Seattle Planning Commission Review - October 31, 2006
SR 520 Bridge Replacements and HOV Project
Draft Environmental Impact Statement

DEIS Chapters	Comments:
General comments	• The new format is user friendly. It makes technical information more accessible to the general public. It is a great contribution to making SEPA review more interesting to the average citizen. • The maps and computer enhanced photographs are very graphically appealing and useful. • Overall, the DEIS is very well written, with minimal technical errors. • There are a variety of areas throughout the DEIS where more subheadings, graphic renderings, comparison charts, tables and definitions would increase its clarity and accessibility to the average reader. • Certain aspects of the proposed alternatives for SR 520 should be explored further. In particular, the menu of options for noise reduction, bridge aesthetics, mitigation strategies for construction impacts, maintaining views, and bike, transit and pedestrian connectivity are sometimes either incomplete or lack depth. • In general, the primary goal for the bridge rebuild other than increasing safety should be improving bike, pedestrian and transit connectivity. In keeping with Seattle's comprehensive plans, transit/bike/pedestrian connections should be top transportation priorities for this project. The Pacific interchange option seems to serve the transit connection better than the other options, though its visual blight is a major concern. Coordination with Sound Transit's light rail progress at the stadium will be critical. Improving pedestrian and bike connections are also critical. However, at times it seems the DEIS focuses more on increasing capacity for trucks and autos.
Chapter 1: Introduction to the Project	***General Comments:*** This Chapter was very approachable and easy to read. It gave an appropriate overview of the history and current options for SR 520 developments. The graphics were generally useful, particularly the diagrams of the lane options. The description of the working groups was useful for knowing the groups and individuals involved. The timeline of recent events assisted in knowing the context for action. The Chapter should not attempt to be both an Executive Summary and an Introduction. The Introduction should not be a discussion of the research results, nor should it present a distinct point of view. This information should be in the Executive Summary. Photos of the options being considered don't clearly show the full interchanges. Updated financials and other possible details will need to be included in the Final EIS. The impacts to 1-5 and I-405 during construction should be further explored in the Final EIS. Whether or not SR 520 could

support light rail should also be explored in the FEIS. Further explanation should be provided detailing why the Six-Lane option is the only option that could accommodate mass transit. Height comparisons of all the proposed alternatives for the SR 520 with other Seattle bridges should be provided.

Specific Comments:

- *Purpose and Need*
  - This document refers to the project's purpose and need, yet it is not written as a purpose and need statement. More thought should be put into how the purpose and need is presented so that the reader understands that the purpose and need is the foundation by which all alternatives are developed, screened, evaluated, and selected. The way this Chapter is written, the emphasis is not clear. Too much information is presented in this Chapter. A purpose and need should be clearly stated and succinct.

- *Transportation*
  - In Section 1-2, third paragraph, first sentence, it is unclear how the project area faces an imperative of updating its role in transportation.
  - Whether or not SR 520 will be able to accommodate light rail should be further described and explored.

- *Mobility*
  - It was understood that this project was needed in order to make SR 520 seismically safe. If the bridge was in good shape and was not at risk, it would seem that we would not be looking at replacing it (given the financial constraints we face with the many mega-projects in the region). It is unclear then why the purpose and need expanded to increased mobility. The whole basis of this document and the development of alternatives seems rather convoluted, since the implied purpose is simply to create a safer facility.
  - In Section 1-11, third paragraph, last sentence, the sentence beginning "Therefore, the Four-Lane…." is totally contradictory to the last sentence in the previous paragraph. That sentence says that WSDOT has a four component plan to increase vanpools, carpools, and transit. Yet the DEIS says that mobility for goods and people will not be met, which ignores WSDOT's plan. It seems like a decision is already being made without doing the analysis. If transit and vanpools were increased, thus decreasing some autos, the mobility for trucks (goods) would then be improved. This part of the DEIS is troubling, as it seems like the whole analysis is tilted toward eliminating the Four-Lane alternative just because it won't bring more cars to Seattle or the Eastside.

- *Graphics*
  - Photos of the options being considered don't clearly show the full interchanges, particularly for the Pacific Avenue interchange. Describing locations in the body of the DEIS for additional information after the sections in Chapter 1 would assist in navigation.

- *Introduction vs. Executive Summary*
  - The Chapter is trying to be both an Executive Summary and an Introduction to a report. An introduction to this project, as

described (Section 1-1 caption), should set up the research and analysis that follows in the report. The introduction should not be a discussion of the research results, particularly since the EIS is meant to describe the alternatives and impacts (Sections 1-14 through 1-15) for further examination, not just state opinions on alternatives. The description of the alternatives (Sections 1-8 through 1-12) describe the conclusions based on the project goals (Section 1-8), therefore presenting a distinct point of view. This is appropriate for an Executive Summary and the conclusion/recommendation section, but does not provide an objective presentation of the considered alternatives. If such commentary is kept, the inclusion of the commentary should be explicitly stated when the alternative section starts (i.e. Section 1-8 should not just be described as 'project alternatives', but as 'conclusions on project alternatives').

- The Introduction seems to be placing too much emphasis on the alternatives, in particular Alternative Six and its options. This Chapter reads more like an Executive Summary and not an introduction. As such, the main point – why this project is being done – gets lost in all the unnecessary text.

- *Construction*
  - Construction impacts to I-5 and I-405 are a concern, and should be further explored.

- *Bridge Height*
  - It was not clear how much higher the Pacific Street Interchange (80 feet above the water) and Union Bay Bridge (110 feet above the water) would be in comparison to all of the other proposed structures.

- *Updates*
  - Updated financials and other possible details will need to be included.

- *Line by Line Comments*
  - Section 1, line 7: WSDOT has a goal of producing documents which can be read and understood by the general public. However, using the word "isthmus" in the first paragraph seems to be contrary to WSDOT's goal.
  - Section 1-2, sidebar: Please spell out the acronym FHWA. This is the first time it is used.
  - Section 1-5, second paragraph, line 5: It should be explained why hollow-core columns are difficult to retrofit.
  - Section 1-14, under "Who is leading…": This is the third time FHWA is used without explaining to the reader what or who FHWA is.
  - Section 1-15, second paragraph: Please explain what a Draft Section 4(f0 is. It is unclear why this needs to be mentioned in this location.
  - Section 1-15, third paragraph: This paragraph seems condescending. Please rewrite so that you are not talking down to the audience.

Chapter 2: The Project Area, Then and Now	***General Comments:*** Information in the chapter thoroughly cover the history of the area including the transportation and land use plans for the areas, the current status of neighborhoods, environmental issues facing them, including noise, air quality, water quality of the Lake. ***Specific Comments:*** • *Arboretum* o This chapter does not adequately address the arboretum. It does not adequately address the traffic impacts to the arboretum particularly given its historical importance. The DEIS recognizes that the arboretum has never been evaluated for its significance. We believe you should evaluate it and suggest that Section 106 is applicable.
Chapter 3: Developing the Alternatives	***General Comments:*** The information provided in this Chapter is quite thorough, and appears to support replacing SR 520 with the Six-Lane Alternative. However, this Chapter is occasionally difficult to understand. Additional information, tables, and subheads should be included in the Final EIS to increase its clarity. In addition, the portion of the Chapter dealing with the movement of people and goods appears to be rather one-sided. Pontoons should be discussed further in the FEIS. The Chapter should explain why the Six-Lane Alternative being proposed would be built so high above water level. The sound walls will have enormous visual impacts. However, graphic depictions of these walls after construction are wide angle and do not provide an accurate depiction of how they would look. The need for the walls at all is debatable, since the noise mitigations appear to do little to reduce noise for residents surrounding the bridge. Further study should be done on the affect of noise reflection off of the walls. Further study should also be done of a 'no-build' option and its affect on nearby residents (analyzing the noise impact in particular). More study should be done on how to consolidate a transit hub on the north side of the Montlake cut and further analyze what options exist concerning building a Montlake bridge. Connecting Madison Park to SR 520 with several bridges seems unnecessarily damaging to views and the environment, especially when the Montlake connection could be used instead. In addition, more information needs to presented regarding the ability of the proposed facility to accommodate high capacity transit in the future. How the conversion would work should be documented. Whether or not the general purpose and/or HOV lanes would be converted should also be documented. ***Specific Comments:*** • *Mobility* o The fourth paragraph in Section 3-8 seems rather one-sided. It says the movement of people and goods would be marginal, but it should give solid numbers to back up this statement. For example, it should account for the ability for buses to move easier because of shoulders (moving stalled vehicles over, etc.), as well as pedestrians and bicyclists.

- *New Pacific Interchange*
  - The bridge itself, illustrated with the appendix, seems insensitive to the surrounding natural beauty and environment, including residents of the University, Laurelhurst, Montlake, and other neighborhoods. Its lifeless and extraordinarily ordinary concrete appearance suggests a lack of consideration for arguably one of our State's most treasured waterways. With that said there are real advantages to the Pacific Street Interchange. While there will be serious impacts to the University of Washington and the Arboretum, the interchange could be a tremendous public benefit in gaining an intermodal transit station and transportation lines. It will be of utmost importance that the Final EIS outline how it will better address offsetting these significant impacts.
  - The illustration of the span unfairly depicts the span in wide angle and does not capture the fact that while being a rather ordinary concrete freeway overpass-like bridge, it sits almost twice as high as the Montlake Bridge. Its clearance is 110' while the existing Montlake Bridge is just over 50.'
  - The DEIS suggests that WSDOT wants to consolidate a transit hub on the north side of the Montlake cut, and thus has proposed the Pacific Interchange. While this solution may respect improved future intermodal connections, the cost to stakeholders and users alike should be closely considered. It remains possible that the second Montlake Bridge option may offer opportunities to preserve Union Bay, have a more appropriate scale, and cost less than the Pacific Interchange Bridge. It still remains unclear if the benefits of the Interchange are worth the cost.
  - The Pacific Interchange and bridge, as currently envisioned appears to be disruptive to the University. The DEIS should incorporate new ideas to connect the Montlake cut and transit related needs. The DEIS suggests that the second Montlake Bridge solution eliminated the SR 520 transit stop. There must be more thoughtful and appropriate options.

- *Sound Walls*
  - The height and location of the sound walls along the entire corridor from I-5 to I-405 has not been depicted within the DEIS with a sense of confidence and understanding of the true visual impacts. In reviewing plates 3.1a, 3.1b, and 3.5b one clearly identifies the proposed locations for these walls but must dig into the appendices to retrieve any illustrative example of the impacts. These illustrations are woefully understated, utilizing very wide angle perspective that diminishes not only the impacts of the rebuilt bridge but of the sound walls completely.
  - The corridor on the east side often parallels wooded areas and undeveloped land and may have a lesser impact. However, the sound walls on the west end of the bridge create huge walls that pile up upon an already elevated bridge platform that sits some 40' above the water level, twice as high as the bridge entry in the Union Bay site today. There are no illustrations that depict the actual impacts of the sound walls due to the wide angle perspective of the illustrations. The new bridge over Portage Bay also shows huge sound walls that are also depicted in illustration with very wide angle views-not a true measure of the impact.
  - The need for the sound walls is debatable and the documentation and engineering providing a foundation for the need for these walls is questionable. These walls are designed to be 20' tall in places on the bridge and the illustrations and engineering design suggest a pattern of decibel reduction that is only locally limited, and in fact their greatest impact lies adjacent to the walls.
  - As soon as one measures the decibel reduction 100' away the mitigation is reduced. What appears to be missing is a study of the reflected noise from the opposite side sound wall. The need for these walls on the bridges appears suspect because of the reflected

noise and the fact that those impacted properties lie well outside the zones for immediate mitigation.
  - There does not appear to be a serious attempt at analyzing a 'no-build' option and its impact on those properties surrounding Portage Bay and Union Bay. The fact that those living in the neighborhoods impacted by the rebuild already are impacted by the 'din' of the roadways may be an important discussion considering the fact that the city is 'noisy'.

- *Bridge Design*
  - The DEIS states that the new bridge would be twenty feet higher than the existing. However, it is unclear where in the DEIS the height of the existing bridge is documented. (a similar type of statement is made in Section 3-13, but once again, the size of the current bridge is not documented).
  - The concept of converting the Four-Lane or the Six-Lane bridge to a roadway/transit facility needs to be further discussed and presented. Exactly how this word work should be explained.
  - For some reason that is not clearly articulated and supported within the DEIS, the new design section supports a new bridge deck above floating pontoons and columns-resulting in a bridge that will sit some 30' above where it lies today. This has an incredible environmental impact and visual interruption. There is some discussion of the reasons pertaining to future rail; however, the I-90 bridge was designed with a similar program allowing for rail and appears to rest some 20' or more lower to the water level.

- *Madison Park/Bicycle/Pedestrian Path*
  - While there is a need to connect adjacent neighborhoods and Bike/Pedestrian opportunities to the SR 520 corridor, the solutions to connect Madison Park to SR 520 with several bridges seem arbitrary and could be harmful to preserving fragile ecosystems, stakeholder views, and environmental harmony. These bridges are depicted as connecting only Madison Park via long bridges spanning over sensitive habitat. There may be no compelling need to interrupt such important and fragile environments. While there would be a convenience in making this connection, walking or riding a few more miles to the Montlake connection could be much simpler and would respect the natural land and waterscapes more. Those connections from the neighborhoods on the west side of Lake Washington might be easily satisfied at Montlake.

- *Exhibits*
  - Exhibits 3-1a, 3-3a, and 3-3c are all missing legends. If someone were reading this as a single sided document or online, they would not be privy to the legend on the opposite page (odd page). Please add legends.

- *Clarity*
  - The entire discussion in Section 3-22 is hard to follow. Maybe using subheadings would help

- *Six Lane Options:*
  - A comparative table would be very useful. There is too much text to follow the discussion.

Chapter 4: Comparison of the Alternatives	***General Comments:*** This Chapter is well done. However, a comparative table that summarizes everything would be extremely helpful. Steps that could be taken to reduce the effects of construction on various parties should be further explored, as should alternatives to the current noise reduction proposal and bike/pedestrian path proposal. The DEIS should document where increased transit funding to address increased ridership will come from. It seems a continuous path from Montlake to the existing SR 520 is a good idea. ***Specific Comments:*** • *Parking* o The possibility that better transit access and service make up for the lost parking supply should be explored. • *Bus Transit* o Funding for transit service would have to be increased to meet ridership projection. Where this money will come from should be addressed. Closing the Montlake and Evergreen Point Freeway stations is an adverse impact to the transit riders in the nearby neighborhoods and the region. • *Light Rail Transit* o Light rail is critically important to plan for ST2 and SR 520 together, especially if the Pacific Interchange option is selected. Seattle Comp Plan calls for establishing multi-modal hubs providing transfer points between transit modes in urban centers and urban villages (Transportation Element A, T5). It also calls for working with transit providers to design and operate transit facilities and services to make connections within the transit system and other modes safe and convenient. Integrate transit stops, stations, and hubs into existing communities and business districts to make it easy for people to ride transit and reach local businesses. Minimize negative environmental and economic impacts of transit service and facilities on surrounding areas and; working with transit providers to ensure that the design of stations and alignments will improve how people move through and perceive the city, contribute positively to Seattle's civic identity and reflect the cultural identity of the communities in which hey are located. (Transportation Element C, T25) • *Pedestrian/Bike* o A continuous bike/pedestrian path from Montlake all the way to the existing SR 520 path in Bellevue is a good idea. It does not seem that these should be gaps between NE Points Drive in Kirkland to the NE 24th SR 520 trailhead in Bellevue. Seattle Comp Plan specifically calls for improving mobility and safe access for walking and bicycling, and create incentives to promote non-motorized travel to employment centers, commercial districts, transit stations, schools and major institutions, and recreational destinations (Transportation Element C2, T30); and T34 to Provide and maintain a direct and comprehensive bicycle network connecting urban centers, urban villages and other key locations. Provide continuous bicycle facilities and work to eliminate system gaps (Transportation Element C2, T34). These goals and policies should be given considerable weight in assessing

	pedestrian and bicycle considerations. • *Project Aesthetics* o Landscaping adjacent to noise walls should be provided wherever possible. "Tree screens" do not provide the significant sound attenuation that is implied in this document. • *Community Cohesion* o Pedestrian and bicycle connections are very important in helping the project meet Seattle's Comp Plan goals. Transportation Element C TG9 states that transportation projects provide programs and services to promote transit, bicycling, walking, and carpooling to help reduce car use and SOV trips. • *Construction Effects* o Construction effects should be reduced by expediting and providing incentives for a speedy construction plan that does not inconvenience transit riders during construction. • *Environmental Justice* Tolling would have an adverse effect primarily on SOV drivers. HOV and transit would be not adversely affected. Seattle's Comp Plan clearly supports programs and strategies aimed at reducing SOV car trips and miles driven (for work and non-work purposes) to increase the efficiency of the transportation system. • *Ecosystems* o Unless upstream areas are capable of supporting salmonids, it does not make much sense to spend a lot of money to remove fish passage barriers. Where new wetlands would be created, or when restoring degraded wetlands, efforts should be made to locate those within the same watershed.
Chapter 5: Detailed Comparison of the Alternatives - Seattle	***General Comments:*** There should be more discussion of the various options. Options to improve the aesthetic appearance of the bridge in particular are not adequately explored. Projected regional growth should be considered when developing the plan for SR 520. Special attention should be given to ensuring adequate pedestrian, bike and transit connectivity, as well as connectivity for drivers to I-5. The building of the new bridge could serve as an opportunity to greatly improve transit and lure new riders to public transit. Alternatives to the current proposals for noise reduction should be explored. More visuals should be provided to better understand the aesthetic and environmental impacts. ***Specific Comments:*** • *Corridor Aesthetics/Visuals* o The corridor aesthetics handbook is a great idea. There is not currently enough information on the aesthetics of the sound

retaining walls along the bridge, or how the aesthetics of the bridge as a whole will impact views from the Arboretum and the Husky stadium area. Exhibit 5-1 is well done. More of these types of exhibits from more angles should be provided, particularly with respect to the Pacific Interchange option.

- The project is unexciting because all the alternatives look bulky, massive and clumsy. More creative ways to make the structure look less clumsy should be explored, while retaining the same engineering characteristics. Possibilities include tapering the columns, making the structure look more like a series of arches, or adding a more monumental finish above the deck instead of sound walls. With the Pacific Interchange, the location is directly in the middle of Portage Bay, so mitigation can't simply be a technique to make it less visible. For safety reasons it is doubtful the girth could be sacrificed but should be carefully analyzed. However, the mitigation could be some kind of addition - monumental, ornamental or otherwise that might divert the eye from the blight at the water level if less ugly, bulky columns cannot be devised.

- *Noise*
  - It remains unclear if WSDOT investigated the use or rubberized roadway for SR 520 as it has for the Viaduct replacement. It is also worth exploring if speed limits set at 50 MPH would reduce the need for the bulky sound walls. The main concern here is the presence of the sound walls, which might pose a greater visual problem than the auditory one is was designed to solve.

- *Bike/Pedestrian/Transit Connections*
  - In keeping with Seattle's comprehensive plans, transit/bike/pedestrian connections should be top transportation priorities for this project. The Pacific interchange option seems to serve the transit connection better than the other options, though its visual blight is a major concern. Coordination with Sound Transit's light rail progress at the stadium will be critical. Improving pedestrian and bike connections are also critical.
  - Linkage between Sound Transit station and the SR 520 transit stop near University of Washington Hospital was discussed. However, this should be a multi-modal transit station/terminal so people have maximum flexibility in using the transit resources to get around the region. Cooperation between the various planning/project entities is essential. The shared costs certainly present the opportunity to save taxpayers money.

- *Regional Growth*
  - Improved transit links across Lake Washington are likely to make Seattle even more attractive to the young, upwardly mobile professionals who like the urban environment of the city but work at hi-tech companies on the eastside. The look at regional and community growth could consider what development pressures are likely to occur. For example, in order to accommodate the suggested growth for the region, whether or not residential demand in Montlake could be satisfied with land use changes that encourage mixed use, denser development along 23rd should be explored. Whether or not an expanded bridge would hasten the "gentrification" of Madison Valley could also be addressed.

	• *I-5 Connectivity* o The Chapter made no mention of how SR 520 would access I-5. Proposals as to how the increased volumes merging with I-5 should be documented. While this could be beyond the scope of the bridge project, improvements that address the "Mercer weave" issue should be considered. • *Historical Notes* o When projects are built "on the cheap," residents live to regret it. I-5 opened in 1963 and immediately exceeded planned capacity. SR 520 was built without shoulders to handle broken down or disabled vehicles. • *Visuals* o It is not clear the scale of the bridge compared to cars, humans, boats and animals. In general, more visuals should be provided to give a clearer picture of the environmental and aesthetic impacts of the various options.
Chapter 6: Detailed Comparison of the Alternatives – Lake Washington **Commissioners Assigned:**	***General Comments:*** There is not enough information on the current impacts of the existing bridge provided. There is no information on the impacts during the phase of the project when two bridges exist. The impacts on views should be further explored, as well as options that would maintain views for those using SR 520. There should be further discussion of WSDOT's plans to mitigate surface water runoff, including where water treatment facilities will be placed. The DEIS should provide more information concerning access to Lake Washington. Much of the information in Chapter 5 regarding fish should be placed in this Chapter. More visuals should be provided to give a clearer picture of the environmental and aesthetic impacts of the various options. ***Specific Comments:*** • *Views* o Little information on the visual impacts of the sound walls in the Union Bay/Arboretum/Madison Park area is provided. A reference to the discussion in Chapter 5 of these impacts to Lake Washington would have been helpful. o It appears the computer simulations in this Chapter do not include the sound walls. o There is no mention of a Scenic Route designation of the highway along Lake Washington in this Chapter, and little description of how scenic views from the new bridge would be affected by the sound walls. There should have at least been a reference to the discussion in Chapter 5 of this. o Views down to the lake and shoreline from SR 520 along the south end of Lake Union, by Marsh and Foster Islands, are valuable. Not just the view over the lake to the Cascades and Mt. Rainier are important. This experience of seeing one of the only natural shorelines of the Lake and observing people canoeing and swimming there is very enjoyable. It is a very unique visual situation. The sound walls will alleviate this view completely. The benefit of noise reduction may outweigh this, but it is an impact that should be disclosed.

- The proposal to create design guidelines and take other measures to ensure aesthetic quality in this corridor should be pursued. Please consult with the Seattle Design Commission on these measures.

- *Stormwater*
  - WSDOT proposes mitigating for increased surface water runoff by providing new storm water treatment facilities. Part of the water treatment measures would be directly in the lake, in "the lagoon enclosed by the pontoons." There was only brief mention of this as a mitigation measure, but no discussion was included on the possible negative impacts of this on the lake. Whether or not WSDOT has experience with this type of storm water treatment facility should be examined.
  - Besides the water treatment in lagoons in the lake, there was no mention of where the other water treatment facilities would be located in this Chapter. There is information in Chapter 5. Questions remain concerning whether the storm water mitigation is taking place entirely within the watershed or in the basin, as well as whether storm water treatment facilities would be built primarily in natural or developed areas.

- *Lake Washington*
  - The DEIS should explain how the project alternatives will change access to the shoreline of Lake Washington in Seattle, and explore if the changes on the MOHAI site will make the water more accessible. In addition, the DEIS should examine if parking for recreation uses or the recreation facilities along the water neat the University of Washington and Montlake would be eliminated. The DEIS should also address how access to the water would be affected in this area under the various alternatives. (There is discussion of impacts to parks in Chapter 5, but not all of these concerns are addressed there.)

- *Animals*
  - Information on fish was put in Chapter 5, and not in Chapter 6.
  - Although this Chapter addresses the shading of the bridge alternatives in the middle of the lake, it does not address this impact in the shoreline, riparian zone along the south of Lake Union, by Marsh Island and Foster Island. That information is found in Chapter 5.
  - Impact of the alternatives on fish migration was not mentioned in this Chapter on Lake Washington. This is an important portal to Lake Washington for fish. The different alternatives would have varying degrees of impact on this. This information is only included in Chapter 5.
  - Those involved with the project should work closely with Seattle DPD environmental planners, the tribes and Washington Department of Fish and Wildlife on issues concerning fish habitat.

- *Cultural Resources*
  - Producing documentation, and making public, information on the existing bridge before it is removed is a good idea.

	• *Visuals* o Exhibit 6-1 (Chapter 6, Section 6-2) does not provide a reasonable schematic. In general, more visuals should be provided to give a clearer picture of the environmental and aesthetic impacts of the various options.
Chapter 7: Detailed Comparison of the Alternatives - Eastside	***General Comments:*** More explanation should given concerning the possible use of lids to mitigate noise, as well as how decibel levels are compared to one another. The estimates for anticipated increases in traffic demand/capacity seem overly optimistic. More information should be provided concerning the various transit alternatives being considered prior to the opening of the Six-Lane Alternate. The statement that regional and community growth will not change regardless of which option is chosen does not seem correct. ***Specific Comments:*** • *Noise* o The decision to lid parts of the Eastside approach within the Six-Lane Alternative only should be explained, perhaps within this Chapter, in a brief discussion, or a review from another Chapter. This would help explain why the Six-Lane Alternative qualifies for lids but not the Four-Lane Alternative. o The DEIS suggests that lids 'would' mitigate noise impacts from SR 520. This statement seems too optimistic and unfairly suggests that there may be little to no noise impacts at all. The DEIS should fairly describe the anticipated reduction created by the lids. o There is a continued thread within this Chapter and presumably others related to decibel levels. There are numerous points made within this Chapter related to decreased and increased decibel levels and arguments made that certain design solutions including lids and sound walls will reduce decibel levels by specific amounts. Unfortunately there is no base-line described for comparison measurement. These figures should include a description of present levels and comparisons to anticipated design solutions. Stating that there will be an 11 decibel reduction doesn't prove anything. • *Traffic Demand/Capacity* o The Chapter discusses the anticipated increases in traffic demand/capacity through 2030 and only suggests an increase of 4% for the Four-Lane and 2% for the Six-Lane over the next 24 years. During construction of the bridge on the Eastside, there was a tremendous increase in demand immediately, no less than what will likely happen when more capacity is provided when a new bridge (either configuration) is completed. The reasoning as stated relies upon the fact that because there will be tolls, traffic will seek alternate free routes. However, these figures seem overly optimistic. • *Transit* o The Chapter states that there is 'no increase in transit funding at this time,' even though the Six-Lane Alternate relies upon a dramatic increase in transit level of service. There should be a comprehensive plan and explanation of the transit alternatives that will be contemplated and in place prior to the opening of a Six-Lane Alternate.

	• *Regional and Community Growth* o The DEIS suggests that 'Regional and community growth would not materially change between the no-build alternative and the build alternatives.' This is difficult to believe given the history of growth on the eastside, the PSRC Vision 20/20 growth forecasts for Urban Centers, and the natural outgrowth created by increased capacity, especially with the Six-Lane Alternative. • *Line by Line Comments* o Page 7-16, middle of the page: There exists a possible error. The sentence reads: "Except where noted, the effects of the Six-Lane Alternative options would not differ from those of the Six-Lane Alternative." However, one of these alternatives should read Four-Lane instead of Six-Lane.
Chapter 8: Construction Effects	***General Comments:*** Overall, this Chapter is well written and clear. However, much of the information in the first five pages should go in the 'Alternatives' Chapter, since it is discussing the elements of the project, not the actual construction phasing. Also, a lot of the discussion regarding water quality and impervious surfaces would be excellent in the impacts Chapter. Further explanation of noise and vibration mitigations should be provided. ***Specific Comments:*** • *Noise* o How noise would be mitigated during the evening periods if a variance is granted should be explored. • *Historic Properties* o There is no discussion of mitigating vibration. The DEIS should document whether or not an analysis was done to determine how far from the source the vibration would travel, as well as if any historic structures exist within that zone. • *Construction Employees* o In the first paragraph of Section 8-12, construction employees should be addressed. This section only discusses truck hauling. • *Line by Line Comments* o Section 8-6: Please define/explain "finger pier." o Section 8-31, second paragraph: If possible, please include route detour plans. Not everyone wants to look in the appendices for this important information
Chapter 9: Other Considerations	***General Comments:*** The CEA review is decent. It is always a difficult analysis, but this one was relatively good. There should have been more detail on the process. This may exist in an appendix. CEQ requires that geographic and temporal boundaries are identified for the cumulative effects

	analysis, but this information does not seem to be in the DEIS. The DEIS should detail how far back the study went, how far into the future it goes, and the parameters of the study area. ***Specific Comments:*** • *Line by Line Comments* o Section 9-3, first sentence: Add an "s" after 'effect.' o Section 9-4, third paragraph: The phrase "on the books" should be explained. It could mean the projects that are planned, funded, or under construction. Please be clear o