

## Comments on 520 corridor project SDEIS

To whom it concern

- I-315-001** | One would think that with 10 plus years of planning, the 520corridor project should be ready to build and that the result when finished will be a first class transportation system that will move people and goods to their destination safely and efficiently. Sadly, after \$220 million of planning, we are not even close to attaining that goal. The floating part of the project will be an eyesore of epic proportions, there is no financial plan to pay for it and when finished, traffic movement will be no more efficient than it is now. In spite of this, many want to forge ahead and start pouring concrete.
- I-315-002** |
- I-315-003** |
- I-315-004** | The State has published an Environmental Impact Statement and then a Supplement to it that supposedly explains why this project is going to take a bad situation and make it better. In fact, when you read it, it becomes a statement why this whole project should be stopped. The bottom line is that after you have spent about four and one half billion dollars, the traffic flow will in some cases be minimally improved and in some cases worse. Not only that, the debt incurred will cost an additional three billion dollars in interest.
- I-315-005** | I find the SDEIS more interesting for what it doesn't say than what it does. Following are some examples in no particular order except for the first one which should be the most important
- I-315-006** |
- I-315-007** |
- I-315-008** |
- I-315-009** |
- I-315-010** |
- I-315-011** |
- I-315-012** |
1. Show me the money. What possible justification is there to build this project when more than half the cost is money the State does not have. Further, it makes no attempt to explain where it will come from. Once this question is addressed, it leads to many more money questions. This is a major omission.
  2. Apparently the current bridge might blow away or sink or fall down. How big a wind or earthquake is it going to take to cause this. The report fails to give any details on this subject. The current bridge was retro-fitted several years ago to withstand sustained 77 mph winds. I find no evidence this has ever occurred in the vicinity of the bridge!
  3. Along this same line, when you build this new structure that is much more massive, why is it less likely to have issues with wind or an earthquake. It seems to me that a structure 20 to 40 feet high has a lot more vulnerability to wind and waves than the current 11 foot structure. This is not addressed.
  4. State legislation caps the number of lanes for the new bridge at six lanes. The architectural plans show the Bridge to be much wider than necessary for six lanes. Why?
  5. Another goal in building this new bridge/corridor is to relieve traffic congestion. Not only does the SDEIS fail to explain why there will be less congestion, it clearly states that some areas will be more congested after the completion of the project. Someone needs to explain how we can or should justify spending \$4.50 to make something worse. Then explain why spending 4.5 BILLION DOLLARS is any better!!!
  6. How seriously was the idea of a retrofit looked at. It has been done to a lot of existing structures. It was done to this bridge before. Why is this situation different. Why is it not addressed?
  7. With the current 520 set up, when cars get off 520 they exit onto already congested streets, roads or freeways. There is little indication that these are going to be improved to handle the extra traffic. Why not? Did anyone ever consider the idea of making the "side streets" more efficient to see if the 520 bridge traffic might then move better? Where can one read about why this idea was rejected.

### I-315-001

After publication of the Final EIS, FHWA will issue a Record of Decision (ROD) for the project. The construction schedule for the project is outlined in Chapter 3 of the Final EIS.

### I-315-002

Governor Gregoire and the Washington State Legislature have signed two important tolling bills related to the SR 520 program, House Bill 2211 (May 2009) and Senate Bill 6392 (March 2010), that allow WSDOT to move forward with constructing a new pontoon construction facility, to have pontoons readily available in case of an emergency, and a to begin construction on new floating bridge. At present, this leaves a total of \$1.98 billion currently unfunded. The SR 520 Program is developing a new finance plan designed to identify ways to fully fund the program and planned corridor improvements. This finance plan will incorporate recommendations from the ESSB 6392 workgroup process, which looked at the issue of funding transit improvements in the SR 520 corridor. Chapter 1 of the Final EIS provides additional discussion about project costs, and how WSDOT will attempt to address budget needs as the project advances.

Construction has begun on the SR 520, Pontoon Construction project, and WSDOT has released a Request for Proposals to hire a contractor for the Floating Bridge and a Landings portion of the SR 520, I-5 to Medina project.

### I-315-003

The addition of high-occupancy-vehicle (HOV) lanes to the corridor, with no increase in the existing number of general-purpose lanes, is intended to improve the speed and reliability of transit service, thus providing an incentive to use transit. As noted in the discussion of project need on page 1-6 of the SDEIS, the prospect of substantially increased travel times in 2030 "...makes it imperative that commuters be provided with

- I-315-013** | 8. The new bridge when completed is eventually projected to carry considerably more traffic than it does now. The SDEIS says the congestion on side streets will only marginally improve upon completion of the new bridge but does not say anything about future congestion on side streets. Where can one find the projections for the side streets.
- I-315-014** | 9. In chapter 5 page 4, it says traffic volume may actually decrease on the new bridge initially as cars move to I-90 because it won't have tolls.
- I-315-015** | 10. On page six and seven of the executive summary, it says that a current problem exists on the eastside of the lake where the westbound HOV lane ends at the bridge. This causes congestion where HOV traffic has to merge with general purpose traffic. Why then when the new bridge becomes three lanes westbound is it not a problem when traffic has to merge down to one or two lanes at for example I-5 northbound or on Montlake Boulevard northbound. Also what possible reason is there to build a second bascule bridge over the Montlake cut when there are no additional lanes being added. The SDEIS seems to say merging is a problem in one place (on the eastside) while totally ignoring the fact that upon completion of the project, there will be much more merging necessary on the Westside but ignoring that. It appears the State is going to spend money they don't have on something that say causes congestion(merging). This is a major failure of the SDEIS...ignoring the obvious.
- I-315-016** | 11. I have been told by the Seattle Department of Transportation that their input to the SDEIS was minimal because the EIS process does not require it since this is a State project. If this is true, then I guess you can't call it a failure or an omission of the SDEIS. I would however say it makes the whole process null and void!!!
- I-315-017** | In summary, the SDEIS makes no case that the existing structure can't be fixed or improved, clearly says that barely 50% of the funding exists to do the project (and makes no attempt to justify proceeding without money or explaining where the rest of the money will come from) and says clearly that when finished, traffic in the 520 corridor will still be very congested immediately and since they project 50% more use as time passes, that it will only get worse. Issues seemingly ignored are the fact that this will be a visual blight on a beautiful lake and that the corridor will be as much as 13 lanes wide in some places compared to 6 now. What do the 7 additional lanes accomplish? The SDEIS seems to ignore that issue or leave it up to us to decide. For 4.65 billion dollars, we deserve answers and the project should be stopped until an SDEIS is prepared that addresses all the above issues.
- As an aside, it seems Microsoft is all in favor of going ahead with the project. My guess is if they updated the windows operating system and it has as many flaws as this, they would not release it even in beta form. If they studied the SDEIS at all, one must surmise they don't care what happens to their Seattle employees once they get close to home.
- Another aside. When the Seattle side of this project is completed and traffic in the vicinity of the bridge is at a standstill, do you think the State will come running with money to help solve the mess they created or will we the people of Seattle be stuck with the problem. City officials including the Mayor, City Council and SDOT better seriously think about this and demand that the State show why there is not an issue going forward. If Seattle City officials have studied the SDEIS and can't foresee a problem they need to explain this to the citizens of Seattle.
- I-315-018** | Further aside. The state has the 520 and viaduct project, the county has metro, the city has the Mercer mess. We have sound transit and sluts and RTA and now Bellevue wants to build some kind of tunnel. Is there some kind of plan here or are we just throwing money at traffic issues and hoping they will go away. The SDEIS does not seem to address how the 520 corridor project fits in with all these other projects to make things better. WHY?????
- I-315-019** | And finally, will someone explain to me why these lights at freeway and bridge entrances are called flow meters. When you stop traffic IT IS NOT FLOWING, IT IS BACKING UP. Further is backing up onto other streets and making them NOT FLOW EITHER.

travel choices that allow them to avoid driving alone, and that the proposed project be built to support increased use of transit and HOVs.” As discussed in section 5.1 of the SDEIS and 5.1 of the Final EIS, HOV and transit commuters would experience substantial travel-time benefits in 2030 with the addition of the HOV lane.

#### **I-315-004**

Since the SDEIS was published, FHWA and WSDOT have identified a Preferred Alternative that is most similar to Option A, but includes a number of design refinements that minimize the effects presented in the SDEIS. These refinements respond to comments made on the SDEIS and to WSDOT's work with many project stakeholders under Engrossed Substitute Senate Bill (ESSB) 6392, which was passed by the Washington State Legislature in 2010. See Chapter 2 of the Final EIS for a description of the planning process and a description of the Preferred Alternative. In particular, the addition of HOV lanes to the corridor, with no increase in the existing number of general-purpose lanes, is expressly intended to improve the speed and reliability of transit service, providing an incentive to use transit. As noted discussion of project need on page 1-6 of the SDEIS, the prospect of substantially increased travel times in 2030 “makes it imperative that commuters be provided with travel choices that allow them to avoid driving along, and that the proposed project be built to support increased use of transit and HOVs.” As discussed in Section 5.1 of the SDEIS and 5.1 of the Final EIS, HOV and transit commuters would experience substantial travel time benefits in 2030 with the addition of the HOV lane.

#### **I-315-005**

Comment noted. Please see the responses to your specific comments below.

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**I-315-006**

The justification to proceed with the SR 520, I-5 to Medina project is to address the growing safety concerns with the floating bridge and other vulnerable structures along the SR 520 corridor. Please see SDEIS page 1-4, Section 1.3 "Why is the project needed now?" for a complete discussion about how structures along the SR 520 corridor are vulnerable to catastrophic failure during an earthquake or windstorm.

**I-315-007**

Further information about the bridge's safety issues can be found on WSDOT's web page at:  
<http://www.wsdot.wa.gov/Projects/SR520Bridge/vulnerability.htm>.

**I-315-008**

The new structure will meet current safety guidelines for seismic design and wind. See Chapter 2 of the Final EIS for a description of the Preferred Alternative, Chapter 3 and the Construction Techniques and Activities Discipline Report and Addendum for information about project construction, and the Geology and Soils Discipline Report Addendum for information about seismic design.

**I-315-009**

The proposed project includes six vehicle travel lanes: two general purpose and one HOV lane in each direction. It also includes a bicycle/pedestrian lane. Standard engineering terminology includes only through lanes, not ramps or shoulders, in describing the number of lanes in a facility, and do not include bicycle lanes. SDEIS exhibits 2-6, 2-9, and 2-14 showed the number of lanes and the width of each SDEIS design option. See Chapter 2 of the Final EIS for a description of the Preferred Alternative, which also includes six lanes.

The Preferred Alternative has been designed to minimize SR 520's

footprint as much as possible while allowing room for HOV lanes and the shoulders required to satisfy current safety standards regulated by FHWA and the Association of American State Highway and Transportation Officials (AASHTO). Highway lanes and shoulders are designed to standards that have been established to protect the safety of drivers. When circumstances warrant a change from these standards, WSDOT must request FHWA's approval of a "design deviation." WSDOT has already obtained approvals for design deviations for both lane and shoulder widths in response to community requests for a narrower roadway footprint. In the interest of safety, FHWA will not approve further narrowing of the corridor. See Chapter 2 of the Final EIS for more information on lane and shoulder widths.

WSDOT intends to operate SR 520 as a 6-lane corridor and has no plans to restripe it in the future. The width of the new 6-lane SR 520 corridor and the width of the new floating bridge would not allow conversion to eight lanes without physical widening of the roadway. This would result in a new project that would need to undergo separate environmental review.

#### **I-315-010**

As stated in Chapter 1 (page 1-3) of the SDEIS: The purpose of the SR 520, I-5 to Medina: Bridge Replacement and HOV Project is to improve mobility for people and goods across Lake Washington within the SR 520 corridor from Seattle to Redmond in a manner that is safe, reliable, and cost-effective, while avoiding, minimizing, and/or mitigating impacts on affected neighborhoods and the environment.

This project does not have an additional goal of reducing congestion as stated in the comment. However, there will be some level of congestion reduction on the corridor compared to a No Build configuration because of the additional lane provided for buses and carpools, and because of the toll. More information about traffic volumes, congestion, and travel

times can be found in Chapter 5 of the SDEIS Transportation Discipline Report.

### **I-315-011**

The Albert D. Rosellini Floating Bridge (aka, the Evergreen Point Floating Bridge) was opened to traffic on August 8, 1963, and has been in service for almost 47 years. The floating portion of the bridge was originally designed for a sustained wind velocity of 57.5 mph (50 knots). This wind speed is substantially less than the current WSDOT design standard (e.g., the 100-year storm), which equates to a design wind velocity of 92 mph. Through a series of in-house assignments and external consultant contracts, WSDOT has modeled, analyzed, and evaluated the condition of the existing bridge and options for structural upgrades to meet current design criteria. From these efforts, WSDOT has determined that rehabilitation of the existing bridge to withstand the 100-year design storm is not feasible due to limitations with respect to structural capacity of the pontoons, impact of rehabilitation on pontoon flotation, and anchor capacity.

Structural capacity of the bridge refers to the facility's ability to resist the intended loading from traffic and other natural loads (e.g., wind, wave action, seismic, etc.) and inadvertent loads such as vessel impact. Pontoon flotation limits the amount of rehabilitation that can be performed in that additional weight affects the position that the pontoons float in the water, or freeboard elevations. The pontoons currently are floating 6" to 10" lower than originally designed. WSDOT has completed several rehabilitation contracts to upgrade the floating portion of the bridge to resist the 20-year storm (wind velocity of 77 mph). These improvements include: watertight doors for pontoon cell compartmentalization, pontoon bilge pumping system, pontoon cell water monitoring and warning system, elimination of the "hanging" counterweights in the draw span, strengthening of the pontoon bolted joints, reduced anchor cable demand on short anchor cables, pontoon

crack sealing, and longitudinal post-tensioning of the pontoons. In order for the bridge to withstand the 100-year design storm, complete replacement of the floating portion of the bridge will be required (e.g., pontoons, anchor cables, lake bottom anchors, and the moveable span).

The approach structures to the floating bridge do not meet current seismic design standards. The approach structures were analyzed for their structural sufficiency in 1993 and were found to be deficient in the roadway to substructure connections along with the substructure strength and ductility (exhibits brittle characteristics). There is no established method for effectively retrofitting hollow-core piles to improve ductile performance for seismic loading. One alternative to retrofitting the existing substructure is to essentially build a new substructure under the existing roadway. This retrofit method would be extremely expensive (over half the cost of a new structure built to current standards), and would still leave a substandard roadway that is beyond the midpoint of its life expectancy (WSDOT. 2002. SR 520 Evergreen Point Floating Bridge and Approach Structures Storm and Seismic Risk Statement, Bridge and Structures Office. Washington State Department of Transportation. January. 6pp).

WSDOT currently has comprehensive regional plans to account for an emergency event. The SR 520 Catastrophic Failure Plan (Summer 2008) is available for download at <http://www.wsdot.wa.gov/Projects/SR520Bridge/vulnerability.htm>. As part of its emergency planning, WSDOT is preparing for potential emergency replacement of pontoons to restore the floating section of the SR 520 floating bridge in case of a catastrophic failure. WSDOT recently awarded a contract to Kiewit-General Joint Venture to build a casting facility and pontoons, and to store these pontoons until needed. More information on the Pontoon Construction project is available on <http://www.wsdot.wa.gov/projects/sr520bridge/>.

**I-315-012**

The primary congestion points along the SR 520 corridor today and into the future occur at the on- and off-ramp merge points with the highway and at locations where there is a reduction in the number of lanes on the highway. These congestion points are independent from the local street operations. Improvements to the local street operations have been considered and described through the project EIS process. This information can be found in the SDEIS Transportation Discipline Report in Chapters 5 and 6.

**I-315-013**

Traffic volume projections for local arterials can be found in the Final EIS and Chapter 6 of the Transportation Discipline Report and Final Transportation Discipline Report. Chapter 6 of the Final Transportation Discipline Report also includes discussion of the operational effects of the No Build and Preferred Alternatives on local streets.

**I-315-014**

Since publication of the SDEIS, WSDOT has developed a Preferred Alternative, which is similar to Option A, but with a number of design refinements that would improve mobility and safety while reducing negative effects. The Chapter 2 of the Final EIS describes the Preferred Alternative.

As described in Chapter 5 of the Final Transportation Discipline Report, daily vehicle demand on the SR 520 floating bridge in the year 2030 would be about 5 percent lower with the Preferred Alternative compared to the No Build Alternative. During the morning and afternoon commute periods, total vehicle trip demand across SR 520 in the year 2030 for the Preferred Alternative would be similar to the No Build Alternative (within 1 percent); however, actual vehicle throughput would increase with the Preferred Alternative, and more people would be traveling in higher occupancy modes, such as HOV 3+ or transit (resulting in fewer general-

purpose trips). Please refer to Chapter 5 of the Final Transportation Discipline Report for additional discussion regarding vehicle and person demand and throughput for the No Build and Preferred Alternatives.

**I-315-015**

Two things happen at the west terminus of the SR 520 corridor that allow the merge of traffic to result in less congestion than the current condition at Evergreen Point. First, there are more cars that exit from westbound SR 520 to the Montlake interchange than enter onto Portage Bay bridge. This results in a reduction in traffic prior to the merge point. In the morning, when the westbound highway terminates at the I-5 interchange, there are an equal number of lanes joining I-5 as there are on the SR 520 corridor. During the evening peak, there are three lanes available for traffic leaving SR 520 to I-5 and the design improvements provided on Portage Bay bridge help to facilitate improved traffic flow compared to the existing condition at Evergreen Point bridge. More information about the future traffic operations can be found in Chapter 5 of the SDEIS Transportation Discipline Report.

**I-315-016**

WSDOT has worked collaboratively with the Seattle Department of Transportation and other City of Seattle departments. The Agency Coordination and Public Involvement Discipline Report and Addendum (Attachment 7 to the Final EIS) provides more detailed information about WSDOT's work with other agencies as part of the project. In early 2010 the Legislature passed Engrossed Substitute Senate Bill (ESSB) 6392, which directed WSDOT to work collaboratively with the City of Seattle and other regional agencies and stakeholders to consider design refinements and transit connections within the Preferred Alternative. The ESSB 6392 workgroup process assisted with refinement of the design of the Preferred Alternative evaluated in the Final EIS, and the group's recommendations will continue to shape the project during design development. The findings of the workgroup are presented in the ESSB



6392: Design Refinements and Transit Connections Workgroup Recommendations Report (Attachment 16 to the Final EIS). Some of the ideas proposed by the Seattle Department of Transportation and discussed in the workgroup would be implemented by WSDOT, while others would be under the jurisdiction of the City of Seattle, separate from the SR 520, I-5 to Medina project. See the responses to comments in Item L-011, which was submitted by the Seattle Department of Transportation, for more information. As a result of the ESSB 6392 Arboretum Mitigation Workgroup, WSDOT has committed to fund traffic calming measures along Lake Washington Boulevard and to work with the Seattle Department of Transportation on additional measures to manage traffic in the Washington Park Arboretum. More details are provided in the SR 520 Arboretum Mitigation Plan (Attachment 9 to the Final EIS).

**I-315-017**

See the responses to comments I-315-002 regarding project funding, I-315-004 regarding improvements in mobility that would result from the project (also see Section 5.1 of the Final EIS and Chapters 5 and 6 of the Final Transportation Discipline Report for a description of the long-term transportation effects of the project). The effects of the project on visual quality and aesthetics are described in the Visual Quality and Aesthetics Discipline Report Addendum. While changes in the bridge's scale and appearance would be noticeable, overall vividness, intactness, and unity for the Lake Washington and West Approach areas would be similar to or higher than with the existing bridge. The comment's characterization of the project as having 13 lanes is inaccurate. The Preferred Alternative is 6 lanes wide. In Portage Bay it includes a managed shoulder instead of a seventh, auxiliary lane.

**I-315-018**

The SR 520, I-5 to Medina project has been considered through mandated state and regional transportation planning processes. As

stated on page1-2 of the SDEIS, it “is designated as a strategic project by the Puget Sound Regional Council and is included in WSDOT’s 2009-2012 Statewide Transportation Improvement Program.”

The transportation analysis conducted for the project accounts for regional roadway and transit network improvements that were planned and programmed (funded) at the time of analysis, as part of the No Build Alternative (see chapters 3 and 4 of the Transportation Discipline in Attachment 7 to the SDEIS and Final Transportation Discipline Report in Attachment 7 to the Final EIS for further discussion). Thus, conclusions regarding the benefits of the proposed project account for the projects listed in these reports.

**I-315-019**

Comment noted.