Seattle's infrastructure city wide under Nickels' terms becomes evident. The condition of sewers, storm drains, the electric grid and roadways throughout Seattle are third world in many areas of the city and well past the engineered lifespan and they too need attention. Why so much money in one small area. The potholes in this city are not only a disgrace they are a menace. It is also a disgrace that the tunnel capacity fails to address growth projections. Good grief!

The Seattle Tunnel Project has been qualified for all sorts of federal and state funding in part because it has been expanded to incorporate the solution for a crumbling seawall and need for a new ferry terminal and thus qualifying the project for more federal and state funding. However, their is no reason that seawall construction and ferry terminal rebuild can't also be provided as part of a viaduct replacement.

The EIS has simply failed as a tool to help evaluate this project and intent and purpose of SEPA has not been met.

Leslie Sacha

502 North 72nd Street

Seattle, Washington 98103

This report discusses the permanent (operational) effects of the views along the waterfront as well as the effects on views from downtown toward the waterfront for all the build alternatives.

I-135-003

All of the build alternatives would have underground utility relocations as described in Chapter 6, Construction Effects, of the Final EIS. The Elevated Structure Alternative is expected to result in fewer effects on underground utilities than either tunnel alternative because there would be less below-grade work required.

The project has investigated constructing segments off-site and floating them in. However, the tidal fluctuations in Elliott Bay make this construction approach impractical.

I-135-004

The Bored Tunnel Alternative has been identified as the preferred alternative because it best meets the project's purpose and need. With this alternative replacing the Elliott Bay Seawall is a separate project led by the City of Seattle. The environmental review process for this project meets all NEPA and SEPA requirements.

From: Gayle Sammons [redvinestoo@yahoo.com]
Sent: Wednesday, December 01, 2010 1:44 PM
To: AWV SDEIS Comments
Subject: Please get the tunnel going

I-136-001

I was unable to attend recent meetings with regards to the bored tunnel alternative. I am very supportive of the tunnel for the following reasons:

1. North and south bound hwy 99 traffic is minimally impacted during construction
2. The tunnel not only allows the waterfront to be re-worked as a more people friendly area it also provides the very much needed additional option for north south traffic to simply I-5
3. We need to get rid of the viaduct and not keep patching something that is old = past it's prime.

Love your updates and the great videos.

Gayle Sammons
redvinestoo@yahoo.com

I-136-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: jonsavelle@yahoo.com [mailto:jonsavelle@yahoo.com]
Sent: Saturday, October 30, 2010 7:26 AM
To: Alaskan Way Viaduct
Subject: AWV Feedback

Sent from: Jon Savelle
Address:
City: Seattle
State: WA
County: King County
Zip: 98103
Email: jonsavelle@yahoo.com
Phone:

Comments:

I-137-001 In the new tunnel design, there is no connection between Highway 99 and I-90 at the south portal. There should be a way to get to I-90 while traveling north or south on 99, and there should be a way to connect with 99 while traveling west on I-90. These connections should be exit ramps like those joining I-90 to I-5, not surface streets.

I-137-001

Providing direct access ramps from SR 99 to I-90 is not a part of the scope of this Alaskan Way Viaduct Replacement Project. The SR 519 project completed by WSDOT in 2010 provided improved access from the SODO neighborhood to I-5 and I-90. Additional information about the SR 519 project can be found on WSDOT's website.

From: Dan Schwartz [dpschwartz@gmail.com]
Sent: Sunday, December 12, 2010 2:36 PM
To: AWV SDEIS Comments
Subject: the tunnel is the wrong solution

I-138-001 A deep-bore tunnel is the wrong solution to the Alaskan Way Viaduct replacement problem. The surface/transit/I-5 hybrid solution examined by DOT and the stakeholder committee in 2008 is a much better solution. To my mind, the issue can be summed up by considering the change from a stated purpose in earlier versions of the EIS of 'mobility' to the current purpose of 'capacity.' The tunnel can only be justified by ignoring many aspects of our regional needs and focusing instead on maintaining a dependence on cars.

I-138-002 We have seen from this DEIS that the tunnel could not serve roughly 1/3 of the trips that currently use the viaduct because they start or end downtown. We have further seen that, of the remaining 2/3, as many as 50% may not use the tunnel if tolling is implemented at levels needed to secure the funding for the tunnel's construction. This is obviously a huge problem, both from a fiscal responsibility standpoint and from a planning standpoint. If the state has already demonstrated that the hybrid surface/transit solution could serve the needed trips, there is no good reason to incur the extra costs and risks associated with the tunnel. The risks associated with boring are of course well documented, including a high probability of cost overruns (for which funding is again lacking after the state has drawn down a substantial portion of the contingency fund to prevent bidders from dropping out) and possible damage to historic buildings, costs which would have to be covered by taxpayers. In terms of planning, the tunnel does nothing to increase transit usage (funding for this part of the project has been cut, plus transit could not use the tunnel) or reduce dependency on single-occupant vehicles and their associated greenhouse gas emissions. This doesn't make sense for the state, which has stated goals of reducing GHG and VMT.

I-138-003 The tunnel also represents an affront to the democratic process, and in particular the 2008 stakeholder process. It is clear that the tunnel was decided by powerful interests behind closed doors but this is in no way a sufficient justification for its selection as the best solution to this transportation problem. The EIS process has been similarly flawed and has clearly been prejudiced to favor the tunnel despite previous recommendations for other alternatives (and the fact that the stakeholder group rejected a tunnel option out of hand, precisely because it was too risky and too expensive in comparison to other alternatives). Other viable options are not being given serious consideration within this EIS process, which is a clear violation of the purpose and spirit of the process.

I-138-004 In summary, the tunnel is a risky, expensive option that fails to provide the best solution to the question of mobility around our region. I hope that the officials considering these comments will not bow to the political forces aiming to push this project forward and will instead work to find the best way to meet our transportation needs.

Thank you,

Dan Schwartz
Seattle resident

I-138-001

Because many people expressed interest in developing and evaluating a surface and transit hybrid, the lead agencies completed additional traffic analysis to confirm the rationale for screening out this concept for further analysis in the EIS. The surface and transit hybrid was considered in the 2010 Supplemental Draft EIS, see pages 53-58. The additional analysis confirmed the rationale for not evaluating this concept further. Details of that traffic analysis were provided in Attachment A of Appendix C, Transportation Discipline Report, to the 2010 Supplemental Draft EIS. In addition, Appendix W, Screening Report, of the Final EIS includes the updated Surface and Transit Scenario Year 2030 Analysis Results.

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.

I-138-002

The analyses regarding how tolls might be implemented as part of the proposed action are preliminary in nature and will be further refined should the state legislature authorize tolls on the SR 99 Bored Tunnel.

The potential effects resulting from these preliminary analyses represent the upper end of implementing tolls on the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from SDOT, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the city's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County and these strategies can form the blueprint for future strategies.

Additional King County Metro transit service will be provided as part of construction mitigation. Improvements to the speed and reliability of transit service will also be supported by the project and continue to be in place after construction is completed. While some added travel time would be incurred by buses under the Bored Tunnel Alternative, transit operations would still be maintained. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program. The I-5, Surface, and Transit Hybrid approach was seriously considered, but was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region. The Surface and Transit Scenario Year 2030 Analysis Results is included in Appendix W, Screening Reports, of the Final EIS. Chapter 2 of the Final EIS discusses the alternatives development process and screening analysis.

Although costs are an important part of project planning and decision-making, they are purposely not a major part of the environmental review process. As provided in CFR 1502.23 “For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations.” Overall project costs are included with the project description and are used for the analysis of economic impacts. Greenhouse gas emissions are predicted to increase with thee Bored Tunnel Alternative because of the increases in future vehicular volumes and the power needed to operate tunnel operations and lighting systems. Most greenhouse gas emissions with thee Bored Tunnel Alternative would come from vehicle emissions. Green house gas effects are explained in Appendix R, Energy Discipline Report.

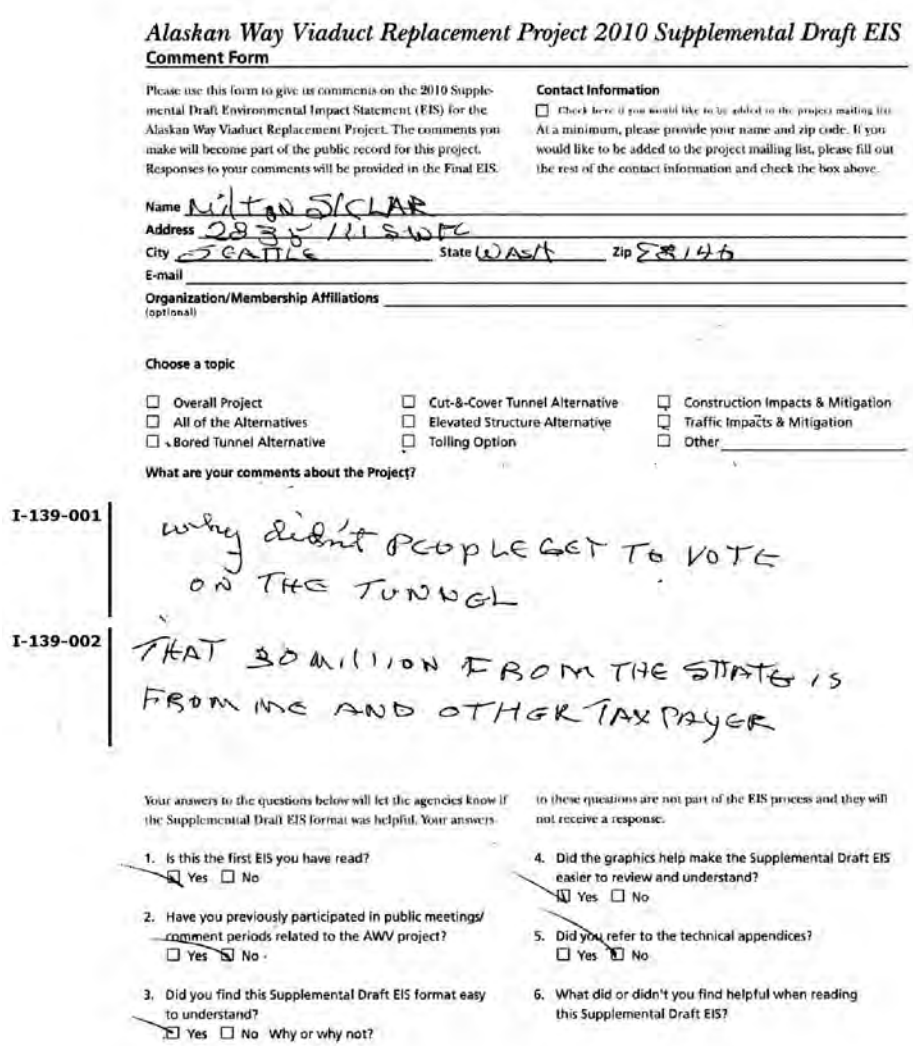
I-138-003

FHWA, WSDOT, and the City of Seattle have worked diligently throughout the life of this project to provide extensive opportunities for public involvement. This input has been and continues to be invaluable and has shaped the three build alternatives considered in the 2010 Supplemental Draft EIS and the Final EIS. The recommendation provided by Governor Gregoire, former City of Seattle Mayor Nickels, and former King County Executive Ron Sims to replace the viaduct with a bored tunnel reflected the input provided by stakeholders through the 2008 Partnership Process.

FHWA, WSDOT, and the City of Seattle have provided an objective analysis of the proposed build alternatives the environmental documents that support this project. As documented in the 2010 Supplemental Draft EIS and the Final EIS other viable build alternatives evaluated include the Cut-and-Cover Tunnel Alternative and the Elevated Structure Alternatives. Throughout the life of the project, many other alternatives and concepts have been considered, but are not evaluated in this Final EIS because they do not meet the purpose and need of the project.

I-138-004

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the alternatives.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS
Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information
☐ Check here if you would like to be added to the project mailing list. At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name MILTON SINCLAIR
Address 2835 111 SW PL
City SEATTLE State WASH Zip 98146
E-mail
Organization/Membership Affiliations (optional)

Choose a topic

☐ Overall Project
☐ All of the Alternatives
☐ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

What are your comments about the Project?

I-139-001 why didn't PEOPLE GET TO VOTE ON THE TUNNEL

I-139-002 THAT 30 MILLION FROM THE STATE IS FROM ME AND OTHER TAX PAYER

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read? ☒ Yes ☐ No
2. Have you previously participated in public meetings/comment periods related to the AWV project? ☐ Yes ☒ No
3. Did you find this Supplemental Draft EIS format easy to understand? ☒ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand? ☒ Yes ☐ No
5. Did you refer to the technical appendices? ☐ Yes ☒ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-139-001
In 2007 an advisory vote was held in Seattle, calling for an up-down vote on a cut-and-cover tunnel and an elevated structure to replace the viaduct. Both received a majority “no” vote. Following the vote, WSDOT, King County and the City of Seattle began an open and collaborative process of evaluating replacement alternatives for the Alaskan Way Viaduct's central waterfront section. The agencies assembled a Stakeholder Advisory Committee of almost 30 people, representing neighborhoods, business and freight interests, labor groups, and environmental and other cause-driven organizations; hosted public meetings at key milestones to show the committee's progress; and sought public input. As we initially evaluated surface and elevated options, many of the stakeholders expressed concerns about how such options would affect the waterfront as a place for people and maintain mobility in and through downtown both during and after construction. The proposed bored tunnel was seen by many as the solution that would best balance all of these goals.

In 2009, following this process, the Governor, then-King County Executive, then-Seattle Mayor and Port of Seattle CEO recommended the bored tunnel as the replacement. The Washington State Legislature passed legislation that endorses the bored tunnel and provides the budget authority necessary for its construction, and Governor Gregoire signed the bill into law. The Seattle City Council voted unanimously to authorize the Mayor to sign a memorandum of agreement that outlines the State and City's responsibilities for the viaduct replacement program, including the proposed bored tunnel.

I-139-002
We understand that all public money comes from taxpayers and are committed to see that it is put to good, cost-effective use.

From: Robert Smith [bobakemi@comcast.net]
Sent: Sunday, December 12, 2010 2:07 PM
To: AWV SDEIS Comments
Subject: 2010 SupDrEIS - Comments on Alaskan Way Replacement Project

From Robert Smith, 9835 Arrowsmith Ave So, Seattle WA
Who attended Nov 16 meeting at Madison Middle School

Comments

I-140-001

1. **Tolling** - I am very skeptical about the tolling plan if it is put into effect. Proposing to get tolls as high as $4 or $5 at peak times looks totally unrealistic. If the tolls were standard at $1.00 or $1.50, and maybe up to $2 at peak periods, I think there would be acceptance for that.

I acknowledge that, we the public, have been conditioned to expect tolls on highway projects as the new reality. But does it make sense to predicate project financing on unrealistic revenue projections?

In the case of our family, we don't consider ourselves poor, but If the toll on the bore tunnel gets too pricey . . . more than $2.00 at the peak . . . I can't see using it except in truly urgent circumstances. I will be just another driver overloading the surface streets exploring alternative routes. Lots of waiting at lights, cutting through residential and commercial areas, alleys, parking lots and the like. And of course, using fuel inefficiently and generating more air pollution and ozone depletion. I believe that describes the general situation that will result if you price the tunnel passage too richly.

I-140-002

2. **Tolling method** - The transponder method of electronic toll collection looks like a proven way to gather tolls without slowing traffic flow. But how do you keep traffic from backing up if you still need a separate toll booth lane for cash collection from drivers not using the transponder system? This question is not addressed in the WSDOT website pages nor in the draft EIS. Wouldn't that be an important thing to explain when you are submitting this tunnel to the public and future users for comment?

I-140-003

3. **Tunnel safety** - The Parsons Brinckerhoff section of the DEIS speaks about the function of the lateral chambers at the south side of the tunnel.

> The wider shoulder would also provide access to emergency tunnel exits, which would be provided at least every 650 feet. In an emergency, travelers would walk along the shoulders to reach a doorway into a secure waiting area, called a refuge area, located between the tunnel's levels. Staircases inside the refuge area would provide access between the roadway levels. Signs would point travelers to the nearest exit, where they would either wait for assistance or walk out of the tunnel.

This says that the chambers are intended to be ambulatory escape routes for motorists and their passengers if for some reason they have to abandon their vehicles and walk to daylight. If so, that could involve having to walk nearly a mile to arrive at the outer world. Are the designers asking

I-140-001

Yes, if the new facility is tolled, traffic diversion is expected. 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). See Chapter 8, Mitigation, of the Final EIS for a discussion of the work of the TAC.

A detailed tolling analysis that includes effects to traffic has been conducted for all alternatives and is summarized in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

I-140-002

SR 99 would use "open road" tolling, similar to what is being used on SR 520, so the toll structures would consist of gantries above the roadway, not toll booths used elsewhere. Toll booths would not be needed for drivers not using transponders. Instead, cameras would photograph the license plates of these vehicles, and their drivers would be mailed a bill. This information is available on the WSDOT website.

I-140-003

Yes, stairways to the surface are located at both ends of the tunnel. However, every 650 feet there would be an emergency exit leading directly into a refuge area. The refuge area provides a safe environment that has separate ventilation and is isolated from roadway traffic and emergencies with continuous walls. Each refuge area also has enough space for several wheelchairs, benches, a phone, and a camera so WSDOT would know when people are waiting for assistance. It is in the refuge areas, which are separate from the egress corridor, that those who need assistance would wait.

I-140-003

the aged, the infirm, the handicapped, and infants to walk this distance? How can this be mitigated and managed? This circumstance is not addressed in the DEIS.

And if so, are you serious about providing only two ambulatory refuge exits, one at each end of the 1.7 mile tunnel? Wouldn't it be logical to provide stair and elevator lift shafts perhaps at third point intervals? And is the refuge corridor only for the public, or is it also a means of access for emergency workers trying to get down to the scene of a serious accident? If the passageway is also for emergency workers, wouldn't that be additional reason to place interim access shafts from street level to improve response time?

I-140-004

Will there be trained response staff that will rush to the trouble spot when trouble happens? I find nothing in your information pages or the DEIS to reassure the public that you have a plan for quick response. Further, regarding getting emergency response vehicles to the scene, please read my separate concerns below, in ***5. Lane Widths.***

Safety summary: Incidents and emergencies will inevitably take place down in that 1.7 mile long tunnel. What measures will take place during those periods? If it is addressed in your materials, I can't find it. I have read through your website pages and the draft environmental impact statement without success on this area of concern. I would think you could call that a glaring deficiency.

I-140-005

4. Lane polarity - The cutaway illustration shows the lower roadway with the shoulder lane on the left of northbound traffic, and the upper roadway with the shoulder lane on the right of southbound traffic. It is apparent that this is due to the tunnel width restriction, meaning the escape/refuge corridor shoulder lane can be on one side only.

I understand that it is either the convention or the law that freight trucks are to stay to the right or outside lane on our highways. Yet your cutaway illustration shows freight on the right side going north and on the left side going south.

Does this mean that truckers will be directed to move to the left lane as they approach the southbound tunnel portal? Won't this necessitate lane repositioning by trucks as they approach the tunnel, and then lane repositioning once again after they emerge from the tunnel? Won't this will be a disruptive influence on motorists having to cope with this complication? And won't this result in degrading the vehicular volume planned for that stretch of Highway 99?

5. Lane Widths - The lane widths as shown in your tunnel design are set at 11 ft each for the two vehicle lanes, 2 ft for one shoulder and 6 ft for the other shoulder. Even a layman can see the inadequacy of this arrangement and I have to wonder what the thinking was when going forward with this substandard design. Were engineers told to compromise their standards to meet a cost target?

In using the AASHTO standard, WSDOT shrank the lane widths to a minimum, while still calling them legal. Then WSDOT essentially admitted that this was not good practice when it told bidders they would value-score proposals in the attempt to get a wider tunnel.The bid proposals are now in and the contractor has been selected. However the information released to the press gives no specifics as to whether this will produce a tunnel wide enough to accommodate proper sized lanes and shoulders.

I-140-004

The proposed bored tunnel would include safety features:

- Safe travel lanes: Two 11-foot travel lanes with shoulders in each direction would ensure enough space for legal size trucks. Long curves would allow for safe sight distances.
- Tunnel control center: The tunnel would have a 24-hour control center that would allow quick response to changing conditions and emergencies. WSDOT's tunnel operators would have access to real-time information about the tunnel's safety systems. The control center would have direct lines to the Seattle Fire Department, Police Department and other emergency responders.
- Incident response: Real-time traffic technology would minimize delays caused by collisions, stalled vehicles or other similar disruptions in the tunnel. If a collision occurs, incident detection systems would allow tunnel operators to view and respond to the incident.
- Emergency exits and refuge areas: Safe and effective evacuation routes would be provided for motorists. Enclosed emergency walkways, which would have independent ventilation and fire control systems, would run parallel to both traffic levels in the tunnel. The walkways would be separated from the tunnel's roadways by concrete walls and fire-rated doors. Access to the walkways would be provided about every 650 feet. In an emergency, travelers would walk along the shoulders to reach an emergency doorway and a safe refuge area. A flight of stairs would connect the refuge area to the emergency exit walkway and the non-affected level of the tunnel. Travelers unable to evacuate using the stairs would be protected by staying in the safe refuge areas, which would be equipped with fire-rated doors and lighting, ventilation and fire suppression systems. Refuge areas would also be monitored by cameras, provided with an emergency phone, and would be large enough to accommodate several people, including those with

I-140-005

a. Federal interstate highway standards call for 12 ft lanes and a 10 ft shoulder.

http://en.wikipedia.org/wiki/Interstate_Highway_standards

b. Washington State Highway Design Standards call for 12ft lanes and an 8 ft shoulder. 8 ft shoulder for law enforcement lane and for disabled vehicle lane.

http://www.wsdot.wa.gov/publications/manuals/fulltext/M22-01/1140.pdf

c. WSDOT employed the AASHTO minimum width for tunnels to justify a 30 ft roadway and a too narrow tunnel. This kind of decision-making is worrisome in the extreme.

How can a six foot shoulder lane be suitable for a disabled vehicle? And what about for an 8'-0" ambulance, or an 8'-6" tow truck, or a 9'-0" fire truck? [And these dimensions don't include the extended bracket mirrors.] There is no explanation about access for emergency vehicle in the DEIS.

There will be collisions and pile-ups that will result in a double lane blockage. How can emergency vehicles always and without exception reach the scene? How can you clear passenger vehicles past a blockage using a 6 ft shoulder lane?

Can you depend on passenger vehicles stopped in the lane adjacent to the shoulder always providing sufficient shy room clearance for emergency vehicles to move by in the shoulder lane?

Or are emergency vehicles expected to reach the scene by entering the tunnel from its exit portal, i.e. the opposite direction? The DEIS does not consider this question.

If that is the plan, where are the access locations near the portals that will permit emergency vehicles to enter the roadway in the reverse direction? The graphic presentation shows no provision for this.

Imagine the lawsuits against the WSDOT for wrongful death due to failure to design to federal or state standards.

Think of the fear of motorists being trapped in that tunnel, stuck in their vehicles or in the refuge corridor, waiting hours to get out of that nightmare. Count me among them. Take a good dose of tunnel claustrophobia and then add the fear of being trapped down there for hours. Result: Plentiful trouble that could have been avoided by better design.

I-140-006

6. **Freight traffic** - The FAQ's make the following statement:

Would there be restrictions on freight using the bored tunnel? Most freight would be able to use the proposed bored tunnel. Vehicles hauling hazardous or combustible materials would be prohibited from the tunnel, similar to current restrictions in the Battery Street Tunnel and on the viaduct during peak hours. These vehicles would take I-5 or the waterfront, as they do today.

wheelchairs. Fire, police or WSDOT incident response vehicles would be dispatched to those waiting in the refuge areas.

I-140-005

Lane polarity

The purpose of the bored tunnel cross-section graphic is to provide the reader with a conceptual illustration of what the tunnel would look like. This conceptual exhibit, as seen on page 92 in the 2010 Supplemental Draft EIS, is not meant to comment on what type of vehicle is allowed to travel in which lane.

Lane widths

Yes, the shoulder widths proposed in the tunnel are a deviation from WSDOT roadway design standards. As explained in the 2010 Supplemental Draft EIS in Chapter 5, this deviation is necessary to minimize the diameter of the bored tunnel. The tunnel design proposed by the selected design-build contractor has a 2-foot shoulder in one direction and an 8-foot shoulder in the other direction. The 8-foot shoulder will help with emergency vehicle access and provide space for disabled vehicles to stop. All design standards deviations proposed for this project are contained in the Design Approval Package that was prepared by the project team and approved by WSDOT and the Federal Highway Administration (FHWA). The lead agencies are concerned about safety and will ensure that the roadway is built to be a safe facility for travelers.

The lead agencies have coordinated with emergency service providers on the proposed design of the project and it is the responsibility of these service providers to have an emergency response protocol or plan to respond to emergencies located in the tunnel.

I-140-006

The way that this ambiguous statement is worded makes it sound like freight trucks hauling hazardous cargoes will be prohibited from the tunnel, but only during peak hours.

Does this mean that hazardous waste can be hauled through the tunnel during other hours? That sounds patently ridiculous, and very frightening.

If access to the tunnel by freight trucks can be regulated, as this policy states, then why not consider reducing or denying freight traffic during peak tunnel hours, as a means of improving overall traffic volumes? It would also improve safety. With the tunnel limited to two lanes in each direction, the larger and cumbersome truck-and-trailer combinations will lead to additional difficulty at times when an incident takes place and the tunnel gets seized up.

Robert Smith
9835 Arrowsmith Ave So.
Seattle, WA 98118

I-140-006

At this time transporting hazardous materials in the Battery Street Tunnel is prohibited. The Final EIS notes that hazardous and flammable cargo would be prohibited in the bored tunnel all day. Currently hazardous/flammable materials can be transported on downtown city streets without restriction, as long as the trucks do not exceed 30 feet in length. Vehicles exceeding 30 feet in length carrying hazardous or flammable materials wishing to travel through downtown Seattle would continue to use I-5 Alaskan Way. This practice is not expected to change as a result of Alaskan Way Viaduct Replacement Project construction activities.

From: Margaret Staeheli [mpegrose@gmail.com]
Sent: Thursday, November 04, 2010 11:48 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment Tolls

I-141-001

I live in West Seattle - I would likely reroute a trip or just skip shopping and entertainment in the Queen Anne seattle center and ballard zones rather than pay a toll for this minimal zone.

I think WSDOT will need to seriously review the viability if tolls paying for construction. A toll for Lake Washington makes sense - it would be difficult drive around.

Peg Staeheli
Sent from mobile

I-141-001

The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts. Chapter 8 of the Final EIS further discusses the role and objectives of the Tolling Advisory Committee.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation

System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

From: Neal Starkman [nealstarkman@msn.com]
Sent: Monday, December 13, 2010 3:42 PM
To: AWV SDEIS Comments
Subject: the tunnel

I-142-001

I'm sure you've heard all the positive and negative comments by now. All I'd ask you to do is to objectively consider this: Would Seattle and its citizens really be better off with this tunnel than with just about any reasonable alternative? It's difficult for me, at least, to answer affirmatively to that. Tolls, added traffic, poor access and egress, environmental dangers, incredible expense and virtually assured overruns . . . this is a travesty.

Neal Starkman
281-1153

I-142-001

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the alternatives.

From: Martin Talarico [findmarty@me.com]
Sent: Tuesday, November 16, 2010 10:21 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

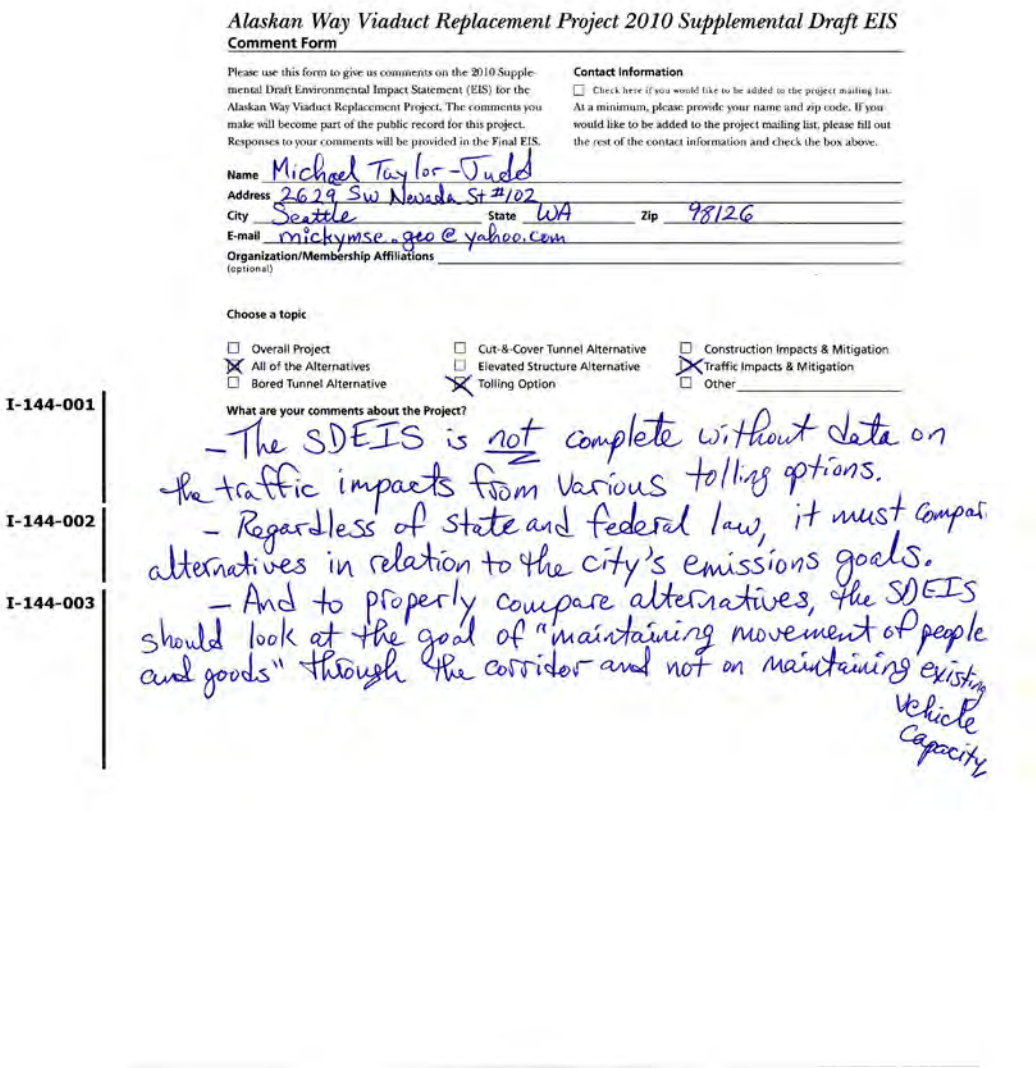
I-143-001

I fully support the tunnel option for SR99 through downtown as outlined in your SDEIS.

Martin Talarico

I-143-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.



Alaskan Way Viaduct Replacement Project 2010 Supplemental Draft EIS

Comment Form

Please use this form to give us comments on the 2010 Supplemental Draft Environmental Impact Statement (EIS) for the Alaskan Way Viaduct Replacement Project. The comments you make will become part of the public record for this project. Responses to your comments will be provided in the Final EIS.

Contact Information

☐ Check here if you would like to be added to the project mailing list. At a minimum, please provide your name and zip code. If you would like to be added to the project mailing list, please fill out the rest of the contact information and check the box above.

Name Michael Taylor-Judd
Address 2629 SW Nevada St #102
City Seattle State WA Zip 98126
E-mail mickymse.geo@yahoo.com
Organization/Membership Affiliations (optional)

Choose a topic

☐ Overall Project
☒ All of the Alternatives
☐ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☒ Tolling Option
☐ Construction Impacts & Mitigation
☒ Traffic Impacts & Mitigation
☐ Other

I-144-001
I-144-002
I-144-003

What are your comments about the Project?

- The SDEIS is not complete without data on the traffic impacts from various tolling options.
- Regardless of state and federal law, it must compare alternatives in relation to the city's emissions goals.
- And to properly compare alternatives, the SDEIS should look at the goal of "maintaining movement of people and goods" through the corridor and not on maintaining existing vehicle capacity

I-144-001

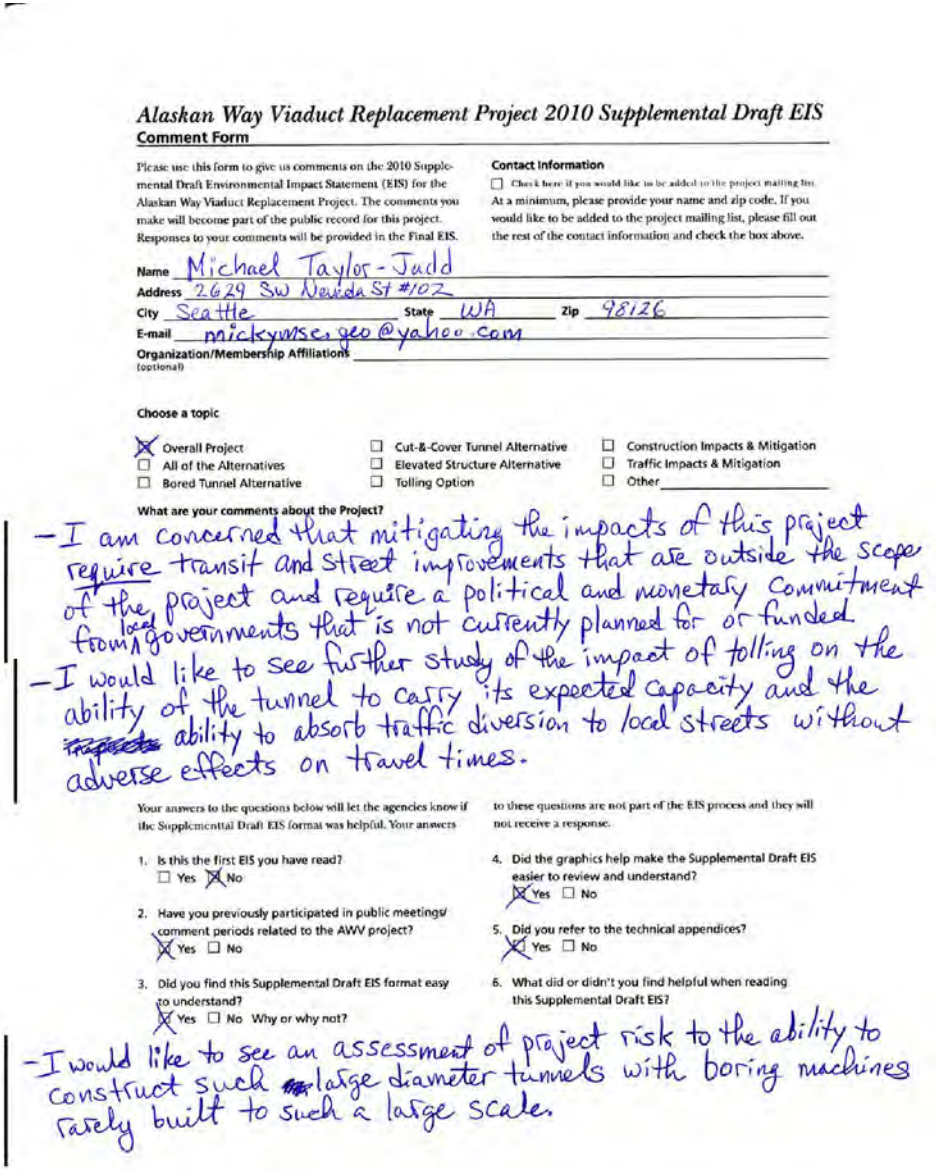
Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

I-144-002

The law setting the VMT benchmarks directs WSDOT to "adopt broad statewide goals to reduce annual per capita vehicle miles traveled by 2050 consistent with the stated goals of Executive Order 07-02." The state law does not require individual projects to set VMT reductions. WSDOT is working on this task and related tasks in Executive Order 09-05 in conjunction with a working group established for this purpose. The cumulative greenhouse gas impacts of transportation projects are best addressed at a system-wide level where multiple projects can be analyzed in aggregate, such as in regional transportation plans. The Alaskan Way Viaduct Replacement Project is included in PSRC's Regional Transportation Plan, *Transportation 2040*, which considered greenhouse gas emissions along with other transportation objectives.

I-144-003

The methodology used in both the Supplemental Draft EIS and Final EIS explicitly analyzes the movement of people and goods. Specifically, chapters 4-8 of Appendix C, Transportation Discipline Report, provide detailed analysis for many factors beyond vehicle capacity. Each chapter contains data and dedicated sections analyzing transit, freight, pedestrians, bicycles, parking, ferries, and event traffic. Additionally, person-trips across selected screenlines are presented in the regional traffic patterns section.



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Name Michael Taylor-Judd
Address 2629 SW Nevada St #102
City Seattle State WA Zip 98126
E-mail mickymsc.geo@yahoo.com
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Choose a topic

☒ Overall Project
☐ All of the Alternatives
☐ Bored Tunnel Alternative
☐ Cut-&-Cover Tunnel Alternative
☐ Elevated Structure Alternative
☐ Tolling Option
☐ Construction Impacts & Mitigation
☐ Traffic Impacts & Mitigation
☐ Other

What are your comments about the Project?

I-144-004 – I am concerned that mitigating the impacts of this project require transit and street improvements that are outside the scope of the project and require a political and monetary commitment from local governments that is not currently planned for or funded

I-144-005 – I would like to see further study of the impact of tolling on the ability of the tunnel to carry its expected capacity and the ~~impacts~~ ability to absorb traffic diversion to local streets without adverse effects on travel times.

Your answers to the questions below will let the agencies know if the Supplemental Draft EIS format was helpful. Your answers to these questions are not part of the EIS process and they will not receive a response.

1. Is this the first EIS you have read? ☐ Yes ☒ No
2. Have you previously participated in public meetings/comment periods related to the AWV project? ☒ Yes ☐ No
3. Did you find this Supplemental Draft EIS format easy to understand? ☒ Yes ☐ No Why or why not?
4. Did the graphics help make the Supplemental Draft EIS easier to review and understand? ☒ Yes ☐ No
5. Did you refer to the technical appendices? ☒ Yes ☐ No
6. What did or didn't you find helpful when reading this Supplemental Draft EIS?

I-144-006 – I would like to see an assessment of project risk to the ability to construct such ~~a~~ large diameter tunnels with boring machines rarely built to such a large scale.

I-144-004

The effects of this project are discussed in Chapter 5 (Permanent Effects) and Chapter 6 (Construction Effects) of the Final EIS. Mitigation measures for the project are described in Chapter 8. The project only analyzes the impacts and mitigation measures that are within the project's scope.

I-144-005

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

I-144-006

The design-build team selected for this project has experience constructing large bore soft ground tunnels, including a comparable 49.5-foot diameter Madrid South Bypass Tunnel. This 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. In addition, because risk is always associated with project's of this scale, the cost estimate for the Bored Tunnel Alternative includes $205 million to cover risk.

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

From: Jeffrey Toce [jeff@toce.org]
Sent: Monday, December 13, 2010 5:44 PM
To: AWV SDEIS Comments
Subject: SR 99 - Alaskan Way Viaduct and Seawall Replacement Comments

To whom it may concern:

I-145-001

While I support replacing the Alaskan Way Viaduct, I feel the need to voice some concerns I have regarding the proposed tunnel. My chief concern is the tunnel as designed will not have any downtown exits. Combined with the tolling, this will certainly push quite a bit of traffic onto downtown city streets. My secondary concern is that the proposed plans don't adequately address what to do with that increased traffic. If the point is to move people through downtown Seattle, there needs to be ingress and egress in tunnel under downtown Seattle. Furthermore, I'd consider it a safety hazard not to have exits. Can you imagine a traffic jam under the city with no way for people to get out of the tunnel? I also think it's foolish to not plan ahead for the increased traffic in downtown. Traffic is vital to the economic vitality of the downtown region. People have to be able to get into downtown in order to spend money. If they can't take the viaduct into downtown, how are they going to exit and use surface options to get to their destinations? We need to be planning ahead for this in order to ensure we don't snarl downtown traffic.

Thanks,
Jeffrey Toce
1448 21st Ave
Seattle, WA 98122

I-145-001

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.

Because operational effects of the built alternative would be substantially better than the Viaduct Closed (No Build Alternative), long-term transportation mitigation measures are not anticipated. However, a number of mitigation measures in place during construction could have benefits over the longer term. Refer to Chapter 8 Mitigation in the Final EIS for details.

Updated analysis has been included in the Final EIS. A detailed tolling analysis has been conducted and is described in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts.

Regarding safety and exits, the tunnel would include emergency exits as required by building codes.

From: Blake Trask [rbtrask@gmail.com]
Sent: Monday, December 13, 2010 1:56 PM
To: AWV SDEIS Comments
Subject: 2010 Supplemental Draft EIS Comments

I-146-001 I wish to submit comments regarding the 2010 Supplemental Draft EIS:

- Because of the need for tolls, the proposed tunnel alternative will not capture the ADT of this corridor sufficiently and will cause adverse impacts on the downtown core, as well as the North and South portals.
- Sufficient transit is not included in the recommended alternative.
- The proposed tunnel reduces access along SR-99 to the downtown core and does not replace the usefulness of the current structure.

I-146-002
- The 2010 Supplemental Draft EIS does not adequately address other alternatives to the tunnel. Specifically, the other scenarios do not sufficiently address the impact on tolling to the tunnel alternative, thus making the comparisons inadequate.

I-146-003
- The 2010 Supplemental Draft EIS does not examine the Surface/Transit/I-5 alternative - this is discouraging considering the substantial analysis conducted by the Viaduct Stakeholder Advisory Group, which ultimately appeared to have a majority in support of this option.

I-146-004
- The proposed tunnel appears to have adverse impacts on numerous structures in Pioneer Square and Downtown.

I-146-005
- Northbound traffic exiting the northportal (headed westbound) will be diverted on Dexter. Inadequate analysis has been conducted on the impact of this turning movement upon the Dexter Avenue bike lanes, which are some of the most heavily used in Seattle.
- The South Portal design will create an unfriendly impact on the pedestrian environment around Seattle's stadia.

Thank you,

Blake Trask

6724 Dibble Ave NW
Seattle, WA 98117

I-146-001

With the Bored Tunnel Alternative, traffic and transit 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.

Added King County Metro transit service would be provided as part of construction mitigation. Also, improvements to the speed and reliability of transit service would be supported by the project and would continue following construction completion. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit LRT and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

A detailed tolling analysis has been conducted and is described in the Final EIS. Please refer to Chapter 7 of Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts.

I-146-002

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

I-146-003

Chapter 2, Alternatives Development, of the Final EIS describes the environmental documentation and alternatives analysis that occurred prior to the 2010 Supplemental Draft EIS, which included the I-5, Surface, and Transit Hybrid. This approach was seriously considered, but was rejected because the lead agencies determined it lacked the capacity to serve the long-term needs of the region. Also, WSDOT conducted further analysis as documented in the Surface and Transit Scenario Year 2030 Analysis Results, which is included in Appendix W, Screening Reports, of the Final EIS.

I-146-004

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.

2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

I-146-005

The intersection of Republican Avenue and Dexter Street is currently unsignalized. The project proposes to signalize the intersection of Republican Avenue and Dexter Street. When traffic exiting SR 99 via the eastbound ramp at Republican Avenue receive a green light to turn left and travel northbound on Dexter Avenue, all traffic on Dexter Avenue, including bicycles, will be stopped for a red light, thereby reducing conflicts and increasing safety.

The proposed roadway improvements in the south portal area would improve pedestrian access and mobility. Specifically, the new cross streets and associated sidewalks between S. Royal Brougham Way and

S. King Street, and reconfiguring and widening the multi-use path located on the east side of Alaskan Way S. would benefit pedestrian movement in this area.

From: Phoebe Underwood [phoebe@shesellsseattle.com]
Sent: Monday, December 13, 2010 9:24 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

I-147-001 I am writing to express my concerns about the environmental impact of the Bored Tunnel currently under consideration for replacing the Alaskan Way Viaduct.

- NO EXIT to downtown?! -unacceptable. 10's of thousands use the viaduct to get downtown DAILY, without this exit, alternative routes to and through the city will clog surface streets, I-5 and the waterfront. The viaduct-downtown is crucial to West Seattle, South Seattle, Burien, Tukwilla, and Seatac, eliminating the downtown exit will eliminate a lot of these consumers from spending money downtown.
- ONLY TWO lanes in either direction?!! The reduced flow will increase commute times and clog surface area streets
- NO EMERGENCY or HOV lane. Not even a true shoulder for emergency vehicles or alternative exit in case of a roll-over accident, multiple car pile-up, fire or other tunnel closure?!
- The proposed open space that the tunnel provides is not guaranteed to be useable public space; tunnel proponents continue to use "open space" as a means to appeal to the public yet there aren't any assurances the land won't be developed for private use after the tunnel is completed.
- Rebuilding the seawall and stabilizing the existing structure wasn't fully explored.
- No increased benefit for bus riders.

I-147-002
- Only the city of Seattle was allowed to vote about the viaduct issue, yet the state has to pay for it…not truly an environmental concern, but a concern about the Government's disregard for the people.

I-147-003
- The winning contractor has been involved in numerous lawsuits, accused of professional misdealing and underbid the estimate to secure the contract.

I-147-004
- Reduced traffic flow & increased congestion are only exacerbated when tolls are taken into consideration…SCORES of people will avoid the tolls and travel alternate routes; only adding to increased commute times and congested surface streets.
- Written materials provided to the public are misleading. Statistics are used to promote the tunnel's efficiency, using best case scenarios without considering real world applications; detailed readings of reports reveal a much less positive impact (longer travel times, increased congestion and tolls as high as $4.00)

I-147-005 The tunnel under consideration is not a reasonable replacement for the current SR99 viaduct. More consideration should be taken before allowing the viaduct to be replaced.

Phoebe Underwood

11807 20th Ave SW
Burien, WA 98146

I-147-001

With the preferred Bored Tunnel, the southbound on-ramp at Columbia Street and the northbound off-ramp at Seneca Street will be removed. Traffic patterns are expected to alter slightly with removal of these ramps, and the Alaskan Way surface street is expected to carry additional traffic to and from the central business district. To provide similar capacity levels as currently exists today, six lanes of traffic on the Alaskan Way surface street are necessary south of Yesler Way. The Bored Tunnel Alternative does not include the Alaskan Way surface street as part of the project. Overall, it is expected that traffic that diverts to use surface streets and I-5 will distribute based on available capacity of these various roadways. At this time, there are no plans to substantially increase capacity along I-5 through the downtown core. Appendix C, Transportation Discipline Report, addresses capacity and traffic safety issues. Please refer to the Final EIS for current information.

The Elliott Bay Seawall needs to be rebuilt or replaced because it is deteriorating and vulnerable to earthquakes. However, the seismic stability of a viaduct replacement along Seattle's central waterfront does not necessarily require that the seawall be rebuilt or replaced. The Cut-and-Cover Tunnel and Elevated Structure Alternatives include replacing the Elliott Bay Seawall because the alignments for these alternatives are located in close proximity to the failing seawall, which if not repaired, could compromise the seismic stability of the proposed cut-and-cover tunnel or elevated structures proposed. The Bored Tunnel Alternative proposes to construct a new tunnel inland; therefore, the failing seawall does not have the potential to affect the seismic stability of this alignment.

Additional King County Metro transit service will be provided as part of construction mitigation. Improvements to the speed and reliability of transit service will also be supported by the project and continue to be in place after construction is completed. While some added travel time

would be incurred by buses under the Bored Tunnel Alternative, transit operations would still be maintained. The project would not be supporting ongoing transit expansion following construction completion. However, transit service enhancements are expected in downtown Seattle; for example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

I-147-002

While the 2007 Advisory Vote was held in the City of Seattle, state legislators have been actively involved in the alternatives development for this project. In January 2009, the Washington State Governor, along with the King County Executive and Seattle Mayor, recommended replacing the central waterfront portion of the Alaskan Way Viaduct with a bored tunnel. Later that year, the Washington state legislature passed Senate Bill 5768, which urged the state to expedite environmental review and authorized state funds for the bored tunnel.

In addition, with the publication of each EIS for this project, the public, not just those who live in Seattle, were invited to comment on the project. These comments have been reviewed and responded to in the Final EIS Appendix S, 2004 and 2006 Comments and Responses, and Appendix T, 2010 Comments and Responses. In general, public input has been accepted throughout the life of the project via the project's website and email address.

The viaduct section of State Route 99 is a main north-south route through Seattle, carrying more than 100,000 vehicles per day. Many commuters and industries, particularly the Port of Seattle, depend on this vital corridor as an alternative to I-5. It is critical to regional mobility and our local, regional and state economies. This is why it is important to move forward and replace the seismically vulnerable viaduct.

I-147-003

Thank you for your comment.

I-147-004

Chapter 9 in the 2010 Supplemental Draft EIS discussed the possibility of tolling and effects if tolls were applied to the Bored Tunnel Alternative. In addition, a detailed tolling analysis has been conducted for all alternatives and is presented in this Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis of tolling impacts to transportation elements.

I-147-005

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would be more disruptive to Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provide a more in-depth comparison of trade-offs for the alternatives.

From: Jane Walton [walton.jane@comcast.net]
Sent: Friday, December 10, 2010 12:04 PM
To: AWV SDEIS Comments
Subject: re: Viaduct replacement

I-148-001 It is obvious that the only reason for the tunnel is to "improve " the area of the existing viaduct for pleasure and business. It is NOT for improvement of traffic, especially for West Seattle where I live. I was amazed when I first moved here how easy it was to drive the Viaduct, either to downtown or on through to the U-district, North Seattle and beyond. It rarely has accidents that tie-up traffic, compared to the daily stoppages on I-5 through the city. The proposed tunnel will not handle the same volume of traffic which quickly moves through the area now, will block off the downtown area, making drivers drive through the city in heavy traffic from the south end to get to First Hill for doctor visits, or the downtown business and shopping areas. Business will suffer, but the developers will love their new views. One of the great attractions for Seattle has always been the drive along the Viaduct overlooking the harbor (and at the same time avoiding the ferry traffic and rather tacky touristy areas below) and the Olympics and everything in between. I lived in the Boston area during the Big Dig fiasco there - it turned out well eventually but at the cost of great inconvenience, multiple construction problems, e.g. leaks pooling in the roadway, and incredible over-runs in costs.

I-148-002 This will quite likely happen here, and Seattle residents will be forced to pay these over-runs as the contracts are now set-up. At the very least the entire STATE should be included in paying for these over-runs, as many cars and trucks now driving STATE Highway 99 are from outside the Seattle itself. All in all I can see nothing good about the bored tunnel, only many problems and high costs to the taxpayers and future traffic woes for all.

Sincerely, Jane Walton
1564 Alki Ave. SW #305, Seattle, WA 98116 206-932-2145

I-148-001

The Final EIS Chapter 1, Introduction, describes the Purpose and Need for the project and one of several purposes is to provide capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle. All of the alternatives have been evaluated based on their ability to meet the Purpose and Need. Appendix C, Transportation Discipline Report, addresses the importance of the viaduct as a transportation corridor. It also covers issues related to capacity, local access, mobility, and transit service for each build alternative. Please refer to the Final EIS for current information.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would have severe adverse effects on Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provides a more in-depth comparison of tradeoffs for the three alternatives.

I-148-002

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

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.

From: James Watson [JAMES@LABORERSLOCAL440.COM]
Sent: Monday, December 13, 2010 12:46 PM
To: AWV SDEIS Comments
Subject: 2010SDEISComment

I-149-001 | **the tunel will put people back to work for a long time, *"TUNNEL UP, LET'S GO TO WORK"***

I-149-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: chris smith [mailto:renshenc@gmail.com]
Sent: Monday, December 13, 2010 12:21 PM
To: AWV SDEIS Comments
Subject: Alaska Way Viaduct/Oppose Current for tunnel

Dear WSDOT,

I-150-001 I was at the opening of the Viaduct way back when,(See Photo) I have watch this city grow and limp forward to were we are today.

The concept of City management is a lost art and to cut it short, the tunnel, for so many reasons is the cherry on the top of a long line if City MIS-Management.

Any and all of my comments I have documentation for.

Sincerely

Chris Webb
206 883 8022

I-150-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative.

From: Aram West [aramwest@yahoo.com]
Sent: Friday, December 03, 2010 10:07 AM
To: AWV SDEIS Comments
Subject: Comment period on the Deep Bore Tunnel comments

I-151-001

PLEASE DO NOT DIG THIS TUNNEL!!!!!

I encourage the building of the "elevated" option. After reviewing much of the EIS I am even more convinced that rebuilding the current structure, or something like it, is the best option. The added benefits of an improved seawall and streetcar only sweeten the option.

As a voter I will continue to vote against any tax increases as long as this tunnel is being built. I cannot believe that our priority is to build a scenic downtown for the wealthy while our infrastructure and educational system are suffering. What about affordable housing? or serious job creation. I can not consciously support the Deep Bore Tunnel.

Thank you
Aram Westergreen.

I-151-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Elevated Structure Alternative. The Elevated Structure Alternative continues to be an option and is analyzed in the Final EIS.

From: eddiew@speakeasy.net [mailto:eddiew@speakeasy.net]
Sent: Saturday, December 11, 2010 8:18 PM
To: Alaskan Way Viaduct
Subject: AWV DEIS comment

WSDOT AWV team,

I-152-001 Thank you for publishing the DEIS. Please consider the following comments.

1. What mitigation will be implemented to address the many rats that will be displaced during construction and demolition of the project? The residential and commercial areas near the AWV could be impacted.

I-152-002 2 The project will take out several hundred parking spaces. Please consider an additional mitigation measure. While the recession stalls development, the former north lot of the Kingdome is in use as long term parking. While the project takes out short term parking in Pioneer Square, WSDOT could lease about 200 spaces from the owners of the north lot and allow them to leased by the Pioneer Square business association as short term parking.

I-152-003 3. During several years of the project construction, SR-99 will reduced to two lanes in each direction. It will become congested. The congestion on SR-99 will lead to traffic diversion and slow transit service that uses the AWV to and from the south. Please ask the Legislature for permission for "early" tolling on SR-99 (parallel to the early toling on SR-520 to be implemented in spring 2011). Gantries could be placed at the Elliott Avenue on ramp, the Battery Street tunnel entrance, and northbound north of South Spokane Street. Please ask the Legislature for permission to toll all lanes of I-5 in King County. WSDOT needs to raise at least $2 billion to fund rehabilitation of I-5. The tolling of the project will be more effective if I-5 is also tolled.

I-152-004 4. The DEIS partially describes the January 2009 agreement between Governor Gregoire, Mayor Nickels, and Executive Sims. A key part of the agreement is not emphasized sufficiently: the one percent MVET for Metro Transit. Under the agreement, it was intended to fund three important parts of the program: transit capital, transit service related to the project, and to fill in the decline of sales tax revenue necessary to fund the baseline level of transit service. Metro is closer to a fiscal cliff due ot the recession and the decline of its sales tax revenue. If this element of the agreement was enacted, it would significantly reduce the Metro fiscal crisis. Much of the baseline level of service, a high portion of which serves downtown Seattle, the project area, will disappear if the funding crisis is not addressed. Implicit in the agreement is Executive Sims' understanding of the upcoming fiscal crisis. The project will benefit bypass trips. Improved transit service is necessary to improve the transit mode share in downtown Seattle. The DEIS does not seem to measure the impact of not enacting this key element of the January 2009 agreement. How much service will be cut? What will happen to the transit mode share in downtown Seattle? How much more congested will the downtown surface streets become? The DEIS seems to assume not only the program elements, but also the baseline level of transit service.

I-152-005

5. The transit capacity of downtown Seattle is constrained. It has been measured by the number of outbound buses and trains departing downtown Seattle in the p.m. peak hour. The limiting factors are curb space for loading buses, the sidewalk area for intending passengers, the

I-152-001

Thank you for your comments. The project team does not expect to need mitigation measures to address rats. Mitigation measures for the project are described in Chapter 8 of the Final EIS and in Appendix N, Wildlife, Fish, and Vegetation Discipline Report.

I-152-002

Private development of the Qwest Field North Lot is still planned, so the project does not anticipate being able to use that space for project or mitigation purposes.

The lead agencies recognize that businesses along the central waterfront, Western Avenue, and Pioneer Square rely on the short-term parking in the area. The City of Seattle Department of Transportation (SDOT), in coordination with the project, has conducted parking studies as part of the process to develop mitigation strategies and better manage the city's parking resources. SDOT's studies identified a number of strategies to offset the loss of short-term parking in this area, including new or leased parking and the increased utilization of existing parking. Although the mitigation measures would be most needed during construction, many of them could be retained and provide benefits over the longer term. Specific parking mitigation strategies have not yet been determined, but the project has allocated $30 million for parking mitigation. The parking mitigation strategies will continue to evolve in coordination with the project and community partners. Parking measures under consideration and refinement include:

- Encourage shift from long-term parking to short-term parking
- Provide short-term parking (off-street), especially serving waterfront piers, downtown retail, and other heavy retail/commercial corridors
- Implement electronic parking guidance system
- Provide alternate opportunities to facilitate commercial loading activities

I-152-005

throughput of the transit tunnel, the throughput of the north-south avenues (e.g., 1st, 2nd, 3rd, and 4th), the throughput of the key east-west streets connecting the north-south avenues with I-5 (e.g., Stewart, Howell, and Virginia streets, and Olive Way), and the capacity of several key intersections at the ends of the north-south avenues (e.g.., 2nd Avenue Extension South and 4th Avenue South at South Jackson, and 4th Avenue and Olive Way. The project will degrade the transit capacity of downtown Seattle by diverting general purpose traffic to the north-south transit corridors during construction by decreasing the lanes on SR-99, and after project completion, through tolling. The constraints on downtown Seattle transit capacity may not be relaxed until ST Link is implemented in north Seattle at NE 45th Street, Roosevelt, and Northgate, and bus service can be restructured. That is expected in about 2021. WSDOT could help mitigate the impact of the project by improving transit flow. Please consider limiting the Stewart Street reversible ramp to HOV, as the other downtown I-5 reversible ramps are limited. This would reduce the SOV traffic on Stewart and Howell streets and Olive Way and improve transit flow. The SOV trips on the reversible Stewart Street ramp may shift to the I-5 general purpose ramps or to transit. The tolling of I-5 outlined in comment 3 above could also improve transit flow on I-5 and on key arterials leading to I-5 interchanges. Also, please address in the cummulative impacts section, the impact of the planned First Hill streetcar on the transit capacity of South Jackson Street and the north-south avenues of 2nd Avenue Extension, 4th, and 5th. The streetcar plans seem to take lanes on South Jackson Street and affect all three intersections.

I-152-006

6. The project includes the closure of the Battery Street Tunnel and filing it with rubble. Should Seattle chose to add it to its program, please be open to converting the BST to a transit way to and from the north and transit layover to and from the south with ramps to and from 3rd Avenue. This addition to the Seattle program would save the project the cost of filling in the BST. The off street layover could replace valuable curb space in Belltown. The transit ramp to and from the north would take many thousands of transit riders past the choke point of Denny Way, a place where the street grid shifts. Reuse of the BST would improve transit flow on several important transit routes. Only one new crossing of Aurora Avenue North would be lost if the BST was retained for transit use.

Thank you for considering these comments.

Jack Whisner

8325 11th Avenue NW, Seattle 98117

- Develop a Center City parking marketing program
- Use existing and new social media and blog outlets to provide frequent parking updates
- Establish a construction worker parking policy that is implemented by the Contractor

Refer to the Parking Mitigation during Construction section in Chapter 6 of the Transportation Discipline Report (Appendix C of the Final EIS) for additional information.

I-152-003

The lead agencies appreciate your suggestions. Project financing is not included in an environmental impact analysis, though it does guide decision-making. Therefore, the Final EIS will not change as a result of your suggestions, but they have been noted by the lead agencies.

I-152-004

The agreement signed by the Governor, County Executive, and Mayor in January 2009 described a program of independent yet complementary projects for replacing the Alaskan Way Viaduct and providing a strategy for overall mobility in Seattle. The State is responsible for replacing the viaduct, the City for the seawall and central waterfront, and the County accepted responsibility for additional RapidRide and express bus service, with some identified as construction mitigation. These future transit service improvements have benefits independent of replacing the Alaskan Way Viaduct. WSDOT recognizes the funding anticipated in the agreement has not been realized, and that the recent economic downturn has reduced other funding sources King County currently relies on for providing transit service throughout King County.

Currently WSDOT is providing funding for King County on the S. Holgate Street to S. King Street Viaduct Replacement Project to provide

From: eddiew@speakeasy.net [mailto:eddiew@speakeasy.net]
Sent: Monday, December 13, 2010 11:10 PM
To: Alaskan Way Viaduct
Subject: AWV Feedback

Sent from: Jack Whisner
Address: 8325 11th Avenue NW
City: Seattle
State: WA
County: King County
Zip: 98117
Email: eddiew@speakeasy.net
Phone:

Comments:

I-152-007

WSDOT AWV Replacement, Please consider the following comments on the Alaskan Way Viaduct Replacement Project 2010 SDEIS. One Many rats will be displaced by the project. How will that be mitigated?

Two The project will cause the loss of several hundred parking spaces. The former north lot of the Kingdome is slated for development, but is now used for long-term parking. The development may be stalled by the recession. Consider mitigation for the loss of short-term parking in Pioneer Square by providing about 200 spaces from the western half of the former north lot to the Pioneer Square business association for use as short-term parking.

Three The transit capacity of downtown Seattle is constrained. The constraint will not be relaxed until about 2021, when Sound Transit Link LRT is implemented to the Northgate, Roosevelt, and Brooklyn stations, allowing the restructure of north Seattle transit service. The transit capacity is measured by the outbound buses and trains leaving downtown Seattle in the peak p.m. hour. There are several constraints: curb space for buses, sidewalk area for intending passengers, east-west streets connecting the north-south avenues with I-5 (e.g., Stewart Street, Olive Way, and Howell Street) intersection capacity (e.g., 4th Avenue and Olive Way, South Jackson Street and 2nd Avenue Extension South, South Jackson Street and 4th Avenue South), lane capacity on 2nd, 3rd, and 4th avenues, and, transit tunnel capacity. The project will impact the capacity during construction and after opening. During construction, traffic will probably divert to downtown Seattle streets away from congestion on SR-99, as it will be reduced by one lane in each direction. After completion, the project will be tolled and traffic is expected to be diverted to downtown Seattle streets. WSDOT could help mitigate the constraints on transit capacity by restricting the Stewart Street ramp with the I-5 reversible lanes to HOV only, as the other downtown ramps are restricted. This would improve the flow for transit on Stewart Street, Olive Way, and Howell Street and their intersections. The SOV traffic using the Stewart Street reversible ramp could shift to HOV, transit, or other ramps.

Four The project seems to require $400 million in toll revenue. The Legislature must first authorize the tolling. During construction, SR-99 will become more congested due to a reduction in lanes. Please consider asking the Legislature for authority to toll SR-99 during

additional transit service hours to help mitigate the effects of construction. This program is ongoing and regularly monitored to evaluate its effectiveness. For the Alaskan Way Viaduct Replacement Project, WSDOT will continue to evaluate the need for increased bus service in the West Seattle, Ballard, Uptown, and Aurora Avenue corridors during the initial portions of the construction period, as well as a bus travel time monitoring system. WSDOT will also work with the County to identify funding sources for the service originally contemplated in the January 2009 agreement.

I-152-005

The transportation analysis in the Final EIS, including effects on public transit, incorporated key assumptions regarding future (2030) services and facilities. The assumptions for public transit were based on transit operator development plans such as Sound Transit 2 and the King County Metro RapidRide enhanced bus service. This approach is similar to other travel forecasting conducted in the region.

I-152-006

King County Metro worked in cooperation with the City of Seattle several years ago to identify key transit pathways. The pathways and the new Rapid Ride service are the main focal points for any new Metro service; the Battery Street Tunnel does not lie on any of these pathways and therefore would not be projected to serve any great need.

The cost of constructing new ramps to serve a very short section of tunnel would likely be considerably more than the cost of decommissioning the Battery Street Tunnel. It would require additional right-of-way and cause considerable construction disruption in Belltown. Additionally, bus stops at Denny Way are needed but would be precluded by running buses in the Battery Street Tunnel. The project has been coordinating with Metro Transit to address transit concerns. Refer

I-152-007

construction and not just after project completion. The early tolling would be similar to that authorized for the SR-520 project in spring 2011. Early tolling would help the AWV project with both demand management and revenue. Also please consider asking the Legislature for authority to toll I-5. The general-purpose lanes are congested in both directions and in both peak periods, especially southbound in the afternoons. Tolling could help with both demand management and revenue. WSDOT needs about $2 billion to repair I-5 through Seattle.

Five The project would close the Battery Street Tunnel (BST) and fill it with rubble. Please be open to its reuse if Seattle expands its program to include transit functions for the BST. If ramps connected the BST roadway with 3rd Avenue in both directions: to and from the north, it could be a transit way for routes on Aurora and Dexter avenues North; to and from the south, it could be used for transit layover, replacing many blocks of curb space in the Denny Regrade. The project would be less costly by not having to fill in the BST.

Six The DEIS outlines the January 2009 agreement between Governor Gregoire, Mayor Nickels, and Executive Sims. The description omits a key provision: the one percent MVET for Metro Transit. The revenue from the one percent MVET is needed for three purposes: transit service and transit capital in the program and to backfill the decline in sales tax due to the recession. Without additional service subsidy, the underlying transit serving downtown Seattle will be reduced by the Metro fiscal crisis. The program is dependent upon the underlying network. The project improves bypass trips. The January 2009 agreement included transit improvements for the trips oriented to downtown Seattle.

Thank you for considering these comments.
Jack Whisner

to the Final EIS Appendix C, Transportation Discipline Report for more information on transit.

I-152-007

Please see the responses to your previous comments.

From: brent white [brent_white@hotmail.com]
Sent: Monday, December 13, 2010 7:53 AM
To: AWV SDEIS Comments
Subject: Comments on Hwy 99 SDEIS

I-153-001

Thank you for the opportunity to comment on the Hwy 99 SDEIS.

As a bus rider, I remain disappointed that the least transit-friendly option has been chosen for replacement of the viaduct, when transit has replaced personal vehicle trips as the preferred form of entrance and egress in downtown Seattle.

I am also disappointed that alternative tunnel routes were not studied, especially in light of the higher freight traffic to and from Interbay, vs. Aurora Ave N.

Moreover, looking to the near future when politicians realize that they've built a tunnel for the wrong mode of transportation, I hope that WSDOT can do further study on the feasibility of converting the tunnel to being a second transit tunnel, or a pathway to get high-speed commuter and/or freight rail under downtown.

On the freight piece, I'd like WSDOT to take a realistic look at how freight using the shorter new Alaskan Way, and the use of tolls, will affect traffic patterns and how much traffic the tunnel is expected to carry if the money isn't wasted trying to force freight to cut over to the north portal. Plus, how much of that tunnel traffic is simply competing with the future possible North Link extensions? (This may affect the routing of North Link.)

Thank you, again, for the opportunity to comment. I hope conversion of the tunnel to a more-preferred mode is shown to be feasible and more useful for relieving traffic on freight routes and for general use.

--Brent White
800 S. Donovan St. #210
Seattle, WA 98108

I-153-001

The focus of the project is replacement of a highway facility. Transit development plans such as Sound Transit 2 did not identify use of the project tunnel for future services. However, the project would include elements that support public transit. These elements include transit speed and reliability improvements that would be available during and after project construction. In the south area, there would be a bus-only lane in the northbound SR 99 off-ramp. In the north area bus-only lanes would be provided on Aurora Avenue that will support transit operations in the South Lake Union area.

From:	michaelhwilkins@comcast.net
Sent:	Monday, November 15, 2010 12:44 PM
To:	AWV SDEIS Comments
Cc:	mike.mcginn@seattle.gov; Godden, Jean; Clark, Sally; Burgess, Tim; Rasmussen, Tom; Obrien, Mike; Licata, Nick; Harrell, Bruce; Conlin, Richard; Bagshaw, Sally
Subject:	SR 99 Viaduct Replacement Project/Deep Bore Tunnel - Comments on Supplemental Draft EIS

I-154-001 Although the supplemental draft EIS document (SDEIS) identifies a large number of potential adverse environmental impacts of the project to Seattle and its residents, I focus my comments on what I see as two broad problems which I think present the great threat to Seattle's transportation network and the city's livability.

First, according to recent news reports, the Washington State Department of Transportation (WSDOT) acknowledges that it has already obligated over 3/4 of its $415 million contingency budget to entice the two remaining bidders to stay in the competition after the other bidders dropped out because they believed the project was too risky. The commitment of most of the contingency before the tunneling phase of the project begins compounds the risk that if and when it encounters unforeseen problems during tunnel excavation and construction, including soil stability problems and cultural resources issues referred to in the SDEIS, the State will have no choice but to shift money from other parts of the planned project scope to complete the tunnel work. Unfortunately for Seattle, the other parts of the project -- the surface street connectors to each of the tunnel portals and the demolition and replacement of the viaduct with a high capacity surface highway are critical to the functioning of the surface transportation network which serves downtown, Pioneer Square and the Seattle Center area of the city. Moreover, these at risk elements are critical mitigation to the Project's numerous negative environmental impacts.

I-154-002 Second and in addition to the potential adverse impacts noted above, the State's traffic studies show that over half of the daily trips on the existing viaduct will divert to surface streets as a result of two factors: the absence of entrances to and exits from the tunnel in the downtown area and the planned use of tolling to cover part of the State's cost of the $3.1 billion viaduct replacement capital project. It appears that most of that diversion will be through Seattle's historic Pioneer Square, the neighborhood where I worked and spent much of my leisure time for nearly forty years. I can't imagine how

I-154-003 that fragile neighborhood will survive such a forced concentration of through traffic. And according to recent press reports, the WSDOT project manager openly acknowledges that the State has no money in its project budget to mitigate those expected adverse impacts, and he further asserts that any mitigation of those impacts will be a responsibility of the City of Seattle.

So, at a cost of over $3 billion Seattle will get: *diminished access to downtown from the north and from the south*; and *significantly more traffic congestion on city streets, especially in Pioneer Square and probably in the Seattle Center area*. This alone calls

I-154-001

The committed funds and financial plan for the project remain sound and on budget. The lead agencies will manage the project to ensure it is completed on time and on budget by consulting with a panel of international tunnel experts, utilizing an innovative dispute resolution process and implementing a risk management plan. Also, the bored tunnel design-build contract requires the design-build team to take a greater share of the risk than a traditional construction contract. More than 90 percent of the work will be performed for a fixed price.

Traffic on surface streets in the project area and transportation mitigation measures are discussed in the Final EIS and Appendix C, Transportation Discipline Report, of the Final EIS for each alternative.

I-154-002

With the Bored Tunnel, access to downtown would be provided via ramps located at Alaskan Way and Dearborn Street in the Stadium area. Traffic using the Stadium area ramps would disperse over several city arterials, including the improved Alaskan Way, First, Second, and Fourth Avenues to access downtown. 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.

Updated analysis has been included in the Final EIS. Please refer to Chapter 7 of Appendix C, Transportation Discipline Report, for additional detailed tolling analysis.

I-154-003

The Bored Tunnel Alternative meets the projects purpose and need

I-154-003

into question whether the preferred deep-bored tunnel alternative even meets to purpose and need statement that provides the basis for the SDEIS. Moreover, if the State encounters major problems in its tunneling phase, as most tunnel projects have experienced, it will have to shift money from its committed scope of work for waterfront reclamation, thus leaving *Seattle's downtown waterfront unimproved*.

If Seattle property owners and taxpayers are then told they will have to pay higher property taxes, property assessments or any other kind of tax or fee to complete work promised by the State or to mitigate damages to the surface transportation network caused by the tunnel, I think voters will feel deceived and will find it difficult to forgive elected officials responsible for allowing the project to precede without a sound and transparent plan for how to complete it and pay for it.

better than other alternatives, as described in this Final EIS. There is no proposal for property taxes to pay for replacement of the viaduct. 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 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.

From: Donna Williamson [mailto:williamson_d@hotmail.com]
Sent: Friday, November 05, 2010 2:05 PM
To: AWV SDEIS Comments
Subject: comment about Tunnel Project

Dear WSDOT-

I-155-001

Seattle has the worst designed transportation system in the west coast. We have no history of supporting mass transit projects such as BART, MAX rail or any other extensive rail systems (our new, limited, light rail system was just recently implemented), which has given any viable alternative to the single occupied vehicle. Even the design to add light rail to the floating bridges to relieve the heavily traffic spewing in and out of the East side has been hampered with lawsuits by Kemper Freeman. Trying to get agreement from any of the competing interest on the design of capitol transportation projects never seems to happen. It's amazing how long it takes to get any transportation project approved and constructed in Seattle, it's a nightmare. I am getting so frustrated with the lack of progress, that I just want to see the ball keep rolling on any project that has any type of momentum at all. Sure, there are pros and cons to each design. I'll be the first to admit that I will miss that beautiful view driving in from the airport on 99 that makes my heart melt and has me renewing the love my city each time I see the stunning view of the high rises and waterfront, but I can live without it. If I don't like a tunnel, I can take Highway 5 instead. I just want to keep the ball moving, so a tunnel design is great, go for it. Just keep the costs from escalating out of control of the budget, and the proposing of a toll on the tunnel is just a joke. We are trying to improve conditions to keep the traffic moving on the roadways, not add to the congestion. I would approve of tolls on roadways going East, but not any that go north-south. It's a joke that there is only one freeway going north-south. Highway 99 has become that much needed alternative freeway, so we need to keep the majority of traffic moving without congestion. There isn't as much traffic moving in the east-west direction, and the majority of that traffic is funneling into Microsoft. Microsoft employees have alternatives to driving their cars to work (they have small vans shuttling people to the East Side campuses can use), and besides, with their salaries, they can afford the east side bridge tolls. So aside from all the ranting here is my vote:

-Tunnel design-YES
-Controlling costs of the Tunnel Project-A MUST
-Tolls on the Tunnel-NO
-Tolls on the East side bridges-YES

Sincerely,
Donna Williamson
3618 Francis Avenue North #203
Seattle, WA 98103
206.579.9728
williamson_d@hotmail.com

I-155-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments on the Bored Tunnel Alternative. The analyses regarding how tolls might be implemented as part of the proposed action were preliminary for the 2010 Supplemental Draft EIS but have been updated for the Final EIS. They will be further refined during final design through a joint planning effort (described below) should the state legislature authorize tolls on the SR 99 Bored Tunnel. The analysis in the Final EIS represents a conservative estimate of the impacts of tolling the SR 99 Bored Tunnel. We anticipate that any effects due to applying tolls to the SR 99 Bored Tunnel will be notably less than those described in the Final EIS analysis.

Prior to a final decision about how the SR 99 Bored Tunnel would be tolled, the Washington State Department of Transportation will be working with the Seattle Department of Transportation and other agencies to refine and optimize how to toll the SR 99 tunnel while minimizing diversion of traffic to city streets and minimizing potential effects to transit, bicycle, and pedestrian travel. WSDOT, with cooperation from the City of Seattle, the Port of Seattle, and King County, will establish a Tolling Advisory Committee to provide strategies for minimizing diversion impacts.

As part of the Bored Tunnel project and related projects, WSDOT and partner agencies have or will implement several strategies that should reduce the effects of potential diversion. For example, both the south and north portal configurations include bus priority lanes to provide reliable travel times for SR 99 transit service into and out of downtown. The streets that transition between SR 99 and the downtown street grid are designed in a manner that meets the City's Complete Street goals and include treatments for pedestrians, bicycles, freight, and adjacent land uses.

In advance of construction, WSDOT funded Intelligent Transportation System (ITS) investments that provide improved signal operations and travel time information on SR 99 and city streets such as 15th Avenue NW that were likely to see increased volumes due to SR 99 construction activities. These investments will have lasting value. Supplemental transit services and transportation demand management were also implemented with assistance from the City of Seattle and King County, and these strategies can form the blueprint for future strategies.

From: Integrity Structural Engineering [IntegritySE@att.net]
Sent: Monday, December 13, 2010 4:26 PM
To: AWV SDEIS Comments
Subject: 2010 SDEIS Comment

Importance: High

Dear WSDOT Tunnel Engineers,

I-156-001

I have reviewed your design proposals and concepts and am extremely upset. Your proposal for only two lanes of traffic in each direction and no downtown access on this major infrastructure element to our community is a complete contradiction to the fundamental purpose of your proposed action. The change from three lanes of traffic on the Viaduct each way, eliminating the traffic capacity of one lane each direction, and the elimination of four downtown access points to the heart of Seattle creates major disruption of traffic patterns on SR 99. This change also will add 20 minutes of travel time to each vehicle. That added travel time compared to direct access today, they must drive through the town and work back through the basic lights or exit SR 99 entirely and again travel through town along the basic surface streets with traffic lights, pedestrians, and all the other commercial and traffic added. This is just the tip of the design where you are not addressing the needs of this community of travelers using this facility and are proposing in fact to heavily damaging them every day for the rest of their travels on this route and burden the entire state with billions of dollars in replacement costs to do it. In the past every federally funded project I have worked on required a 20-year projection of the traffic model to demonstrate achieving the current needs now and at least 20-years into the future before valuable federal money can be spent on a proposal that will damage the individuals you owe an ethical obligation to. Yet you have impacted us greatly with this proposal and ignored the damages.

I-156-002

Now consider the huge environmental implications of your proposals where hundreds of thousands of cars are each expending more fuel for added miles of travel and 20 minutes of added travel time each way. Add to this the increase amount of vehicle emissions you WSDOT Tunnel Engineers will have created. Continue the same concept into maintenance of your facility. All that generated exhaust must now be removed from the tunnels 24 hours per day, every day, with mechanical fans that require energy cost, maintenance, and future facility repair/replacement costs (how long does a fan last?) that is required in perpetuity. This is compared to a current bridge system with $0 of these costs. The tunnel also requires lighting 24 hours per day, the bridge does not. Your proposed tunnel is below the sea water elevation and will require pumping power costs, maintenance, and facilities costs in perpetuity to keep the sea water, ground water, and rain water drained out of this lower tunnel. The Seattle area is listed as critical for tsunamis and this facility will be filled with water should one occur and it would cause months if not a year of closure of your tunnel for work to pump the water, remove the bodies, cars/trucks, and repair the facilities to this underground trap you have created. A bridge such as the replacement viaduct would likely withstand such initial water pulse without critical damage (see the hotels of the recent Pacific tsunamis, all still stood) and would be reopen to usage within days. What is the tsunami level created from the earthquake seismic level you are designing for? These are not independent conditions and with the size of seismic activity designed a tsunami would also occur.

I-156-003

You tunnel engineers and our politicians have wasted millions of dollars of our precious resources on this fools errand. False statements such as those of the governor, that the tunnel bid is under budget, (the maximum allowed is $1,090 million. Your low bid was $1,089.7 million and you say this is under budget!). Even the rehabilitation of the existing bridge provides more community benefits including downtown access points (four more than the tunnel), three traffic lanes each direction plus turn out ramp lanes at select existing access ramps, and each at cost less than the billions proposed with your tunnel. The rehabilitation of this bridge was also SPECIFICALLY considered and addressed by M.J. Nigel Priestly, PhD and Frieder Seible, PhD including Plans and Prototype geometry for the Retrofit of Double

I-156-001

It is recognized that the Bored Tunnel Alternative would result in some changes to travel routes due to ramp reconfigurations and relocations. For instance, 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. The analysis of traffic conditions did include long-range (20 year) projections of traffic flow along the corridor and on parallel arterials. Updated analysis has been included in the Final EIS. Please refer to Appendix C, Transportation Discipline Report, for additional detailed analysis.

I-156-002

The Final EIS Chapter 1, Introduction, describes the Purpose and Need for the project and one of several purposes is to provide capacity for automobiles, freight, and transit to efficiently move people and goods to and through downtown Seattle. All of the alternatives have been evaluated based on their ability to meet the Purpose and Need. Appendix C, Transportation Discipline Report, addresses the importance of the viaduct as a transportation corridor. It also covers issues related to the travel times and vehicle miles traveled for each build alternative.

The lead agencies have identified the Bored Tunnel Alternative as the preferred alternative due to its ability to best meet the project's identified purposes and needs and the support it has received from diverse interests. Specifically, compared to the Cut-and-Cover Tunnel and Elevated Structure Alternatives, it avoids substantial closure of SR 99 during construction and it can be built in a shorter period of time than the other two alternatives. Extended closure of SR 99 would have severe adverse effects on Seattle and the Puget Sound region. Chapters 5 (Permanent Effects) and 6 (Construction Effects) in the Final EIS provides a more in-depth comparison of tradeoffs for the alternatives. The Bored Tunnel Alternative is expected to result in a slight decrease in energy consumptions when completed in 2015 because it is expected to

I-156-003

Decker bridges in July 1991. See Report No. SSRP -91/93 Seismic Assessment and Retrofit of Bridges. Professor Priestley and Seible's seismic retrofit of bridge's work is on all our bridge reference shelves and if you are looking to verify their credibility and application, check these "WSDOT Tunnel Engineers" library and you will also see their copy of "Seismic Design and Retrofit of Bridges" by Priestly Seible, & Calvi on the shelf.

Please rethink and eliminate this Tunnel proposal which is society damaging and a waste of very limited resources for the rest of our lives. Thank you for the opportunity to present my concerns and the fundamental flaws of this project proposal.

Ken Wilson, PE SE
Bridge Consultant
Integrity Structural Engineering, PLLC
4124 Interlake Ave. N.
Seattle, WA 98103
Phone: (206) 547-1379
Fax: (206) 547-1381
Mobile: (206) 890-9864
E-mail: IntegritySE@att.net

have slightly fewer vehicle miles traveled than the 2015 existing viaduct. The total energy use in 2030 is expected to increase compared to 2015 due to the expected increase in vehicle volumes. Appendix R, Energy Discipline Report, explains the methods used for assessing existing conditions and environmental effects.

Air quality is not expected to be affected by the Bored Tunnel Alternative. However, greenhouse gas emissions are predicted to increase by 2030 because of the increases in future vehicular volumes and the power needed to operate tunnel operations and lighting systems. Most greenhouse gas emissions with thee Bored Tunnel Alternative would come from vehicle emissions. Greenhouse gas effects are explained in Appendix R, Energy Discipline Report.

The 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-156-003

WSDOT has thoroughly investigated rebuilding or retrofitting the Alaskan Way Viaduct and determined that is not a prudent use of public monies.

Please see Chapter 2 of this Final EIS for a description of how alternatives were developed.

Janet W. Winans, Ph.D
3837 E. Crockett
Seattle, Washington 98112

December 11, 2010

Ron Paananen, AWV Project Manager
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

Dear Ms. Freudenstein, Mr. Paananen and Mr. Hahn,

I-157-001

This letter is intended to add our voices to those submitting responses about the DRAFT ENVIRONMENTAL IMPACT STATEMENT for the replacement of the Alaskan Way Viaduct. Please consider our comments.

While this letter addresses our interests in the issues about the Deep Bore Tunnel outlined in the DEIS, we want to emphasize our concerns about what seems to be the very rapidly closing discussion about the project itself, now that the Governor has so triumphantly presented the "Winners" of the bidding part of this very complex and lengthy process. It is absolutely essential that there be an open, completely transparent discussion about the concerns that are described in the full environmental impact document.

We know that there are essential legal procedures that must come with the release of this Draft that are critical in the ongoing assessment of the impact that the proposed tunnel will have on critical features in the boring area.

As citizens of Seattle we have worked to be informed about the project, including reading of the Executive Summary of the DEIS. Because we have access to the critiques of others with more expertize than we who have read the entire document, we believe the Executive Summary minimizes very serious issues that demand very careful attention. Certainly, no decisions should be made by those who have read only that Summary.

I-157-002

We are concerned about the potential that Pioneer Square may be irreparably damaged by the tunnel construction; traffic in the entire downtown between I-5 and the waterfront will be disrupted during the construction process but the promised funds for

I-157-001

FHWA, WSDOT, and the City of Seattle thank you for submitting your comments. FHWA, WSDOT, and the City of Seattle (lead agencies) are committed to continuing the open, transparent public process that we have undertaken since this project first began. The public involvement process for this project have surpassed legal requirements under the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA). The lead agencies recognize how important this project is to our citizens, taxpayers, and our state and public input has been and will continue to be invaluable to this project.

The Governor has awarded a contract for building a bored tunnel; however, as you state in your letter, the lead agencies cannot build a bored tunnel until the NEPA and SEPA processes are complete.

We appreciate your efforts to stay informed about this project and will respond to your specific comments and concerns about the executive summary in the text that follows.

I-157-002

Effects to Pioneer Square have been carefully considered and described in the Final EIS and its appendices. Additional King County Metro transit service will be provided as part of construction mitigation. While some added travel time would be incurred by buses during construction, transit operations would still be maintained. Potential improvements to the speed and reliability of transit service would also be supported by the completed project. Following construction of this project, transit service enhancements by other agencies are expected in downtown Seattle; for example, Sound Transit light rail and commuter rail expansion under Sound Transit 2 and the King County Metro RapidRide bus program.

I-157-002 any extra transit seem to have been used elsewhere, perhaps in the efforts of the tunnel advocates to find willing bidders for the project.

I-157-003 Perhaps it is reasonable, among experts in the field, to use only a fictitious 2015 Viaduct as the "control" for what the new tunnel will add to the downtown but it seems unreasonable to use such measures as views and air pollution after the Viaduct is demolished as success for the tunnel. Perhaps travel times , with the new traffic patterns learned by drivers during construction, will mean that we will spend only a minute more at one or another intersection (p 18, ESDEIS), but these traffic changes seem to be completely ignored in the public discussions about this project.

I-157-004 The complete study describes the risks of digging and boring in Pioneer Square (Ch 5, p 126), possible damage to 12 historic structures (Ch 2, p31) and possible collapse or dramatic damage to 2 buildings because of difficulty controlling soil loss or preventing over-excavation or sink holes (Ch6, p142). The Executive Summary calls this "an adverse effect". . .that "would be addressed by a Memorandum of Agreement" (ESDEIS, p23). It does not mention that "Mitigation measures to protect the buildings may not prevent the need for demolition to avoid collapse" (Ch 6, p148). This difference in wording and emphasis seems like a very serious misrepresentation of information, considering that most people who do make the effort to understand the environmental impact of this project will believe that the Executive Summary is a fair representation of the risks and costs, much more than financial, to the city and community discovered in the environmental impact analysis.

I-157-005 We will mention just one more concern about the lack of transparency surrounding this project. The Executive Summary states:

> Tolls are not currently proposed for this project and are not included in the assumptions for the Bored Tunnel Alternative. However, tolling options are being considered. . . Projections show 40,000 trips shifting to other facilities [ESDEIS pp15, 30].

The non-tolled tunnel sends 29,000 of the AWV cars and trucks to city streets. The tolled tunnel sends an additional 40,000+ to the city streets. The Bored Tunnel advocates do not describe how even the 29,000 vehicles will be absorbed into downtown traffic beyond saying "the effect of changed traffic patterns would be mitigated through publicity and signage."

As we understand it, tolling is essential to pay for this project but its effects are not included in the description of all the benefits that the Tunnel will bring to the city of Seattle. When you add the choices drivers' whose business is IN downtown Seattle will make when confronted with tolls into the tunnel, which will allow them access TO downtown from 2 instead of 7 "portals," the studies show that only one-third of the traffic currently using the Viaduct will continue to use the Tunnel.

I-157-006 It seems possible to believe that the purpose of this Tunnel is the rapid routing of the traffic that is passing through Seattle. If that is the case, it seems that the City of Seattle

I-157-003

In addition to a discussion about existing traffic conditions, the Supplemental Draft EIS evalauted and reported traffic effects for conditions in both 2015 and 2030 for the Bored Tunnel Alternative. The Final EIS also analyzes conditions in 2030. For subjects like air quality, the year 2015 and 2030 was evaluated.

I-157-004

The discussion of effects and mitigation for historic structures in Pioneer Square has been updated in the Final EIS and Appendix I, Historic, Cultural, and Archaeological Discipline Report. The Western Building's existing poor structural condition means that it cannot withstand settlement as well as other nearby historic buildings. After studying various options for retrofitting or demolishing the building, and receiving public input, WSDOT determined that a protection plan for the Western Building could be implemented with the Bored Tunnel Alternative. The settlement impacts would be mitigated by:

1. Strengthening the foundation with micro piles and grade beams, or constructing a reinforced concrete wall system, or using a combination of both approaches.
2. Installing epoxy grout and wrap on cracked concrete columns and beams.
3. Constructing a temporary exterior steel frame and interior shoring and bracing.
4. Injecting compensation grout to manage building settlement to less than 0.5 inches.

The steel framing and the interior shoring and bracing would be removed when the risk of settlement diminishes, leaving the exterior appearance of the building approximately the same as it is currently. The work would be reviewed by the Pioneer Square Preservation Board and would be done in compliance with the Secretary of the Interior's Standards for

I-157-006

may pay a very serious price, not just in "cost overruns," that is being terribly ignored in all of the public discussions of the pros and cons of the Alaskan Way Viaduct replacement options. Now the Deep Bored Tunnel is considered the ONLY, Governor decreed, alternative, and the Environmental Impact process seems on fast forward for approval and Let The Digging Begin!

While we certainly recognize that SR99 is a highway that moves vehicles both north and south of the City of Seattle this Draft of the yet to be finalized Environmental Impact Statement describes many other issues than we have listed that make us doubt that the Bored Tunnel is the best option to maintain the through purpose of SR99.

It is absolutely essential that all legal processes continue with due seriousness and transparency and that as many of the potential problems that digging the Tunnel may cause be realistically listed along with the costs to mitigate them delineated, and that all of us confront just how those costs will be funded. All people who use SR 99 must know the actual costs of their convenient use of the highway.

Thank you for your consideration of our concerns.

Drs. Janet and Edgar Winans

Rehabilitation of Historic Buildings (36 CFR 67.6). This work would require tenants to be relocated. The building would be unavailable for 12 to 20 months while it is being reinforced.

The Polson Building is not at risk of collapse or demolition, even though it shares an adjoining wall with the Western Building. The surrounding soil would be stabilized with compaction grouting and, if needed, the basement would be reinforced on the interior.

Buildings and structures (both historic and non-historic) along the alignment have been inspected and evaluated by structural engineers. The potentially affected buildings and the monitoring plan are discussed in Chapter 6 of Appendix I, Historic, Cultural, and Archaeological Discipline Report, of the Final EIS. The construction process includes monitoring of selected buildings and structures before, during and after tunneling. This will enable any settlement impacts to be detected immediately so that they can be prevented or minimized. If damage does occur to historic buildings, it will be repaired according to the Secretary of the Interior's Standards for Rehabilitation of Historic Properties.

I-157-005

Currently, the Washington State Department of Transportation does not have the authority from the Washington State Legislature to toll SR 99. As legislative action is required to toll this facility, the evaluation of the non-tolled Bored Tunnel Alternative in the 2010 Supplemental Draft EIS accurately reflected the status of the project. However, if the Washington State Legislature decides to use tolling to fund a portion of the project, the potential effects of tolling do need to be evaluated and documented. The possible effects of tolling are analyzed in Final EIS. Please see Chapter 5 and Appendix C, Transportation Discipline Report.

Yes, if the new facility is tolled, traffic diversion is expected. 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). See Chapter 8, Mitigation, of the Final EIS for more information about the work of the TAC.

I-157-006

The project's purpose and need statement presented in Chapter 1 of the 2010 Supplemental Draft EIS and the Final EIS clearly state the the purpose of the project is to:

- Provide capacity for automobiles, freight, and transit to efficiently move people and goods *to and through* downtown Seattle, and
- Provide linkages to the regional transportation system and *to and from* downtown Seattle and the local street system.

The focus of all the proposed build alternatives evaluated in the 2010 Supplemental Draft EIS and the Final EIS is to provide capacity for both to and through movements. There are tradeoffs between the build alternatives as to how to and through capacity is provided. There are also differences among the alternatives as to the types of linkages provided. However, in the case of all three build alternatives capacity to and through Seattle and linkages to and from downtown Seattle are provided.

As documented by the 2010 Supplemental Draft EIS and the Final EIS, the Bored Tunnel Alternative is not the only proposed build alternative. Rather, it is the preferred build alternative. The lead agencies will continue to take NEPA and SEPA requirements seriously and have provided updated project costs and mitigation information in the Final EIS.

The legislation authorizing WSDOT to proceed with the project 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.

From: Robert Zverina [rob@zverina.com]
Sent: Monday, December 13, 2010 3:39 PM
To: AWV SDEIS Comments; peter.hahn@seattle.gov; mike.mcginn@seattle.gov; richard.conlin@seattle.gov; sally.bagshaw@seattle.gov; tim.burgess@seattle.gov; sally.clark@seattle.gov; jean.godden@seattle.gov; nick.licata@seattle.gov; bruce.harrell@seattle.gov
Subject: STOP the Boondoggle!

I-158-001

I don't know what shady machinations are keeping this tunnel fiasco moving forward, but please for the love of all that is decent and wise do not pursue this disastrous course of action.

The project is far too risky fiscally and will be a blight for Seattle's most historic district, Pioneer Square.

What vested interests are pushing this forward?

Tear down the viaduct and go with the surface road/transit option. Seattle does not need this tunnel. We should be moving into the 21st century, not regressing to the era of mega roadbuilding in the style of Robert Moses.

Please please please put the brakes on this folly.

Yours truly,
Robert Zverina
Seattle

www.zverina.com
since 1997

I-158-001

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments and your interest in this project. As described in this 2010 Supplemental Draft EIS and many other documents, the lead agencies are pursuing this project because the Alaskan Way Viaduct was damaged in the 2001 Nisqually earthquake, is at the end of its useful life, and must be replaced.

Surface and transit road options have been considered throughout the life of the project. A Surface Alternative was studied and evaluated in the 2004 Draft EIS. An updated version of a surface and transit option was considered as part of the Partnership Process in 2008. Traffic analysis on a surface and transit option was conducted and is presented on pages 55 through 58 of the 2010 Supplemental Draft EIS. The conclusions of this analysis were documented on pages 55-58 and summarized in Exhibit 3-9:

- Mobility for trips heading to and through downtown would be reduced, and for some trips travel times would increase substantially compared to existing conditions or bypass concepts.
- North-south capacity would be reduced, resulting in added congestion on city streets and I-5.

WSDOT conducted further analysis as documented in the Surface and Transit Scenario Year 2030 Analysis Results, which are included in Appendix W, Screening Reports, of the Final EIS.

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