City of Seattle
Seattle Planning Commission

Marty Curry, Executive Director
Gregory J. Nickels, Mayor

City of Seattle
Seattle Design Commission

Vacant, Executive Director
Gregory J. Nickels, Mayor

June 1, 2004

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AWVSP Team Office

Alison Ray
AWV Project Office (Wells Fargo Building)
999 Third Avenue, Suite 2424
Seattle, WA 98104

Dear Ms. Ray:

The Seattle Planning Commission and the Seattle Design Commission appreciate the opportunity to share the results of their combined review and comments on the SR 99: Alaskan Way Viaduct & Seawall Replacement Project Draft Environmental Impact Statement (DEIS).

Many of our comments are grounded in the project principles we developed in October, 2001 and shared with both City and State officials (see attached). We believe that the DEIS is an important opportunity to inform the project team about matters of utmost importance to the two Commissions as this project moves forward, as well as comment more specifically on the adequacy and content of the DEIS document.

The Commissions recognize the important role of the EIS process. It describes in detail the alternative options and identifies all potential impacts; identifies the best possible ways to mitigate these impacts; and gives the public the opportunity to weigh in on the document. It is likely to be the most important tool used to identify the preferred alternative which will be selected later this summer. The Final EIS is also critical as it will become the blueprint for Washington State Department of Transportation, the City, and the community as the project moves into design and implementation for identifying and determining impact mitigation. This document should also confirm the State's and City's commitment to consistency with all relevant City policies.

L-003-001

We believe the EIS process should describe how decisions will be made about this significant project. Since this is not included in the DEIS, the City and State should clearly articulate this process during the next month as it meets with the Leadership Group and other agencies.

Most fundamentally, we hold the Viaduct to be a transportation project that is and should be a driver for urban and community development. This is truly an example of the inextricable relationship between transportation and land use in shaping an area. Therefore, the decision-making process should be transparent to all stakeholders.

1

L-003-001

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, describes the history of the project, including development of the Purpose and Need and alternatives. The lead agencies have worked extensively with each other, the public, the legislature, and the Governor to align the preferred alternative choice with the available project funding. Chapter 2 of the Final EIS describes the Partnership Process leading to the preferred alternative identification. The Partnership Process began by evaluating eight scenarios or comprehensive solutions to learn what elements worked best together to replace the viaduct.

We understand that members of the public may prefer different ways to share their comments. In order to encourage as much feedback as possible, we provided several options. At the hearings, attendees could submit comments on a written form, on a computer using an electronic form, or verbally to a court reporter. In addition to the meetings, the public could submit comments by mail or e-mail to the project team. The project team often holds open-house style public meetings to provide as much flexibility as possible to the public. With an open-house format, hearing participants are able to come and go to the meetings as their schedules allows, making the meetings more convenient for many people. Please refer to the Final EIS for current information.

Nine Planning Commissioners and four Design Commissioners have participated in reviewing specific sections of the DEIS. Commissioners, who represent a broad spectrum of professional disciplines and most geographic areas of the city, have reviewed the DEIS from their diverse perspectives. The Planning Commission reviewed this document keeping in mind their role as a primary steward of the City's Comprehensive Plan and its Neighborhood Plans. The Design Commission's review reflects its primary responsibility for reviewing aesthetic, environmental and design aspects of City capital improvement projects and projects in the City right-of-way.

Based on this analysis of the DEIS and additional project reviews, each of the two Commissions will also identify key issues that are important for the City to consider in its role in the selection of a preferred alternative this summer. To that end, we would strongly recommend the creation of a consolidated scorecard by which decision makers could compare and assess the alternatives based on the critical aspect, including: transportation benefits, economic benefits, quality of urban environment, and costs.

Below you will find a summary of our comments and overall recommendations, while a more detailed, DEIS Comments Matrix is attached.

Overall Recommendations:

L-003-002
- **Alternatives –**
  The five alternatives and many variations present a complex range of potential solutions, but still miss some reasonable alternatives. While the effort to bracket the broadest range of options possible is admirable, we encourage more study of some lower cost and more common sense solutions, including a reduced traffic capacity option (see the detailed comments on this option). The overall analysis should assess which option best addresses the emergency or default plans if a seismic event were to occur sooner rather than later.

L-003-003
- **Land Use/Economics –**
  The Final EIS should look more in-depth at the economic value inherent in the future use of land that is made available by various alternatives since this will vary widely among the options. The loss of surface parking is a key issue that requires more focused study. The impact on the City and to waterfront businesses, in particular, promises to be profound and should be addressed for all alternatives.

L-003-004
- **Construction –**
  The Commissions have serious concerns about the scale of construction activities with all of the options and the protracted phasing schedule outlined in the DEIS. We urge you to look at more expeditious strategies, and believe the schedule need not be so sequential. We recommend that the project commit to implementing surface improvements early on and identify a point in the project to step back and study how traffic redistribution is working, adjusting future phases accordingly.

2

L-003-002

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments. After the 2004 Draft EIS was published, your comments along with others led to additional planning, analysis, and the revised alternatives presented in the 2006 Supplemental Draft EIS. Following publication of the 2006 Supplemental Draft EIS, there was not a consensus on how to replace the viaduct along the central waterfront. In March 2007, Governor Gregoire, former King County Executive Sims, and former City of Seattle Mayor Nickels initiated a public process called the Partnership Process to develop a solution for replacing the viaduct along the central waterfront. Details about the project history are described in Chapter 2 of the Final EIS. Because the project has evolved since comments were submitted in 2004, please refer to this Final EIS for the current information.

In January 2009, Governor Gregoire, former King County Executive Sims, and former Seattle Mayor Nickels recommended replacing the central waterfront portion of the Alaskan Way Viaduct with a single, large-diameter bored tunnel. After the recommendation was made, the Bored Tunnel Alternative was analyzed and compared to the Viaduct Closed (No Build Alternative), Cut-and-Cover Tunnel, and Elevated Structure Alternatives in the 2010 Supplemental Draft EIS. The comments received on the 2004 Draft and 2006 Supplemental Draft EISs, subsequent Partnership Process, and the analysis presented in the 2010 Supplemental Draft EIS led to the lead agencies' decision to identify the Bored Tunnel Alternative as the preferred alternative for replacing the viaduct along the central waterfront.

L-003-003

Appendix L, Economics Discipline Report, of the Final EIS describes the indirect impacts for future land use in qualitative terms (see the indirect effects section in Chapter 5). Analysis of economic effects on specific parcels not being acquired for new right-of-way would be speculative.

L-003-005 • **Transportation –**
The Final EIS should look at the project in its larger context, considering the need for regional transportation network solutions and for a commitment to not impact other parts of the network.

L-003-006 • **Visual Quality –**
Develop the potential to improve the coherence and connections into the City and views from the City. Strive to repair the gaps in the fabric of downtown.

Again, we appreciate the chance to provide our comments on this project DEIS, recognizing the magnitude of its importance to the community and region. We would be happy to meet with both City of Seattle and Washington State Department of Transportation staff to answer any questions you have or to discuss our comments further.

Sincerely,

David Spiker, Chair
Seattle Design Commission

George Blomberg, Chair
Seattle Planning Commission

Attachments:
1. SPC / SDC Recommended Principles on the Alaskan Way Viaduct and Seawall Abbreviated Version
2. Section by Section Comment Matrix

cc: Secretary Doug McDonald, WSDOT
Mayor Greg Nickels
Seattle City Council
Maureen Sullivan, WSDOT
Tom Madden, WSDOT
Grace Crunican, SDOT
Bob Chandler, SDOT
Steve Pearce, SDOT
Diane Sugimura, DPD
John Rahaim, DPD

3

The effects would be dependent upon economic forces beyond the control of this project and outside the scope of the Final EIS.

The economic effects of the loss of short-term, on-street parking are quantified in both Chapters 5 and 6 of the Economics Discipline Report. Construction effects on waterfront businesses are evaluated in Chapter 6 for all alternatives.

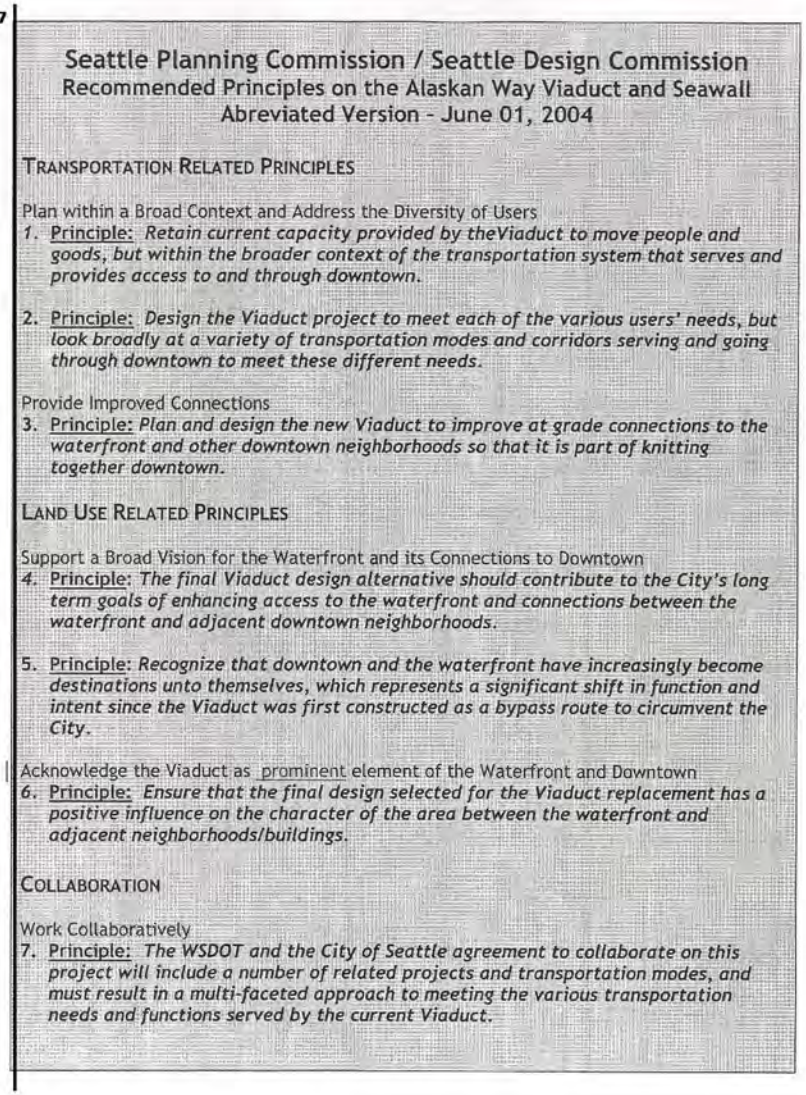
L-003-004

The 2004 Draft EIS evaluated one construction plan that considered brief closures of SR 99 during construction, but otherwise assumed that at least two lanes would be provided in each direction on SR 99 or an alternate detour route. In comments received on the 2004 Draft EIS, many people asked the lead agencies to consider more than one construction plan. Specifically, many people wanted to know if closing the corridor would reduce the amount of time it takes to build the project. To respond to this question, three different construction plans were developed (a shorter construction plan, an intermediate construction plan, and a longer construction plan) and evaluated in the 2006 Supplemental Draft EIS. Since 2006, the Cut-and-Cover Tunnel and Elevated Structure Alternatives and the construction approach for each of the alternatives have been refined. One construction plan is analyzed for each of the alternatives (Bored Tunnel, Cut-and-Cover Tunnel, and Elevated Structure) in the Final EIS. Chapter 3 describes each alternative and its construction plan, and Chapter 6 describes construction effects.

L-003-005

Please see the Final EIS and Appendix C, Transportation Discipline Report, for an updated discussion of transportation effects and proposed mitigation.

L-003-007



Seattle Planning Commission / Seattle Design Commission
Recommended Principles on the Alaskan Way Viaduct and Seawall
Abreviated Version - June 01, 2004

TRANSPORTATION RELATED PRINCIPLES

Plan within a Broad Context and Address the Diversity of Users

1. Principle: *Retain current capacity provided by theViaduct to move people and goods, but within the broader context of the transportation system that serves and provides access to and through downtown.*

2. Principle: *Design the Viaduct project to meet each of the various users' needs, but look broadly at a variety of transportation modes and corridors serving and going through downtown to meet these different needs.*

Provide Improved Connections

3. Principle: *Plan and design the new Viaduct to improve at grade connections to the waterfront and other downtown neighborhoods so that it is part of knitting together downtown.*

LAND USE RELATED PRINCIPLES

Support a Broad Vision for the Waterfront and its Connections to Downtown

4. Principle: *The final Viaduct design alternative should contribute to the City's long term goals of enhancing access to the waterfront and connections between the waterfront and adjacent downtown neighborhoods.*

5. Principle: *Recognize that downtown and the waterfront have increasingly become destinations unto themselves, which represents a significant shift in function and intent since the Viaduct was first constructed as a bypass route to circumvent the City.*

Acknowledge the Viaduct as prominent element of the Waterfront and Downtown

6. Principle: *Ensure that the final design selected for the Viaduct replacement has a positive influence on the character of the area between the waterfront and adjacent neighborhoods/buildings.*

COLLABORATION

Work Collaboratively

7. Principle: *The WSDOT and the City of Seattle agreement to collaborate on this project will include a number of related projects and transportation modes, and must result in a multi-faceted approach to meeting the various transportation needs and functions served by the current Viaduct.*

L-003-006

The visual character and quality of the views, as well as the likely viewer response of drivers and passengers, were discussed for each alternative in the 2004 Draft EIS, the 2006 and 2010 Supplemental Draft EISs, and in greater detail in the Final EIS Appendix D, Visual Quality Discipline Report. The Visual Quality Discipline Report analysis considers views in the SR 99 corridor, which is designated as a City of Seattle Scenic Route, and identifies and assesses designated view corridors largely along east-west streets. Views from the roadway and of the roadway are also assessed.

L-003-007

The recommended principles are consistent with the project's purpose and need.

SR99: Alaskan Way Viaduct and Seawall Replacement Project DEIS
Joint Design Commission and Planning Commission Comments

	SECTION	COMMENT
	GENERAL COMMENTS Main Introductory Document (Chapters 1-11)	Overall the introductory document provides a good description of the project need, background and the alternatives. Many of the Commissions' comments relate to clarifying statements and the alternatives and to including more about the larger framework for the project and decision-making process.
L-003-008		The 156-page overview document of the DEIS is thorough, informative, easy to read and understandable, making clear references to other technical memos, as appropriate. It is a beautifully laid out document with superb graphic quality, which we hope will be used as a model and precedent for other major transportation projects. We do, however, question the production cost and whether many important details are accessible to the general public. Our main concern is whether people could easily access all the necessary technical information to adequately assess the impacts of each of the 5 alternatives by reading only the DEIS document itself.
L-003-009		The Commissions have a major concern that the DEIS does not inform the reader of the process for developing the preferred alternative. If the preferred alternative is to be developed prior to or concurrent with the response to DEIS comments in a FEIS, it is critical that the public understands how their comments were reflected in the decision process. It must also be clear what role the three lead agencies and the Leadership Group will have in selecting the preferred alternative. Some general description of the process from this point forward would be helpful for the interested reader and the general public and should be articulated soon.
L-003-010		Chapter 2 serves as the Executive Summary and is well presented. It is a dramatic improvement over typical EIS documents and is directed toward the essence of the task – choosing the best alternative. However, despite the vast amount of interesting data, it is not organized in a way that is very useful in informing a responsible decision. A larger framework for making the decisions around the preferred alternative needs to be added to the Final EIS document, with the data put into a meaningful context for decision makers. Wherever possible there should be

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L-003-008

Thank you for providing support for the EIS layout and documentation approach. The production costs of the EIS was comparable to other EIS documents, despite improvements to the quality of the graphic design and layout. This was made possible by the type of printing process used to produce the document.

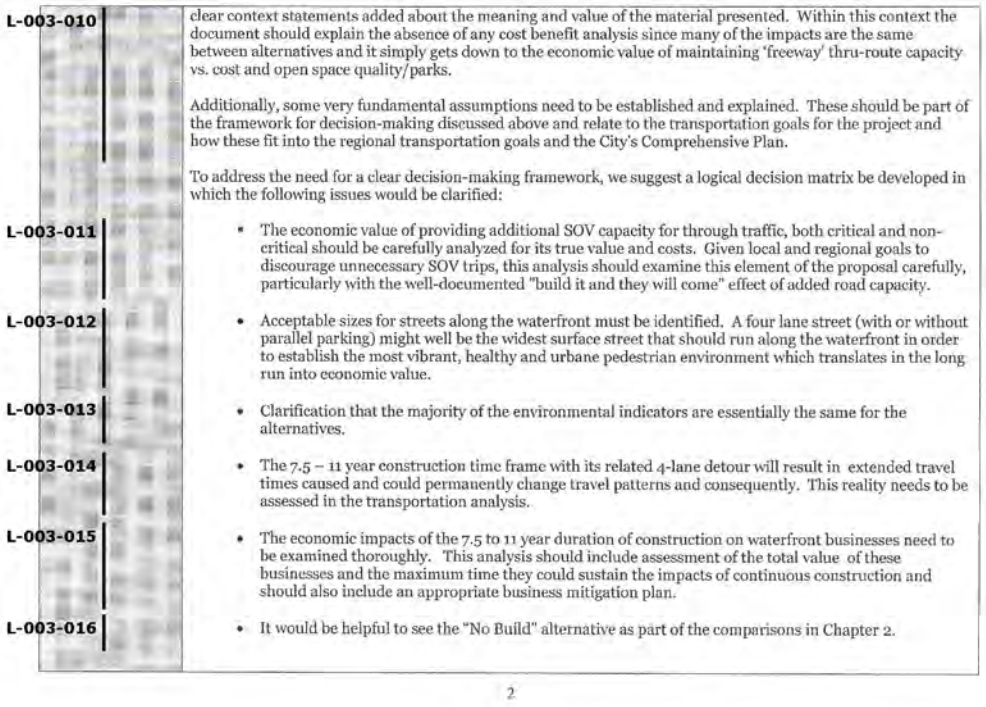
The 2004 Draft EIS, 2006 Supplemental Draft EIS, 2010 Supplemental Draft EIS, and the Final EIS provide clear references to technical appendices in an effort to help direct interested readers to detailed information and to make sure the EIS is concise and focuses on relevant issues. The technical appendices are provided to all recipients of the EIS on a CD, making these technical details accessible to the public. Additionally, hard copies of all of the technical appendices are provided at City of Seattle libraries and neighborhood centers to ensure accessibility to the public. This approach is supported by both the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA) in the following references:

NEPA References:

- 40 CFR 1502.1: Agencies shall focus on significant environmental issues and alternatives and shall reduce paperwork and the accumulation of extraneous background data. Statements shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses.
- 40 CFR 1502.2: Environmental impact statements shall be analytic rather than encyclopedic.

SEPA References:

- WAC 197-11-400 (3): Environmental impact statements should be



L-003-010 clear context statements added about the meaning and value of the material presented. Within this context the document should explain the absence of any cost benefit analysis since many of the impacts are the same between alternatives and it simply gets down to the economic value of maintaining 'freeway' thru-route capacity vs. cost and open space quality/parks.

Additionally, some very fundamental assumptions need to be established and explained. These should be part of the framework for decision-making discussed above and relate to the transportation goals for the project and how these fit into the regional transportation goals and the City's Comprehensive Plan.

To address the need for a clear decision-making framework, we suggest a logical decision matrix be developed in which the following issues would be clarified:

L-003-011
- The economic value of providing additional SOV capacity for through traffic, both critical and non-critical should be carefully analyzed for its true value and costs. Given local and regional goals to discourage unnecessary SOV trips, this analysis should examine this element of the proposal carefully, particularly with the well-documented "build it and they will come" effect of added road capacity.

L-003-012
- Acceptable sizes for streets along the waterfront must be identified. A four lane street (with or without parallel parking) might well be the widest surface street that should run along the waterfront in order to establish the most vibrant, healthy and urbane pedestrian environment which translates in the long run into economic value.

L-003-013
- Clarification that the majority of the environmental indicators are essentially the same for the alternatives.

L-003-014
- The 7.5 – 11 year construction time frame with its related 4-lane detour will result in extended travel times caused and could permanently change travel patterns and consequently. This reality needs to be assessed in the transportation analysis.

L-003-015
- The economic impacts of the 7.5 to 11 year duration of construction on waterfront businesses need to be examined thoroughly. This analysis should include assessment of the total value of these businesses and the maximum time they could sustain the impacts of continuous construction and should also include an appropriate business mitigation plan.

L-003-016
- It would be helpful to see the "No Build" alternative as part of the comparisons in Chapter 2.

2

concise, clear, and to the point, and shall be supported by the necessary environmental analysis. The purpose of an EIS is best served by short documents containing summaries of, or reference to technical data, and by avoiding excessively detailed and overly technical information. The volume of an EIS does not bear on its adequacy. Larger documents may even hinder the decision making process.

- WAC 197-11-420 (6): Agencies shall incorporate material into an EIS by reference to cut down on bulk, if an agency can do so without impeding agency and public review of the action.

L-003-009

Environmental documentation for the project has been prepared in compliance with NEPA (42 U.S.C. 4322(2)(c)) and 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. The lead agencies have worked extensively with each other, the public, the legislature, and the Governor to align the preferred alternative choice with the available project funding. Chapter 2 of the Final EIS describes the Partnership Process leading to the preferred alternative identification. The Partnership Process began by evaluating eight scenarios or comprehensive solutions to learn what elements worked best together to replace the viaduct.

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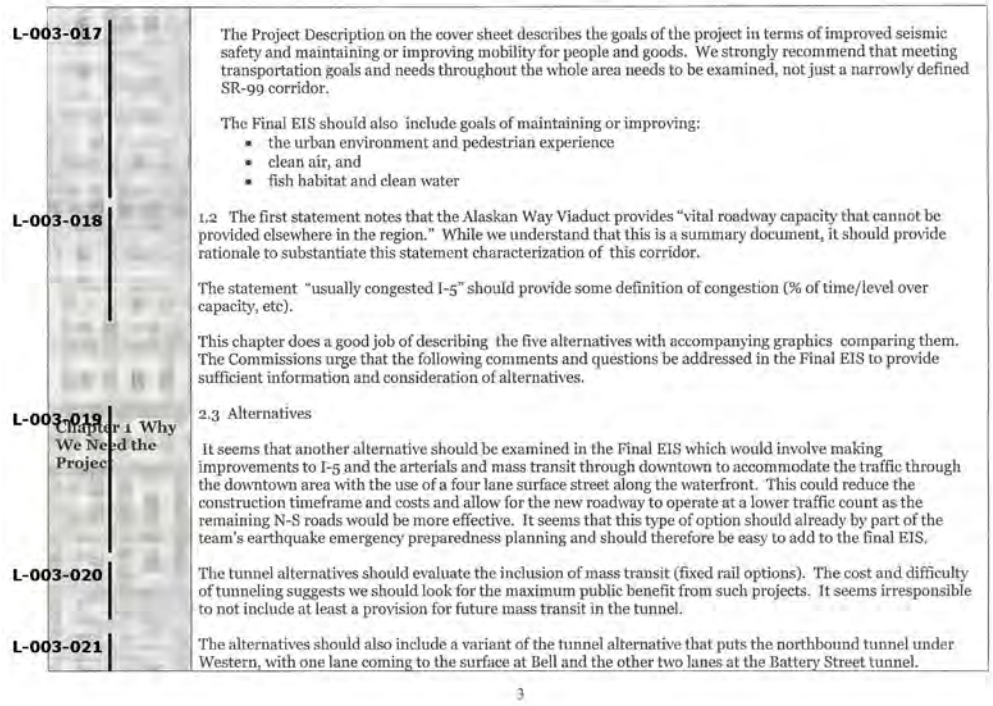


L-003-017

The Project Description on the cover sheet describes the goals of the project in terms of improved seismic safety and maintaining or improving mobility for people and goods. We strongly recommend that meeting transportation goals and needs throughout the whole area needs to be examined, not just a narrowly defined SR-99 corridor.

The Final EIS should also include goals of maintaining or improving:

- the urban environment and pedestrian experience
- clean air, and
- fish habitat and clean water

L-003-018

1.2 The first statement notes that the Alaskan Way Viaduct provides "vital roadway capacity that cannot be provided elsewhere in the region." While we understand that this is a summary document, it should provide rationale to substantiate this statement characterization of this corridor.

The statement "usually congested I-5" should provide some definition of congestion (% of time/level over capacity, etc).

This chapter does a good job of describing the five alternatives with accompanying graphics comparing them. The Commissions urge that the following comments and questions be addressed in the Final EIS to provide sufficient information and consideration of alternatives.

L-003-019

2.3 Alternatives

It seems that another alternative should be examined in the Final EIS which would involve making improvements to I-5 and the arterials and mass transit through downtown to accommodate the traffic through the downtown area with the use of a four lane surface street along the waterfront. This could reduce the construction timeframe and costs and allow for the new roadway to operate at a lower traffic count as the remaining N-S roads would be more effective. It seems that this type of option should already by part of the team's earthquake emergency preparedness planning and should therefore be easy to add to the final EIS.

L-003-020

The tunnel alternatives should evaluate the inclusion of mass transit (fixed rail options). The cost and difficulty of tunneling suggests we should look for the maximum public benefit from such projects. It seems irresponsible to not include at least a provision for future mass transit in the tunnel.

L-003-021

The alternatives should also include a variant of the tunnel alternative that puts the northbound tunnel under Western, with one lane coming to the surface at Bell and the other two lanes at the Battery Street tunnel.

3

Chapter 1 Why We Need the Project

schedules allows, making the meetings more convenient for many people. Please refer to the Final EIS for current information.

L-003-010

Thank you for your comments supporting the presentation of the Chapter 2 summary. Your comments do not include specific suggestions to help us improve organization; however, the presentation is somewhat constrained by NEPA and SEPA requirements dictating the content of the summary. We did, however, work closely with City staff in developing the summary chapters for this and subsequent EISs.

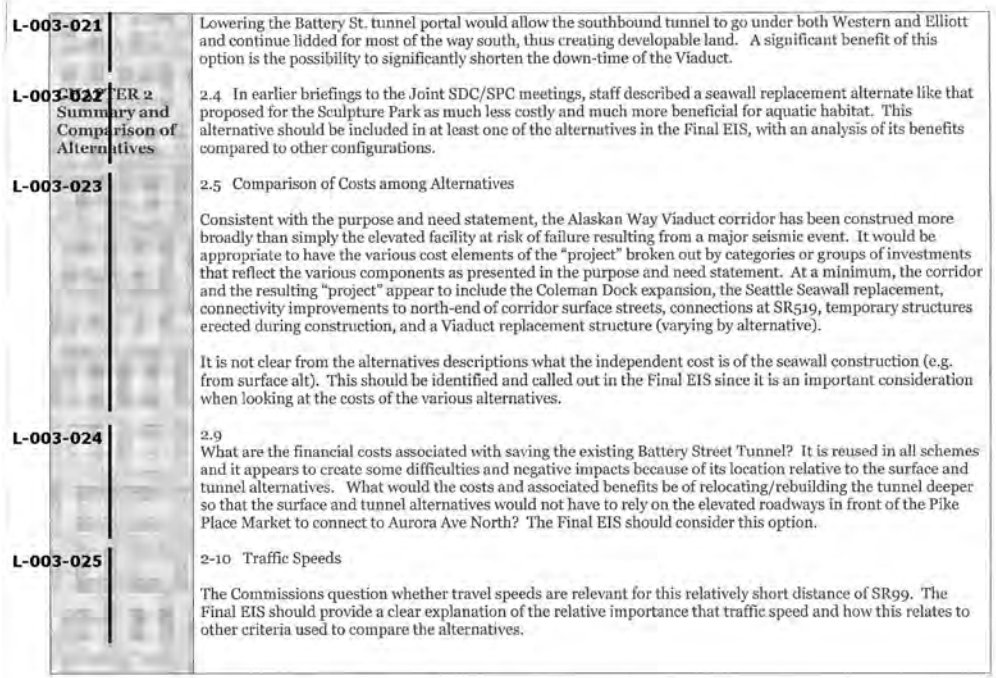
Cost-benefit analysis is not required by NEPA regulations, though it is clearly appropriate to discuss both qualitative and quantitative values as they pertain to the alternatives and choice made related to the preferred alternative. This type of discussion is included in the Final EIS.

L-003-011

The type of economic analysis requested is not relevant based upon the project's purpose and need.

L-003-012

Both the Cut-and-Cover Tunnel and the Elevated Structure Alternatives evaluated in the Final EIS feature an Alaskan Way surface street with four lanes of traffic (two lanes each direction) and a center turn lane. Double streetcar tracks would allow the waterfront streetcar to share the inside traffic lane in both directions. The center lane would have alternating turn pockets and streetcar stops between Pine and Broad Streets. Both alternatives provide space for sidewalks, bicycle lanes, and parking/loading lanes. 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-



L-003-021

Lowering the Battery St. tunnel portal would allow the southbound tunnel to go under both Western and Elliott and continue lidded for most of the way south, thus creating developable land. A significant benefit of this option is the possibility to significantly shorten the down-time of the Viaduct.

L-003-022

CHAPTER 2 Summary and Comparison of Alternatives

2.4 In earlier briefings to the Joint SDC/SPC meetings, staff described a seawall replacement alternate like that proposed for the Sculpture Park as much less costly and much more beneficial for aquatic habitat. This alternative should be included in at least one of the alternatives in the Final EIS, with an analysis of its benefits compared to other configurations.

L-003-023

2.5 Comparison of Costs among Alternatives

Consistent with the purpose and need statement, the Alaskan Way Viaduct corridor has been construed more broadly than simply the elevated facility at risk of failure resulting from a major seismic event. It would be appropriate to have the various cost elements of the "project" broken out by categories or groups of investments that reflect the various components as presented in the purpose and need statement. At a minimum, the corridor and the resulting "project" appear to include the Coleman Dock expansion, the Seattle Seawall replacement, connectivity improvements to north-end of corridor surface streets, connections at SR519, temporary structures erected during construction, and a Viaduct replacement structure (varying by alternative).

It is not clear from the alternatives descriptions what the independent cost is of the seawall construction (e.g. from surface alt). This should be identified and called out in the Final EIS since it is an important consideration when looking at the costs of the various alternatives.

L-003-024

2.9
What are the financial costs associated with saving the existing Battery Street Tunnel? It is reused in all schemes and it appears to create some difficulties and negative impacts because of its location relative to the surface and tunnel alternatives. What would the costs and associated benefits be of relocating/rebuilding the tunnel deeper so that the surface and tunnel alternatives would not have to rely on the elevated roadways in front of the Pike Place Market to connect to Aurora Ave North? The Final EIS should consider this option.

L-003-025

2-10 Traffic Speeds

The Commissions question whether travel speeds are relevant for this relatively short distance of SR99. The Final EIS should provide a clear explanation of the relative importance that traffic speed and how this relates to other criteria used to compare the alternatives.

4

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.

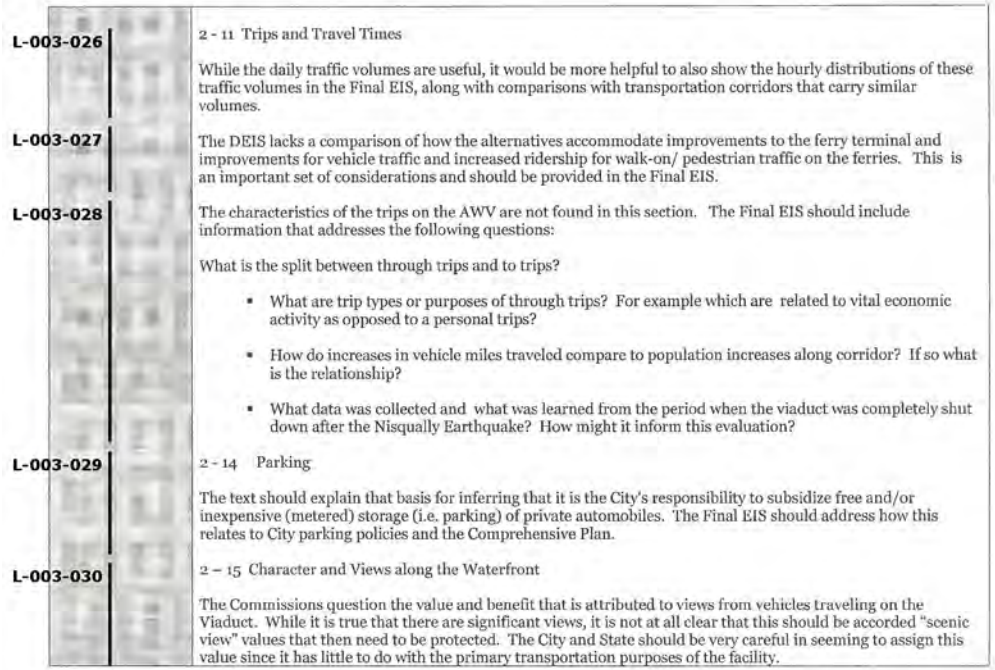
Under the Bored Tunnel Alternative, the City of Seattle would lead the project to rebuild and improve the Alaskan Way Surface Street between S. King Street and Pine Street. Generally, the new street would be located east of the existing Alaskan Way surface street where the viaduct is today to create 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.

L-003-013

The summary of the environmental disciplines is contained in Chapter 2 of the 2004 Draft EIS, Chapter 3 of the 2006 Supplemental Draft EIS, and Chapter 2 of the 2010 Supplemental EIS. In the Final EIS, the Summary precedes all of the other chapters. Rather than developing a large matrix, the environmental disciplines are summarized and discussed in a question and answer format. There are several exhibits within the chapters that help to make the information in the text clear.

L-003-014

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.



L-003-026

2 - 11 Trips and Travel Times

While the daily traffic volumes are useful, it would be more helpful to also show the hourly distributions of these traffic volumes in the Final EIS, along with comparisons with transportation corridors that carry similar volumes.

L-003-027

The DEIS lacks a comparison of how the alternatives accommodate improvements to the ferry terminal and improvements for vehicle traffic and increased ridership for walk-on/ pedestrian traffic on the ferries. This is an important set of considerations and should be provided in the Final EIS.

L-003-028

The characteristics of the trips on the AWV are not found in this section. The Final EIS should include information that addresses the following questions:

What is the split between through trips and to trips?

- What are trip types or purposes of through trips? For example which are related to vital economic activity as opposed to a personal trips?
- How do increases in vehicle miles traveled compare to population increases along corridor? If so what is the relationship?
- What data was collected and what was learned from the period when the viaduct was completely shut down after the Nisqually Earthquake? How might it inform this evaluation?

L-003-029

2 - 14 Parking

The text should explain that basis for inferring that it is the City's responsibility to subsidize free and/or inexpensive (metered) storage (i.e. parking) of private automobiles. The Final EIS should address how this relates to City parking policies and the Comprehensive Plan.

L-003-030

2 – 15 Character and Views along the Waterfront

The Commissions question the value and benefit that is attributed to views from vehicles traveling on the Viaduct. While it is true that there are significant views, it is not at all clear that this should be accorded "scenic view" values that then need to be protected. The City and State should be very careful in seeming to assign this value since it has little to do with the primary transportation purposes of the facility.

5

Overall construction effects of each of the alternatives are described in 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.

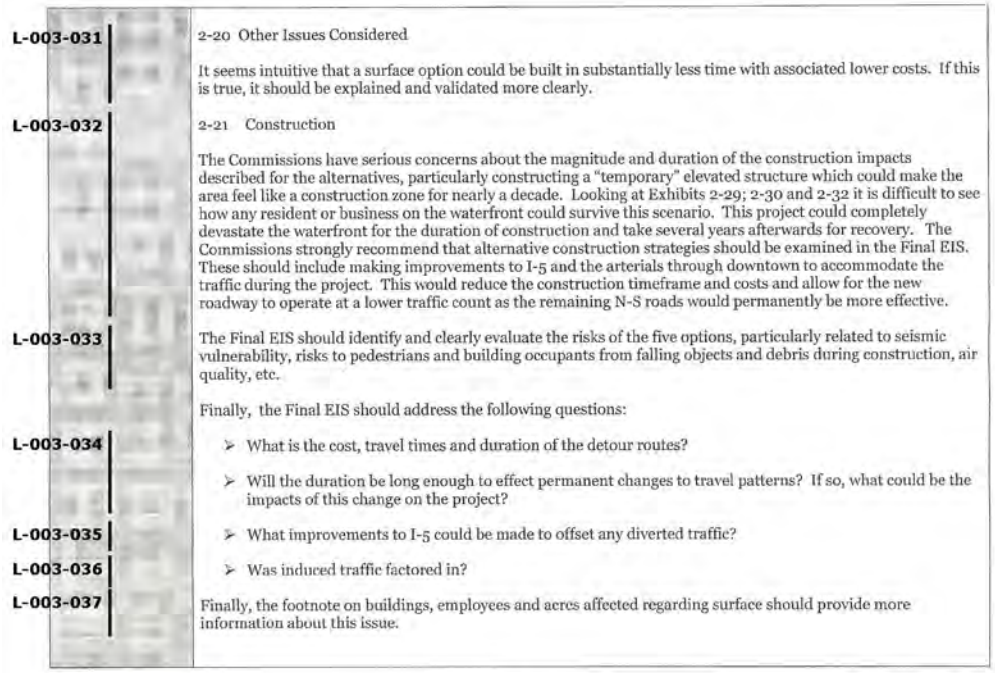
L-003-015

The level of detail requested for the economic analysis for individual businesses is beyond the scope of the Final EIS. Impacts were evaluated by separate business districts, as appropriate, that share common economic characteristics such as location, reliance on on-street, short-term parking for customers, business size, and access. Assessments of the total value of individual businesses are typically not found within publicly available information. Evaluations of an individual business' ability to "sustain the impacts of continuous construction" would be speculative and would rely on information that may not be able to be independently verified. For these reasons, the economic analysis limited itself to identified business districts as the smallest division for analysis.

The project acknowledges that construction activities, especially along the central waterfront, would interfere with access to businesses. However, a primary goal of construction planning is to maintain adequate access to all businesses so they can continue to operate. Economic effects and mitigation measures for businesses during construction are presented in Chapter 8 of the Final EIS.

L-003-016

The No Build Alternative is required as part of NEPA, and, therefore, it is



L-003-031

2-20 Other Issues Considered

It seems intuitive that a surface option could be built in substantially less time with associated lower costs. If this is true, it should be explained and validated more clearly.

L-003-032

2-21 Construction

The Commissions have serious concerns about the magnitude and duration of the construction impacts described for the alternatives, particularly constructing a "temporary" elevated structure which could make the area feel like a construction zone for nearly a decade. Looking at Exhibits 2-29; 2-30 and 2-32 it is difficult to see how any resident or business on the waterfront could survive this scenario. This project could completely devastate the waterfront for the duration of construction and take several years afterwards for recovery. The Commissions strongly recommend that alternative construction strategies should be examined in the Final EIS. These should include making improvements to I-5 and the arterials through downtown to accommodate the traffic during the project. This would reduce the construction timeframe and costs and allow for the new roadway to operate at a lower traffic count as the remaining N-S roads would permanently be more effective.

L-003-033

The Final EIS should identify and clearly evaluate the risks of the five options, particularly related to seismic vulnerability, risks to pedestrians and building occupants from falling objects and debris during construction, air quality, etc.

Finally, the Final EIS should address the following questions:

L-003-034

- What is the cost, travel times and duration of the detour routes?
- Will the duration be long enough to effect permanent changes to travel patterns? If so, what could be the impacts of this change on the project?

L-003-035

- What improvements to I-5 could be made to offset any diverted traffic?

L-003-036

- Was induced traffic factored in?

L-003-037

Finally, the footnote on buildings, employees and acres affected regarding surface should provide more information about this issue.

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included in the EIS. However, the No Build Alternative would not address the safety concerns associated with the aging viaduct, a main component of the project's purpose and need statement. The lead agencies have agreed that because the viaduct structure poses significant safety concerns, it is not an option to do nothing (i.e., select the No Build Alternative as the preferred alternative). The Final EIS includes information on the No Build Alternative for comparison, but much of the discussion is between the build alternatives because this allows the public and decision-makers compare between alternatives that are viable options for this project.

L-003-017

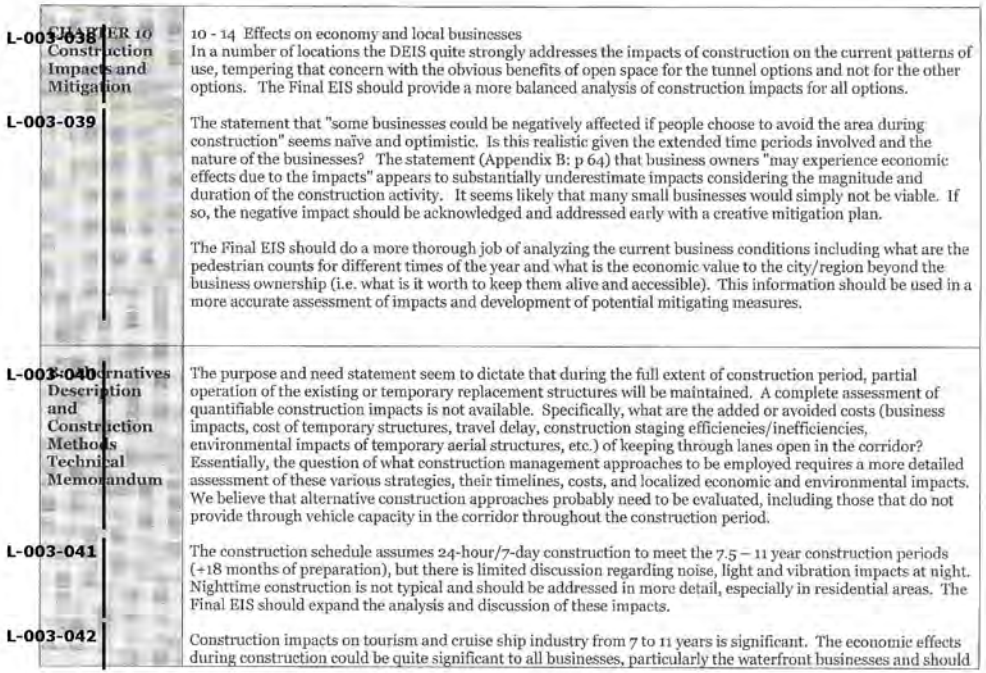
The recommedations for the project's purpose and need statement are noted. The purpose and need statement has been updated since 2004 and reflects the goals and objectives of a transportation facility replacement project (as this project is). See Chapter 1 of the Final EIS for the current purpose and need statement.

L-003-018

This section of the document has been revised since the 2004 Draft EIS and no longer characterizes I-5 as "unusually congested". Please see the Final EIS for revised text, updated information about the project, and the role of SR 99 in the broader transportation network.

L-003-019

Many people asked the lead agencies to consider an alternative that would remove the viaduct and replace it with a four-lane surface roadway along Alaskan Way and include transit improvements. Without a host of improvements and modifications, a four-lane Alaskan Way would create even more congestion on I-5 and downtown streets than the alternatives evaluated in the Draft and Supplemental Draft EISs. Transportation studies performed for this project indicate that replacing



L-003-038	CHAPTER 10 Construction Impacts and Mitigation	10 - 14 Effects on economy and local businesses In a number of locations the DEIS quite strongly addresses the impacts of construction on the current patterns of use, tempering that concern with the obvious benefits of open space for the tunnel options and not for the other options. The Final EIS should provide a more balanced analysis of construction impacts for all options.
L-003-039		The statement that "some businesses could be negatively affected if people choose to avoid the area during construction" seems naïve and optimistic. Is this realistic given the extended time periods involved and the nature of the businesses? The statement (Appendix B: p 64) that business owners "may experience economic effects due to the impacts" appears to substantially underestimate impacts considering the magnitude and duration of the construction activity. It seems likely that many small businesses would simply not be viable. If so, the negative impact should be acknowledged and addressed early with a creative mitigation plan. The Final EIS should do a more thorough job of analyzing the current business conditions including what are the pedestrian counts for different times of the year and what is the economic value to the city/region beyond the business ownership (i.e. what is it worth to keep them alive and accessible). This information should be used in a more accurate assessment of impacts and development of potential mitigating measures.
L-003-040	Alternatives Description and Construction Methods Technical Memorandum	The purpose and need statement seem to dictate that during the full extent of construction period, partial operation of the existing or temporary replacement structures will be maintained. A complete assessment of quantifiable construction impacts is not available. Specifically, what are the added or avoided costs (business impacts, cost of temporary structures, travel delay, construction staging efficiencies/inefficiencies, environmental impacts of temporary aerial structures, etc.) of keeping through lanes open in the corridor? Essentially, the question of what construction management approaches to be employed requires a more detailed assessment of these various strategies, their timelines, costs, and localized economic and environmental impacts. We believe that alternative construction approaches probably need to be evaluated, including those that do not provide through vehicle capacity in the corridor throughout the construction period.
L-003-041		The construction schedule assumes 24-hour/7-day construction to meet the 7.5 – 11 year construction periods (+18 months of preparation), but there is limited discussion regarding noise, light and vibration impacts at night. Nighttime construction is not typical and should be addressed in more detail, especially in residential areas. The Final EIS should expand the analysis and discussion of these impacts.
L-003-042		Construction impacts on tourism and cruise ship industry from 7 to 11 years is significant. The economic effects during construction could be quite significant to all businesses, particularly the waterfront businesses and should

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the viaduct with a four-lane surface street would substantially increase congestion for most of the day and part of the evening on I-5 through downtown Seattle, downtown streets, and Alaskan Way. On downtown streets, traffic would increase by 30 percent; though traffic increases to specific areas like Pioneer Square and the waterfront could exceed 30 percent. With a four-lane roadway, traffic on Alaskan Way would quadruple to 35,000 to 56,000 vehicles per day compared to about 10,000 vehicles today. This traffic increase would make Alaskan Way the busiest street downtown, carrying more traffic than Mercer Street does today. The increased traffic congestion would also make travel times worse for buses, making transit improvements along these streets largely ineffective. Finally, neighborhoods west of I-5 (Ballard, Queen Anne, Magnolia, and West Seattle) would be less accessible and would face longer commute times.

L-003-020

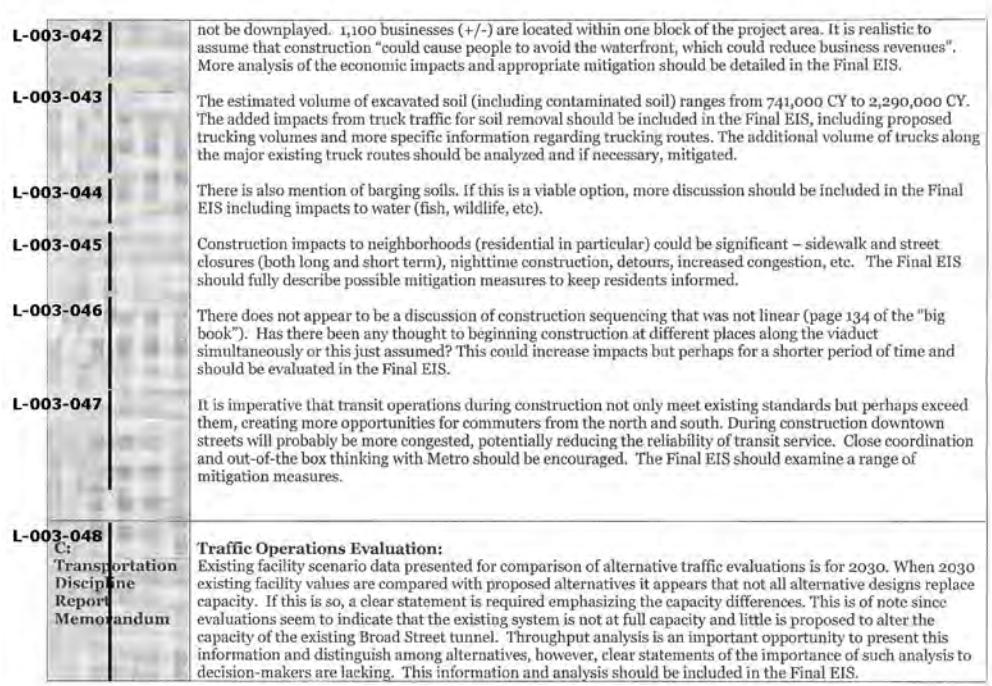
Although transit has been considered when developing all of the alternatives, rail tracks inside of the tunnel alternatives have not been included as part of the project. Future transit service enhancements in downtown Seattle are expected to include extending the Seattle Streetcar along First Avenue as well as other improvements such as Sound Transit light rail and commuter rail expansion under Sound Transit 2, and the King County Metro RapidRide bus program.

L-003-021

The alignment of the Cut-and-Cover Tunnel Alternative discussed in the 2006 Supplemental Draft EIS and Final EIS does go underneath Elliott and Western Avenues and includes a lid built over SR 99 linking Steinbrueck Park and the Pike Place Market to the waterfront.

L-003-022

The lead agencies have identified the Bored Tunnel Alternative as the



L-003-042		not be downplayed. 1,100 businesses (+/-) are located within one block of the project area. It is realistic to assume that construction "could cause people to avoid the waterfront, which could reduce business revenues". More analysis of the economic impacts and appropriate mitigation should be detailed in the Final EIS.
L-003-043		The estimated volume of excavated soil (including contaminated soil) ranges from 741,000 CY to 2,290,000 CY. The added impacts from truck traffic for soil removal should be included in the Final EIS, including proposed trucking volumes and more specific information regarding trucking routes. The additional volume of trucks along the major existing truck routes should be analyzed and if necessary, mitigated.
L-003-044		There is also mention of barging soils. If this is a viable option, more discussion should be included in the Final EIS including impacts to water (fish, wildlife, etc).
L-003-045		Construction impacts to neighborhoods (residential in particular) could be significant – sidewalk and street closures (both long and short term), nighttime construction, detours, increased congestion, etc. The Final EIS should fully describe possible mitigation measures to keep residents informed.
L-003-046		There does not appear to be a discussion of construction sequencing that was not linear (page 134 of the "big book"). Has there been any thought to beginning construction at different places along the viaduct simultaneously or this just assumed? This could increase impacts but perhaps for a shorter period of time and should be evaluated in the Final EIS.
L-003-047		It is imperative that transit operations during construction not only meet existing standards but perhaps exceed them, creating more opportunities for commuters from the north and south. During construction downtown streets will probably be more congested, potentially reducing the reliability of transit service. Close coordination and out-of-the box thinking with Metro should be encouraged. The Final EIS should examine a range of mitigation measures.
L-003-048	C: Transportation Discipline Report Memorandum	**Traffic Operations Evaluation:** Existing facility scenario data presented for comparison of alternative traffic evaluations is for 2030. When 2030 existing facility values are compared with proposed alternatives it appears that not all alternative designs replace capacity. If this is so, a clear statement is required emphasizing the capacity differences. This is of note since evaluations seem to indicate that the existing system is not at full capacity and little is proposed to alter the capacity of the existing Broad Street tunnel. Throughput analysis is an important opportunity to present this information and distinguish among alternatives, however, clear statements of the importance of such analysis to decision-makers are lacking. This information and analysis should be included in the Final EIS.

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preferred alternative. The Bored Tunnel Alternative does not require or include replacing the Elliott Bay Seawall. The City of Seattle is now leading that project with the Corps of Engineers.

For the Cut-and-Cover Tunnel or Elevated Structure Alternatives, a wide variety of seawall replacements have been considered during project development; however, the best solutions for this project are those described in the Final EIS. There are several reasons for not adding material to create new intertidal areas; one is interference with navigation. Also, new material would cause settlement and damage adjacent piers.

L-003-023

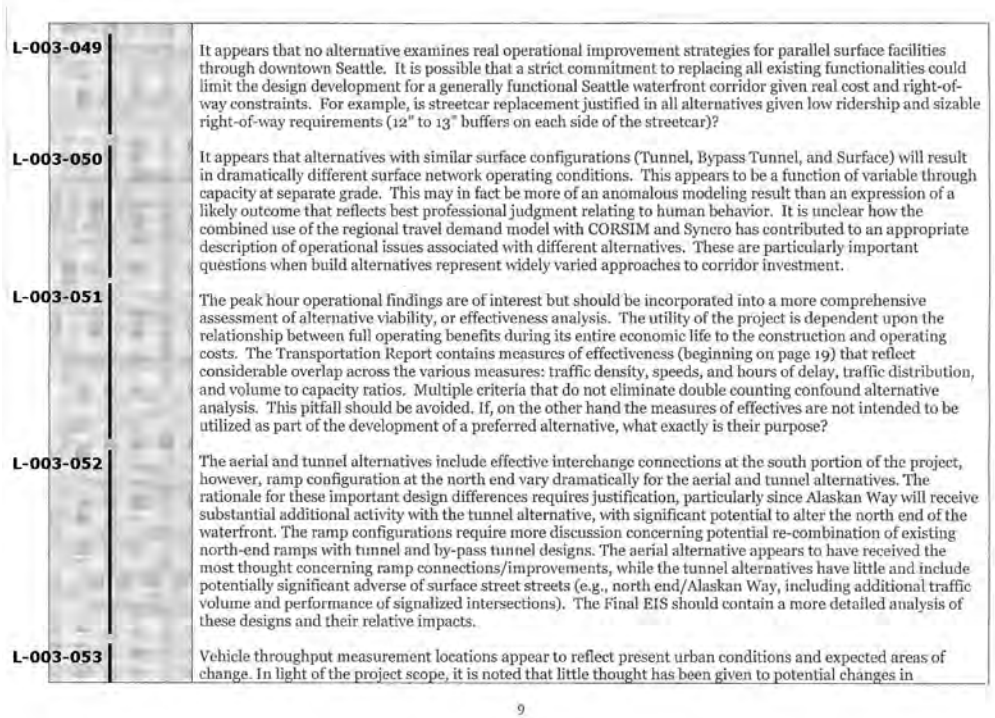
Although costs are an important part of project planning and decision-making, they are purposely not part of the environmental review process. Overall project costs are included with the overall project description and are used by the economic impact analysis. Cost estimates by project element were used by the lead agencies in developing the preferred alternative. It should be noted the Colman Dock project is a separate project and its costs are not included with the Alaskan Way Viaduct Replacement project costs.

L-003-024

The fate of the Battery Street Tunnel depends on which alternative is selected. The preferred alternative for this project, the Bored Tunnel Alternative would decommission the Battery Street Tunnel. This alternative also does not rely on elevated roadways in front of Pike Place Market. Please see the Final EIS for current information about the configuration of each proposed build alternative.

L-003-025

The Final EIS evaluates traffic effects using a wide range of metrics



L-003-049 It appears that no alternative examines real operational improvement strategies for parallel surface facilities through downtown Seattle. It is possible that a strict commitment to replacing all existing functionalities could limit the design development for a generally functional Seattle waterfront corridor given real cost and right-of-way constraints. For example, is streetcar replacement justified in all alternatives given low ridership and sizable right-of-way requirements (12" to 13" buffers on each side of the streetcar)?

L-003-050 It appears that alternatives with similar surface configurations (Tunnel, Bypass Tunnel, and Surface) will result in dramatically different surface network operating conditions. This appears to be a function of variable through capacity at separate grade. This may in fact be more of an anomalous modeling result than an expression of a likely outcome that reflects best professional judgment relating to human behavior. It is unclear how the combined use of the regional travel demand model with CORSIM and Syncro has contributed to an appropriate description of operational issues associated with different alternatives. These are particularly important questions when build alternatives represent widely varied approaches to corridor investment.

L-003-051 The peak hour operational findings are of interest but should be incorporated into a more comprehensive assessment of alternative viability, or effectiveness analysis. The utility of the project is dependent upon the relationship between full operating benefits during its entire economic life to the construction and operating costs. The Transportation Report contains measures of effectiveness (beginning on page 19) that reflect considerable overlap across the various measures: traffic density, speeds, and hours of delay, traffic distribution, and volume to capacity ratios. Multiple criteria that do not eliminate double counting confound alternative analysis. This pitfall should be avoided. If, on the other hand the measures of effectives are not intended to be utilized as part of the development of a preferred alternative, what exactly is their purpose?

L-003-052 The aerial and tunnel alternatives include effective interchange connections at the south portion of the project, however, ramp configuration at the north end vary dramatically for the aerial and tunnel alternatives. The rationale for these important design differences requires justification, particularly since Alaskan Way will receive substantial additional activity with the tunnel alternative, with significant potential to alter the north end of the waterfront. The ramp configurations require more discussion concerning potential re-combination of existing north-end ramps with tunnel and by-pass tunnel designs. The aerial alternative appears to have received the most thought concerning ramp connections/improvements, while the tunnel alternatives have little and include potentially significant adverse of surface street streets (e.g., north end/Alaskan Way, including additional traffic volume and performance of signalized intersections). The Final EIS should contain a more detailed analysis of these designs and their relative impacts.

L-003-053 Vehicle throughput measurement locations appear to reflect present urban conditions and expected areas of change. In light of the project scope, it is noted that little thought has been given to potential changes in

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including travel speeds. Since the document has been revised considerably since 2004, please see the Final EIS for updated information related to traffic effects of the build alternatives.

L-003-026

Hourly distributions of traffic on SR 99 are provided in the Final EIS Appendix C, Transportation Discipline Report.

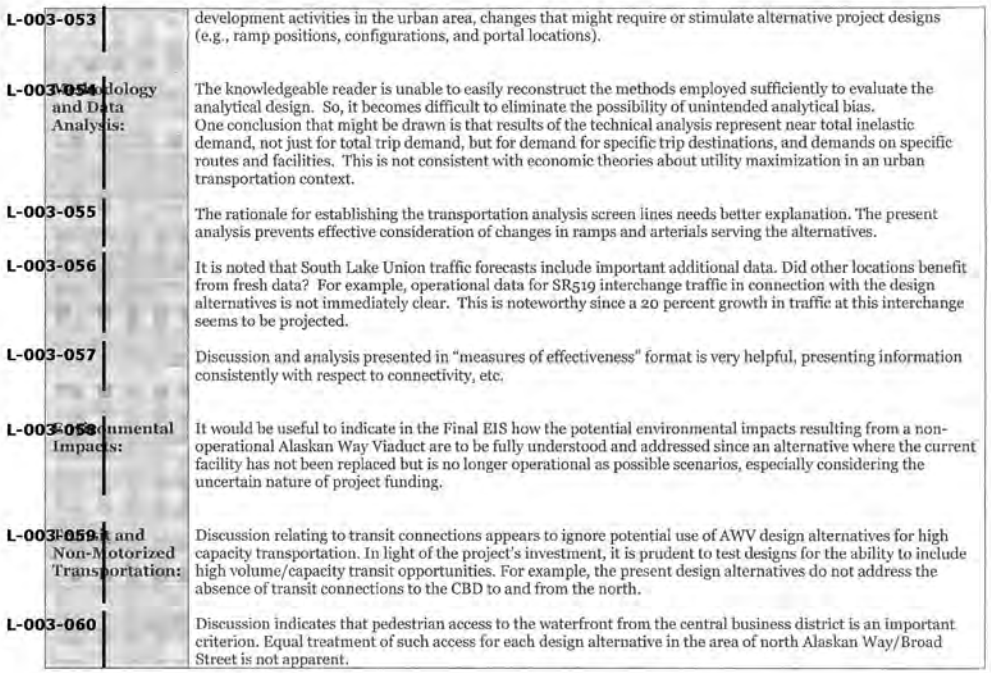
L-003-027

The Colman Dock project planning has been postponed, so the Final EIS does not compare how each alternative would accommodate improvements to the ferry terminal. Assumptions on future demand for ferry traffic, both for auto and non-auto trips, are based on current planning assumptions agreed to by the project and the Washington State Ferries. The project will continue to coordinate with the Washington State Ferries as the planning for the Seattle Ferry Terminal improvements proceeds. Because the project has evolved since comments were submitted in 2004, please refer to the Transportation Discipline Report, Appendix C, of the Final EIS for current information.

L-003-028

Detailed information regarding travel demand and travel patterns, including the nature of through trips and those destined to downtown, are included in the Transportation Discipline Report (Appendix C of the Final EIS). This information is summarized in the Final EIS. The travel demand model used in the evaluation of trip making for the Final EIS incorporates land use and transportation assumptions found in the City of Seattle Comprehensive Plan and the Metropolitan Transportation Plan.

Very little concrete data is available to document the performance of the transportation system during the relatively short closure of the Alaskan Way Viaduct. Most information is in the form of anecdotal experiences.



L-003-053		development activities in the urban area, changes that might require or stimulate alternative project designs (e.g., ramp positions, configurations, and portal locations).
L-003-054	Methodology and Data Analysis:	The knowledgeable reader is unable to easily reconstruct the methods employed sufficiently to evaluate the analytical design. So, it becomes difficult to eliminate the possibility of unintended analytical bias. One conclusion that might be drawn is that results of the technical analysis represent near total inelastic demand, not just for total trip demand, but for demand for specific trip destinations, and demands on specific routes and facilities. This is not consistent with economic theories about utility maximization in an urban transportation context.
L-003-055		The rationale for establishing the transportation analysis screen lines needs better explanation. The present analysis prevents effective consideration of changes in ramps and arterials serving the alternatives.
L-003-056		It is noted that South Lake Union traffic forecasts include important additional data. Did other locations benefit from fresh data? For example, operational data for SR519 interchange traffic in connection with the design alternatives is not immediately clear. This is noteworthy since a 20 percent growth in traffic at this interchange seems to be projected.
L-003-057		Discussion and analysis presented in "measures of effectiveness" format is very helpful, presenting information consistently with respect to connectivity, etc.
L-003-058	Supplemental Impacts:	It would be useful to indicate in the Final EIS how the potential environmental impacts resulting from a non-operational Alaskan Way Viaduct are to be fully understood and addressed since an alternative where the current facility has not been replaced but is no longer operational as possible scenarios, especially considering the uncertain nature of project funding.
L-003-059	Transit and Non-Motorized Transportation:	Discussion relating to transit connections appears to ignore potential use of AWV design alternatives for high capacity transportation. In light of the project's investment, it is prudent to test designs for the ability to include high volume/capacity transit opportunities. For example, the present design alternatives do not address the absence of transit connections to the CBD to and from the north.
L-003-060		Discussion indicates that pedestrian access to the waterfront from the central business district is an important criterion. Equal treatment of such access for each design alternative in the area of north Alaskan Way/Broad Street is not apparent.

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Some data was collected by transit agencies as part of their regular operations activities. These sources of information were used in the planning efforts to develop construction mitigation measures. More information about these measures can be found in the Transportation Discipline Report.

L-003-029

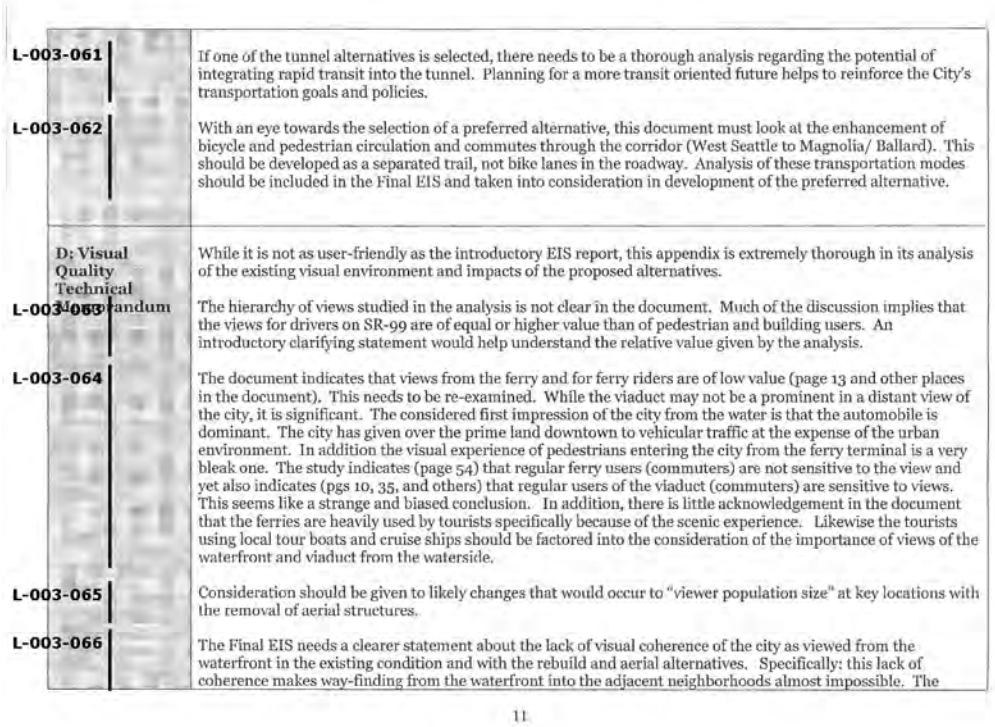
The Final EIS clarifies Seattle's parking goals and policies as they relate to this project.

L-003-030

Views from the existing Alaskan Way Viaduct, and similar views from the Elevated Structure and Tunnel alternatives were assessed in the Final, Draft Supplemental and Draft EISs and Appendices D and E, Visual Quality Discipline Report and Visual Simulations prepared for the EISs. The analysis considers the Alaskan Way corridor designation as a City of Seattle Scenic Route and also identifies and assesses designated view corridors largely along the east-west streets that end at the waterfront. Views from the road and of the road are both assessed. The evaluation of the visual character and quality of the views, as well as the likely viewer response of drivers and passengers and others viewing the corridor considers a variety of elements. Scenic views from roadways are described in the text as an element of satisfaction for drivers and passengers. Decision makers are provided with an assessment of the range of visual quality impacts of the alternatives as one of many factors balanced in selecting a preferred alternative.

L-003-031

The Surface Alternative is no longer being considered because it did not meet the project's purpose.



L-003-061		If one of the tunnel alternatives is selected, there needs to be a thorough analysis regarding the potential of integrating rapid transit into the tunnel. Planning for a more transit oriented future helps to reinforce the City's transportation goals and policies.
L-003-062		With an eye towards the selection of a preferred alternative, this document must look at the enhancement of bicycle and pedestrian circulation and commutes through the corridor (West Seattle to Magnolia/ Ballard). This should be developed as a separated trail, not bike lanes in the roadway. Analysis of these transportation modes should be included in the Final EIS and taken into consideration in development of the preferred alternative.
	D: Visual Quality Technical Memorandum	While it is not as user-friendly as the introductory EIS report, this appendix is extremely thorough in its analysis of the existing visual environment and impacts of the proposed alternatives.
L-003-063		The hierarchy of views studied in the analysis is not clear in the document. Much of the discussion implies that the views for drivers on SR-99 are of equal or higher value than of pedestrian and building users. An introductory clarifying statement would help understand the relative value given by the analysis.
L-003-064		The document indicates that views from the ferry and for ferry riders are of low value (page 13 and other places in the document). This needs to be re-examined. While the viaduct may not be a prominent in a distant view of the city, it is significant. The considered first impression of the city from the water is that the automobile is dominant. The city has given over the prime land downtown to vehicular traffic at the expense of the urban environment. In addition the visual experience of pedestrians entering the city from the ferry terminal is a very bleak one. The study indicates (page 54) that regular ferry users (commuters) are not sensitive to the view and yet also indicates (pgs 10, 35, and others) that regular users of the viaduct (commuters) are sensitive to views. This seems like a strange and biased conclusion. In addition, there is little acknowledgement in the document that the ferries are heavily used by tourists specifically because of the scenic experience. Likewise the tourists using local tour boats and cruise ships should be factored into the consideration of the importance of views of the waterfront and viaduct from the waterside.
L-003-065		Consideration should be given to likely changes that would occur to "viewer population size" at key locations with the removal of aerial structures.
L-003-066		The Final EIS needs a clearer statement about the lack of visual coherence of the city as viewed from the waterfront in the existing condition and with the rebuild and aerial alternatives. Specifically: this lack of coherence makes way-finding from the waterfront into the adjacent neighborhoods almost impossible. The

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L-003-032

After the 2004 Draft EIS was issued, numerous comments were received relating to the visual impacts and other negative effects of the Battery Street Flyover Detour. As the design plans for the Cut-and-Cover Tunnel and the Elevated Structure Alternatives evolved, the Battery Street Flyover Detour was eliminated.

In the Final EIS, the Broad Street Detour would construct a temporary trestle structure from approximately Alaskan Way and Vine Street to the intersection of Broad Street and Western Avenue. The Broad Street Detour is only for the Elevated Structure Alternative and would be in place for approximately 27 months while the improvements to the Battery Street Tunnel are completed. An updated description of the alternatives and of construction-related transportation effects is provided in the Final EIS and Appendix C, Transportation Discipline Report.

L-003-033

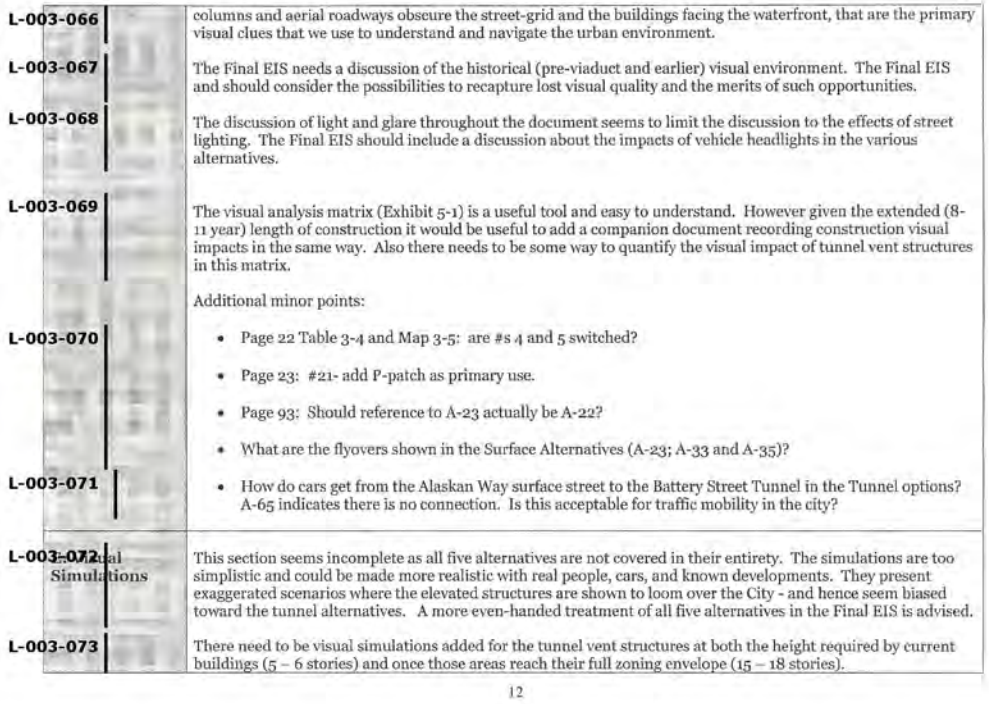
The alternatives have been refined since the publication of the 2004 Draft EIS. Please see the Final EIS for current information on the proposed build alternatives.

The build alternatives evaluated in the Final EIS would all meet current seismic standards for earthquake resistence. In addition, the very removal of the existing viaduct addresses the seismic vulnerability along this transportation corridor.

Construction effects are discussed in Chapter 6 of the Final EIS. Safety precautions will be taken during construction. Pedestrians will be directed around heavy construction zones.

L-003-034

The 2004 Draft EIS evaluated one construction plan that considered brief closures of SR 99 during construction, but otherwise assumed that at



L-003-066	columns and aerial roadways obscure the street-grid and the buildings facing the waterfront, that are the primary visual clues that we use to understand and navigate the urban environment.
L-003-067	The Final EIS needs a discussion of the historical (pre-viaduct and earlier) visual environment. The Final EIS and should consider the possibilities to recapture lost visual quality and the merits of such opportunities.
L-003-068	The discussion of light and glare throughout the document seems to limit the discussion to the effects of street lighting. The Final EIS should include a discussion about the impacts of vehicle headlights in the various alternatives.
L-003-069	The visual analysis matrix (Exhibit 5-1) is a useful tool and easy to understand. However given the extended (8-11 year) length of construction it would be useful to add a companion document recording construction visual impacts in the same way. Also there needs to be some way to quantify the visual impact of tunnel vent structures in this matrix.
L-003-070	Additional minor points: • Page 22 Table 3-4 and Map 3-5: are #s 4 and 5 switched? • Page 23: #21- add P-patch as primary use. • Page 93: Should reference to A-23 actually be A-22?
L-003-071	• What are the flyovers shown in the Surface Alternatives (A-23; A-33 and A-35)? • How do cars get from the Alaskan Way surface street to the Battery Street Tunnel in the Tunnel options? A-65 indicates there is no connection. Is this acceptable for traffic mobility in the city?
L-003-072	Visual Simulations This section seems incomplete as all five alternatives are not covered in their entirety. The simulations are too simplistic and could be made more realistic with real people, cars, and known developments. They present exaggerated scenarios where the elevated structures are shown to loom over the City - and hence seem biased toward the tunnel alternatives. A more even-handed treatment of all five alternatives in the Final EIS is advised.
L-003-073	There need to be visual simulations added for the tunnel vent structures at both the height required by current buildings (5 – 6 stories) and once those areas reach their full zoning envelope (15 – 18 stories).

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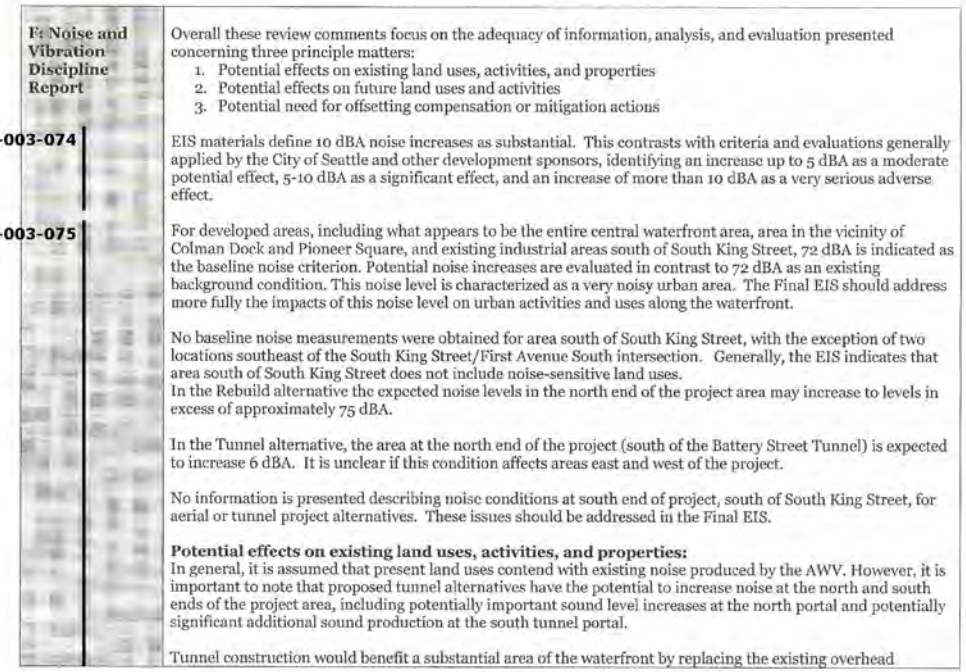
least two lanes would be provided in each direction on SR 99 or an alternate detour route. In comments received on the 2004 Draft EIS, many people asked the lead agencies to consider more than one construction plan. Specifically, many people wanted to know if closing the corridor would reduce the amount of time it takes to build the project. To respond to this question, three different construction plans were developed (a shorter construction plan, an intermediate construction plan, and a longer construction plan) and evaluated in the 2006 Supplemental Draft EIS. Since 2006, the Cut-and-Cover Tunnel and Elevated Structure Alternatives and the construction approach for each of the alternatives have been refined. One construction plan is analyzed for each of the alternatives (Bored Tunnel, Cut-and-Cover Tunnel, and Elevated Structure) in the Final EIS. Chapter 3 describes each alternative and its construction plan, and Chapter 6 describes construction effects.

L-003-035

Access and circulation measures for general purpose traffic in the downtown area are being examined and include assessments of key alternative routes such as I-5 and various major downtown arterial streets. Specific construction mitigation measures are being developed and more information about them can be found in the Transportation Discipline Report of the Final EIS. However, improvements to I-5 would be part of another project.

L-003-036

Induced traffic is a phenomenon that typically relates to an increase in capacity within a corridor (new trips that occur since congestion levels are reduced). With respect to construction impacts, the capacity of the downtown transportation will be reduced during construction activity. Travel forecasting for the project estimates that the opposite of induced traffic--that is, traffic reductions--are likely during the construction period. These reductions in traffic are expected to vary



F: Noise and Vibration Discipline Report

Overall these review comments focus on the adequacy of information, analysis, and evaluation presented concerning three principle matters:

1. Potential effects on existing land uses, activities, and properties
2. Potential effects on future land uses and activities
3. Potential need for offsetting compensation or mitigation actions

L-003-074

EIS materials define 10 dBA noise increases as substantial. This contrasts with criteria and evaluations generally applied by the City of Seattle and other development sponsors, identifying an increase up to 5 dBA as a moderate potential effect, 5-10 dBA as a significant effect, and an increase of more than 10 dBA as a very serious adverse effect.

L-003-075

For developed areas, including what appears to be the entire central waterfront area, area in the vicinity of Colman Dock and Pioneer Square, and existing industrial areas south of South King Street, 72 dBA is indicated as the baseline noise criterion. Potential noise increases are evaluated in contrast to 72 dBA as an existing background condition. This noise level is characterized as a very noisy urban area. The Final EIS should address more fully the impacts of this noise level on urban activities and uses along the waterfront.

No baseline noise measurements were obtained for area south of South King Street, with the exception of two locations southeast of the South King Street/First Avenue South intersection. Generally, the EIS indicates that area south of South King Street does not include noise-sensitive land uses.
In the Rebuild alternative the expected noise levels in the north end of the project area may increase to levels in excess of approximately 75 dBA.

In the Tunnel alternative, the area at the north end of the project (south of the Battery Street Tunnel) is expected to increase 6 dBA. It is unclear if this condition affects areas east and west of the project.

No information is presented describing noise conditions at south end of project, south of South King Street, for aerial or tunnel project alternatives. These issues should be addressed in the Final EIS.

Potential effects on existing land uses, activities, and properties:
In general, it is assumed that present land uses contend with existing noise produced by the AWV. However, it is important to note that proposed tunnel alternatives have the potential to increase noise at the north and south ends of the project area, including potentially important sound level increases at the north portal and potentially significant additional sound production at the south tunnel portal.

Tunnel construction would benefit a substantial area of the waterfront by replacing the existing overhead

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depending on the magnitude of the capacity reduction. A detailed traffic analysis for construction and operation 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 impacts to transportation elements, including event traffic.

L-003-037

The Surface Alternative was not carried forward into the Final EIS.

L-003-038

The lead agencies worked hard to present a balanced discussion of impacts for all of the alternatives in the 2004 Draft EIS, and all subsequent environmental documents developed for the project.

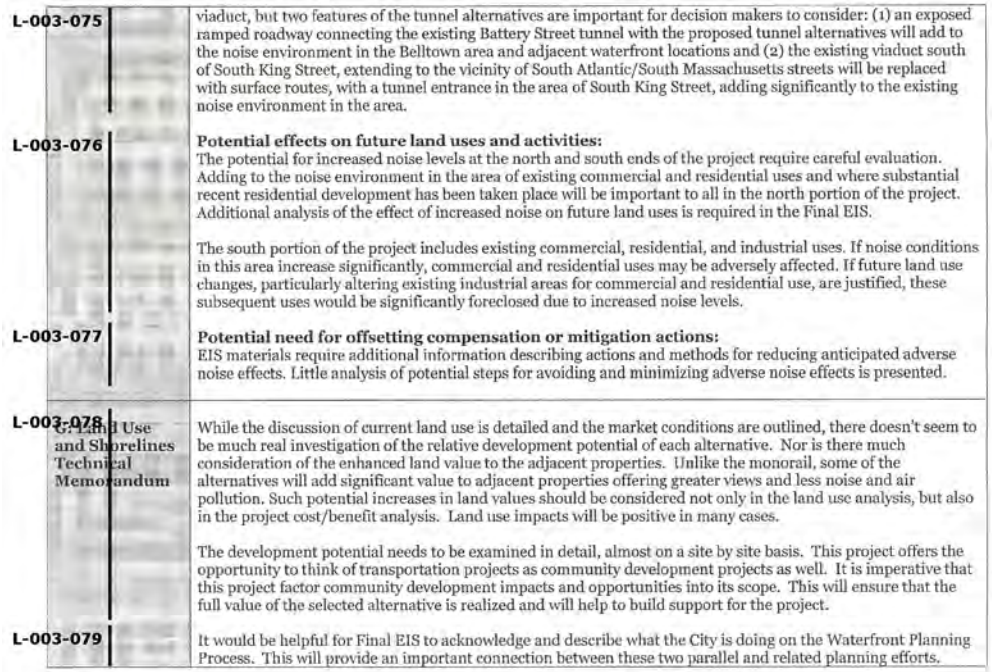
L-003-039

The types of impacts that you mention are secondary economic impacts. For the EIS, the degree of accuracy regarding the secondary impacts to business is at the business-district level. Because of the diversity of business types along the entire 2-mile corridor, a business-by-business analysis is not feasible and is beyond the scope of this EIS. The Final EIS identifies those business districts that clearly have identifiable risk factors that will be directly affected by the project, such as loss of parking for Pioneer Square. Chapter 8 of the Final EIS includes mitigation measures that address project effects to businesses.

Pedestrian counts along the Central Waterfront were performed twice during 2006 (winter and summer). The results of the pedestrian counts are included in the Transportation Discipline Report, Appendix C of the Final EIS.

L-003-040

The 2004 Draft EIS evaluated one construction plan that considered brief



L-003-075		viaduct, but two features of the tunnel alternatives are important for decision makers to consider: (1) an exposed ramped roadway connecting the existing Battery Street tunnel with the proposed tunnel alternatives will add to the noise environment in the Belltown area and adjacent waterfront locations and (2) the existing viaduct south of South King Street, extending to the vicinity of South Atlantic/South Massachusetts streets will be replaced with surface routes, with a tunnel entrance in the area of South King Street, adding significantly to the existing noise environment in the area.
L-003-076		**Potential effects on future land uses and activities:** The potential for increased noise levels at the north and south ends of the project require careful evaluation. Adding to the noise environment in the area of existing commercial and residential uses and where substantial recent residential development has been taken place will be important to all in the north portion of the project. Additional analysis of the effect of increased noise on future land uses is required in the Final EIS. The south portion of the project includes existing commercial, residential, and industrial uses. If noise conditions in this area increase significantly, commercial and residential uses may be adversely affected. If future land use changes, particularly altering existing industrial areas for commercial and residential use, are justified, these subsequent uses would be significantly foreclosed due to increased noise levels.
L-003-077		**Potential need for offsetting compensation or mitigation actions:** EIS materials require additional information describing actions and methods for reducing anticipated adverse noise effects. Little analysis of potential steps for avoiding and minimizing adverse noise effects is presented.
L-003-078	G. Land Use and Shorelines Technical Memorandum	While the discussion of current land use is detailed and the market conditions are outlined, there doesn't seem to be much real investigation of the relative development potential of each alternative. Nor is there much consideration of the enhanced land value to the adjacent properties. Unlike the monorail, some of the alternatives will add significant value to adjacent properties offering greater views and less noise and air pollution. Such potential increases in land values should be considered not only in the land use analysis, but also in the project cost/benefit analysis. Land use impacts will be positive in many cases. The development potential needs to be examined in detail, almost on a site by site basis. This project offers the opportunity to think of transportation projects as community development projects as well. It is imperative that this project factor community development impacts and opportunities into its scope. This will ensure that the full value of the selected alternative is realized and will help to build support for the project.
L-003-079		It would be helpful for Final EIS to acknowledge and describe what the City is doing on the Waterfront Planning Process. This will provide an important connection between these two parallel and related planning efforts.

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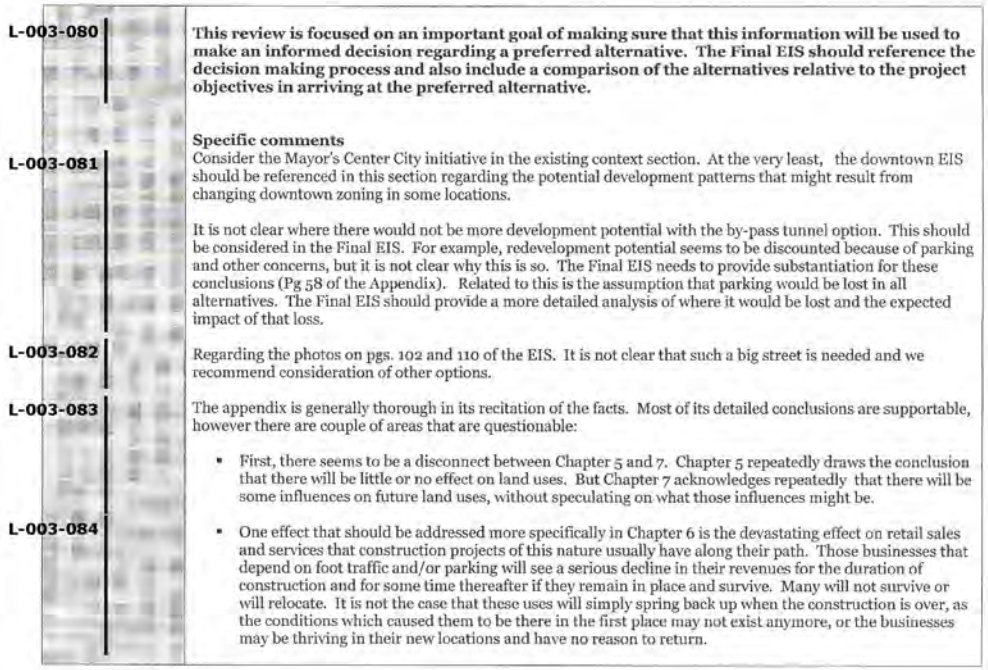
closures of SR 99 during construction, but otherwise assumed that at least two lanes would be provided in each direction on SR 99 or an alternate detour route. In comments received on the 2004 Draft EIS, many people asked the lead agencies to consider more than one construction plan. Specifically, many people wanted to know if closing the corridor would reduce the amount of time it takes to build the project. To respond to this question, three different construction plans were developed (a shorter construction plan, an intermediate construction plan, and a longer construction plan) and evaluated in the 2006 Supplemental Draft EIS. Since 2006, the Cut-and-Cover Tunnel and Elevated Structure Alternatives and the construction approach for each of the alternatives have been refined. One construction plan is analyzed for each of the alternatives (Bored Tunnel, Cut-and-Cover Tunnel, and Elevated Structure) in the Final EIS. Chapter 3 describes each alternative and its construction plan, and Chapter 6 describes construction effects.

L-003-041

Construction noise and vibration effects are qualitatively discussed in the Noise Discipline Report. Please refer to Appendix F, Noise Discipline Report, for additional details. Construction of the project will require nighttime construction activities, and the City of Seattle requires a Major Public Project Noise Variance. Construction noise mitigation requirements would be developed and specified in the noise variance. The Major Public Project Noise Variance will be presented for public comment. With regard to the potential for nighttime construction light, the City will also be regulating the degree of light allowed through the various construction permits that will be necessary, such as street use. Mitigation measures are described in the Final EIS, Chapter 8.

L-003-042

The Final EIS discusses the economic impact of the project during construction on businesses in Chapter 6 and presents potential



L-003-080 **This review is focused on an important goal of making sure that this information will be used to make an informed decision regarding a preferred alternative. The Final EIS should reference the decision making process and also include a comparison of the alternatives relative to the project objectives in arriving at the preferred alternative.**

Specific comments

L-003-081 Consider the Mayor's Center City initiative in the existing context section. At the very least, the downtown EIS should be referenced in this section regarding the potential development patterns that might result from changing downtown zoning in some locations.

It is not clear where there would not be more development potential with the by-pass tunnel option. This should be considered in the Final EIS. For example, redevelopment potential seems to be discounted because of parking and other concerns, but it is not clear why this is so. The Final EIS needs to provide substantiation for these conclusions (Pg 58 of the Appendix). Related to this is the assumption that parking would be lost in all alternatives. The Final EIS should provide a more detailed analysis of where it would be lost and the expected impact of that loss.

L-003-082 Regarding the photos on pgs. 102 and 110 of the EIS. It is not clear that such a big street is needed and we recommend consideration of other options.

L-003-083 The appendix is generally thorough in its recitation of the facts. Most of its detailed conclusions are supportable, however there are couple of areas that are questionable:

- First, there seems to be a disconnect between Chapter 5 and 7. Chapter 5 repeatedly draws the conclusion that there will be little or no effect on land uses. But Chapter 7 acknowledges repeatedly that there will be some influences on future land uses, without speculating on what those influences might be.

L-003-084

- One effect that should be addressed more specifically in Chapter 6 is the devastating effect on retail sales and services that construction projects of this nature usually have along their path. Those businesses that depend on foot traffic and/or parking will see a serious decline in their revenues for the duration of construction and for some time thereafter if they remain in place and survive. Many will not survive or will relocate. It is not the case that these uses will simply spring back up when the construction is over, as the conditions which caused them to be there in the first place may not exist anymore, or the businesses may be thriving in their new locations and have no reason to return.

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mitigation measures in Chapter 8. The main objective of the mitigation measures included in the Final EIS is to maintain the viability of these waterfront businesses that will bear the brunt of the economic impacts during construction. The mitigation measures are intended to provide mitigation for all businesses along the entire construction corridor.

L-003-043

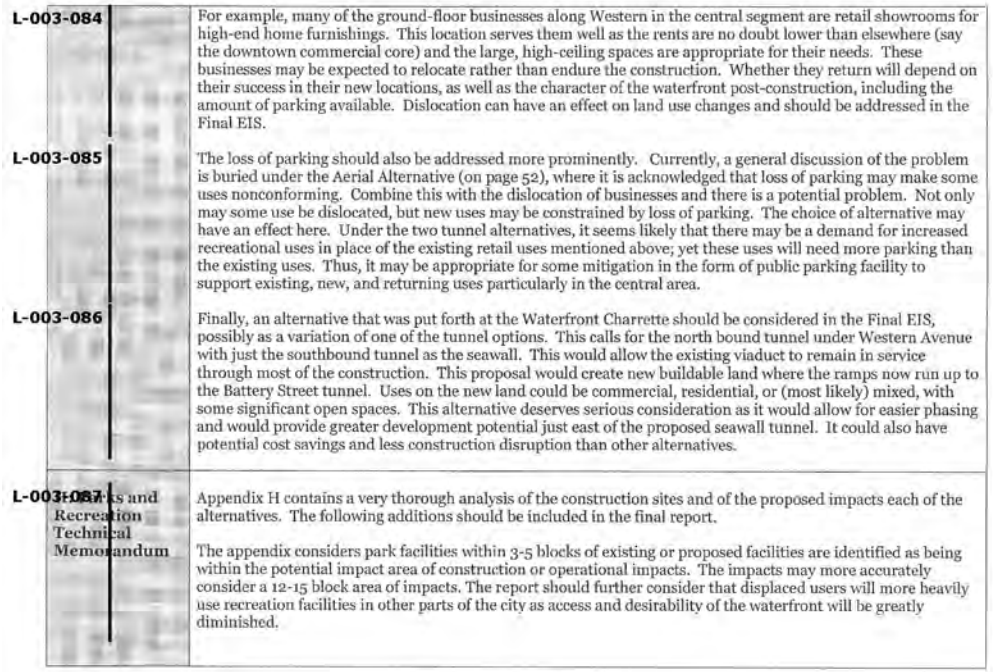
Specific construction haul routes will be identified based on final construction staging and phasing plans for the project and will be fully developed with the construction contractor. Chapter 6 of the Final EIS and Chapter 6 of Appendix C, Transportation Discipline Report, contain some information regarding proposed construction routes during the various construction stages as well as transportation effects during the most severe stage of construction. Overall, construction haul traffic would not comprise a significant portion of the overall downtown traffic volumes. Efforts will be made to route construction haul trucks in a manner that limits the impact to general traffic.

L-003-044

Chapter 6 in the Wildlife, Fish, and Vegetation Discipline Report, Appendix N of the Final EIS, discusses the potential for delivery and removal of construction materials by barge. Barge operations would be similar to existing vessel navigation movements along the shoreline. The use of barges would be determined by the contractor and any activities would be subject to permit conditions.

L-003-045

The impacts to neighborhoods, particularly residential areas, are described in the Final EIS Appendix H, Social Discipline Report, Chapter 5, Operational Effects, Mitigation, and Benefits. Chapter 8 of the Final EIS also presents potential mitigation measures.



L-003-084

For example, many of the ground-floor businesses along Western in the central segment are retail showrooms for high-end home furnishings. This location serves them well as the rents are no doubt lower than elsewhere (say the downtown commercial core) and the large, high-ceiling spaces are appropriate for their needs. These businesses may be expected to relocate rather than endure the construction. Whether they return will depend on their success in their new locations, as well as the character of the waterfront post-construction, including the amount of parking available. Dislocation can have an effect on land use changes and should be addressed in the Final EIS.

L-003-085

The loss of parking should also be addressed more prominently. Currently, a general discussion of the problem is buried under the Aerial Alternative (on page 52), where it is acknowledged that loss of parking may make some uses nonconforming. Combine this with the dislocation of businesses and there is a potential problem. Not only may some use be dislocated, but new uses may be constrained by loss of parking. The choice of alternative may have an effect here. Under the two tunnel alternatives, it seems likely that there may be a demand for increased recreational uses in place of the existing retail uses mentioned above; yet these uses will need more parking than the existing uses. Thus, it may be appropriate for some mitigation in the form of public parking facility to support existing, new, and returning uses particularly in the central area.

L-003-086

Finally, an alternative that was put forth at the Waterfront Charrette should be considered in the Final EIS, possibly as a variation of one of the tunnel options. This calls for the north bound tunnel under Western Avenue with just the southbound tunnel as the seawall. This would allow the existing viaduct to remain in service through most of the construction. This proposal would create new buildable land where the ramps now run up to the Battery Street tunnel. Uses on the new land could be commercial, residential, or (most likely) mixed, with some significant open spaces. This alternative deserves serious consideration as it would allow for easier phasing and would provide greater development potential just east of the proposed seawall tunnel. It could also have potential cost savings and less construction disruption than other alternatives.

L-003-087

Parks and Recreation Technical Memorandum

Appendix H contains a very thorough analysis of the construction sites and of the proposed impacts each of the alternatives. The following additions should be included in the final report.

The appendix considers park facilities within 3-5 blocks of existing or proposed facilities are identified as being within the potential impact area of construction or operational impacts. The impacts may more accurately consider a 12-15 block area of impacts. The report should further consider that displaced users will more heavily use recreation facilities in other parts of the city as access and desirability of the waterfront will be greatly diminished.

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L-003-046

Please see the Final EIS for updated information about construction sequencing.

L-003-047

The project has been in close coordination with the transit agencies that operate services in downtown Seattle and would be affected by project construction activities. Appendix C, Transportation Discipline Report, of the Final EIS documents a range of measures to help maintain existing transit service levels, and proposes opportunities for new service strategically targeted to points of origin that are heavily affected by project construction.

L-003-048

Detailed analysis of transportation elements associated with all alternatives is provided in Appendix C, Transportation Discipline Report, of the Final EIS. Vehicle and person throughput is presented as one of the many transportation related measures included in the appendix.

L-003-049

Opportunities to improve or develop alternate corridors are limited by the lack of parallel routes, the densely developed setting, and competing needs/uses on alternate routes. Opportunities on alternate corridors were considered prior to initial screening and again during transportation planning for the construction period. If the preferred alternative is selected, the City of Seattle's Central Waterfront Project would create 9 acres of new public space along the waterfront corridor once the viaduct is removed.

L-003-050

The application of travel demand modeling to estimate projected users followed by traffic operations models to study the detailed effects on

L-003-088	In the tunnel options the impacts of not lidding the portion of SR99 directly in front of Victor Steinbrueck Park and Pike Place Market should receive more emphasis. The tunnel options and the rebuild option should include lidding the last several hundred feet of roadway as well as any scheme that utilizes the Battery Street Tunnel.
L-003-089	The impacts on the Aquarium is very serious, particularly the construction impacts which will drive away users for a long period of time and could harm the current sea creatures and exhibits. Mitigation measures should be described in the Final EIS.
L-003-090 I: Social Resources Technical Memorandum	This technical memorandum does a very thorough job of describing the "who and what" occurring in each segment (South, Central, North, N. Waterfront) of the project based on analysis of data from the census, local social services groups, housing providers, etc. While it describes the impacts for each of the alternatives, it fails to explain the "why" or "what could be done" in some instances. For example, on pg. 110, why do certain properties (Local 19) need to be acquisitioned and not others? Some explanation of why certain decisions are made for each alternative would be helpful to readers.
L-003-091	When describing how the adverse affects of this project will be mitigated, the memo fails to mention who will be responsible for them (WSDOT, City of Seattle, etc.). It is not enough for the memo to describe how the adverse effects will be mitigated if there is no accountability. Also, more measures should be taken to make sure the people (residents, homeless, employees) of the area are aware of what is going on. A newsletter is not enough (page 155). Communications should include use of websites, a radio station dedicated to what will be happening with the AWV project, similar to "Highway Advisory AM Radio updates" so that people know what is going on around their business, home, cultural/social/sports/institutional destination 24 hours a day. If construction occurs 24 hours a day, then something like this may lessen the adverse impacts of the project during construction or at least help people anticipate and find ways to avoid them. It is critical that a commitment is made at the outset of the project for ongoing outreach and communication throughout the entire life of the project. The Final EIS should be clear about the scope of these mitigation strategies, responsibility and accountability.
L-003-092 Environmental Justice Technical Memorandum	This document is very straight-forward and clearly states that the AWV and seawall project: (1) will take many years to complete; (2) is presented in only preliminary design concepts at present, which are likely to change significantly; and (3) will require continuing monitoring of plans and actions to protect disadvantaged communities. However, none of the other materials were so clear in stating that evaluating the potential effects due to the project cannot be precise since the project will change in response to numerous technical and institutional requirements and that conclusions concerning potential adverse effects are equally subject to significant changes.

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traffic operations caused by the projected users is a standard component of transportation planning. Please see the Final EIS and Appendix C, Transportation Discipline Report, for updated traffic analysis for the build alternatives.

L-003-051

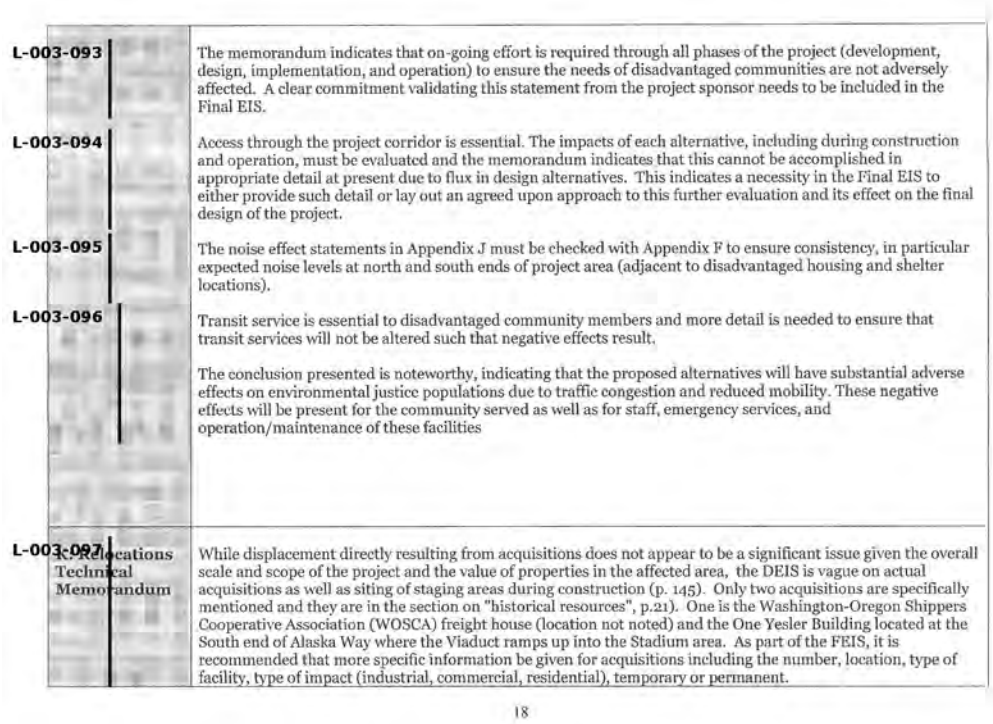
The ranges of measures of effectiveness are intended to provide a broad and comprehensive picture of transportation conditions for each of the alternatives studied. While they inform the selection of a preferred alternative, no formal scoring or weighting system was employed to combine the results of these measures. Therefore, measures that in some ways quantify similar aspects were not double counted. Please see the Final EIS and Appendix C, Transportation Discipline Report for updated analysis.

L-003-052

The Final EIS includes detailed analysis of the Bored Tunnel Alternative, the Cut-and-Cover Tunnel Alternative and Elevated Structure Alternative. For the Bored Tunnel Alternative, northbound off-ramp and southbound on-ramps would be provided at Republican Street. A northbound off-ramp to Western Avenue and a southbound on-ramp from Elliott Avenue would be provided under both the Cut-and-Cover Tunnel Alternative and Elevated Structure Alternative. Please see the Final EIS Appendix C, Transportation Discipline Report, for detailed analysis of these designs and their relative impacts.

L-003-053

The configuration of the project alternatives and transportation analyses consider known planned developments and reflected growth projections developed by the Puget Sound Regional Council. Note that vehicle throughput measurement locations were selected based on the ability to directly measure and compare across the range of project



L-003-093		The memorandum indicates that on-going effort is required through all phases of the project (development, design, implementation, and operation) to ensure the needs of disadvantaged communities are not adversely affected. A clear commitment validating this statement from the project sponsor needs to be included in the Final EIS.
L-003-094		Access through the project corridor is essential. The impacts of each alternative, including during construction and operation, must be evaluated and the memorandum indicates that this cannot be accomplished in appropriate detail at present due to flux in design alternatives. This indicates a necessity in the Final EIS to either provide such detail or lay out an agreed upon approach to this further evaluation and its effect on the final design of the project.
L-003-095		The noise effect statements in Appendix J must be checked with Appendix F to ensure consistency, in particular expected noise levels at north and south ends of project area (adjacent to disadvantaged housing and shelter locations).
L-003-096		Transit service is essential to disadvantaged community members and more detail is needed to ensure that transit services will not be altered such that negative effects result. The conclusion presented is noteworthy, indicating that the proposed alternatives will have substantial adverse effects on environmental justice populations due to traffic congestion and reduced mobility. These negative effects will be present for the community served as well as for staff, emergency services, and operation/maintenance of these facilities
L-003-097	3. Relocations Technical Memorandum	While displacement directly resulting from acquisitions does not appear to be a significant issue given the overall scale and scope of the project and the value of properties in the affected area, the DEIS is vague on actual acquisitions as well as siting of staging areas during construction (p. 145). Only two acquisitions are specifically mentioned and they are in the section on "historical resources", p.21). One is the Washington-Oregon Shippers Cooperative Association (WOSCA) freight house (location not noted) and the One Yesler Building located at the South end of Alaska Way where the Viaduct ramps up into the Stadium area. As part of the FEIS, it is recommended that more specific information be given for acquisitions including the number, location, type of facility, type of impact (industrial, commercial, residential), temporary or permanent.

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

L-003-054

The analysis employed makes use of standard, accepted tools and practices available to transportation planners. Travel forecasting was conducted using a version of the regional travel demand model developed by the Puget Sound Regional Council. This tool is used to estimate forecasted conditions for all major projects in the 4-county Puget Sound region. While some elements of the model are fixed (population and employment forecasts, for example), the model is not inelastic in nature. Travel choices are based on relationships between travel opportunities and costs. Hence, fewer trips are forecast in the study for reduced-capacity alternatives than for higher-capacity alternatives (see screenline tables in the Transportation Discipline Report). The traffic operations analysis is consistent with procedures and methods described in the Transportation Research Board's Highway Capacity Manual.

L-003-055

The selection of screenlines used in the traffic analysis of the Alaskan Way Viaduct Replacement Project was based on lead agency accepted locations and did take into consideration location of ramps and arterials critical to the function of SR 99 and the neighboring street and highway grid.

L-003-056

All travel demand modeling, traffic forecasts, and traffic operations analysis has been updated for the the Final EIS. The assumptions, findings and results of the analysis are presented in Appendix C, Transportation Discipline Report.

L-003-098		The greatest difference in neighborhood impacts based on the different alternatives is the amount of parking. With the Rebuild or Aerial alternatives, there will continue to be parking under and around the structure. With the Tunnel, Tunnel By-Pass, or Surface alternatives, you will lose most of the parking (p.12). For future use of a redeveloped waterfront, a public parking facility should be considered as part of the redevelopment along with improved public transportation options.
L-003-099		One lesson from the Sound Transit Project is that mitigation is limited for businesses which are not going to be acquired in whole or in part. This appears to be the case for the vast majority of the businesses and facilities along the Viaduct corridor. As a result, the FEIS should be very specific about the types of impacts and the duration of disruptions due to construction activity.
L-003-100	O: Public Services and Utilities Technical Memorandum	The section appears to be thorough and offers an objective, failure evaluation of potential impacts of the alternatives. No other comment.
L-003-101	P: Economics Technical Memorandum	The assessment of economic impacts associated with project construction is handled responsibly within a traditional input-output framework. However, this reveals very little about the economic viability of the project itself or the relative economic importance of project alternatives. For example the same construction multiplier effects would result from an alternative project, with equivalent federal participation, regardless of the nature of the construction project and independent of its actual usefulness. A project that is economically important will in fact change production functions in some small way. This indicates that a formal assessment, recognizing opportunity costs and quantifying user benefits is the preferred way to estimate the economic viability of this type of project. The input-output analysis recognizes that only new dollars represent net contributions to the regional economy, the same perspective should be applied to the measure of sales tax impacts. In addition to the project capital and operating costs, the substantial economic impacts of construction will relate to the business disruption during the prolonged construction period associated with any build alternative. It was not clear that these economic impacts were formally quantified in the DEIS. Ideally, a project benefit-cost analysis would be performed at this stage in the alternative analysis.

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L-003-057

Thank you for your comment.

L-003-058

The alternatives presented in the 2004 Draft EIS, 2006 and 2010 Supplemental Draft EISs, and Final EIS represent a reasonable range of approaches that can meet the purpose and need for improvements. Chapter 3 describes the No Build Alternative, which is essentially the "non-operational Alaskan Way Viaduct" scenario referred to in this comment. Chapter 3 explains the lead agencies' approach to analyzing this alternative in the Final EIS.

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

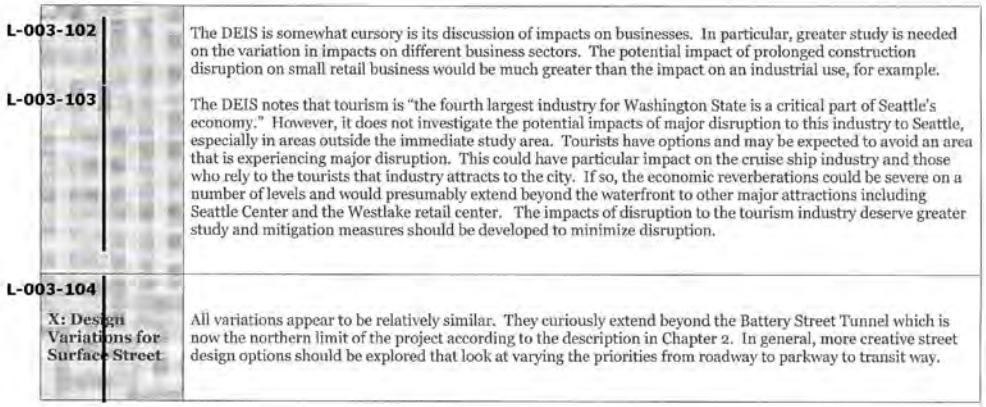
"The legislature finds that the replacement of the vulnerable state route number 99 Alaskan Way viaduct is a matter of urgency for the safety of Washington’s traveling public and the needs of the transportation system in central Puget Sound."

This legislation also authorizes WSDOT to obligate $2,800,000,000. In order to fund this obligation, the legislation further identifies sources of funding: $2,400,000,000 of state funding and $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.

L-003-059

The alternatives analyzed in the 2004 Draft EIS focused on replacement of the existing viaduct. Mid-to-high capacity transit developments are



L-003-102		The DEIS is somewhat cursory is its discussion of impacts on businesses. In particular, greater study is needed on the variation in impacts on different business sectors. The potential impact of prolonged construction disruption on small retail business would be much greater than the impact on an industrial use, for example.
L-003-103		The DEIS notes that tourism is "the fourth largest industry for Washington State is a critical part of Seattle's economy." However, it does not investigate the potential impacts of major disruption to this industry to Seattle, especially in areas outside the immediate study area. Tourists have options and may be expected to avoid an area that is experiencing major disruption. This could have particular impact on the cruise ship industry and those who rely to the tourists that industry attracts to the city. If so, the economic reverberations could be severe on a number of levels and would presumably extend beyond the waterfront to other major attractions including Seattle Center and the Westlake retail center. The impacts of disruption to the tourism industry deserve greater study and mitigation measures should be developed to minimize disruption.
L-003-104	X: Design Variations for Surface Street	All variations appear to be relatively similar. They curiously extend beyond the Battery Street Tunnel which is now the northern limit of the project according to the description in Chapter 2. In general, more creative street design options should be explored that look at varying the priorities from roadway to parkway to transit way.

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being addressed by other agencies, specifically Seattle Department of Transportation (e.g., South Lake Union Streetcar), King County Metro (e.g., RapidRide), and Sound Transit (e.g., Link Light Rail, Sounder). Potential fixed guide-way high-capacity transit (HCT) alignments that have been developed in the long-range plans for these agencies and at present do not include the SR 99/Alaskan Way Viaduct corridor.

In the south portal area, the northbound off-ramp to downtown would have a transit-only lane to accommodate buses. In the north portal area, transit lanes are included on Aurora Avenue connecting to Wall Street and Third Avenue and transit lanes on Aurora Avenue between Harrison Street and Denny Way. Refer to the Final EIS Appendix C, Transportation Discipline Report, for more details.

L-003-060

More information about pedestrian access to the waterfront for all the build alternatives can be found in the Final EIS Appendix C, Transportation Discipline Report. Effects on pedestrian facilities during construction are addressed as well. Pedestrian facilities are described in Chapter 5 and construction effects are covered in Chapter 6 of the Transportation Discipline Report.

L-003-061

The alternatives analyzed in the Final EIS did not include items other than those directly relating to replacement of the existing viaduct. High-capacity transit (HCT) developments are being addressed by other agencies, specifically Sound Transit and King County Metro. Potential HCT alignments that have been developed in the long-range plans for these agencies did not include the SR 99/Alaskan Way Viaduct corridor.

L-003-062

The Final EIS Appendix C, Transportation Discipline Report, contains an

updated illustration of the City of Seattle's designated bicycle routes. Please see Chapter 5 of the Transportation Discipline Report for updated details regarding the bicycle facilities associated with each build alternative. Chapter 6 contains details concerning the effects of construction activities on bicycle facilities. Bicycle access would be maintained at all times during construction, although at times it may be necessary to reroute bicycles using temporary facilities/detours that would be designed to minimize user inconvenience.

L-003-063

A hierarchy of views and a ranking of the relative value of views were not provided in the 2004 Draft EIS or Appendix D, the Visual Quality Technical Memorandum. The Visual Analysis Matrix in Exhibit 5-1 of Appendix D provides a numerical assessment of visual quality, but does not take into consideration viewer response. The analysis avoids providing a quantitative rating, and rather describes changes in visual character, visual quality, viewer exposure or viewer sensitivity. Impacts on views are not readily quantifiable in a manner that is assured of reflecting community consensus. The relative importance given to views is just one of many factors to be balanced by the lead agencies in the course of making design decisions. The analysis is intended to provide a consistent means of describing the differences between alternatives, but is not intended to provide a quantitative rating.

Appendix D has been revised considerably since the publication of the Draft EIS in 2004. Please refer to the updated discipline report appended to the Final EIS.

L-003-064

Views from the Washington State Ferries are discussed on page 13 of the Draft EIS Appendix D, Visual Quality Technical Memorandum. Views from the ferries are analyzed, but were excluded from visual simulations because of the viaduct's limited visual prominence from a distance

greater than the end of Piers 55-59, as is indicated in the existing conditions view in Draft EIS Appendix E, Visual Simulations Exhibit A-43. The views from the piers are discussed and provide an accurate description of the character of near views from the ferries. The views from the ferries are not described as of low value. As indicated in Draft EIS Appendix D, page 13, the views from the ferries are of the downtown skyline and the piers visible from the water. Views of the existing viaduct are partially obscured by intervening pier buildings and provide a neutral base to the prominent views of the city skyline from the ferries. The minor element of the viaduct in views from the ferries does not provide an impression of automobile dominance.

The sensitivity to views of ferry users is characterized on page 9 of the Draft EIS Appendix D, Visual Quality Technical Memorandum, in terms of viewer sensitivity based on activities, the visual context, expectations, and interests. In those terms, commuters are likely to be less sensitive to views than tourists (as indicated on page 54). The presence of tourists as a component of the viewing population is discussed for the various areas from which views are assessed, including Pioneer Square, the Central Waterfront, and the Pike Place Market area.

L-003-065

The character of the viewing population and viewer sensitivity discussion is based primarily on the typical activities of viewers. General information on viewer population is provided where available. The factors that affect viewer population in an urban context are varied and complex. Where visual quality may be a factor, it is only one of many likely factors. Other factors such as circulation patterns, destinations such as work place, cultural destinations, restaurants, services and retail stores also play a part. The project does identify the potential for attracting a larger viewer population along Alaskan Way for those alternatives that eliminate an aerial structure. Please see Appendix D, Visual Quality Discipline Report, of the Final EIS for the current visual quality discussion.

L-003-066

Visual coherence is one element of the unity of views as discussed on pages 7 to 9 of the 2004 Draft EIS Appendix D, Visual Quality Technical Memorandum. The existing viaduct does not eliminate visual coherence from views toward downtown. The viaduct does present a visual intrusion, blocks or screens views of vivid landscape features such as the Olympic Mountains or the downtown skyline, and reduces the visual coherence and compositional harmony of views. However, visual coherence of views is provided by a number of elements, not all of which are impacted by the viaduct. The general view of the downtown from the west encompasses a contrast between the water areas of Elliott Bay and the Puget Sound on one hand and the downtown skyline on the other, which together provide a compositional coherence (page 40). As indicated on page 3, the viaduct contrasts with the building character and the character of street corridors, as would the Elevated Structure Alternative.

The lead agencies disagree that the existing viaduct, or Elevated Structure Alternative, obscures the system of streets and blocks of buildings to the extent that it affects "way finding" from the waterfront to the easterly neighborhoods within the city. In addition to the viaduct, there are a variety of other elements that affect "way finding," such as the topographic break and lack of connecting vehicular streets between Spring Street and Wall Street.

Please see the revised Visual Quality Discipline Report, Appendix D of the Final EIS, for the current visual quality discussion.

L-003-067

The visual impacts analysis discusses the potential impacts of the project compared to existing visual conditions and existing public policies. The visual context of the past is not directly relevant to the discussion of direct or indirect effects of the project. The Seattle

waterfront and downtown skyline has seen much change since the 1950s, so even if the viaduct is removed, recapturing the views from that time period is not possible.

The historic context of the corridor is discussed as it relates to the visual context of designated Historic Districts and in the cumulative effects analysis for the project, found in Chapter 7 of the Final EIS.

L-003-068

In the urban context of the SR 99 corridor, the light produced by normal arterial lighting is of greater intensity and more constant than vehicle headlights. For rural unlighted highways, vehicle headlights can be a substantial source of light and glare for unlighted surroundings. For urban arterials with streetlights, the light source from headlights is generally less than the light projected from the roadway surface. In addition, the direction of vehicle lights is likely to be in the direction of travel and not toward adjacent uses, except at curves. The design of the barrier at the edge of the Elevated Structure Alternative will interrupt the beam of vehicle lights at curves and result in little or no spillover to surrounding areas. For these reasons, the discussion focuses on light and glare from roadway lighting as the appropriate measure of impact.

L-003-069

Visual quality effects during construction are described in text in Chapter 6 of the Visual Quality Discipline Report, Appendix D of the Final EIS. The type of visual impacts likely during construction would generally reflect the lack of visual coherence inherent in a site that is in the process of being built. There is little comparative value to the decision-making process in providing a matrix of visual quality impacts during construction.

Discussion of the visual effects of the tunnel operations building (which would house the vents) is in Chapter 5 of the Visual Quality Discipline Report.

Please note that for the Final EIS, the Visual Analysis Matrix is Attachment A to the Visual Quality Discipline Report.

L-003-070

Yes, the Waterfront Bicycle/Pedestrian Facility (Waterfront Trail) in Exhibit 3-4 was mislabeled 4; it should have been 5. This error translates to Map 3-5.

On page 23 of the Draft EIS Appendix D, Item 21, the Belltown Cottage Park does not include the P-Patch because the P-Patch is not a recreational facility.

On page 93 of the Draft EIS Appendix D, the text discusses the Tunnel Alternative. Yes, the reference to views north from the Alaskan Way surface street at Yesler Way should have been Visual Simulation A-22.

The flyovers shown in Visual Simulations A-23, A-33, and A-35 are of the overpass for ferry traffic located along Columbia Street connecting the Colman Dock Ferry Terminal to First Avenue as described on page 119 of the Draft EIS.

L-003-071

Direct access between the Alaskan Way surface street and the Battery Street Tunnel would not be provided under the three build alternatives evaluated in the Final EIS. Please see the Final EIS, Chapter 5 of the Appendix C, Transportation Discipline Report, for updated detailed analysis of these designs.

L-003-072

New visual simulations have been prepared for the Final EIS. Please see Appendix E, Visual Simulations, for the current simulations.

L-003-073

Vent structures as free-standing structures have been largely eliminated from the design in favor of a single tunnel operations building at each tunnel portal.

The visual simulations (provided in Appendix E) and text in the Final EIS provide a description and a graphic of the approximate height and scale of the tunnel operations buildings. The tunnel operations buildings would conform to zoning requirements.

L-003-074

Traffic-related noise increases are identified as substantial when they increase noise levels by 10 dBA in the state of Washington.

L-003-075

Predicted future operational noise levels at noise sensitive land uses are identified in Final EIS Appendix F, Noise Discipline Report.

The Final EIS Appendix F, Noise Discipline Report, evaluated operational noise levels south of South King Street and at the north end of the project. Existing and future noise levels were reported.

Noise impacts are only evaluated in areas with existing noise sensitive land uses. WSDOT and FHWA only consider mitigation measures for existing noise sensitive land uses. The waterfront area south of South King Street is an industrial area owned by the Port of Seattle. No noise-sensitive land uses currently exist in this area.

L-003-076

The lead agencies are not responsible for providing sound abatement for new development that occurs adjacent to the proposed highway project that is not already planned, designed, and programmed. Provisions of such noise abatement becomes the responsibility of private developers. Therefore, analysis of the potential effects of noise on future land uses was not conducted as part of this project.

Please see the Final EIS for the current noise analysis. For the preferred alternative, the Bored Tunnel Alternative, expected 2030 peak traffic noise levels near the south and north portals are expected to be similar to existing conditions during the facility's operation.

L-003-077

Chapter 8 of the Final EIS presents the proposed mitigation measures for project effects, including potential mitigation measures to address noise effects.

L-003-078

The development potential under all alternatives was considered in the land use evaluation; however, a quantitative analysis of this potential was not attempted. Generally, it was determined that the Bored Tunnel Alternative and Cut-and-Cover Tunnel Alternative would have the greatest potential for future development because they would provide more opportunities along the project route. The Elevated Structure Alternative would continue to provide an above-ground structure and would require a larger footprint than the existing structure. Therefore, future development opportunities in the vicinity of the central waterfront related to this alternative are expected to be more limited than those expected to occur with the tunnel alternatives.

One of the difficulties in specifying the nature of future development on parcels along the project route is the length of time required for

construction. Other activities in the project area could occur during this time and may also enhance or detract from development potential. Thus, the land use discussion generally indicates that future development is expected to be consistent with the underlying zoning of parcels in the project area, but does not speculate further about the variety of possibilities that could occur with each parcel.

Regarding the project's influence on property values, it is less certain how much impact the project would have. The Final EIS acknowledges the project's potential to affect adjacent land uses, but regarding property values, the project would be only one of many factors that may determine future market values of local properties.

Any enhancement in land values that may occur as a result of the project would likely take place after the construction period has ended. Again, because construction would be completed several years in the future, it is difficult to predict events and conditions 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 and other goods and services. Because of all the considerations that go into the purchase of property, the Final EIS does not speculate on how the project might influence the value of land, buildings, or services in the area.

L-003-079

The City of Seattle is the lead agency for the Central Waterfront Project and one of the lead agencies for the Elliott Bay Seawall Project. As such, the project staff has been closely following and coordinating with the City's Central Waterfront Project since the waterfront planning effort was initiated in 2003. The Final EIS briefly describes both of these City

projects and indicates that the Central Waterfront Project is an independent project that complements the Bored Tunnel Alternative.

L-003-080

Chapter 2 of the Final EIS describes the project's history, explains the decision-making process that led to the development of the alternatives analyzed in the Final EIS, and describes public coordination efforts.

L-003-081

Please see Appendix G, Land Use Discipline Report, of the Final EIS for an updated discussion of applicable state, local, and regional land use plans located in the Affected Environment chapter. However, the Final EIS is meant to present existing land use conditions and the project's potential effects on land use. The document does not speculate about potential development patterns that might result from anticipated (not adopted) zoning or land use designation changes.

The Bypass Tunnel Alternative has been dropped from further consideration. Please see the Final EIS for current information on permanent parking impacts for each build alternative in Chapter 5 and the mitigation proposed to address these impacts in Chapter 8.

L-003-082

The street design that was referred to in this comment was associated with the Bypass Tunnel Alternative, which was not carried forward for further evaluation in the Final EIS.

L-003-083

Chapter 5 of the Draft EIS Appendix G, Land Use and Shorelines Technical Memorandum, presents operational impacts of the proposed project, also sometimes referred to as direct impacts. Chapter 7 of this report presents secondary and cumulative impacts, which considers

impacts from the project in combination with other projects and actions in the area. Thus, Chapter 5 acknowledges that direct impacts from operating the build alternatives are not expected to be great; however, Chapter 7 acknowledges that there may be some influences to land use as a result of the project when considered together with other actions.

While such potential future influences are not precise, Chapter 7 does indicate that during the construction period for the project in combination with other projects: "these projects will be expected to contribute noise, dust, and traffic congestion to the project area." After construction, "the proposed build alternatives could indirectly help stimulate changes in land uses for Terminal 46, where land use may differ from containerized cargo handling facility that is there today." Also, "changes in land uses may be encouraged by overall improvements associated with the new roadway."

As this chapter is describing, proposed improvements throughout downtown and the greater project area will have some influence on changes in existing land uses. Where some properties may be underdeveloped currently, new development may take place. Existing uses may be converted to different uses, in accordance with existing or proposed zoning designations. Development may be transformed from industrial or commercial uses to more office, service, or residential uses. While this is possible, it is noted that the exact type and pace of development changes downtown and elsewhere cannot be predicted because other influences, such as economic conditions, will also determine changes that may transpire.

Please see the updated Appendix G, Land Use Discipline Report, for the current land use discussion.

L-003-084

Chapter 6 of the Land Use Discipline Report (Appendix G of the Final EIS) discusses potential impacts associated with construction activities of the proposed project. This chapter acknowledges that some existing uses may change as a result of construction activities and does not presuppose that these displacements would return. It does not attempt to predict how many such changes could occur. It is possible that some uses would not survive over the length of the construction period; however, it is not known how many businesses would be affected this way.

The Economics Discipline Report, Appendix L of the Final EIS, addresses business impacts during construction of the project. Please see this appendix for updated analysis and proposed mitigation measures to address effects to businesses.

L-003-085

The parking loss analysis has been updated for the Final EIS and Appendix G, Land Use Discipline Report. Mitigation for impacts associated with potential parking losses is also discussed in the Final EIS, and in Appendix C, Transportation Discipline Report, for this project.

L-003-086

The alternatives presented in the 2004 Draft EIS represent a reasonable range of approaches that can meet the purpose and need for the project. Many options were looked at during the initial phases of the project's screening process, which involved early analysis by the project team and discussions with community groups at more than 140 community meetings and community interviews. A total of 76 initial viaduct replacement concepts and seven seawall concepts were considered, and concepts that were not feasible, or were outside the purpose of the project, were dropped from further consideration. The most workable ideas formed the alternatives analyzed in the 2004 Draft EIS. Additional

screening and analyses were conducted for the 2006 and 2010 Supplemental Draft EISs and 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 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.

L-003-087

It is unlikely that construction would directly affect facilities in parks that are farther than one block from the construction area. The analysis of an area three to five blocks distant is likely to cover all the direct impacts.

It is not clear that displaced users of parks near the waterfront will more heavily use other parks in the city. The range of uses of recreation facilities along the waterfront is generally related to the waterfront context. Users of recreation facilities along the waterfront may choose to use other park facilities in the city, but would likely remain in the general vicinity.

Please refer to the Final EIS and Appendix H, Social Discipline Report, for current information related to how the project would affect parks. If the preferred alternative is selected, construction effects would be mostly limited to the south and north portal areas.

L-003-088

A lid was incorporated into the design of the 2006 Cut-and-Cover Tunnel

Alternative and evaluated in the 2006 Supplemental Draft EIS. It was included in the project, due in part to numerous 2004 Draft EIS public comments requesting the lead agencies to consider a lid in the Pike Place/Belltown area. The proposed lid would extend north from where SR 99 emerges from the tunnel's north portal near Pine Street to Victor Steinbrueck Park near Virginia Street. The design for this lid structure with the current Cut-and-Cover Alternative is described in this Final EIS and in Appendix B, Alternatives Description and Construction Methods Discipline Report.

Elements of the Rebuild Alternative are now included in the Elevated Structure Alternative, which does not include the lid near Victor Steinbrueck Park because of the roadway's configuration.

L-003-089

The lead agencies are aware of the concerns surrounding potential construction effects to the Seattle Aquarium. Descriptions of potential construction effects on the Seattle Aquarium and proposed mitigation measures are discussed in Appendix H, Social Discipline Report, of the Final EIS. Chapter 8 of the Final EIS also provides a summary of mitigation measures proposed for the project.

L-003-090

The purpose of the 2004 Draft EIS Appendix I, Social Resources Technical Memorandum, is to evaluate potential effects of the operation and construction of the project build alternatives on social resources. The purpose is not to comprehensively document which parcels would need to be acquired for the different build alternatives, why they would need to be acquired, the nature and severity of the effects, and/or proposed mitigation measures.

The type of information requested in this comment can be found in the following Final EIS appendices: Appendix B, Alternatives Description and

Construction Methods Discipline Report, for detailed information about why the design of the build alternatives or the proposed construction approach, methods, or activities would require the acquisition of parcels; and Appendix G, Land Use Discipline Report, for comprehensive information about the specific parcels or portions of parcels that would need to be acquired temporarily or permanently for the project build alternatives.

There has been a substantial engineering effort that has continued on the project build alternatives since the publication of the Draft EIS, and the effects of property acquisition have been substantially reduced for the build alternatives.

L-003-091

WSDOT is responsible for ensuring that mitigation for the project occurs. Considerable effort has been undertaken in the development of mitigation measures in the Final EIS and Appendix H, Social Discipline Report, to assure these concerns are addressed. There will be public outreach during construction of the project, and the proposed measures are outlined in both the Final EIS and Appendix H. The Record of Decision is the document that ultimately will commit the lead agencies to a plan of mitigation measures.

L-003-092

This Final EIS provides complete information on the project at this point, but, as this comment points out, ongoing planning and design efforts will continue to produce additional information. We are confident we have accurately described the effects of the project and that additional information will add detail but will not introduce new subjects or change conclusions.

L-003-093

The lead agencies are committed to working closely with disadvantaged communities to avoid or minimize any adverse effects. This commitment is included in the Final EIS.

L-003-094

Access throughout the project corridor will be generally maintained during construction. It is possible that some specific routes may require temporary detours depending on the construction activities. The identification of specific access modifications or detours would occur during final construction planning after final design is complete. The Final EIS contains effects of each proposed build alternative on environmental justice populations; see Chapters 5 and 6. Chapter 8 of the Final EIS presents the mitigation measures that the lead agencies will implement to address any effects to these populations.

L-003-095

Please refer to revised appendices included with this Final EIS. Both have been updated and are consistent with each other.

L-003-096

Transit will play a critical role in maintaining mobility for all populations and members of the community during construction. Please refer to the description of the construction transportation mitigation measures in the Final EIS to see how the project proposes to address potential effects to transit.

L-003-097

Since issuance of the Draft EIS, additional information on potential displacements has been provided. Full and partial acquisitions for the project were identified, and maps showing potential acquisition locations were provided in the Supplemental EIS. This information has been

updated for and included in the Final EIS. The number of potential full and partial acquisitions is identified for each build alternative, along with potential building displacements, and current uses and zoning designations for affected properties.

L-003-098

Your comment is noted. While some of the displaced parking is expected to be replaced, new parking would not be provided for every space lost. Mitigation measures for potential parking losses may include public transportation improvements and some replacement parking in, or near, the project area. Please see Appendix C, Transportation Discipline Report, of the Final EIS for a discussion of potential mitigation measures.

L-003-099

The Final EIS contains information about potential construction impacts with as much specificity that can be provided at the current design stage for the project alternatives. The potential construction durations are noted for the build alternatives. Where construction impacts are certain at specific locations, these impacts have been identified. In most instances, however, impacts at specific locations are less certain, so potential impacts are addressed more broadly. Mitigation measures are included in Chapter 8 of the Final EIS.

L-003-100

Thank you for reviewing 2004 Draft EIS Appendix O, Public Services and Utilities Technical Memorandum.

L-003-101

A cost-benefit analysis is not warranted for the project, because economics are not a direct component of the project's purpose and need. The purpose and need reflects the lead agencies' desire for a safer transportation facility that will maintain or improve mobility, accessibility,

and traffic safety. Economic viability is not the appropriate benchmark for public infrastructure projects, especially this project that has such a strong public safety component.

The level of detail requested for the economic analysis for individual businesses is beyond the scope of this impact analysis. Impacts were evaluated by separate business districts, as appropriate, that share common economic characteristics such as location; reliance on on-street, short-term parking for customers; business size; and access. Assessments of the total value of individual businesses are typically not found within publicly available information. Evaluations of an individual business' ability to continue operating during the prolonged construction period would be speculative, would rely on information that may not be able to be independently verified, and would be subject to economic forces beyond the direct control of the project. For these reasons, the economic analysis limited itself to identified business districts as the smallest division for analysis.

Please refer to the updated Economics Discipline Report, Appendix L of the Final EIS, for current methodology and analysis of economic effects for each build alternative.

L-003-102

The project team presented a summary of the business inventory of all businesses (approximately 1,200) within one block of the current SR 99 alignment (Draft EIS Appendix P, Economics Technical Memorandum). This inventory identified approximate business size, access and parking requirements, and business type. The information has been updated for the Final EIS.

The impacts to potentially fragile business districts, such as small retail businesses present in Pioneer Square and the Central Waterfront, that

rely on short-term, on-street parking to support their businesses are identified in the Final EIS Appendix L, Economics Discipline Report.

L-003-103

While it is possible that tourists may choose to avoid downtown Seattle because of a large transportation project, quantifying this possibility is speculative. However, the project can mitigate for the effects that may be a deterrent to tourists. To that end, mitigation measures to address parking and pedestrian and vehicle access effects, as well as business assistance, are discussed in Chapter 8 of the Final EIS. The operations of the cruise ship terminals, and the ability of their passengers to reach tourist attractions at the waterfront, are also addressed in the mitigation measures included in this Final EIS.

L-003-104

Dozens of surface street designs have been considered for Alaskan Way. The design plans are different for the Cut-and-Cover Tunnel and Elevated Structure Alternatives. Each includes the Alaskan Way surface street, a wide pedestrian promenade, and two sets of trolley tracks.