Coalition for a Sustainable SR 520

Madison Park, North Capitol Hill, Montlake, Laurelhurst, Roanoke Park/Portage Bay, Boating community

April 15, 2010

Ms. Jenifer Young
Environmental Manager
SR 520 Program Office
600 Stewart ST, Stu520
Seattle, WA 98101

Dear Ms. Young,

The Coalition for a Sustainable SR 520 hereby submits its comments on the SDEIS for the SR 520 I-5 to Medina Project, consisting of this letter and Appendices A through Z. Most of the Appendices are on the attached CD.

We give heartfelt thanks to the many members of the community who created this response.

Coordinator fran@roanokecap.com 206-328-4444
117 East Miller St, #205, Seattle 98102

Boating Community
by

Laurelhurst Community Council
by

Madison Park Community Council
by

Montlake Community Council
by

N. Capitol Hill Neighborhood Assoc.
by

Roanoke Park/Portage Bay Community Council
by

Fran Conley
Appendices

*Printed and on CD*

Appendix A: Comment Letter written by David Bricklin
Appendix B: Analysis of damage done to parks and public open space
Appendix C: Comment Letter from Tighlman Group on traffic
Appendix D: Letter from JGL Acoustics on noise

*The following appendices are on the CD only:*

Appendix E: Current funding for SR 520 program
Appendix F: Email on timing of EIS for pontoon project
Appendix G: 1954 map of “Option A”
Appendix H: Letter from Governor Gregoire to Seattle City Council
Appendix I: Excerpt from Publicola report on Federal court decision
Appendix J: Seattle Times Article quoting governor and Senator Tom
Appendix K: Report of Legislative Workgroup
Appendix M: Methodological flaws in transportation analysis
Appendix N: Traffic simulation flaws
Appendix O: References on traffic
Appendix P: Generated Traffic
Appendix Q: Capacity of 4 Lanes
Appendix R: Ramp at I-5 SR 520 Intersection
Appendix S: References on Traffic, Air, and Health
Appendix T: Analysis of SDEIS assertions on air and health
Appendix U: Comments on Health Impacts Assessment
Appendix V: Ruling on Uses of Tolls
Appendix W: Fish Impacts
Appendix X: Park Commissioner’ Comments
Appendix Y: RFP Pontoon Bidding
Appendix Z: Errors and Omissions in Cultural Resources report

This document also incorporates by reference the comment letters from the Madison Park Community Council; the Montlake Community Council; the Shelby-Hamlin Group; the Roanoke Park/Portage Bay Community Council; the Seattle Yacht Club; the Queen City Yacht Club, and the Laurelhurst Community Club.
Summary

There are nine basic problems with the state’s analysis (SDEIS) for the 520 corridor from I-5 to Medina:

I) The state has improperly separated the evaluation of the I-5 to Medina segment from the pontoons segment and from the east side segment. In fact, these are interdependent parts of one project.

II) The state appears to have made a decision already, and to be going through a paper environmental review process while subverting the intent of the laws.

III) The SDEIS does not demonstrate that people and goods would move better after the construction. The methodology for estimating demand and assessing congestion is fundamentally flawed.

IV) The state is planning to take protected parkland for most of the length of 520 on the west side, destroying a unique chain of linked parks and bays. Federal law requires seeking alternatives rather than taking parkland or harming historic areas.

V) The state has not analyzed obvious alternatives which might have better results and do less damage, including a tolled, transit-priority 4 lanes which might be adequate for some years until additional funding is available, and a 6 lane alternative with 2 lanes used for light rail.

VI) The SDEIS does not correctly describe the Current Proposals. The SDEIS also does not adequately describe the current congestion in Seattle, the planned projects will increase that congestion, and the lack of space for additional cars.

VII) The SDEIS does not adequately describe the effects of this highway expansion on air pollution and human health. The state has an obligation to seek alternatives which will do less damage.

VIII) The state plans to start expanding the east side of 520 this year. The whole program is at least $2 billion short on funding, and the state is choosing to use the available funds for an area which has no safety problems, rather than to do a safety project for which funding is available.

IX) The costs to businesses, families, and travelers are not fairly portrayed. Almost no mitigation of damages is promised. Noise reduction levels, limits on air pollution, offsets for construction damages, and lids are either ignored or presented as optional.
I) The SDEIS errs in breaking the environmental analysis of the 520 Program (from I-5 to Redmond) into segments.

A) There are four components of the SR 520 Program; three of these are segments of the same construction project.

1) WSDOT 520 website: “there are four projects in the SR 520 Bridge Replacement and HOV Program:

   I-5 to Medina: Bridge Replacement and HOV Project (hereafter I-5 TO MEDINA PROJECT)

   Medina to SR 202: Eastside Transit and HOV Project (hereafter East Side Project)

   Pontoon Construction Project (hereafter Pontoon Project)

   Lake Washington Congestion Management Project

   http://www.wsdot.wa.gov/projects/SR520Bridge/

2) The first three of these projects are large construction projects. WSDOT is doing separate environmental analyses on each of them. However, these are interdependent segments of the same project, see (B) below.

3) The fourth project, Lake Washington Congestion Management Project, consists of early tolling; active traffic management (electronic signage) and travel time signs. This project can be carried on independent of the other three and does not need to be covered in the same analysis.

B) The SDEIS for the I-5 TO MEDINA PROJECT does not include necessary analysis of the East Side and the Pontoon Projects.

   http://www.wsdot.wa.gov/Projects/SR520Br1

1) The East side project is literally a continuation of the I-5 TO MEDINA PROJECT described in the DEIS, adding lanes.
2) The Pontoon project creates the flotation devices which support the 520 floating bridge described in the I-5 TO MEDINA PROJECT.

3) **The three projects are functionally inseparable.** To cross Lake Washington on SR 520, one must travel from the area covered by the SDEIS to the area covered by the East side project, and the roadway on which one travels is supported by the pontoons.

4) **The three projects have intertwined and interdependent purposes.**
   a) “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.” *SDEIS Chapter 1, page 3*

   b) Eastside: “The purpose of this project is to enhance travel time reliability, mobility, access, and safety for transit and carpool in the rapidly growing areas along the SR 520 corridor east of Lake Washington.” *520 Medina to SR 202: Eastside Transit and HOV project Environmental Assessment. Chapter 2, page 1*

   c) “Pontoon s are the foundation of a floating bridge and can take several years to construct. They are large, hollow concrete structures designed to support the weight of the road, plus the cars, trucks and buses that use
the bridge daily. The Pontoon Construction Project is a critical step toward restoring the existing SR 520 bridge as soon as possible in the event of a catastrophic failure. The timely availability of new pontoons is a critical element of restoring the bridge for drivers and maintaining a critical link - the SR 520 corridor - to the region’s transportation system and economy.”

http://www.wsdot.wa.gov/Projects/SR520/Pontoons.htm

Section I)B) cont’d

5) In other documents, WSDOT shows that these projects are interdependent.
   a) The EIS published in 2006 treated 520 from I-5 on the west side to I-405 on the east side as one project. On Page 1-8, the purpose is defined as “to improve mobility for people and goods across Lake Washington within the SR 520 corridor from Seattle to Redmond …”

   http://www.wsdot.wa.gov/projects/sr520bridge/DraftEIS.htm

   b) The Lake Washington Congestion Management project includes both east and west sides of the Lake as part of the same congestion project

http://www.wsdot.wa.gov/Projects/LkWaMgt 1

Section I)C)

C) Constructing any one of the three construction projects would preclude important design alternatives for the other projects.

1) If the east side were constructed soon, as is currently planned, without provisions for light rail, and the I-5 TO MEDINA PROJECT final design includes light rail, we would have the ridiculous situation of a light rail line stopping at water’s edge, or later mammoth redesign and reconstruction of a new light rail lane for the east side.

2) If the east side were constructed soon, as is currently planned, with room for 8 travel lanes (after striping the shoulders), and the I-5 to Medina Project
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final analysis concludes that a narrow 6 lanes is best, the existence of the additional lanes on the east side project would put pressure to design to accommodate them.

3) If the west side were constructed as currently proposed (Option A or variations), it could not add light rail in the future. See Nelson Nygaard report on light rail alternatives, April 2010, incorporated here by reference. This is contrary to the legislative intent, and precludes an important option.

4) The pontoons as discussed in the SDEIS would not support light rail, but light rail is an active possibility for the I-5 TO MEDINA PROJECT. Additional pontoons would be needed, and they would change the size and environmental impact from that described in the SDEIS.

5) The pontoons determine the size and structure of the bridge superstructure described in the SDEIS for the I-5 TO MEDINA PROJECT. Constructing the pontoons as currently designed would preclude a smaller lower bridge over lake Washington.

D) Because the state does not have enough funding for the full 520 program, construction of any one segment would limit the design options of the other segments.

   a) The state funded the 520 program as a whole, another indication that the projects form one whole.

   (i) In 2009, ESSB 2211 Sec 8 says “for all projects in the state route number 520 corridor program, the legislature intends that the total cost will be no more than $4.65 billion”.

   (ii) In 2009, ESSB 2211 then appropriates funds for “the replacement of the floating bridge and necessary landings” which is one piece of the I-5 TO MEDINA PROJECT, one of the three construction projects. This limited piece of a project not correspond to any definition of project.

   (iii) In 2010, ESSB 6392 removes the limitation of floating bridge and necessary landings, and says bonds may be issued for the “state route number 520 bridge replacement and HOV program”, once more treating the program as a whole.

   (iv) In 2009, ESSB 1272 authorizes issuing $1.95 billion general obligation bonds for the “state route number 520 corridor projects”
b) Current estimates of shortfall in funding for the full 520 program are at least $2 billion of the $4.6 billion total.
http://www.wsdot.wa.gov/Projects/SR520Bridge/financing.htm

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(i) Unless additional funding is found, construction of any one segment will limit the ability to construct the others.

(ii) If the east side is constructed, there may not be funds to construct the safety-threatened bridge and west side.

(iii) If the east side is constructed, there may not be sufficient funding for the west side. The design may be changed, and the mitigation features reduced.

(iv) The most likely source of additional funding is to add tolls to the I-90 corridor; but there are legal and political obstacles to that action, and the results are unknowable.

(v) Even with tolls on I-90, the funding would be insufficient. Appendix E, Legislative Workgroup Nov. 2009 Additional taxes would be needed, and the willingness of citizens to vote for them is unknown.
E) The timing of the environmental reviews makes it impossible to assess the impact on the human environment of the whole program.

1) The east side environmental analysis was published in December 2009 and the comment period ended on January 7, 2010.
http://www.wsdot.wa.gov/Projects/SR520Bridge/EastsideEA.htm

2) The EIS for the pontoon project is expected to be published in May 2010, after the comment period for the I-5 TO MEDINA PROJECT SDEIS is closed. [Appendix F]

3) The SDEIS for the I-5 TO MEDINA PROJECT was published on January 22, after the comment period for the eastside ended and its comment period runs until April 15, before the EIS for the pontoon project will be published.
http://www.wsdot.wa.gov/Projects/SR520Bridge/SDEIS.htm

F) There appear to be significant conflicts of designs shown in the segments, so that it is currently impossible to know what will be built.

1) Documents differ on the number of lanes and their purposes.
   a) RCW 47.01.408 says the bridge shall be designed for 6 total lanes, with 2 lanes that are for transit and high-occupancy vehicle travel and 4 general purpose lanes.

   Citizens have been told on numerous occasions, including at a mediation meeting, that 6 means 6; that is, that light rail and bus will be on lanes 5 and 6 and there will be no lanes 7 and 8. [find 6 = 6 document!]

   b) The bidding documents for the pontoon project show additional lanes (i.e. lanes 7 and 8) with light rail in the future. The SDEIS for the I-5 TO MEDINA PROJECT does not show or discuss light rail on the bridge or on the west side. The east side environmental analysis (incorporated by reference) does not show or discuss light rail. Lanes 5 and 6 can be built to support light rail; but if they are not designed now for that, it will be impossible to add light rail in the future without rebuilding the structures.

2) Current documents show busses and HOV on one lane on the east side and the bridge; but except for a ramp, there is no bus/HOV lane on the west side. This precludes meaningful bus rapid transit.
3) The Nelson Nygaard report (April 2010) indicates that the current design of the west side landing precludes light rail in the future.

4) We have been told that an emergency project to produce pontoons in case of failure is underway, but no information is divulged regarding the size, location, or impact of this project. It may be covered in the EIS expected in May, after the comment period for this SDEIS is closed.

G) Evergreen Point is not a logical terminus on the east side. Virtually all the 520 traffic at Evergreen Point continues east on 520. See Appendix C, letter from David Bricklin.

II) The state appears to have made a decision already, and to be going through a paper environmental review process while subverting the intent of the laws (NEPA and SEPA).

Section II) A)

A) The pre-ordained result is 6 or more traffic lanes, car-centric, across the lake and on the east side, with option A+ (perhaps with minor variations) on the west side. (hereafter Current Proposals)

1) The state has been pushing small variations on this design for years. Each of the state-run processes... the TransLake Study, the Mediation, the Legislative Workgroup... has inched closer to it. Participants in each of these groups urged further study of specific alternatives but were ignored.

2) Although all parties agree that in 1963 the highway should not have been put through an area of intense recreational use and unique environment, the state has not presented the preservation of the remaining natural area as a weighty element for any of these groups or the SDEIS. See section IV below.

3) In the EIS of 2006, the state promoted a version of this plan called “Base 6”. This was defeated by voters.

4) In 2007, the state (ESSB 6099) defined the expected result and the task of the mediation group as a 6 lane highway with 2 HOV/transit lanes, and 4 general purpose lanes. This law is an attempt to pre-determine results before alternatives were fully considered.

5) In 2009, Mediation participants were given the definition above and not allowed to introduce alternative solutions.
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6) Indeed, the currently preferred alternative was conceived in 1954 and has not advanced much since then. See Appendix G.

Section (I) B

B) The public is being asked to comment on the SDEIS by April 15, 2010, even though many critical elements of the proposal are not yet known, so the public can not make effective comments.

1) The pontoon project is not yet published;

2) The “Cultural Resources” section which is crucial for the west side is not updated. The overall impact on the historic districts is not laid out.

3) The construction plans are not laid adequately out so that the public could assess their impacts;

4) The whole chain of linked parks and opens spaces along the west side has not been depicted and is not known to the public;

5) And Option A+, which is likely to be chosen, is not laid out in enough detail, see specifics below.

C) The Current Proposals were in fact chosen as the preferred design before the SDEIS was published, although the most senior leaders of the program have avoided saying so.

Section II) C

1) The media have frequently reported the recommendation of the legislative workgroup in December 2009 as a decision, without any contradiction from state leaders.

2) In her letter to the city council, the governor indicates that only small changes will be accepted, and those must be made quickly. Appendix H

3) The governor and Sen. Rodney Tom, who was a member of the Legislative workgroup and is a leader in attempting to get 520 expanded, are quoted in media as opposing efforts to rethink the bridge... before the comment period ended. Appendix I.

4) The state plans to proceed rapidly to construction of the east side segment of the Current Proposal before the other segments are finalized.

(i) The environmental assessment was published December 2009;
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(ii) ESSB 6392 in March 2010 changed the use of the appropriated funding, from floating bridge only to anywhere on the project, with legislators saying the intent was to start the east side.

(iii) A "Finding of no Significant Impact" is expected April 2010
http://www.wsdot.wa.gov/Projects/SR520Bridge/eastsideenviro.htm

(iv) Permits for the east side project are expected to be received around May 2010; (P8 presentation to legislative workgroup 7/29/09)

(v) Construction of the east side project is expected to start around June 2010. (P8 presentation to legislative workgroup 7/29/09)

Section II) D)

D) The state has continued to press toward its Current Proposals even though the state does not have funding, rather than evaluate alternatives which could be done with foreseeably available funding.

Speaker Frank Chopp and Rep. Jamie Pederson in their minority report to the legislative workgroup say “Absent a commitment to engage in genuine discussion for a more viable option, we recommend that the Washington State Department of Transportation (WSDOT) address the immediate safety concerns on the existing bridge and work with the affected neighborhood communities and the City of Seattle to find a long term solution that better serves the region.”

P 5 Report of Legislative Workgroup.

1) The state plans to start construction of the east side in a few months even though funding for the full program is not available, and design of the full program is incomplete so real total costs can not be known.

E) The state has used arbitrary deadlines to cut off analysis of alternatives.

Section II) E)

1) In 2008, the governor directed that the program be accelerated so that the new bridge could be open in 2014. This deadline was arbitrary. Safety fixes could have been done quickly and could still be done separate from expanding the highway.

2) The 2009 mediation process was cut off with an arbitrary deadline for reporting to the legislature. WSDOT insisted on including Alternative L, which no participant wanted at the time, and on not including an Improved-4-Lane alternative or more intensive study of transit, which many participants wanted and would have insisted on in subsequent meetings.

3) When the mediation process was cut off, one of the design options was a tunnel called “Alternative K”. Mediation participants wanted to study a type of tunnel called an “immersed tube tunnel” Many months later, they learned that WSDOT
was studying only a much more expensive method called “Sequential Excavation”. Because this more expensive method did not work well, months later WSDOT agreed to look at the immersed tube tunnel, now called “Option M”; but then analysis of Option M was stopped as soon as the legislative workgroup made its recommendation. The date cutoffs have been critical to eliminating alternatives without serious study.

4) The 2009 legislative workgroup was instructed to recommend a design alternative by the end of 2009, far before the engineering was far enough along to solve important problems, or establish reasonable cost ranges.

5) In turn, one of the reasons given by the legislative workgroup for not finishing the development of Option M was that it would delay the schedule. Appendix K [http://www.wsdot.wa.gov/partners/sr520legislativeworkgroup/files/finalreport/RecommendationsRpt.pdf]

6) The arbitrary deadline for the SDEIS means that “live” options for the west side were not analyzed, while obsolete options are.

a) The SDEIS discusses three design options for the west side:
   (i) Option A, which simply expands the existing footprint while adding a second drawbridge over the Montlake Cut. (SDEIS page 2-6)

   (ii) Option K, which moves the interchange west, uses a tunnel under the Montlake Cut, and keeps the footprint narrower going towards I-5.

   (iii) Option L, whose footprint is similar to Option K, but which uses a second drawbridge going at a long diagonal over than Montlake Cut.

b) All of these options were obsolete at the time the SDEIS was published.

   (i) For months before the SDEIS was published, all parties knew that Option A did not work for traffic mobility. Putting that option in the SDEIS gives the appearance of considering options without the reality.

   (ii) “Option A+” is Option A plus its suboptions. It is part of the Current Proposals. However, the SDEIS analysis mentions it only in passing and fails to analyze its overall impact, see YY below.

   (iii) For months before the SDEIS was published, all parties knew that Option K had been discarded in favor of Option M. As with Option A, its inclusion in the SDEIS simply gives the appearance of considering options without the reality.

   (iv) Option M is not included in the SDEIS because WSDOT dropped it when the legislative subgroup decided to recommend the Current
Proposals. The development of this option might have led to a real west side alternative to the Current Proposals.

(v) For months before the SDEIS was published, all parties knew that Option L was not practical. Its inclusion in the SDEIS gives the appearance of analysis of alternatives without the reality.

Section III) F)

F) The SDEIS has minimized attention to legislative directives that do not lead to the Current Proposals, and put heavy weight on directives that do lead there.

1) These laws include ESHB 1272; ESHB 2211; ESHB 2878; ESSB 5352 ESSB 6099; ESSB 6392.

2) State law shows an intent for a 6 lane total (RCW 47.01.408), and WSDOT used this to preclude any analysis of less than 6 lanes. However, the Current Proposals have more than 6 lanes on almost all of the west side, and could be striped for additional lanes.

3) State law requires effective transit connections from SR 520 at the University of Washington light rail station (RCW 47.01.408), but the current proposals do not achieve that. Light rail passengers would have to walk about 1200 feet across a busy street to catch their bus.

4) State law requires both HOV and transit (same RCW), but virtually all WSDOT communications and analyses emphasize HOV rather than transit. SDEIS CH 2-2 in describing the 6 lane alternative emphasizes HOV and does not mention bus or rail.

5) State law requires that the bridge be designed to accommodate light rail, but the SDEIS does not analyze the impacts of a light rail system on the design, on demand, on congestion, or on avoidance of harm to 4f-protected properties.

6) Legislative intent of minimizing footprint is ignored. The Current Proposals have wide shoulders and wide footprint.
   a) ESSB 6099 states as a legislative goal: “Minimize the total footprint and width of the bridge, and seek appropriate federal design variances to safety and mobility standards, while complying with other federal laws”;

Section II) G)
G) The SDEIS ignores verbal negotiated agreements with the communities because they do not lead to the Current Proposals which the state wants to build.

1) During the mediation, the communities insisted that primary effort must be to avoid damage rather than to mitigate it. The state agreed that “mitigation will be inherent to and inseparable from design”. However, the design does not avoid or minimize damage harm, see Appendix B and each section below, inadequate lids are the only mitigation proposed, and the SDEIS clearly states that most of the lids are optional.

2) The communities insisted that noise is a primary concern and must be mitigated, and WSDOT agreed. However, there is no promised level of noise mitigation, see below.

3) The communities and WSDOT agreed that all alternatives would have narrow shoulders and not be wide enough to permit striping for additional travel lanes. The Current Proposals have broad shoulders which would permit such re-striping.

4) After extended negotiation, WSDOT agreed that the center line of the Portage Bay bridge would be in the future where it is now. The SDEIS shows the Portage Bay bridge moved to the north, nearer to more homes and to the yacht clubs.

H) There is a pattern in the errors and omissions detailed below; they consistently work towards defining the Current Proposals as the solution.

Readers, please be aware of this pattern as you consider the errors and omissions.

I) The state has manipulated the timing and content of cost estimates to discredit west side design options other than the one in the Current Proposals.

1) As the mediation group worked on 3 designs, WSDOT called a press conference immediately prior to the mediation meeting. At the press conference and before members had a chance to see or question the cost numbers, WSDOT announced cost numbers for the 3 designs.

2) At that time, engineering was no more than 10% complete. At this stage, costs are not reliable. Furthermore, WSDOT’s costing methodology is heavily dependant on a
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risk factor which leads to choosing familiar alternatives rather than techniques with which the department is less familiar.

3) One of the designs included a tunnel under the Montlake Cut. WSDOT numbers for this tunnel were **eleven** times the costs for other new tunnels.

| Tunneling Costs |  
|-----------------|--------------------------------------------------|
| Project         | Length In Feet | Estimated Cost | Cost per Foot |
| Bremerton, WA   | 960            | $53,900,000    | $56,146       |
| Tunnel          |                |                |               |
| Pittsburgh River| 2,240          | $156,000,000   | $69,643       |
| Tunnel          |                |                |               |
| Seattle Viaduct | 10,560         | $2,200,000,000 | $208,333      |
| Tunnel          |                |                |               |
| Average above   |                | $111,374       |               |
| SR 520 Plan K   | 900            | $1,056,000,000 | $1,173,333    |
| Tunnel          |                |                |               |

WSDOT estimates are **11** times the average above.

4) Participants asked many times for explanation of the costs. Although WSDOT hired a cost expert to review its numbers, we never received line items adding up to a total until after the legislative workgroup made its decision.

5) The cost numbers were a primary factor in the legislative workgroup's choice of Alternative A for the west side. The costs were probably the factor, with quick timing as the second factor, because the legislative workgroup did no meaningful comparison of the effects on parks, the environment, the historic areas, mobility on the city streets, etc. see report of Legislative workgroup, Appendix K.

6) After the legislative workgroup had voted, on the night before their final meeting, costs adding up to a total were published for the first time, on page30 of their draft report. Appendix J. The costs of the tunnel option as finally presented are extremely inflated by assuming half a billion dollars for a garage for the University of Washington, right of way, and mitigation. Thus the legislative workgroup's decision was made without any opportunity to see or analyze the costs, and these costs appear to be extremely biased towards the design favored by the state.

Section II J) The SDEIS does not show the pontoons or the 2 layer bridge to the public, but state officials now say it is too late to change them.

Please see Section V.
III) The SDEIS does not demonstrate that people and goods would move better after the construction. The methodology for estimating demand and assessing congestion is fundamentally flawed.

Section III) A)

A) The state has made inconsistent and questionable assumptions in order to conclude that the project purpose of improving mobility would be achieved by the SR 520 project as described in the SDEIS.

1) 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 ... (SDEIS Chapter 1, page 3)

   a) Because this purpose statement extends to Redmond, the purpose cannot be achieved without completion of the east side project. Results from another project can not be used to justify this project.

   b) Mobility from I-5 to Medina depends on the traffic at the interchanges at I-5 and the bus stop at Evergreen Point. Assumptions about the evolution of traffic patterns at these spots are not clearly identified or tested (Traffic Discipline Report, Chapter 4).

2) The SDEIS asserts in various places that mobility would be improved by the 6-lane alternative. [Chapter 5, p 5 and following ] However, this assertion is based on assumptions that are not clearly stated or tested.

   a) Particular assumptions were made about traffic demand and transportation conditions in the year 2030, which strongly influence conclusions. These include untested stated assumptions about human behavior (In particular, that tolls will cause large numbers of people to switch to HOV transport); demand (such as that load remains heavily concentrated at peak periods); transportation infrastructure (particular transport services existing such a s light rail across the lake); and many other implicit assumptions such as that citizen pressure does not cause HOV lanes to be opened for general use. It is highly improbable that all these assumptions will turn out to be valid.
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b) The SDEIS 2030 No-Build and Cumulative Effects Definition Technical Memorandum and supplement March 28, 2008 acknowledge that these assumptions drive the results “These elements (i. e., the input assumptions) are major factors that influence travel behavior and patterns.”

Section III) B)

B) The SDEIS omits discussion of demand and use of the SR 520 corridor during most of its expected life... all the years after 2030. Since the expansion of the 520 corridor is intended to last for 75 years, or at least until 2090, it appears the SDEIS assumes all conditions will remain static from 2030 to 2090.

1) It is an error to make statements about improvements in mobility without the qualification that they are based on use of a model which projects only to 2030.

2) Seattle’s population growth is forecast to double by 2100, (Open Space Seattle) with increasing demand for transportation across Lake Washington. A plan for 520 must allow the flexibility to adapt to the larger population as it grows during the next century. The project would not be successful if it improved mobility only until 2030.

Section III) C)

C) The SDEIS does not test an adequate range of assumptions about the impacts of tolling on projected traffic levels on the No-Build, Existing, 4- or 6-lane options.

1) The SDEIS failed to examine the possibility that 4 lanes, tolled and transit-priority, would accommodate the expected demand.

2) The SDEIS compares the no-build alternative without tolling to the 6 lane alternative with tolling. This is misleading.

Section III) D)

D) The SDEIS Transportation Discipline Report (TDR, hereafter) reveals fundamental flaws in the methodology used to predict demand and use of the facility and nonstandard or nonexistent tests of model assumptions. Please refer to Appendices M and N for discussions of some of the major flaws in this modeling methodology. We cite here only a few.

1) The Puget Sound Regional Council chose the model, gave the model inputs (i. e., the controlling assumptions), did the model validation, and provided the goals for development. There was no independent review of the process at any step.
2) The Transportation Discipline Report omits customary and critical model validation procedures.

3) The model is calibrated from data from one month alone (October, 2008). Many different parameter settings can fit the data from the short (one month) period but would produce wildly different results. There is no explanation for how the choices were made and no discussion of uncertainties, and no robust sensitivity analysis as is standard professional practice.

4) The model is land based and does not adapt for behavioral choices. If, for instance light rail were available, it should affect vehicle traffic results.

5) The model relies on assumptions about how many people will live here, where, where they will want to go, how they will travel, what legislative and price restrictions will be in place concerning use of certain fuels, and other demographic and economic factors. Because of the number and importance of these assumptions, the model results themselves have to be treated as a set of assumptions, not fact, and a range of such assumptions (called "scenarios") should have been used in the analysis. However, the current analysis rests on only one scenario. Thus it does not support the conclusion that the benefits for transportation will continue to exist if the circumstances of the future become different from what was assumed in 2009.

6) The statements that general-purpose vehicles would decrease by up to 10,000 vehicles and 13,500 persons per day (Table 5.1.2, Ch 5) that "travel demand models are not intended to provide an absolute traffic volume forecast", advising that forecasted traffic flows should be used only for comparison between options, NOT for estimating absolute conditions.

7) The SDEIS says that completion of the eastbound HOV lane could save vehicles approximately 40 minutes (Chapter 5). However, completion of the eastbound HOV lane is not part of this I-5 to Medina project. Results from another project can not be used to justify this project.

Section III) E)

The SDEIS lacks adequate studies of the impacts of the SR 520 project on I-5 and on city streets. Thus in effect it assumes these impacts will not modify traffic performance. These flaws are discussed in Appendix C and summarized here.
1) The model does not take into account crucial factors like on-street parking. It is further unable, according to discussions with WSDOT, to predict what will happen on affected city streets. Since the congestion on city streets will affect trip performance, the model is inadequate to predict overall travel time improvement and queuing times.

2) The model assumes the area impacted by modification to the Montlake Interchange is limited on the south by the SR-520 Arboretum ramps. (TDR- 4-7) This is inconsistent with current traffic and congestion patterns and discussions elsewhere in the document. Likewise, on Capitol Hill the area defined as impacted is much smaller than the area profoundly impacted by SR 520, which reaches from the Harvard I-5 northbound onramp at least to 10th and East Miller.

3) Pedestrian volumes are assumed to remain static (TDR 4-15) That assumption conflicts with all other assumptions about population, transit ridership, changing behaviors, etc. Please provide more realistic assumptions on pedestrian volumes.

4) The SDEIS errs in not adequately quantifying the current and future congestion on all the Seattle arterials and at all important interchanges near 520.

   a) The TDR does not provide data on the current vehicle levels and congestion in the following areas, all of which currently have severe congestion related to SR 520.

      1. Madison at 23rd
      2. Madison at Lake Washington Blvd
      3. Montlake Boulevard at Pacific and at University Village;
      4. 10th Avenue at Miller or Boston;
      5. Harvard north of Roanoke, before the entrance to I-5.
      6. I-5 southbound and northbound from 520

   b) The TDR does not provide predicted vehicle levels and congestion in the same areas, taking into account the following major, planned developments in Seattle:

      1. Large new condo buildings in the Broadway area
      2. More commercial space at Eastlake
      3. In the Montlake area and north, the expansions of
         a. Children’s Hospital
         b. University Hospital
         c. University Village
         d. See appendix XX for data on the above developments.
5) The SDEIS model appears to assume the one way express lanes at the SR 520—I-5 junction will be adequate to maintain mobility at that junction through the year 2090. This assumption is inconsistent with present data and is highly unlikely to be valid at any time in the future.

6) The analysis of local arterials deals only with the morning and afternoon peak hour. The analysis thus assumes a standard traffic pattern that is irrelevant in the vicinity of Montlake Bridge, where traffic mobility is far more sensitive to bridge opening than to overall 'rush hours'. Without specific data and simulations of the impacts of bridge openings the model conclusions are of very limited applicability.

**Section III) F)**

F) The traffic and congestion predictions in the SDEIS (TDR and Chapter 5) are inconsistent with experience and published studies of urban highway expansion elsewhere. A number of traffic studies relevant to this point are summarized in Appendix P; a few of these are highlighted here. SDEIS must explain what assumptions led to results so inconsistent with these data based studies.

1) SDEIS projected improvements in traffic mobility are not supported by experience or data collected on other urban highways.

   a) Under typical urban conditions, data demonstrate that more than half of added capacity is filled within five years of project completion by additional vehicle trips that would not otherwise occur, with continued but slower growth in later years. (Dargay and Goodwin, 1995). As a result, traffic congestion tends to maintain a self-limiting equilibrium: once congestion becomes a problem it discourages further growth in peak-period travel. Road expansion that reduces congestion in the short term attracts additional peak-period trips until congestion once again reaches a level that limits further growth. (Litman, 2010). Whether the expansion is SOV or HOV. The experience and literature on this is critical and needs to be made clear to decision makers.

   b) SDEIS predictions on travel time (Table 5.1.5) are inconsistent with published data that show that travel time does not decrease with expanded highway capacity. People tend to average about 75 minutes of daily travel time regardless of transport conditions (Levinson and Kumar 1995; Lawton 2001). National data indicate that as freeway travel increases, average commute trip distances
and speeds increase, but trip time stays about constant (Levinson and Kumar 1997).

c) SDEIS does not adequately analyze the effects of generated traffic on surrounding streets. In general, the more congested a road, the more traffic is generated by capacity expansion. Increased capacity on highly congested roads often generates considerable traffic (Marshall 2000). This generated traffic must move through surface streets in the vicinity of the highway.

**SECTION III) G)**

G) The SDEIS does not adequately analyze the potential impacts of public transit on 520 itself or on neighboring surface streets and arterials.

SDEIS ignores the likely possibility that light rail, or lanes dedicated to bus rapid transit, will be needed on 520 in the future. This lack alone renders this study inadequate as a predictive tool for transportation planning. The demand for bus or light rail is likely understated with no supporting data. The projection of 65 passengers per bus, contrasted with today’s 30 passengers per bus, seems impossible. SDEIS provides inadequate explanation of how the predicted number of buses could accommodate the predicted number of bus passengers.

**IV) The state is planning to take protected parkland for most of the length of 520 on the west side, destroying a unique chain of linked parks and bays. Federal law requires seeking other alternatives rather than taking parkland or arming historic districts.**

**Section IV) A)**

A) Along 520 from Roanoke Park to the Arboretum is a linked series of parks and publicly-used natural spaces
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B) These spaces qualify for protection under the federal Section 4f rule. Appendix B enumerates and describes them.

1) The SDEIS fails to identify many of these spaces. See Appendix B

2) The SDEIS does not recognize that WSDOT right of way must be discussed as public park space if it has been used as such.

C) The SDEIS All of these spaces form a connected green space, heavily used by humans and by wildlife, which is completely irreplaceable. It has frequently been called "Seattle's chain of pearls."

1) Although the SDEIS discusses some of these parks, it does not put them this perspective of one unique, interconnected whole.

2) The linked nature of these parks makes it almost impossible to replace them, and therefore essential to avoid damaging them.

D) The state plans to repeat the errors of 1963, taking public recreation space for highway use.

1) For years, people have said "never again!" and "They couldn't do that now"

2) The Current Proposals more than double the width of 520 in Seattle. The state would take more park space now then it did in 1963.

E) The SDEIS does not prove, as required, that other alternatives which would do less damage are not feasible. See suggested alternatives below, Section V.

F) In addition, the area around Roanoke Park is a national historic area, the NOAA building is recognized as historic, and there are a number of historic sites and
areas in Montlake. Protection of these is mandatory. The SDEIS does not demonstrate:
1) That it evaluated alternatives which would avoid the damage, such as a 4 lane 520 or a 4 lane Portage Bay Bridge, or use of immersed tube tunnels or light rail in an immersed tube tunnel, see Section V below.

2) That it evaluated ways to change the Current Proposals to minimize the damage to the historic areas. Many of these ways are enumerated in the sections below and in appendix B.

3) That is took every reasonable step to mitigate the damage. On the contrary, the SDEIS is clear that lids are optional and no other mitigation is currently planned.

4) There are numerous errors and omissions in the Cultural Resources section. For a partial enumeration, see Appendix Z

V) The state has not analyzed obvious alternatives which might have better transportation results and do less damage.

The SDEIS has neglected to provide serious analysis of obvious alternatives to the Current Proposals.
Ch1.4 says all options have 6 lanes, 2 HOV
Ch1.7 reviews EIS options
Ch 1.8 says 4 lanes discarded
Ch1.9 defines alternative: no build and 6 lane, with HOV

A) The SDEIS does not adequately address the impact of safety issues on alternatives.
1) Part of the project purpose is safety, and the state has presented the probability of bridge collapse as a major incentive for the 520 program.
   a) The SDEIS says that improvement of safety is a major purpose of the project. (Ch 1.3)
   b) The state has published a video showing possible collapse of the bridge. [Link](http://www.youtube.com/watch?v=qliuDUvyZpY)
   c) The SDEIS says it will design for a 7% probability of failure during 75 years.

2) However, the state's actual priorities in building do not correspond to the safety problems.
   a) The SDEIS presents a plan for possible phased implementation based on risk: (ATT 7, Description of Alternatives, P 71 and preceding).
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However, the SDEIS does not mention that in real life the state is proceeding to build the East side project, where there are no safety risks, diverting resources from the vulnerable areas.

b) The state has one funding plan for this segment and the east side segment of the 520 program. Funding is quite uncertain; please see Section VIII below. Please explain why tolls on 520 are not being dedicated to the vulnerable areas, particularly since tolls on I-90 are uncertain.

3) The SDEIS has failed to present analysis of how much safety improvement would be achieved by the Current Proposals, and by the alternatives which it should have examined.

a) For each of the priority areas (eg p71) in the Description of Alternatives, What is the probability of failure in 25 years, and in 50 years, before and after the construction of the Current Proposals?

b) How is that weighed against the harm done... the damage to the natural environment, health, etc?

c) What range of safety goals is acceptable for each priority area?

4) The SDEIS asserts that bringing the 520 bridges up to current standards would not be cost effective without also adding lanes (Find this).

a) How much safety improvement could be achieved by a retrofit which is aimed at improving safety but short of current standards?

b) How can that improvement in safety be weighed against the costs?

5) The state has enough money to fix all the current safety problems. The SDEIS does not explain why the state is embarking on a project which it does not have money to complete, rather than fixing the safety problems with funds that are forseeably available. Please explain.

Section V) B) State legislation does not excuse the lack of analysis of alternatives

1) The legislation providing for a 6 lane highway, with 2 lanes used for HOV and transit and with narrow shoulders and rail connections, gives guidance.
2) However, the federal environmental laws still demand that the state evaluate alternatives that might avoid damage to the protected parks and historic areas.

Section V) C)

C) The “No Build” alternative is not realistic, and the state should create a “toll, transit priority 4 lanes” alternative as a base.

1) The “No build” alternative is not feasible or logical and it is an error to present it as a valid a base case.
   a) It is an error to present as an alternative, a situation which is defined as a failure: SDEIS says that the current structures are likely to fail within 15 Years. Ch 1-4.
   b) It is an error to assume no tolls would be used on a no-build alternative in spite of the state’s directive to use tolls for congestion management.
   c) The base case should include tolls, which is now a given, and transit priority, which is an obvious result of recent transportation policy statements.

2) The SDEIS should examine an alternative with 4 lanes, tolled, and with transit given priority, and noise reduction features.

   a) An analysis which says that an improved 4 improved lanes could handle up to 40% more vehicles is attached, appendix Q. Please respond to its arguments. Should this not be tested?

   b) A tolled and transit-priority 4 lanes would do much less damage to the protected parklands and historic areas. The SDEIS should analyze these tradeoffs.

   c) A tolled and transit-priority 4 lanes might not accommodate the expected demand for the next 75 years, but for how long would it be likely to be effective? What is the feasibility and desireability of constructing this promptly, and then adding light rail when funding becomes available?

Section V) D)

D) Another obvious alternative which should have been examined, and should still be examined, is use of an immersed tube tunnel.

1) As indicated above, WSDOT stopped studying Option M, with an immersed tube tunnel, as soon as the legislative workgroup chose A+. However,
   a) The legislators were not told about, and did not understand, the necessity of protecting the parklands which run along the whole west side corridor, and
b) The legislators were not told about, and did not understand that the result of the Current Proposals would be permanent congestion in all the areas from Montlake to north Capitol Hill, and the accompanying health impacts of increase in chronic disease;

c) We believe that WSDOT spent most of its energies trying to prove that an immersed tube tunnel did not work, rather than creatively thinking about how to use one to solve the problems.

2) A six lane alternative where all lanes go underwater before Foster Island would almost eliminate the 4f issues of taking parklands and damaging historic sites, and would solve many of the city congestion problems. At least two lanes underwater would reduce the 4f issues. Variations of a tube tunnel which should be evaluated include

a) 2 lanes from Foster Island to the UW light rail station;
b) 2 lanes from Foster Island to South Lake Union, avoiding the inevitable congestion on I-5 and solving the Mercer weave; and

c) Any other variations which would get people to their destinations without overcrowding I-5 or the city streets.

3) Although the costs for some of these alternatives might be higher, they might also achieve the objective of improving mobility while preserving parks and communities. In addition, a solution which appeals to people and solves big problems might be easier to fund and to obtain federal money.

Section VJ E) The SDEIS should analyze an alternative with 6 lanes of which 2 are light rail only.

1) It is well documented that light rail will cause less pollution and therefore be better both for health and for greenhouse gases; it would run on rail lines to stations and therefore not impact I-5 or city streets; and it could be designed to avoid most damage to parks and communities, particularly if it went underwater at or before Foster Island.

2) Recent polls and votes show that people want light rail. If we give people the kind of transportation they want, they are more willing to use it and pay for it.

3) The legislature wanted the bridge to be able to carry light rail, and under the Current Proposals it could not do so (Nelson Nygaard light Rail report!, April 2010), and Section VI) A) below.

VI) The SDEIS does not correctly or fairly describe what it is planning to do (The Current Proposals).
Since the Current Proposals, as described above, use option A+ or variations of it, all comments and questions below on west side issues assume Option A+ or variations thereof.

Section VI| A) 

A) The SDEIS does not analyze adding 2 lanes for light rail, although both logic and the state's bidding-on-pontoons documents show that as an alternative. This is an error.

1) The SDEIS has no discussion of adding lanes for light rail. The SDEIS shows that the floating bridge will look like this (Ch 1, P24)

![Exhibit 1-5. 6-Lane Alternative Roadway Cross Section](image)

NOTE: Dimensions shown on the diagram are on the proposed Evergreen Point Bridge.

2) The state documents given to bidders on the pontoons show additional lanes for light rail in the future;

![West Transition Spans - Future (6-Lane + 2 HOV)](image)

Source: Appendix Y. Request for proposal

3) These documents depict very different bridges. If the state is planning to add light rail the SDEIS should show and analyze it.
   a) State law says the bridge should be constructed to support light rail in the future.
   b) Since the Current Proposals will cause severe congestion, it is reasonable to suppose that light rail might be added within 10-20 years.
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c) The Nelson Nygaard study on light rail alternatives
http://www.seattle.gov/mayor/PDF/SR520-MayorsDRAFTReport_040610.pdf, incorporated here by reference, indicates that light rail can not be put on the bridge that is depicted in the SDEIS, both because
(i) the capacity of the structure and the flotation capacity of the pontoons are both less than would be required to have light rail on the 6 lane bridge, and re-building plus additional exterior pontoons would be required, and because
(ii) Light rail can not go on the outside, so even if one expanded the bridge to 8 lanes and expanded the pontoon base, the currently proposed bridge would have to be strengthened in the middle.

4) If exterior pontoons were needed, or if the highway were expanded to 8 lanes of which 2 are light rail, the environmental effects would be quite different from those described in the Current Proposals. The SDEIS must analyze these alternatives, which its own bidding documents show the state is considering.

Section VI) B)

B) The “6 lane” alternative’s name is misleading and should be changed.
The name of this alternative is misleading. In almost all of the west side, there are more than 6 lanes. Although many of these are ramps, they still take up space and contain moving vehicles.

1) The alternative’s name is also misleading since it refers only to HOV and not to transit, where both are specified in the state law. This seems to be part of a pattern to minimize discussion of transit. The name should say “transit and HOV”.

Section VI) C)

C) The width of the bridge should be narrowed so that 8 lanes are not physically possible.
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1) Also the description is labelled 6 lanes and the analysis is based on 6 lanes, the SDEIS gives assurance is given that the bridge will remain 6 lanes. The SDEIS shows wide, 10 foot shoulders which could be re-striped for additional lanes. There is precedent in our region for such re-striping. Both the legislative direction and the verbal agreements with communities call for narrow shoulders.

![Exhibit 1-5. 6-Lane Alternative Roadway Cross Section](image)

NOTE: Dimensions shown on the diagram are on the proposed Evergreen Point Bridge.

2) All the analysis in the SDEIS assumes the quantities of traffic, pollution, etc. that would result from 6 lanes. If there is any intention of allowing for the possibility of 8 lanes, the results should be analyzed. If not, the possibility must be precluded by the physical size of the bridge.

Section VI) D)

D) The SDEIS does not depict the bridge from the lake, or analyze the need for its height and massive blockage of views.

1) Please show a side view of the bridge in context and with all its features, so that its impact can be assessed. Using WSDOT data, we had a depiction constructed, showing how the bridge would look before adding the stabilizing pontoons on the sides and the noise walls above.

![Proposed Bridge, looking north from Madison Pier](image)
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a) Please analyze the tradeoffs: The higher the bridge across the lake, the more impact on views, the more taking of public space used by the public, the worse the noise, and the more expense. How does one weight these costs against the benefits?

b) The SDEIS omitted explanations of why the bridge would be as high as planned, and double-layered.

c) The SDEIS omitted analysis of alternative actions which would do less damage to the environment. If the bridge is designed that way for ease of maintenance, what other options for maintenance exist, and how are they weighed against the damage to the public's use of the environment, and the noise, and the added expense?

d) The SDEIS does not explain why the SR 520 bridge can not be approximately as low as the I-90 bridge.

Section VI) E) The SDEIS omits needed analysis related to the connections of SR 520 to I-5 and the nearby communities of Roanoke Park, Portage Bay, and north Capitol Hill.

1) The SDEIS errs in not describing the intersection adequately.
   a) Today, we finally obtained a visual of the intersection showing that the ramp at the intersection of I-5 and 520 will be considerably higher than the current one. This is the first time that information has been available. This is a material fact which was omitted from the SDEIS. More information is needed, so that readers can have a clear picture of the planned connections.
   b) The merging of the lanes from the Portage Bay Bridge to the I-5 connections is never clearly portrayed. It is always shown under a lid. This area needs to be clearly shown.

2) The SDEIS does not explain what are the expected effects of the additional traffic from 520 on the express lanes south of SR 520? How will this impact congestion on I-5?

3) And the effects of the additional on the mainline I-5, north and south on I-5? What throughput can be expected? What are the implications for congestion on I-5?

4) The SDEIS does not explain the expected effects of not having additional connections from SR 520 to I-5 north?
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5) What is the expected effect of the Current Proposals on vehicle throughput and on congestion, in the following areas, all of which are heavily impacted by SR 520 traffic?

   (i) Harvard Street from 520 to the northbound onramp of I-5  
   (ii) 10th Avenue from 520 to East Boston Street  
   (iii) Impact on Delmar, both east and westbound.

6) The SDEIS omits analysis of the possibility that it is not possible to put more cars in the communities near the 520 offramp at Roanoke. There does not appear to be any way to make more traffic from SR 520 traffic flow freely either to the north or to the south. The possibility must be examined that it is simply not feasible to put additional cars from SR 520 into this area.

Section VI) F)

F) The SDEIS omits many analyses related to the proposed 7 lanes of the Portage Bay Bridge.

a) Since no additional connections to I-5 north are planned, why have three additional lanes on Portage Bay Bridge?

   (i) If the purpose of these lanes is to stack up traffic waiting to go to I-5, how does that weigh against the taking of public use of the bay underneath, the additional strain on the water ecology, and the additional expense of constructing these lanes?

   (ii) If the purpose of these lanes is to enable traffic entering at Montlake to move more quickly up the Portage Bay bridge, how does that weigh against the factors above?

   (iii) The additional lane (auxiliary lane) for vehicles entering at Montlake going west has been described as a way for those vehicles to gain speed before merging. However, the SDEIS omits any analysis of this, including

      (i) This auxiliary lane would not be necessary if the Montlake interchange were further east, near the current Museum of History and Industry. Since that alternative is available, what is the justification for taking away public use of Portage Bay parkland, harming the ecology, and causing extra expense?

   (iv) What is the purpose of a lane enabling cars to go faster on the Portage Bay Bridge, since in a few hundred yards the seven lanes...
have to merge into 5 operating lanes anyway, and there is a very high probability of backups because of the lack of additional connection to I-5 north of 520?

(v) The SDEIS lacks description of the width of the Portage Bay bridge as it approaches the Delmar area, and of the lane configuration at the planned merge of the 7 lanes into 5 active lanes, including the area under the lid.

b) Our analysis indicates that adding the 2 westbound lanes to the Portage Bay bridge so that there are 4 westbound lanes actually decreases the throughput compared to the existing 2 lanes, because there are only two functioning exit lanes in the afternoon, when traffic is heaviest, and 3 lanes in the morning. Vehicles on the Portage Bay bridge will be changing lanes and merging, and frequently will be backed up by congestion on I-5 anyway. We calculate that the main use of the additional westbound lanes is to hold cars, which will pollute heavily. Please respond.

c) For the eastbound lanes, the analysis is similar except that the backups will come from the overcongested Montlake area. Please respond.

d) Because the increased size of the Portage Bay Bridge will harm a number of park areas (Section IV and Appendix B), and because the idling cars on the bridge will have a major effect on local air pollution and health, alternatives which do less damage must be considered.

(i) The Nelson Nygaard report on 520 project enhancement, April 2010, incorporated here be reference


indicated that the Portage Bay Bridge could work with 4 lanes.

(ii) If the additional 520 lanes were mass transit and went to a station near UW, it would be easy to avoid the damage by keeping the Portage Bay bridge at 4 lanes.

(iii) In the unlikely event that Portage Bay Bridge can not be kept to four lanes, it should be kept to 5 lanes.

G) The SDEIS omits many analyses related to the Montlake area

1) The SDEIS omits depicting the Montlake Interchange as it will be seen from the ground in Montlake.

   a) Please show drawings of the interchange from several ground and water level vantage points.

   b) Please show detailed drawings of bicycle and pedestrian paths.
2) The SDEIS omits necessary analysis of the second bascule bridge which would cross Montlake Cut.
   a) Please provide drawings showing the second bascule bridge and its impact on view from all sides and from the water.
   b) The SDEIS fails to acknowledge that the second bascule bridge both causes constructive taking of park land, and harming a historic site.
   c) The current Montlake Bridge is a historic site which would be damaged by the second bridge.
   d) The construction of a second bridge takes away constructive use of the Ship Canal Trail (4thd parkland) near the bridge, because people would be walking or biking or sitting under a large noisy structure, instead of in open air.
   e) The construction of the second bridge takes away viewpoints enjoyed by thousands of people each year, including water views from east and west; the more-used view from 10th and Shelby; and views from the land to the east, on both north and south sides.
   f) The SDEIS fails to demonstrate that the second bascule bridge provides any advantages.
      (i) The SDEIS (Ch 6) contains no performance data that allow an assessment of the impact of this second drawbridge.
      (ii) A compilation of data from the 2006 EIS indicates that the bridge adds almost no value. (Appendix XX Balick)
      (iii) Please demonstrate any advantages of the second bridge on intersection efficiency, overall capacity, pedestrian and bicycle experience, and transit service.
   g) Because the proposed second drawbridge does harm to historic and park sites, alternatives must be evaluated to avoid this damage. Please present an analysis weighing any benefits of this bridge against the harms.

3) The SDEIS omits analysis of the possibility that it is not possible to put more cars in the area of the Montlake interchange. After years of study, no one has found a way to make more traffic from 520 traffic flow freely either to the north or to the south. The possibility must be examined that it is simply not feasible to put additional cars from SR 520 into this area.

Section VII) H)

H) The SDEIS omits analysis of the area between Madison Park and Laurelhurst

1) The SDEIS statement that only 18 homes in Madison Park will be affected is erroneous; at least 600 residences are on the north end of the peninsula, running along SR 520.
2) The height of 520 is a major factor for residents of this area and the damages to homes of the proposed higher elevation of 520 are not adequately described. The proposed height and bulk of this bridge would change these from homes with a front-seat lake view, to homes looking at a concrete barrier.

VII) The SDEIS does not adequately describe the effects of this highway expansion on air pollution and the harm to human health.

A) The SDEIS presents unrealistically optimistic projections of air quality.

1) The SDEIS conclusions on air quality are completely dependent on its predictions that congestion will decrease and average speeds will be over 30 mph, which in turn is dependent on overly optimistic assumptions. (Section III above)

2) Because of its inadequate examination of the effects of the expansion of SR 520 on the Seattle roads (see Section VI above), the SDEIS does not acknowledge that much of the Arboretum, the Montlake area, Portage Bay, Roanoke Park, and north Capitol Hill would have permanent heavy congestion, with idling cars spewing pollutants. Please include analysis of congestion and pollutants of these areas.

3) The projections use data only to the year 2030, where residents will be living with the results through 2090 or longer.

4) The SDEIS (Chapter 5) states that according to their models there will be no new violations nor increases in the frequency or severity of existing violations of the air quality standards associated with any of the build options. It was difficult to evaluate this projection because:

   a) At 2030 projected vehicle traffic levels along arterials and local streets is associated with dramatic adverse health impacts (asthma, cardiovascular disease, cancer) for those spending significant amounts of time outside within about 0.2 -0.3 miles of major roads. (For example: Brusge et al (2007); Chang et al (2009); Shendell and Boothe (2008); Williams et al (2009), Buonocore et al (2009).) The impacts grow with length of arterial and are particularly highly correlated with concentrations of particles with diameters less than 2.5 microns (called 'fine' particles).

   b) The only regulations cited in the DEIS are EPA (1992). It is unclear if they have incorporated more recent regulatory standards; (e.g. EPA (2006)).
Moreover, the SDEIS does not provide the 24-hour area concentrations of pollutants, the quantity regulated by EPA.

Section VII) B)

B) By not designing the expansion of SR 520 to avoid air pollution, the state is arguing that it is ok to harm human health and the global environment.

1) The argument: the economic plight of this community is such that people must have access to their cars to travel to work even though the resultant air pollution will adversely affect the health of citizens in ways which include premature death. Is there no other way that people can reach their jobs?

2) Further, the argument is that the economic plight of Puget Sound is so great that we can ignore the effects of increasing CO₂ emissions upon global warming and the adverse effects upon the rest of the world.

Section VII) C)

C) The SDEIS errs in not evaluating other alternatives, like light rail or tunnels, which might provide better mobility with far less air pollution.

1) Whaver the level of pollution in the future, it is not adequate to design a highway, present it in an SDEIS, and then attempt to mitigate the pollution caused by the design.

2) Instead, the design from the beginning should have as one of its primary goals the avoidance of air pollution (and noise pollution).

3) Please give responses to the following questions:
   a) What avenues were explored to find alternatives to the use of the automobile?
   b) What funding was requested for this purpose? What funding was provided? For what grants were applications made?
   c) What instructions were WSDOT planners given to explore alternatives to the automobile to reduce pollution, by senior managers, the governor, or the legislature?
   d) Was exclusive Bus Rapid Transit considered as a less-polluting alternative for lanes 5 and 6?
   e) Was light rail considered as a less-polluting alternative for lanes 5 and 6? If so, who participated in the discussion and what were the conclusions?

Section VII) D)

D) The SDEIS does not adequately address the impacts of the Current Proposals on human health, and does not present the important information that its
proposals would unnecessarily cause some people to become chronically sick or to die.

1) Please include in the SDEIS statements from authorities. Here are examples;
   a) "A comprehensive evaluation of the research findings provides persuasive evidence that exposure to fine particulate air pollution has adverse effects on cardiopulmonary health" (Pope and Dockery, 2006)
   b) "Recent studies have shown associations of long-term and short-term exposure to traffic air pollution with cardiovascular mortality, morbidity, and subclinical parameterers." (Kan, Heiss, et al, 2008)
   c) "Short term and long-term exposures to air pollution have been consistently linked to cardiovascular disease morbidity and mortality." (Van Hee, Adar, etc al, 2009)
   d) "Cohort and case-control studies have also reported an association between long-term exposure to air pollution and fatal coronary heart disease." (Roselund, Bellander, et al, 2009)

2) The SDEIS has many other errors and omissions related to air quality and human health. Please respond to the issues raised by Dr. Doug Stewart in Appendix T. References are in Appendix S, Health Literature references

3) Preparing for the SDEIS, the state commissioned a Health Impact Assessment (HIA). However, that SDEIS refers to that HIA only in passing and does not present the issues related to human health as criteria for assessing alternatives. For a critique of the HIA, please see Appendix U.

4) The SDEIS does not explain that light rail would produce much less pollution than cars, and does not present the data on that subject.
   a) The SDEIS does not explain how tradeoffs were made between expanding for cars, and using alternatives like bus rapid transit or light rail. Were health considerations of vehicle travelers and surrounding citizens considered in weighing the balance between single occupant vehicles and other forms of transportation? What data was considered regarding the potential adverse effects of traffic associated air pollution, on chronic respiratory illnesses, the development of asthma particularly in children, the development of heart disease, the development of cancer, the effects upon the development of children, the particular vulnerability of older people, and the risk to pregnancy.
5) The SDEIS does not explain that tunnels would reduce pollution on the west side, and does not provide analysis of the tradeoffs between surface car lanes and tunnels.

6) The SDEIS does not explore other designs that would result in less air pollution.

Section VII) E)  
E) The SDEIS does not explain that the effect of the Current Proposals is to discourage physical activities which help human health.

a) The SDEIS (Ch 5-27) does not explain how important near 520 in Seattle are walking, bicycling, kayaking, canoeing, and nature outings. It does not explain that the net effect of the Current Proposals is to reduce such activity.

b) See discussion of the takings of parkland and trails, Appendix B. Loss of these parks, trails, and water activity spaces discourages physical activity.

c) In Montlake and at the Roanoke 520 offramp, the Current Proposals create freeway-like movements of traffic, fast and multi-lane, completely inappropriate for a pedestrian or bicycle environment. This endangers people and discourages physical activity.

d) Along the Arboretum walking trail, the Bagley Stair trail, the Bill Dawson Trail, Montlake Park, and Roanoke Park, the highway structure will be so close, so big, and so noisy, that it will have a tremendous discouraging effect on physical activity.

Section VII) F)  
F) The SDEIS errs in its discussion of greenhouse gases. In reality, building more lanes will lead to more emissions, and less-polluting alternatives like light rail are available.

1) In Chapter 5 the claim is made that by 2030 all the options will decrease greenhouse gas emissions by up to 7% over those if we do not build. This projected reduction is highly unlikely:

a) Data based analyses show that adding highway lanes always increase greenhouse gases over the long run, although they may decrease them in the short run. (E. g., Williams-Derry (2007)) Construction and maintenance for 50 years is estimated to produce about 3500 tons of CO2 per mile, before counting emissions from vehicles.
b) Each mile of new highway lane, whether it is HOV or not, is projected to increase CO2 by about 100,000 tons over 50 years. This estimate is based on available data and includes optimistic estimates of projected increases in fuel efficiency.

2) Further, these reductions are insufficient. The goal of the Seattle Climate Action Plan (SeaCAP06), was to reduce citywide greenhouse gas emissions by 7% over 1990 levels by 2012; the goal of the Western Climate Initiative (WCI), to which Washington State belongs, is overall emission reduction by 15 percent below 2005 levels by 2020. Road transportation currently accounts for 52% of greenhouse gas emissions in the state of Washington, 62% in the city of Seattle, and is the only sector of the Seattle economy whose emissions have grown over the past two years. (Community Inventory (2008)). Thus even if we took the DEIS projections at face value, the GHG emissions they project for 2030 are not in keeping with the Seattle or WCI goals.

VIII) The state plans to start expanding the east side of 520 this year. The whole project is at least $2 billion short on funding, and the state is choosing to use the available funds for an area which has no safety problems, rather than to do a safety project for which funding is available.

A) The SDEIS should explain why it is more important to go ahead on an expansion project which is $2 billion short on funding, than to do a safety project for which funding is available.

B) The costs of the Current Proposals are likely to be higher than the $4.6 billion anticipated.
   1) Engineering is far from complete;
   2) As discussed in Appendix B, very substantial required mitigation is not even discussed or defined, and its costs are not included.
   3) The mitigation required by agencies may not yet be covered; and
   4) There is a high likelihood that community actions will postpone construction until the issues are resolved.

C) The state does not have enough funding even for the currently estimated costs of the SR 520 program. Construction is now expected to start on the east side. This is likely to leave the I-5 to Medina project short on funds and constructed with no mitigation.
1) If the Current Proposals for the 520 program are built, the state lacks at least $2 billion committed funding, and at least $1 billion even if I-90 were tolled. See page 33 of appendix K.

2) Additional funding shortfalls are likely;
   a) The funding plans are dependent on tolling a separate highway, I-90. This tolling has not been approved, would require exemptions from federal law, and may not be feasible under a recent ruling. See Appendix V.
   b) The State’s analysis shows that new taxes will be needed Appendix E, and there is no assurance that voters will approve such taxes.

3) The SDEIS omits analysis of how the expected funding shortfalls are influencing design and construction plans. What levels of shortfall will lead to what changes in plans?

4) Starting construction of the east side segment leaves less funding for the I-5 to Medina segment. The SDEIS refers repeatedly to a “phased implementation plan” under which the lanes would be built first, and lids and other mitigation would come later. The SDEIS errs in not explaining that the lack of funds is likely to lead to no mitigation for the west side for many years.

5) Particularly because of the safety issues, the SDEIS needs to analyze an alternative based on the funding which the state is confident of having. For instance, a safety retrofit of the four lanes could be done with funds available. A 4 lane tolled and transit prioritized 520 might be done with funds foreseeably available.

6) For the reasons above, the legislative desire to have an expanded SR 520 is not likely achievable. The state needs to present real alternatives to a 6 lane car-centric 520, alternatives such as those mentioned in Section V above, together with their costs, what they accomplish, and what they leave undone.

IX) Almost no mitigation of damages is promised. Noise reduction levels and technologies, offsets for construction damages, and lids are either ignored or presented as optional throughout the document.

A) Please see the discussions of lack of mitigation in Appendix B and in each of the sections above. The mitigation is required, and will be substantial.

B) Noise is the primary impact on area residents. The SDEIS does not propose to use the techniques recommended by the noise experts panel, and reasonable noise levels are not assured. See Appendix D.
C) However, the SDEIS does indicate that the Current Proposals attempt to avoid and mitigate the impact on fish. We believe the data use is questionable at best; please see and respond to Appendix W.
April 14, 2010

Jennifer Young
Environmental Manager
SR 520 Project Office
600 Stewart Street, Suite 520
Seattle, WA 98101

Re: Supplemental Draft EIS for the I-5 to Medina Portion of the SR-520 Project

Dear Ms. Young:

I write on behalf of the Coalition for a Sustainable 520 and its members to provide comments on portions of the SDEIS for the above-referenced project. Thank you for this opportunity to comment.

All Reasonable Alternatives Have Not Been Included

SEPA (and NEPA) were adopted to assure that government agencies made decisions “by deliberation, not default.” Stemple v. Dept. of Water Resources, 82 Wn.2d 109, 118 (1973). There has been much deliberation regarding addressing the transportation needs in the SR 520 corridor. But despite that, there is still the risk that the lead agencies are defaulting on their obligations to rigorously examine all reasonable alternatives. The alternatives analysis is the “heart of the environmental impact statement.” 40 C.F.R. § 1502.14. It must “[r]igorously explore and objectively evaluate all reasonable alternatives . . .” 40 C.F.R. § 1502.14(a). The EIS must “[d]evote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.” 40 C.F.R. § 1502.14(b). Reasonable alternatives include those that are “not within the jurisdiction of the lead agency.” 40 C.F.R. § 1502.14(c).

Determining the range of reasonable alternatives flows from the project’s purpose and need. The SDEIS states that the project’s purpose remains the same today as it was when the purpose statement was first crafted by the Trans-Lake Washington Study Committee in 2000:

The purpose of the 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.
SDEIS at 1-3. This purpose statement is notable in its focus on moving “people and goods” not motor vehicles. Yet every single alternative examined in the SDEIS involves spending billions of dollars to increase the capacity of SR 520 for motor vehicles only. None of the alternatives include light rail. Light rail offers the possibility of accomplishing the project’s purposes at lower environmental costs. The decision to omit light rail from any of the alternatives examined in the SDEIS is inexplicable and renders the SDEIS fatally flawed.

The viability of a light rail option has been documented in the recent draft report prepared for the City of Seattle’s Mayor: *SR 520 Light Rail Alternatives, Draft Report*, Nelson/Nygaard Consulting Associates (Apr. 2010). A copy of the report is available at www.seattle.gov/mayor/.

The benefits of a rail option are many. At the top of the list, rail offers opportunities to reduce greenhouse gas emissions. In this day and age, an alternative that offers the promise of reducing GHG emission should be examined in great detail in the environmental review process. Your failure to develop and analyze a rail alternative is disheartening given the commitment of the federal and state governments to reducing GHG emissions in the coming years.

State legislation establishes demanding standards for reducing our GHG emissions. The legislation calls for GHG emissions to be reduced to 1990 levels by 2020. By 2050, we are to reduce GHG emissions to 50 percent of 1990 levels. RCW 70.235.020.

The State is not going to meet these standards if it continues to pour billions of dollars into constructing highways for motor vehicles in areas where light rail is a viable option. Few areas of the State have opportunities for light rail. Residential densities and employment opportunities are high enough in the SR 520 corridor to support rail. It is a dereliction of duty by WSDOT to fail to seize this opportunity and do everything it can to explore the opportunities for rail in this corridor now.

The SDEIS explains that a rail option was excluded as a result of planning that started in 1998. The SDEIS seems to take the point of view that because rail was eliminated from consideration many years ago, that the momentum behind that decision somehow excuses analyzing a rail alternative in detail in this EIS in 2010. That rationale is flawed in several respects.

First state law mandates WSDOT, Sound Transit, and others to develop a transportation plan “that ensures the effective and efficient coordination of bus service and light rail services throughout the State Route Number 520 corridor.” RCW 47.01.410 (emphasis supplied). That multi-modal transportation plan is to be “closely coordinated” with the 520 bridge replacement and HOV projects. *Id.* Excluding light rail from every alternative considered in the SDEIS does not reflect “close coordination” between this project and the legislative mandate to “ensure” light rail “throughout the State Route Number 520 corridor.”

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1 I presume the City of Seattle Mayor’s Office is providing a paper copy of that report. If you are unable to obtain a copy, please contact me and I will be happy to provide you with a copy.
Second, none of the prior planning efforts that resulted in the “no rail” decision for SR 520 had the benefit of the analysis in an EIS. Government decisions on major projects are not allowed to be made until after the decision makers are informed by the content of an adequate EIS. Relying on recommendations made without the benefit of an EIS puts the proverbial cart before the horse. Your agencies’ recommendations on how to spend billions of taxpayer dollars must be informed by the contents of an adequate EIS. You should not be justifying the exclusion of reasonable alternatives based on studies that did not enjoy the input of an adequate EIS.

Third, reliance on years of prior planning also is misplaced because the world has changed greatly in the intervening years. Nearly a decade ago, in the early years of the so-called “Trans-Lake Washington Project,” rail was jettisoned from consideration for the SR 520 corridor. SDEIS at 1-10. Much has changed regarding our knowledge about climate change. New policies adopted at the city, state, national, and international levels reflect our increasing awareness of the reality of global warming and the need for bold action to avert its worst consequences.

In 2007, the United Nations’ Intergovernmental Panel on Climate Change (IPCC) released its frequently cited report reflecting the new scientific consensus that is causing global warming. As summarized by the U.N. News Center in its press release announcing the report:

   The IPCC, which brings together the world’s leading climate scientists and experts, concluded that major advances in climate modeling and the collection and analysis of data now give scientists “very high confidence” – at least a nine out of ten chance of being correct – in their understanding of how human activities are causing the world to warm. **This level of confidence is much greater than the IPCC indicated in their last report in 2001.** The report confirmed that it is “very likely” that greenhouse gas emissions have caused most of the global temperature rise observed since the mid-twentieth century. Ice cores, going back 10,000 years, show a dramatic rise in greenhouse gases from the onset of the industrial age. The co-chair of the IPCC working group stated, “There can be no question that the increase in these greenhouse gases are dominated by human activity.”

The United Nations went on to summarize the key findings of the report:

   The report describes an accelerating transition to a warmer world – an increase of three degrees Celsius is expected this century – marked by more extreme temperatures including heat waves, new wind patterns, worsening drought in some regions, heavier precipitation in others, melting glaciers and arctic ice, and rising global average sea levels.
The 2007 report from the IPCC represented a major step forward in the scientific understanding of global warming issues. According to the United Nations, “IPCC Chair Rajendra Pachauri said the science has ‘moved on’ and the extent of knowledge and the research carried now is several steps beyond what was possible for the last report.” “This report by the IPCC represents the most rigorous and comprehensive assessment possible of the current state of climate science and has considerably narrowed the uncertainties of the 2001 report,” according to Michel Jarraud, Secretary General of the World Meteorological Organization. Executive Director of the United Nations Environment Program was quoted as stating: “[T]his new report should spur policy makers to get off the fence and put strong and effective policies in place to tackle greenhouse gas emissions.”

The IPCC was released several years after the Trans-Lake Washington study participants decided not to include rail on SR 520 in the near term. But this information was available to the drafters of the SDEIS in 2009 and 2010 and should have been used by them in determining a regional range of alternatives to simply building more pavement for motor vehicles.

As earth-shaking as the IPCC report in 2007 was (or should have been), scientific analysis since then should be causing alarm bells to ring even louder. The recent Copenhagen Climate Science Congress, attended by 2,000 scientists, concluded with this “Key Message 1:”

Recent observations confirm that, given high rates of observed emissions, the worst-case IPCC scenario trajectories (or even worse) are being realized. For many key parameters, the climate system is already moving beyond the patterns of natural variability within which our society and economy have developed and thrived. These parameters include global mean surface temperatures, sea-level rise, ocean and ice sheet dynamics, ocean acidification, and extreme climatic events. There is a significant risk that many of the trends will accelerate, leading to an increasing risk of abrupt or irreversible climatic shifts.

International Scientific Congress Climate Change: Global Risks, Challenges, and Decisions (Mar. 12, 2009). (This Scientific Congress was held in advance of the December 2009 Climate Change Conference that drew political leaders from around the world.)

More than our scientific understanding of global warming has changed in recent years. The political firmament is shifting, too. At the national level, in 2007, the Supreme Court rejected Bush administration efforts to preclude EPA from regulating greenhouse gas emissions. Massachusetts v. EPA, 549 U.S. 497 (2007). The Supreme Court held that the EPA could regulate those emissions as long as the EPA determines they contribute to climate change. Id.

The Supreme Court decision was followed by the election of President Obama, which opened the doors for new federal initiatives to combat greenhouse gas emissions. Pursuant to the Supreme Court decision, the EPA has proposed rules regulating GHG emissions from motor vehicles. On
another front, directly relevant to this project, on January 13, 2010, the United States Department of Transportation announced a “dramatic change from existing policy” regarding the funding of major transit projects. DOT Secretary LaHood stated, “We want to base our decisions on how much transit helps the environment, how much it improves development opportunities, and how it makes our communities better places to live.” No longer would transit funding decisions be based simply on alleviating congestion “in making funding decisions, the FTA will now evaluate the environmental, community, and economic development benefits provided by transit projects, as well as the congestion relief benefits from such projects.” U.S. DOT Press Release (Jan. 13, 2010).

The shifting political climate also is evidenced by the passage of the American Clean Energy and Security Act by the House of Representatives last summer. The bill sets a goal of reducing overall greenhouse gas emissions by 17 percent from 2005 levels by the year 2020, and 83 percent by 2050.

In like manner, Washington State adopted greenhouse gas reduction standards in legislation adopted in 2008. The legislation states: “The state shall limit emission of greenhouse gases to achieve the following emission reductions . . .” RCW 70.235.070(1)(a) (emphasis supplied). As noted above, the statute establishes that by 2020, emissions shall be reduced to 1990 levels. By 2035, GHG emissions are to be 25 percent below 1990 levels and by 2050, they are to be 50 percent below 1990 levels.

The new law also requires agencies distributing capital funds for infrastructure projects to consider whether the entity receiving the funds has adopted policies to reduce greenhouse gas emissions. The agencies must also consider whether the project is consistent with the State’s limit on the emissions of greenhouse gases established in RCW 70.235.020 and the statewide goals to reduce annual per capita miles traveled by 2050. RCW 70.235.070.

Policy shifts have occurred recently at the local level, too. The Seattle City Council’s 2010 priorities include the adoption of a “carbon neutral goal for Seattle with specific milestones and implementation steps . . .”

In sum, whatever may have led the Trans-Lake Washington Project group to exclude rail from SR 520 nearly a decade ago cannot be cited in 2010 as justification for refusing to consider rail within the range of alternatives today.

Climate change is the most significant and daunting environmental issue facing this generation. We cannot pass up opportunities to reduce GHG emissions based on dated policy recommendations developed without the benefit of an EIS, without the benefit of our current knowledge of the seriousness of GHG emissions, and without the guidance provided by current governmental policies calling for significant reductions in those emissions in the coming years and decades.

We recognize the existence of political and economic forces (and their friends in the mainstream media) that resist adding a new study of rail at this time. They argue that studying rail now will cause delays and that the project has been “studied to death.” First, if delays ensue, they are not the result of those asking that the SDEIS be revised to include a rail option. If the SDEIS had included a rail option in the first place, there would be no need for any delay at all. If an analysis of rail at this stage causes any delay, it is because of the failure of the authors of the SDEIS to include a rail option in the SDEIS in the first place when it was published earlier this year. Don’t shoot the messenger.

Second, the new information about climate issues and government policies addressing global warming are issues of the highest environmental magnitude. We understand that at some point, planning must stop and decisions must be made. If there were new information policies about a relatively minor environmental issue, the need for making a decision might outweigh the need for additional study. But as stated above and as recognized by virtually every credible source, there is not a more important environmental issue than dealing with climate change. This SDEIS recognizes that close to 50 percent of the State’s GHG emissions come from the transportation sector. One of the most heavily traveled transportation corridors in the State is the SR 520 corridor. We are about to make a decision regarding transportation options in that corridor that will be with us for the next 50 to 100 years. How can we possibly in good conscience (thinking not only of ourselves, but of the next generation) make a decision of this magnitude and with such long-lasting impacts without taking a hard look at a rail option now?

Third, reliance on the old recommendations to exclude consideration of rail in the SR 520 corridor is misplaced because it is inconsistent with Sound Transit’s current plan for the SR 520 corridor. Sound Transit has not ruled out constructing light rail in the 520 corridor. Rather, Sound Transit’s current plan (“ST 2”) calls for an analysis of opportunities to develop high capacity transit, including light rail, in that corridor. Yet all of the alternatives currently under consideration would effectively eliminate the opportunity to bring rail to this corridor. See Nelson/Nygaard report. An EIS is required to assess opportunities that will be lost if the proposal goes forward. RCW 43.21C.030(2)(b)(v). But rather than disclose that all of the studied alternatives will doom light rail in this corridor, the SDEIS suggests light rail can be readily added later. Such a claim is debunked by the extensive analysis in the Nelson/Nygaard report. As those authors state, we have one chance to get this right – and that time is now.

The failure of the SDEIS to provide a detailed assessment of a rail option infects other portions of the SDEIS, too. For instance, in the discussion of the project’s consistency with local land use plans and policies (SDEIS at 5-42, et seq.), there is no acknowledgement that proceeding with the current proposal would stymie the region’s long-term plans that call for possible inclusion of rail in the SR 520 corridor. As just noted, Sound Transit (and other regional planning bodies) still consider rail in the SR 520 corridor a viable option that requires further study. Yet this project would effectively eliminate that option from future consideration (for the next 50 to 100 years). That inconsistency should be disclosed in the EIS.
In like manner, the Section 4(f) analysis (SDEIS, Attachment 6) totally ignores the light rail option and fails to provide any consideration of the ability of that alternative to avoid or reduce impacts to parklands protected by federal law. A light rail option could eliminate the need for HOV ramps and, thereby, reduce the footprint of the project and its impacts on protected Section 4(f) lands. Yet this avoidance and minimization strategy was not analyzed because rail had been eliminated as an alternative to be studied in detail in the EIS. See Attachment 6 at 121. This is yet another fatal flaw in the SDEIS.

The failure to consider rail as a means of reducing impacts to parks is ironic given the Governor’s quote in the SDEIS that called for Seattle communities to develop a design for the project in Seattle that “will best serve the neighborhoods, University of Washington, and parks and natural resources.” SDEIS at 1-16 (emphasis supplied). The Governor called on WSDOT “to provide support” to that effort. It is not too late. A rail alternative could be the best option for protecting parks and our most vulnerable natural resource – our atmosphere under attack from GHG emissions. We urge the FHWA and WSDOT to provide support for that effort now.

Segmentation

The SDEIS assesses impacts (and alternatives) only within a part of the SR 520 Project corridor. As the SDEIS recognizes, the earlier Draft EIS evaluated the entire SR 520 corridor from I-5 in Seattle to 108th Avenue NE in Bellevue (just shy of I-405). In contrast, though, the SDEIS chops that corridor in two. The current SDEIS evaluates only the portion of the corridor from I-5 to Medina. This is error.

Federal Highway Administration regulations set forth three criteria that must be met to justify conducting environmental review for only a segment of a longer highway project. The segment evaluated in the EIS “shall:”

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope;

2. Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and

3. Not restrict consideration of alternatives for reasonably foreseeable transportation improvements.

23 C.F.R. § 771.111(f).

The I-5 to Medina segment analyzed in the SDEIS fails all three of these tests.
Logical Terminus

The SDEIS explains the logic of the two endpoints in Section 1.14: "These termini are logical because the I-5/SR 520 interchange is a major system interchange in the City of Seattle, while Evergreen Point Road is the location of a major transit transfer point for the Eastside." We have no quarrel with recognizing the I-5/SR 520 interchange as a major system interchange and a logical terminus for the western end of the project. A parallel eastern terminus is SR 520’s intersection with I-405 in Bellevue or its intersection with SR 202 in Redmond. But there is no comparable “major system interchange” at Evergreen Point Road. The SDEIS claim that Evergreen Point Road in Medina is a logical endpoint because it is a “major transit transfer point” is illogical in several respects.

First, an infinitesimal number of persons traveling along SR-520 use the Evergreen Point Freeway Station. According to data in the SDEIS, of the 160,000 people who use the bridge on an average weekday, only 1,000 of them are transit riders who use the Evergreen Point Freeway Station. That is, barely more than one-half of one percent of persons crossing the bridge use the Evergreen Point Freeway Station.\(^3\) That hardly makes it a “major” transit transfer point.

Second, even if the comparison is made to transit riders crossing the bridge, the numbers are not much better. According to the EIS, there are 15,000 transit riders passing across the bridge on an average weekday (ES 2-1). The 1,000 transit riders using the Evergreen Point Freeway Station constitute just seven percent of all transit riders crossing the bridge. The Evergreen Point Freeway Station simply is not a “major” transfer point.

Third, the minor role of the Evergreen Point Freeway Station is visually conveyed by these pictures of the facility:

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\(^3\) According to the EIS, 160,000 people cross the bridge on an average weekday (ES 1-2) of which only 1,000 are transit riders using the Evergreen Point Freeway Station (SDEIS at 2-8 and Ex. 2-5).
These small bus stops on the side of a major freeway hardly constitute a “logical terminus” for this environmental analysis.

Fourth, in justifying Evergreen Point Road as the western terminus for the segment of this project stretching east to Redmond, the SDEIS asserts: “The existing freeway transit stop at Evergreen Point Road is a key hub for transit on the Eastside, connecting north-south routes with east-west routes across Lake Washington; . . .” SDEIS at 1-36. Key hub? Connecting north-south routes? According to Metro’s Route Map, there are no major north-south bus routes using the Evergreen Point Transfer Station. The only two routes that do not simply pass through the transfer station while remaining on 520 are Route 261 and Route 271. Each of these routes travel south for a short distance and then turn east through downtown Bellevue and then beyond to points further east in Overlake (Route 261) and southeast in Eastgate (Route 271). Characterizing the Evergreen Point Transfer Station as a “logical terminus” on the basis of it being a “key hub” linking east-west with north-south routes is pure fiction. For all of these reasons, the first test in the federal regulation is not met. Evergreen Point is not a major hub and is not a logical terminus.

Independent Utility

Limiting environmental analysis to this western segment also fails the second test which requires that the project have “independent utility,” “even if no additional transportation improvements in the area are made.” Certainly the “no action” alternative would have independent utility by eliminating safety issues associated with the existing, aging structures. But the proposal is to do much more than that, i.e., to expand the road to include new HOV lanes across the lake and in Seattle. The SDEIS claims that these HOV lanes “will complete the SR-520 HOV system in keeping with regional planning.” SDEIS at 1-23. Hardly! Completion of this segment would not complete the SR-520 HOV system in keeping with regional planning. The Eastside project would have to be completed as well.

Eastbound on SR 520 from the Evergreen Point Station, there are no HOV lanes until considerably east of Evergreen Point Road. Constructing eastbound HOV lanes in Seattle and on the bridge would create a huge backup where that traffic has to merge with the general purpose lanes due to the absence of any eastbound HOV lanes from Evergreen Point east.

The eastern segment of this now bi-sected project (i.e., the segment east of Evergreen Point Road) is described as including this major element:

Construct a new eastbound HOV lane from Lake Washington to the existing HOV lane west of the I-405 interchange. This improvement would complete the currently discontinuous HOV network on the Eastside and improve travel time reliability for buses and car pools.
SDEIS, Appendix Q at 1-4 (emphasis supplied). Not unless the west of Medina segment is combined with the east of Medina segment will there be a continuous eastbound HOV system in the SR 520 corridor.

Westbound, HOV lanes exist from I-405 to Lake Washington, but they are on the outside of the right-of-way. The project in Seattle and on the bridge call for the HOV lanes to be on the inside of the other lanes. “This change would enhance safety by eliminating the need for merging vehicles to weave across the faster-moving HOV lanes to reach the general purpose lanes.” Thus, completing the SR 520 HOV system involves more than building HOV lanes in Seattle and on the bridge. The Eastside HOV lanes must be moved so that they form a continuous protected lane inside of the general purpose lanes. Unless the westbound HOV lanes east of Lake Washington are relocated to the inside, the SR 520 HOV system will not be complete, contrary to the claim in the EIS that the Seattle and bridge segment of the project alone will “complete the SR 520 HOV system.”

Segmentation Precludes Alternatives

Carving out the Seattle and Lake Washington portion of the corridor as a separate segment also violates the third test of the federal regulation, i.e., it will “restrict consideration of alternatives for other reasonably foreseeable transportation improvements.” As we have already seen, adding rail to this corridor is a “reasonably foreseeable transportation improvement,” yet all the alternatives under consideration for this segment would not just “restrict” consideration of light rail, but effectively eliminate it. That would be a loss not just for Seattle communities, but for Eastside communities, too.

In like manner, proceeding with the eastern segment in advance of the Seattle and bridge segment threatens the feasibility of adding rail to the Seattle and bridge segment. Unless provision is made now for rail east of Evergreen Point Road, the decisions made on the eastern segment will “restrict,” if not effectively preclude, consideration of adding rail to this corridor at any time in the reasonably near future.

Segmenting the overall project also threatens consideration of alternatives for the Seattle and bridge segment because of funding limitations. There is only so much money that the federal and state agencies can find to fund this project overall. Revenue sources for the entire project have not been found. See, e.g., SDEIS at 2-34. Project cutbacks seem inevitable. By segmenting the project and allowing the eastern segment to go first, scarce funds will be devoted to designing, building, and mitigating impacts on the eastern segment, effectively limiting options when the time comes to design, build, and develop mitigation for the western segment. For all these reasons, the third criterion is not met and this attempted segmentation must be abandoned. A new Supplemental Draft EIS should be prepared that evaluates the entire project. No further action should be taken to implement the eastern segment (east of Evergreen Point Road) until a Final Supplemental EIS is published.
Section 4(f) Lands

Section 4(f) of the Department of Transportation Act and Section 138 of the Federal-Aid Highway Act preclude the use of parklands for highway projects absent extraordinary circumstances. Prior to enactment of Section 4(f), parklands had been an easy mark for highway projects. Building highways in parks typically involves less expense and less political and practical problems than building a highway through established residential or commercial areas. As the Supreme Court stated in the seminal 4(f) case of Citizens to Preserve Overton Park v. Volpe, Section 4(f) "expresses the Congressional will 'that protection of parkland was to be given paramount importance.'"

In Overton Park, the highway departments argued that parkland should be used because of cost, safety, and other factors. The highway departments claimed they had discretion to consider these other factors and to determine "whether, on balance, alternative feasible routes would be 'prudent.'" Id. at 412. The Supreme Court rejected these contentions:

But no such wide-ranging endeavor was intended. It is obvious that in most cases considerations of cost, directness of route, and community disruption will indicate that parkland should be used for highway construction whenever possible. Although it may be necessary to transfer funds from one jurisdiction to another, there will always be a smaller outlay required from the public purse when parkland is used since the public already owns the land and there will be no need to pay for right-of-way. And since people do not live or work in parks, if a highway is built on parkland no one will have to leave his home or give up his business. Such factors are common to substantially all highway construction. Thus, if Congress intended these factors to be on an equal footing with preservation of parkland there would have been no need for the statutes.

Congress clearly did not intend that cost and disruption of the community were to be ignored by the Secretary. But the very existence of the statutes indicates that protection of parkland was to be given paramount importance. The few green havens that are public parks were not to be lost unless there were truly unusual factors present in a particular case or the cost or community disruption resulting from alternative routes reached extraordinary magnitudes. If the statutes are to have

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4 These provisions are currently codified at 23 U.S.C. § 138 and 49 U.S.C. § 303. They were originally enacted as § 4(f) of the Department of Transportation Act of 1966 and are still commonly referred to as "Section 4(f)."

any meaning, the Secretary cannot approve the destruction of parkland unless he finds that alternative routes present unique problems.

_Citizens to Preserve Overton Park, Inc. v. Volpe_, 401 U.S. 402 at 411-12 (1971) (emphasis supplied; footnotes omitted). _See also Arlington Coalition on Transportation v. Volpe_, 458 F.2d 1323, 1335 (4th Cir. 1972) (“Congress has declared through sections 138 and 4(f) that conservation of parkland is of the ** utmost primary importance **”) (emphasis supplied).

Section 4(f) prohibits FHWA from approving any project:

> which requires the use of any publically owned land from a public park, recreation area, or wildlife and water fowl refuge of national, State, or **local significance** as determined by the federal, State, or **local officials having jurisdiction thereof**, or any land from an historic site of national, State, or local significance as so determined by such officials unless (1) there is no feasible and prudent alternative to the use of such land and (2) such program includes all possible planning to minimize harm to such park, recreational area, wildlife and water fowl refuge, or historic site resulting from such use.


The legislation not only provides the utmost protection for parklands, but it also provides local governments with a major role in deciding whether local parklands can be used for a highway project. The Act protects publicly owned park lands “of local significance,” and the Act reserves to the “local officials having jurisdiction” the right to determine whether municipally owned park lands have “local significance.” 28 U.S.C. § 138(a). In like manner, a finding that an impact to a municipally owned park is **de minimis** requires concurrence by the municipality. 28 U.S.C. § 138(b)(iii)(B). This local concurrence cannot be inferred. There must be an explicit determination by the local government. _Arlington Coalition on Transportation v. Volpe, supra_, 458 F.2d at 1336. _See also 23 C.F.R. 774.11(c) (in the absence of an explicit determination by the officials with jurisdiction over a park that it is insignificant, park property “will be presumed to be significant”).

In making the “significance” determination, “the desirability of using the particular parkland in question as a highway must be ignored and only the value of the park as a park can be considered. Were this not so, land valuable to the community as a park could be used for a highway even though ‘feasible and prudent alternatives’ existed because federal or State officials had decided that using the park for highway purposes was desirable according to criteria other than whether such alternatives existed, the only criterion allowed by the Acts.” _Id._ (emphasis in original).
There is no requirement that land that functions as a park be formally designated as a park to enjoy the protection of Section 4(f). *Stewart Park & Reserve Coalition, Inc. v. Slater*, 352 F.3d 545 (2nd Cir. 2003).

Some of the lands at issue here are owned by the State and managed by WSDOT. If WSDOT were to determine that these lands that have been used as park land for decades are not “significant,” the Federal Highway Administration has the duty to independently review that determination and reach its own conclusion. 23 C.F.R. § 774.11(d).

Under separate cover, my clients are providing you with a detailed analysis of the project’s use of and impacts to significant parklands protected by Section 4(f). That analysis demonstrates that the EIS and its Attachment 6 do not comply with the requirements of either NEPA, SEPA, or Section 4(f). Lands that have local significance for park purposes have been ignored in the analysis. Impacts to lands that have been identified as Section 4(f) lands have not been adequately assessed. The EIS and the accompanying 4(f) analysis fail to recognize and disclose numerous project impacts that will substantially impair the activities, features, and attributes of these park lands. That substantial impairment constitutes constructive use of the park lands and triggers Section 4(f) requirements. 23 C.F.R. § 774.15(a). The failure of the EIS and its Attachment 6 to fairly and fully acknowledge the substantial impairment of these park lands renders the EIS and the accompanying 4(f) analysis inadequate and void.

My clients’ comments regarding the impacts to the parks (and the comments of many other citizens, too) are echoed also by the Seattle Board of Park Commissioners. Their recent resolution states that the Parks Board “cannot endorse any of the alternatives . . . due to the profound negative environmental impacts the project would have on the Washington Park Arboretum and the other City of Seattle Parks along the SR 520 corridor.” The resolution goes on to explain that “the visual impacts and noise associated with the project, both during construction and after it is completed, will be significant” for Montlake Playfield. The resolution notes that the SDEIS “fails to recognize Lake Washington Boulevard as a historic resource or a park and recreation resource.” “This officially designated park boulevard is a 204-acre, 9.2 mile long linear park wholly owned by the City and under the jurisdiction of Seattle Parks and Recreation.” The project’s “increased traffic through the heart of the Arboretum limits access to the Japanese Garden from the rest of the Arboretum, reduces the air quality due to vehicle emissions, increases noise from traffic and makes crossing Lake Washington Boulevard unsafe.” The resolution further explains that recent improvements to Washington Park Arboretum “will likely be negatively impacted” by the project. The Parks Board has adopted a plan for future improvements to the Park, yet “redevelopment of SR 520 has the potential to negate the potential to undertake some or all of these projects to the detriment of the Arboretum and contrary to the goals set out in the Master Plan.” The failure of the SDEIS and the Section 4(f) analysis to fully disclose these impacts renders the disclosure functions of those documents inadequate. These impacts also demonstrate the impropriety of using these park lands for the project and failing to minimize impacts as required by Section 4(f).
The EIS and the Section 4(f) analysis also failed to consider the substantial impairment that will occur to park lands if construction of the lids is deferred. Given the considerable funding uncertainties and the lead agencies’ acknowledgment that the project may be completed in phases, there is a significant possibility that the lids will be deferred for a considerable period of time, if they ever are built. Analysis of that issue should not be delayed until that decision point arrives. At that juncture, with most of the rest of the project built and money available to complete the Seattle section (but not enough money for the lids), there will be severe pressure to complete the highway project and build the lids at some unspecified time later. That possibility must be addressed now. This dynamic also further demonstrates the impropriety of segmenting this project into an east and west segment.

The EIS and Section 4(f) analysis also are inadequate in their failure to consider the possibility of alternatives that would avoid or minimize the amount of park lands to be used by this project. The rail option, discussed above, for instance, would result in a narrower footprint in some areas, thereby, reducing the amount of park land used for the project. The analysis also fails to consider the alternative of double decking the roadway to drastically reduce the width of the project and its use of adjacent park lands.

Finally, the EIS and the Section 4(f) analysis are inadequate in their treatment of measures to mitigate the use of and adverse impacts to park lands. Both NEPA and Section 4(f) require the lead agencies to develop and assess all reasonable measures available to mitigate these adverse impacts. As detailed in the accompanying letter from my client, that task remains undone. Of particular (but not exclusive) concern is the extent to which the analysis relies on the unfunded lids. Given the severe funding constraints, exacerbated by your current decision to allow the Eastside segment to proceed in advance of the Seattle segment, there seems to be a significant possibility that the lids never will be built. The EIS and the Section 4(f) analysis must take that into account.

Based on the various inadequacies described in this letter, the lead agencies should proceed promptly to develop a new Supplemental Draft EIS that, among other things, addresses the entire project, not just the Seattle/bridge segment and which includes a reasonable range of alternatives, including a light rail alternative. It is unfortunate that decisions made by the lead agencies in the early stages of drafting this document led to such a flawed document. Those decisions will, unfortunately, result in the loss of some time in planning for this project. The sooner the agencies rectify these errors, the sooner this project can get back on the right path. Ignoring these errors or making excuses for them now will simply delay the inevitable and result in yet more lost time. If a mid-course correction is made quickly now, the amount of time lost can be minimized and this project can still move into the construction phase in a reasonable time frame.
Thank you for your consideration of these comments.

Very truly yours,

BRICKLIN & NEWMAN, LLP

[Signature]

David A. Bricklin

DAB:psc

cc: Clients

Friends of SR 520/SDEIS Comment Letter to Jennifer Young
Linked parks near SR 520; would be taken or harmed by proposed expansion

(1) Interlaken Park
(2) Bagley Viewpoint
(3) Parklands East
(4) Parklands West
(5) Roanoke Park
(6) South Forest Area
(7) North forest area
(8) Bagley Stair Trail
(9) Roanoke Street End Park
(10) Portage Bay
(11) Street End Parks
(12) South Portage Bay Park
(13) Montlake Playfield Park
(14) Portage Bay Park Area in 520 Right of Way
(15) Bill Dawson Trail
(16) Arboretum
(17) Union Bay
(18) Ship Canal Trail
(19) McCurdy Park
(20) East Montlake Park
(21) Arboretum Waterfront Trail
(22) RH Thompson area
(23) University Canal Lands
Appendix B: Analysis of impacts on linked parks and recreation areas
By Gerald Conley 206-322-0427 gerry@roanokecap.com

Federal Section 4(f) of the 1966 Dept. of Transportation Act as amended in 2005 says that a transportation project requiring the use of publicly owned parks, or recreation areas or wildlife areas, can be approved only if

- there is no feasible and prudent alternative to using that land and
- if the project is planned to minimize harm to the property.

To adhere, the state must prove that reasonable alternatives have been evaluated and don’t work. In addition, section 6(f) gives additional protection to certain areas where federal funds have been used to create an amenity (such as the Arboretum Waterfront Trail) regardless of the land on which it resides.

Additional 4(f) focus

While the focus of the 4(f) law is on properties formally dedicated or operated as parks, recreational areas or wildlife refuges, a history of actual use of any public properties for these purposes can extend 4(f) protection to such public properties even though they do not have such formal dedication.

The focus of the process is to identify what properties have to be treated with the extra care for detailed analysis to make sure first that the need for care is identified (i.e. it is 4(f) property); second avoids using that land if feasible and prudent; and third, if avoidance is not possible, minimizes the harm and/or provides appropriate mitigation.

The SDEIS has failed to properly identify all 4(f) property involved, often failed to assess the opportunity to avoid impacting such property, often failed to describe the full adverse impact the project makes on that 4(f) property and incorrectly dismissed the need to deal with that impact in numerous instances. Often the SDEIS dismissal is made based on the statement that the use is temporary because the period of use is contrasted to total project construction time. The forecast time for this project is some 8 years and it easily could be longer. But that fact cannot be used to affirm that everything that takes less time is temporary. Rather, properly applied, the time measure is intended to demonstrate the insignificance of the nature and duration of the occupancy being described. The scope of the work needs to be minor to qualify as temporary. Occupancy, for two or three years affirms the significance, not the insignificance of the project that has caused the use. Occupancy constitutes a use if it “interferes with the purpose of the resource, on either a temporary or permanent basis.” See USDOTFHA section 4(f) Policy Paper, Office of Planning, Environment and Realty, Project Development and Environmental Review, March 1, 2005.
Lids
In addition, the SDEIS assumes that the proposed lids will be built and therefore that the 4(f) harm that would exist if the lids were not constructed does not have to be fully identified. However, the SDEIS also states that the lids are discretionary! SDEIS Chapter 5, Page 5-80: “Under all build options the following are some of the possible mitigation measures that may be performed by WSDOT.”

Given the budgetary tightness of this project, billions of dollars short, discretionary items can be expected to be dropped. **The omission of descriptions of detailed harm to all 4(f) properties creates an impression that the mitigation proposed is in fact discretionary, when, in fact, the state is required to attempt to 1) Avoid, 2) Minimize and 3) Mitigate damage. In short, the properties are not receiving the assessments and protection to which they are legally entitled.**

It is clear in the SDEIS that the lids have been identified as the most discretionary aspect of this project and that they will be built last, if ever. The SDEIS describes the project’s funding outlook as follows:

“Along with the rest of the nation, Washington State and the Puget Sound region are facing serious revenue shortfalls. ......there is a gap between the estimated cost of the project and the revenue available to build it. Because of these funding limitations, there is a strong possibility that WSDOT will construct the project in phases over time.” (SDEIS, Chapter 2, Page 2-34.) The document goes on to say that priority would be given to construction of “the Evergreen Point Bridge’s floating section, Portage Bay Bridge and the west approach to the Evergreen Pont Bridge. This plan is further described (SDEIS Chapter 5, page 5-152) If the project is phased, WSDOT would “…provide new structures to replace the vulnerable bridges in the SR520 corridor, as well as transitional sections to connect the new bridges to exiting facilities. It would include storm water facilities, noise mitigation and the width for the regional bicycle/pedestrian path, but lids would be deferred until a subsequent phase.” Finally, (SDEIS Chapter 6, page 6-128) the document explains: “under the Phased Implementation scenario, corridor improvements in the I-5 and Montlake areas would be completed during later phases after vulnerable structures have been replaced. Lids at I-5, 10th Avenue East and Delmar Drive East, and Montlake Boulevard would be deferred until a subsequent phase.”

The outlook for funding is jeopardized by two additional factors. There is a Federal law that makes it unclear that tolls on I-90 can be used to fund SR520. Second, Washington Legislators are diverting available SR520 funds to commencing work on non-safety related projects on the east side of Lake Washington. The phased implementation plan which the legislature has effectively launched is an intent to not mitigate at the time of construction. **Given the uncertainty of funding and the high probability of phased construction the SDEIS should analyze impacts assuming lids are not constructed.**
This project’s lack of funding raises additional questions regarding the lids. Who will get to design them and with what guidelines? There are trade offs in terms of construction cost vs. aesthetics and safety and future maintenance cost. WSDOT has historically done a very poor job of maintaining lands for which it has responsibility, letting them go to blackberry and tree killing vines. The Seattle Park Department budget is constantly being reduced, so it is not funded to care for lids created to mitigate this project. The SDEIS fails to describe the lid program in a way that permits the public to know if it represents real mitigation or sound reduction at the expense of increased visual blight. Given the current environmental climate, this project should not start until all the funds to complete it are at hand and those funds should cover the full cost of all mitigation including landscape maintenance cost for a duration long enough to ensure an aesthetically attractive landscaping is successfully established.

Linked Parks
The numbers below tie to the Map “Linked Parks near SR 520” Appendix B1

(1) Interlaken Park
SDEIS description is in Chapter 4, page 4-27. Also Described in Attachment 6, page 31. Conclusion is that it would be 4(f) if used. Affirms the historical connection to Bagley. SDEIS describes a small portion of the park used for construction easement Ch 6 page 6-41.

Interlaken is a 52-acre regional park with woods and trails running from the Arboretum to Roanoke Park. Interlaken is a major walking and bike route running roughly south- east to north-west. Interlaken ends on both sides of Delmar at the Delmar bridge abutment, the Delmar bridge creating a gap between Interlaken Park and Bagley Viewpoint which was part of Interlaken Park until severed by SR 520 45 years ago. The Olmstead design envisioned that Roanoke Park was the gateway to the start of Interlaken Park at its north end, with Bagley Viewpoint, a partial block from Roanoke Park. Maintaining a park-like connection from Roanoke Park to Interlaken has been a Park Department objective that has been achieved.

The current plans for 520 impact Interlaken Park as follows:
   1) Interlaken Park usage will be impaired by its use for construction staging, and replacement of Delmar Bridge. While the park is large, its access points are relatively rare and Interlaken Boulevard at Delmar is a primary and significant access point.
   2) The proposal would wipe out the park-like connection between Roanoke Park and Interlaken. This includes the consistent mature tree landscaping between Roanoke Park, Parklands East, Forest Areas (see below), Bagley Viewpoint and Interlaken.
3) The physical linkage between Interlaken and Roanoke Park will be cut for 9 months because of the closing of Delmar associated with the replacement of the Delmar Bridge and the widening of the road below. When the Delmar Bridge is taken out the detour will require biking up a steep hill with lots of competing traffic, and then going through the Miller and 10th Avenue and the 10th Avenue and Roanoke signaled intersections. This is high traffic in compressed space, slow routing now and it will be made worse because the 10th Avenue Bridge will be taken out and a temporary bridge put to the east, an alignment shift that will slow traffic. Also, the I-5 Roanoke Overpass will be being replaced with temporary bridging and forecast lid building. This same route will be a haul route, presumably with flagmen. Simultaneous construction in so many contiguous areas is going to lead to a noisy, dirty, clogged traffic world that people will seek to avoid. This will impair Interlaken’s use for at least two years. Serenity and quiet, also significant attributes of this park, will also be destroyed. See Exhibit 3-6, Construction Elements and Durations in I-5 Area, SDEIS Chapter 3, page 3-12 which shows a 2-year time schedule. The text, Chapter 3, page 3-6 says that the Delmar Bridge will be out for approximately 9 months; Chapter 3 page 13 says Delmar will be closed for 9 to 12 months.

4) Also, as described below, widening of SR 520 exposes Interlaken to increased noise and visual blight.

5) The location of a replaced Bagley Viewpoint is not committed to, nor are its contents and linkages (see below.) The relocation of Bagley could easily cause a taking of Interlaken Park lands if the relocation occurs to the south. The SDEIS in failing to resolve the size and location of a Bagley relocation fails to address these issues.

In sum, Interlaken Park will be harmed by construction impact, by the destruction of mature trees and landscaping during the construction period, and harmed afterwards, the amount depending on the nature of the mitigation if any that is done. Given the high probability that lids will not be constructed at the time SR520 is rebuilt at Delmar, it is very obvious that Interlaken and its peaceful green belt of connection to Roanoke will be damaged seriously. The widening of SR520 takes natural land out of production that is currently a sound absorbing and visual blight reducing mitigation. Given the total lack of real capability and commitment to mitigate, this important entry way to Interlaken must be seen as significantly damaged. Its features of a green belt, its activity of peaceful quiet recreation for pedestrians and bikers, and its attributes as a historical path connecting Roanoke Park and the Arboretum will be seriously impaired. The fact that the bridge will be out for 9 months adds to the loss of activity. The park will be left with significantly more noise at its north end than it has now due to the doubling of road way width and number of cars plus their increased speed. The combination of above factors means that what was a pleasant connection from Interlaken to Roanoke will be broken, significantly impairing a major current and historical function of Interlaken Park, i.e. being an easily accessed bike and pedestrian friendly, serene park
well linked in Boulevard style to Roanoke Park. The SDEIS is incorrect in not assigning 4f constructive use to Interlaken.

The SDEIS identifies Interlaken as a city park and acknowledges that there are 4(f) issues because they plan to do staging and construction at Delmar which they deem not significant in part because of a mis-use of the “temporary use” classification. They are focusing on curbing rather than on the treed area which will be destroyed by that construction. The SDEIS does state that street trees taken out by the lid construction will be replaced, but a mature tree is not replaced by a sapling. Further there are many trees creating the connection between parks and these many trees are in the declared construction area. The SDEIS should have also acknowledged 4(f) status to Interlaken for loss of the preciousness and historically significant connection to Bagley Park Overlook and Roanoke Park, given that said connection will be severed as part of the SR 520 doubling. (See also Parklands East and Parklands West.)

The SDEIS errs in neglecting to consider the relationship between these park areas, including the historical aesthetic significance of the linkage between the parks as well as the need for ease of access by park users.

- The SDEIS fails in its presumption that the harms can be dismissed as temporary taking. If the lid is built the disruption will be over a 2 year period. If the lid is not built, construction will cause very long lasting to permanent damage to the connection between Interlaken and Roanoke park, with greatly increased visual blight and noise and break and the elimination of mature foliage which has been reducing the impact of these problems for a road half the size of the one planned.
- The SDEIS fails to evaluate alternatives which avoid this damage.
  - A 4 lane alternative on Portage Bay bridge, and elimination of I5 express lane connection would minimize the road width of SR520 and would reduce the amount of road widening required. This might permit the retention of Bagley and avoidance of replacement of Delmar and Tenth Avenue Bridges.
  - If these bridges have to be replaced, postponing that construction until funds are available for lid completion would at least ensure that some of the damage done partially offset by the lid. Right now the timing is such as to create maximum damage with possibly no mitigation.
- The SDEIS fails to evaluate alternatives which would minimize the damage.
  - See discussion of Parklands East and Parklands West and Forest Areas.
  - See also Roanoke Park and Tenth Avenue discussion.
- The SDEIS proposals for mitigation are inadequate because the mitigation is not stated as required, and even if required there is high probability the mitigation will not occur at the time of construction if ever. The SDEIS has not documented the harm to this area effectively, which makes it much more likely that the needed mitigation will not be completed. The SDEIS should acknowledge that mitigation for these sites must address the park-like connection between these
parks, fulfilling the physical and aesthetic historical linkage intended by the Olmsteads.

(2) Bagley Viewpoint (which before 520 was built was part of Interlaken Park)

Described in SDEIS in Chapter 4 page 4-27. Also described SDEIS Attachment 6 page 30 and 31. Stairway access from below is acknowledged. SDOT pays parks to maintain it including the stairway. Parks is responsible for maintaining the vegetation.

Bagley Viewpoint is in daily use as a rest place and viewpoint, looking over Portage Bay to Lake Washington and the Cascades. Bagley Viewpoint was part of Interlaken Park before 520 was built, and is part of the Olmstead vision connecting Roanoke Park to Interlaken.

The SDEIS identifies Bagley Viewpoint as a significant city park because it has been so identified by the Seattle Parks Department, is historically significant and is a SEPA site. It will be removed to handle the planned widening of SR 520. The SDEIS notes that the taking of Bagley Viewpoint makes it 4(f) property and that it might be mitigated by creating a viewpoint on a new lid at that point. What it fails to note is that because Bagley Viewpoint is part of the historical and visual entrance path to Interlaken, Interlaken Park is affected by the Bagley Viewpoint removal and qualifies for 4(f) review for that reason as well as for the reason given in the SDEIS (see above). In addition, the damage done by taking Bagley Viewpoint is not clearly described and thus the mitigation cannot be designed or mandated to fit the need. Finally, the mitigation plans are not sufficiently clear with regard to amount and location of parking and the nature of the lid and how lid walls will be treated and how the lid will be fit into adjacent landscaping (see Notes on the Proposed 10th Avenue to Delmar Lid, page 38).

While the SDEIS does state that this taking cannot be avoided, it presumes that what has to come through this area is a 7 lane highway.

The SDEIS fails to evaluate alternatives for narrowing the bridge and thus not taking the Bagley viewpoint.

- The SDEIS should evaluate 520 with 4 lanes, tolled and transit priority.

- The SDEIS should evaluate a 4 lane Portage Bay Viaduct. The Nelson Nygaard report and common sense both indicate that the 4 lane Portage Bay viaduct might work well. See also the Coalition Comments Section VI.

- In the unlikely event that a 4 lane Portage Bay Bridge does not work well, the SDEIS should evaluate a 5 lane bridge.

In addition the SDEIS does not promise mitigation, nor does it describe the (possible) mitigation clearly so that it can be evaluated.
The SDEIS says:
- The SDEIS Ch2, 2-9 says that 10th Avenue to Delmar Lid would incorporate “redevelopment of the path from Bagley Viewpoint to Boyer Way, redevelopment of the Bagley Viewpoint Park and vista points to overlook Lake Union, Portage Bay and the panoramas eastward and westward.” The view is also noted Ch 4 page 4-35.
- SDEIS Chapter 5, page 5-63 says “a new viewpoint would be designed an constructed on the 10th and Delmar lid to recreate the panoramic views of Portage Bay and the Cascade Mountains that were available when Bagley Viewpoint was first built.”
- SDEIS Chapter 5, page 5-81 in the list of “possible mitigation measures,” “Replace Bagley Viewpoint either on the new lid or reconstructed bridge. WSDOT would work with the Seattle Parks department to identify an appropriate site.”
- The SDEIS Ch5, Page 5-67 says 10th Avenue East and Delmar lid “could also recreate a more substantial connection between Interlaken Park and Bagley Viewpoint.” It goes on to say the viewpoint would be recreated and “the areas to the north and south of the lid surface would be planted to reestablish the tree buffer and street trees that were removed for construction.” Which tree buffers and street trees are being discussed is not explained.

So what is to be done, where it is to be done, and if it is to be done are all uncertainties. See also Ch 5 page 5-80.

The SDEIS omits:
- Bagley Viewpoint is an oasis of green and a critical link between Roanoke Park and Interlaken. Treating it only as a viewpoint fails to describe its full purpose as the entry way to Interlaken Park, visually connected by the mature green trees of both Bagley and Interlaken.
- Failing to identify the Bagley Viewpoint parking, an essential part of the viewpoint, and the number of cars for which parking should be provided also minimizes the importance of what needs to be replaced.
- The use of the words “could” and “either” and “possible” in the SDEIS indicate that WSDOT will determine if the mitigation is sufficient or necessary. The SDEIS does not describe the harm to the park in such a way that the mitigation needed is well defined and mandated.
- The SDEIS shows the planned location of proposed lid, lying on top of the north and south retaining walls flanking the roadway, creating the canyon through which SR 520 will flow; this proposal is that the he lid will directly cover the roadway, running from outside wall to outside wall. See Ch 3 page 3-12. These walls will be above grade due to the required lid height to provide clearance above the road. Building the lid this way is an aesthetic
disaster which does not foster neighborhood reconnection. See Notes on 10th Avenue and Delmar Lid, page 38, which discusses the adverse impact of having a lid with ivy and graffiti collecting walls.

- The SDEIS omits a clear description of the harms to be mitigated by the 10th Avenue to Delmar Lid. Given that the lid will not at all likely to be built at the time SR520 is rebuilt is widened, this is a serious failing.

It is important to note that the Bagley Viewpoint mitigation must be integrated with mitigation to Roanoke Park, Parklands East and Parklands West and Interlaken Park. The SDEIS, Ch2, page 2-9 discusses the role of Bagley Viewpoint and adds, “also important is the (10th to Delmar) lid’s integration with the Roanoke Park historical district, located immediately north.” While this is true, the SDEIS omits an integrated description of all of the elements and important mitigations of this lid. Properly done it will connect pedestrians to Interlaken Park land across the street at 11th Avenue on the south side of the lid, with Roanoke Park, across Roanoke Street on the north side of the lid, a connection severed by SR 520 in its original construction and mitigated with the development of Parklands East and Parklands West. The need for the lid to do these things is acknowledged on a cumulative basis, but the analysis did not start from the point of identifying the harm done to each area, assessment of avoidance options, and then the assessment of required mitigation and what it must do.

The SDEIS acknowledges that the taking of Bagley Viewpoint is a 4(f) taking. It acknowledges that it is an important SEPA sight. The issue is all about mitigation, when, how and if.

What would happen to the Bagley Viewpoint if the 10th Avenue to Delmar lid is not built? This is not described in the SDEIS. The SDEIS omits a clear description of the harms to be mitigated by the 10th Avenue to Delmar Lid; one is obviously to permit the replacement of Bagley Viewpoint in an appropriate fashion. Given the high probability that the lid will not come at the time of construction, and the distinct possibility that funds for completion may not be available for decades, this is a serious problem.

For example, where would that leave the replacement of Bagley? There will be no ground on which to place Bagley on the north side of the Delmar bridge. Placing Bagley on solid ground at the south end of the bridge facing east, would place it on Interlaken Park land. That is not mitigation; it is a taking of Interlaken Park. That leaves the option of building Delmar bridge such that a replacement of Bagley Viewpoint is included on the bridge when it is constructed. That would be a viewpoint with possibly parking but it would not replace the function that the Bagley Viewpoint served as a green link between Roanoke Park and Interlaken Park. And, without the lid behind, it would be an extremely noisy viewpoint, far more noisy than the Bagley Viewpoint is now. Bagley Viewpoint replaced will be missing its features and much of its attributes as a pleasant place to stay for a while and read or visit. It will lose its 230 degree cloak of green. The only function that it will retain will be a place where one can look at the view. If it is on
the bridge, will there be a path down to the water as there should be or will this be another missing function?.

Based on what we now know, there is certainty that Bagley will be taken and high probability that if it is replaced soon it will be on the Delmar bridge an very inferior placement relative to its current placement. The conclusion has to be that the taking of Bagley will not be appropriately mitigated in reasonable time if ever and that the SDEIS has not conveyed an accurate depiction of this mitigation.

(3) Parklands East and (4) Parklands West

Both Parklands East and Parklands West lie within the construction area of the project. SDEIS Exhibit 6.2-1 Property Affected by Construction in the I-5 Area, Chapter 6, page 6-20.

This land has been part of the vegetative buffer between SR 520 and Roanoke Park since 1963 and was carefully designed as such. The ground is park-like with a combination of mature trees, garden beds and lawn. These areas, north of the fence line demarking SR 520 right of way, have been maintained by the Seattle Park Department and Roanoke Park volunteers for a very long time; both areas were re-landscaped a decade ago by volunteers who worked with plans approved by the Seattle Parks Department. The Seattle Park Department mows the grass in these areas each week and otherwise services them as needed. These lands blend into the forested areas on the other side of the fence line. (See, 8 North Forest Land below.)

The SDEIS notes the importance of these lands in describing the Roanoke Landscape Unit, Ch 4 page 4-35. “The pleasant landscape at Roanoke Park and streetscapes between 10th Avenue East and Delmar Drive East help to improve the experience” of a landscape unit that is mostly diminished by traffic.”

However, the SDEIS does not acknowledge these lands as park lands and omits discussion of the damage to these lands. It also omits clear discussion of or commitment to mitigation of these lands.

Plans call for the removal of the 10th Avenue Bridge, building a temporary new bridge to the east, building a new, larger 10th Avenue Bridge angled to north of the current alignment and widening of Roanoke Street. This construction can be expected to destroy all the mature vegetation in the area. The SDEIS omits discussion about whether any of the vegetation could be saved and possibly mated with a new lid. The SDEIS omits discussion of the impact of the operational 520 and construction activity on park lands and historic homes in the area.

**Parkland East (3) - Additional Detail**

*Exhibit 5.4-1 Chapter 5 page 54. Note that the southern boundary of Parklands has been taken in SR 520 widening in this exhibit.*
Parklands East is managed by the Seattle Park Department and fully accessible to the public. It provides an area for children as they wait for school bus pick up and drop off, and it provides visual and actual park continuity from Bagley Viewpoint to Roanoke Park. Part is owned by SDOT and part is owned by WSDOT.

The temporary 10th Avenue bridge is going to come right through these lands. The garden beds and trees would be destroyed. The end state of Parkland East is unclear; a lid might be built but has not been committed to (see prior discussion.)

The SDEIS does not acknowledge this area as park land; however, it is publicly accessible, historically used for park purposes and is maintained by the City as park land. The construction planned will destroy the trees which provide its primary feature, it will destroy the visual forest screen and sound deadening, destroying the peace and harmony that is currently one of its attributes, and it will become an unpleasant noisy place for pedestrians to pass, and school children to await their bus or rides.

The SDEIS fails to evaluate alternatives which avoid this damage such as
- A 4 lane Highway 520 from Montlake west;
- A 4 lane Portage Bay Bridge.
- Changing the planned width of 10th Avenue back to or closer to the current 60 feet rather than expanding to 100,
- Changing time of removal of Tenth Avenue bridge until lid expense is committed to.
- Avoiding widening of Roanoke Street.
- Reconstruct the Tenth Avenue bridge in place, two lanes at a time; two lanes are enough to keep traffic flowing, that is all Tenth carries the rest of the way to Broadway. Cut the bridge in half and replace it in two steps, two halves.

The SDEIS fails to evaluate alternatives which would minimize the damage.
- Change of construction boundaries to protect as much of this area as possible. Don’t rebuild 10th Avenue using a temporary bridge in the planned location. Set the target width of Tenth to 3 lanes plus two shoulders, basically what it is now (see discussion under Roanoke Park.)
- The SDEIS proposals for mitigation are inadequate.
  o If the lid is not built, the area will suffer greatly from noise and visual blight.
  o It is a high probability that a lid will not be built at the time construction that widens SR520 occurs and all the damage associated with that widening. It therefore becomes highly likely that the lids will never be built as there is no enforcement mechanism for this mitigation when the approved funds run out.
  o If the lid is built, the area will have unsightly lid walls unless the plans are modified for backfill, leveling and landscaping to transition the lid to the
Parkland West (4) - Additional Detail

Exhibit 5.2-1 Right of Way Acquisitions in the I-5 Area, Chapter 5, page 5-33. Exhibit 5.4-1 is a more
detailed showing where the Fire station property line falls, indicating how much of Parklands West is City
property. (Note this last exhibit shows a diminished Parkland West area due to the proposed widening and
new alignment of 10th Avenue East, and the proposed widening of Roanoke Street.)

Parkland West, east of the Roanoke fire station contains some land owned by the City of
Seattle, and the rest is WSDOT right of way. The Seattle land is fire station land, which is
an historic site. The vegetation that immediately abuts the fire station is cared for by fire
station personnel. The rest has been managed by the Seattle Park Department with aid
from community volunteers. It is an open to the public area, hosts a bus shelter in its
south-east corner and provides a visual landscape connection across Roanoke Street to
Roanoke Park and along 10th Avenue East to Parklands East and Bagley Viewpoint.

This area will be dramatically impacted by widening of three roadways plus the change
in alignment of 10th.
  - SR 520 widening
  - Proposed widening of 10th Avenue
  - Proposed widening of Roanoke Street.
  - Change in alignment of 10th Avenue, shifting it westward into the parcel

The cumulative effect is a very important taking of land in this park which has important
park, safety, and traffic implications.
  - The park land itself will be reduced, changing the nature of the experience as people
    approach the intersection, and the visual connection to Roanoke Park and Bagley
    Viewpoint will be diminished.
  - The change will make the area less pleasant by reducing the land’s ability to buffer
    the sight of SR 520 and the sound coming from it. This buffer is going to be
    increasingly needed because of the new 520 flyover ramps as well as the widening of
    the main roadway.
  - The SDEIS omits consideration of Fire Department access and safety, which is a
    violation of federal rules. Widening Roanoke Street would reduce the safety area in
    front of the station and could cause the station to be unable to continue to use that
    location. The station has important historical status which precludes doing such
    damage without a full 4f SDEIS evaluation and proof that such damage is necessary.
  - The SDEIS fails to provide any explanation of the reason for widening Roanoke
    Street. It fails to acknowledge that that expansion will also be encroaching both on
    Roanoke Park and on Parklands East and Parklands West. It appears that the intent
    is to increase the speed and throughput of this short section of road. But by failing
    to see how short that section is and that roads beyond are at capacity, it fails to
observe how wasteful and unnecessarily damaging this expansion would be. Given that the widening and increased speed would harm both adjacent park areas, it is incumbent on the SDEIS to demonstrate that it has analyzed ways first to avoid and second to minimize this damage. The SDEIS omits description of any alternatives and any explanation of why it is recommending this change rather than another with less impact.

- In addition, the SDEIS omits mention of traffic modeling that justifies the widening of 10th Avenue East. Its congestion is continuous with the streets that lead from it. The reason to widen the 10th Avenue Bridge are given as adding shoulders, but there is no need to do so unless parking is contemplated, plus the existing bridge is wider than is needed by a full lane. Four lanes are shown with two right turn lanes heading south on 10th from Roanoke Street. However, 10th is one lane all the way to Broadway, starting when parking occurs just north of Miller Street, less than a block from Roanoke Street. The reason there is only one right turn lane from Roanoke south onto 10th Avenue now is that having two lanes reduced traffic flow rather than increased it. The current striping is one lane plus a bike lane plus a shoulder wide enough for a bus to pull over for the bus stop. Widening 10th Avenue by 40 percent will create a 100 foot wide swath of Concrete across from Roanoke Park, an impossible to mitigate desert. Keeping the road narrow permits the visual blight to be reduced with trees growing close to the edge further softening the effect, reducing the adverse impact of traffic, noise, and pollution. Coming north on 10th there is only one lane until Miller, then traffic is able to shift lanes and position to make a right turn at Roanoke if desired. Having two lanes north and one lane south plus room for a bike lane and a shoulder for bus pull out is working well. Increasing the width of 10th Avenue East by taking 4f Park land would have to be justified in the SDEIS. If the argument is made that a strip of plantings will be made up the middle of the 10th Avenue bridge, it may be justified, but even then the bridge could be done at less than 80 feet rather than 100 feet.

- There is no discussion of the adverse visual impact of removal of all of the buffer trees from the area. The combination of bringing SR 520 closer to the property removing contiguous former buffer area, the taking of the actual areas into street use, and the destruction of the mature trees on the property all create significant damage to the features, activity, and function of this park area.

- Whereas before Parkland West was a fine place to have a bus stop in pleasant treeed surroundings, the area would be so reduced by the planned work that the bus shelter would have to be moved onto the 10th Avenue Bridge where load restrictions and lack of soil preclude plants of any significant size. Lack of space is would likely mean the covered bus stop would have to be eliminated.

In summary Parkland West land is being taken from several directions in all alternatives in the SDEIS. Less land means that this Parkland is less able to perform its function of carrying the green belt from one side of Roanoke to the other and from one side of 10th
Avenue to the other. This loss of function is created by the combination of taking land and widening both streets. Second, some of the land being taken is in the most accessible and most visible area where most people walk, reducing garden bed and treed area significantly which engages passersbys and gives them relief from urban blight. This is a reduction in attributes. And the encroachment by a roadway with a new alignment increases not just proximity, but also increasing vehicle speed and noise creating a substantial diminishment of the green space harmony that will be experienced. SR520 widening and the removal of buffer vegetation makes things significantly worse, an additional substantial impairment. This combination creates permanent constructive use with or without lid construction.

The SDEIS does not acknowledge this area as park land; however, it is publicly accessible, historically used as Park land and is maintained by the Seattle Park Department as park land.

- The SDEIS fails to evaluate alternatives which avoid this damage.
  - Don’t increase the number of lanes on SR520 through this area.

- Delay replacement of the Tenth Avenue bridge or don’t replace it. The reasons for its taking is not in the SDEIS. The replacement of the 10th Avenue bridge is presumed to be caused by the need to widen SR520 a need that might be eliminated with the 4 lane Portage Bay bridge alternative or other reduction from the many lanes planned. If that is not the cause, don’t replace it until lid funds are in hand.

- Don’t widen 10th Avenue or minimize the widening of 10th Avenue.

- Drop plans to widen Roanoke Street.

- The SDEIS fails to evaluate alternatives which would minimize the damage.
  - Changing the timing of the bridge removal to the time when funds were available for lid construction would help ensure that mitigation was available at the time damage done by removal of 10th Avenue Bridge occurred.

- Changing time of doing any widening of SR520 near Parklands West until lid funds were assured.

- Develop a management plan for all vegetation between the fire house and Delmar and demonstrating how they can be preserved.

- The SDEIS proposals for mitigation are inadequate.
  - The cumulative damage to Parklands West will be only slightly mitigated by the portion of the 10th Avenue lid that is to lie north of 10th Avenue.
The rest of the public open space in Parklands will be exposed to much greater SR 520 exposure than it now has.
  o There is no consideration of noise walls along the north side of SR 520 from the proposed lid to some point past the fire station in order to protect this parcel and Roanoke Park and its historical neighborhood from increased noise associated with the widening and the creation of the lid if it is built.
  o There is no statement of harm that will occur if the lid is not built as proposed. If the 10th Avenue Bridge were to be made narrower, the non-bridge portion of the lid would need to be larger.

(5) Roanoke Park

The SDEIS describes Roanoke Park Ch4 page 26. Attachment 6 page 58 makes statements regarding haul route on residential streets. It does not discuss Roanoke Park as a haul route and its impact on the Park’s activities, features and attributes that qualify for resource protection.

Roanoke Park is an historic park and a destination for many people because of its easy access and oasis feeling. It is a 2.2 acre Seattle park, part of the historical district which surrounds it. The park has a play area, walking trails and a children’s basketball area. It is a horticultural showcase with mature trees and flowering shrubs and well maintained gardens. Roanoke Park is used by many day-care centers and schools as a play area. Children often come from Capitol Hill, down 10th to the Park. Many people drive to the park from surrounding neighborhoods to use it, or stop on their way past or use it as a freeway rest stop.

A trolley line ran to, and ended at, Roanoke Park 100 years ago when it felt like country because there were so few homes in the area. The Olmstead Brothers in designing Interlaken Park envisioned Roanoke Park as a lovely gateway to Interlaken and, via the Bagley Stairs (see below) to Portage Bay.

Impacts to Roanoke Park include:
- Without mitigation, the widening of SR 520 will increase the noise impact and visual blight to Roanoke Park.
- Instead of trees on Parklands East and Parklands West, park users will look at an arterial next to a highway. This will be particularly severe during the construction period when the 10th Avenue Bridge is removed. That bridge has acted as a sound lid for the past forty-five years.
- Roanoke Park Garden beds extend to the pavement of Roanoke Street. The plotted line of construction area comes well into those beds and thus represents a taking of Park Lands. See Attachment 6 Exhibit 25 page 61. Stately elms, the hallmark of Roanoke Park are also relatively close to the pavement.
Reconstructing Roanoke Street may jeopardize the survival of these 90 year old trees by doing damage to their roots. The SDEIS has failed to understand that Park lands come to the pavement and require protection even though WSDOT and street right of ways may come into the park. Any use of right of way that has been public land used for park purposes for the last 45 to 100 years is taking of park land.

- Widening 10th Avenue from 60 feet to 100 feet will expose Roanoke Park to unnecessary visual blight; the road would not need to be 80 feet wide even if a planting strip were placed into it, given the lack of need for more than a shoulder plus two lanes and shoulder going north; one lane, plus a bike lane and a shoulder is sufficient going south. A separate bike lane going north is not safe as it cold put the rider to the right of a car turning right at Roanoke. Bikes hit car speed coming down the hill so the bike lane needs to be in the right car lane. An 80 foot wide bridge would have room for a planter strip.

- The proposed temporary 10th Avenue bridge, plus removal and replacement of the 10th Avenue bridge, placement of the lid, etc. represents a two-year construction period and extreme chaos caused by the construction. This represents a significant impairment of the functions of Roanoke Park. During this period the school groups who currently walk to the park would have a dangerous trip to the park, and people who come from the south will no longer have easy access.

- Both 10th Avenue and Roanoke Street are to be haul roads; the noise, traffic and dust on Roanoke will adversely impact park visitors.

The SDEIS acknowledges Roanoke Park as a park, but does not acknowledge any constructive or other use. The SDEIS does not give Roanoke Park 4(f) status, but should because the park will be impacted by two or more years of construction, and then permanently harmed by having wider arterials and 520 closer to the park.

- Noise, dust from deconstruction and construction (including changes to 10th Avenue bridge, Roanoke bridge, Delmar bridge, SR 520 and I-5 lid)
- Increased traffic noise from 520 noise because of the 10th Avenue bridge removal
- Increased traffic noise due to removal of buffer vegetation in Parklands East and West. Higher speed traffic on 10th and Roanoke as a result of street realignment and widening
- The park abuts Roanoke Street which has been identified as a haul route
- Roanoke Park will also be adversely impacted by the widening of SR 520, which will leave the park much closer to the highway. In addition, the increased size and speed of the roadway and the increased amount of traffic on the new flyover express lane will increase noise.
The SDEIS fails to evaluate these impacts to Roanoke Park cumulatively and thus errs in assessing the impact to Roanoke Park. Roanoke Park’s function is a safe place for children. It offers a pleasant, quiet place to be in beautiful green space. Dust, dirt and noise all rob the park of its ability to continue to provide these attributes and activities. Construction traffic increase the hazard of coming to the park and definitely will retard ease of access for those who would come to the park. For this two year period Roanoke Park will feel like a place under siege. It will not be able to function as a place of refuge. Given that the lid is extremely unlikely to be constructed at the time SR520 is widened, Roanoke will be increasingly subject to the noise of SR520. In addition, Roanoke Park is impaired by the loss of Bagley Viewpoint during this time as a connecting park to Interlaken, by the closure of Delmar for 9 months, and by the damage done to Parklands East and Parklands West. This creates a cumulative reduction in the quality of experience Roanoke Park can provide to those who come there and will result in a reduction in the number that do. It will also impair park activities, sun bathing, reading, Frisbee games, and the like because the experience in the park and access to the park will be degraded. This drop in features for two years of construction plus ongoing excessive noise, represents a significant, substantial impairment and makes it appropriate to classify as experiencing constructive use by the SR520 project.

- The SDEIS fails to evaluate alternatives which avoid this damage
  - The SDEIS acknowledges the damage, but does not evaluate opportunities to avoid it, nor does it commit to mitigation. SDEIS Chapter 6 page 6-40 says: “Construction of the 10th Avenue and Delmar Drive East lid would affect Rogers Playground, Roanoke Park, Bagley Viewpoint and Interlaken Park. Construction activities will last up to 27 months, creating increased noise, dust, and traffic in areas in close proximity to construction work . . . Because Roanoke Park is adjacent to the proposed haul route along East Roanoke Street, noise and visual effects associated with truck traffic may affect park users.”
  - The SDEIS assumes that a lid will be constructed at the time SR520 is expanded. We now know that is all but impossible. So the failure of the SDEIS to discuss what the lid was to mitigate means that the SDEIS does not describe the adverse impact lack of the lid will have on Roanoke Park.
  - And the SDEIS does not examine all the causes of harm, the widening of SR520 and associated construction could be changed by the 4 lane alternative. The widening of 10th could be stopped or reduced. The widening of Roanoke Street could be stopped or reduced. The harm to Parklands East and West could be stopped or reduced. There are many things which could reduce the adverse impact which the SDEIS has failed to evaluate.
- One of the causes of harm is having Roanoke be a haul route. This is a particularly poor idea for trucks that would have to go up 11th to Miller and then to Tenth Avenue and down to Roanoke. That route should be scrapped for a direct on SR520 routing. (a temporary bridge in the Boyer area to 520) Perhaps any trucks that would be coming to Roanoke via Delmar could also be routed that way. Stock piling material to place behind lid walls would also reduce the need to bring trucks past Roanoke Park.

- The SDEIS fails to evaluate alternatives which would minimize the damage such as those suggested above.

- The SDEIS proposals for mitigation are inadequate.
  - The SDEIS shows the connection between Interlaken and the Arboretum, but does not show or discuss the Interlaken/Bagley/Parklands/Roanoke Park connection. The SDEIS fails to note that rebuilding the connection of Interlaken to Roanoke Park will also require the Roanoke lid, which is presented as an optional mitigation. Please see “10th Avenue to Delmar Lid Discussion” below.

- While Roanoke Park would benefit from the possible 10th and Delmar lid, that mitigation has not been committed to. In describing the impact on Roanoke Park of the 10th and Delmar Lid the SDEIS page 5-55 says, “Although no property would be acquired from Roanoke Park, the 10th Avenue East and Delmar Drive East lid would improve the park’s setting and the experience of park users by reducing freeway noise, and creating a more continuous stretch of open space south of the park. The lid would create new open space and grassy areas for residents in the surrounding area. The 10th Avenue East and Delmar Drive East lid would include pathways to improve connectivity and to provide access across SR 520 improving safety for pedestrians and bicyclists.”

- The SDEIS proposes the 10th Avenue to Delmar Lid as a solution to the noise problem in the area. The proposed location of the lid will not protect Roanoke Park from noise from SR 520 noise coming west of the lid, including the new flyover lane.

- Given that there is no commitment in the SDEIS for construction to any of the lids, and given that it is highly probable that the Tenth and Delmar lid will not be built and therefore will experience both the harm during construction and continuing and potentially permanent harm thereafter, and given the substantial impairment described above, the SDEIS was incorrect in not granting Roanoke Park Constructive Use designation as
part of the adverse 4(f) impact to Roanoke Park due to SR 520 construction

(6) South Forest Area (south of 520 and within the SR 520 right of way)

The South Forest Area is between Delmar & 10th on the south side of SR 520 and extending west along the contour toward Miller Street. This land has the potential to link Interlaken most of the way to Colonnade Park with a trail along the south side of SR 520. The South Forest Area is matched by the North Forest Area on the other side of SR 520.

The area is a grouping of 50-year old trees that are the result of remediation from the original SR 520 construction. It is beautiful and mature landscaping which provides an important visual and sound barrier, both from north Capitol Hill and from Bagley and Roanoke Parks and the adjacent Roanoke historic neighborhood. This land is WSDOT right of way, some of which is well back from the highway now and will remain so after the planned construction (all alternatives). The land is fenced to keep the public from walking too close to the 520 highway, but it provides important landscape continuity extending from Interlaken. Given the steep pitch of the sides of SR 520, all of these trees are seen and enjoyed by the public, used by wildlife, and have provided sound and visual protection of green space, protecting the surrounding historical and residential areas from SR 520 visual blight and noise. As such we believe these lands deserve 4f protection.

The SDEIS describes this area only as WSDOT right of way. However, this land has public and park functions which are 4(f) functions. Thus, any diminishment of these lands and functions should be evaluated in the SDEIS, even though it is WSDOT right of way.

The SDEIS description of the WSDOT right of way in this area is in error. The actual WSDOT right of way property line between 10th and Delmar is significantly further south than is described in the SDEIS, and includes the grassy verge that WSDOT maintains.

The SDEIS shows this forest lies within the construction area and then fails to discuss how much of it will be removed during construction. The SDEIS also fails to acknowledge that removing these trees adversely impacts Interlaken and the visual linkage to Bagley Viewpoint and Roanoke Park.

The function of these forests was to mitigate the existing SR520 and they do that, as an established buffer providing scenic beauty as well as sound absorption. That function and attribute will cease with the felling of these trees. In addition they serve to visually connect Interlaken with Bagley, Parklands East and Parklands West and Roanoke Park.
They also work to mask the visual blight of the road cuts. Expansion of SR520 will expose raw earth or concrete, and will necessitate the removal of many of these trees. The SDEIS circles all of the trees within view of the highway as being within the construction zone. There is no discussion of how many actually will be removed in the process. A very significant removal will be caused by the widening of the road and by the need for access during wall construction. This destruction eliminates the function of these trees and represents constructive use.

The SDEIS fails to evaluate alternatives which avoid this damage.
- Keep 520 at its current width in this area: a 4 land 520 or a 4 lane Portage Bay Bridge.
- Replace the 10th Avenue bridge in a way that preserves the treed area, and keep the 10th avenue bridge as narrow as possible. also impacts these trees as does the planned width.

The SDEIS fails to evaluate alternatives which would minimize the damage.
- The number of trees taken should be addressed in the SDEIS as part of a landscape plan. Areas that don’t need to be destroyed by construction could be set aside and protected.

The SDEIS proposals for mitigation are inadequate.
- The proposed 10th and Delmar lid would mitigate some of this damage; however, that lid is not committed to and is highly likely not to take place at the time SR520 is expanded. The proposed lid design also has issues which are discussed in Notes on the Proposed 10th Avenue to Delmar Lid, page 38.

(7) North Forest Area

The North Forest Area is across SR 520 from the South Forest Area. It is also a mature stand of Pine trees that resulted from original 1963 mitigation. These forests link with forests west of 10th Avenue and mature trees from Bagley Viewpoint down to the waterfront on the north side of SR 520.

The North Forest Area’s 50 year old pine trees are the backdrop for the landscape from Roanoke Park. These are very important buffers to both Interlaken Park and to Roanoke Park, and without these trees the noise and pollution would be much worse in the Roanoke Historic District and in Roanoke Park. The north forest area plays a role in maintaining the original grand entrance and connection between Interlaken and Roanoke Park including the Bagley Viewpoint transition. While there is a fence between these trees and Parklands East and Parklands West, that fence is really not seen, and thus these trees blend into the park area and support its purpose. These trees provide continuity of the park’s visual impact and thus extend the park experience really making it a single experience of an integrated park buffer between Roanoke Park and SR 520.
Also, for all who travel across the 10th Avenue Bridge, the forests on both sides of 520 frame the stunning and unique East-West vista corridor, a tree-lined vista from the Olympic Mountains to the Cascade Mountains. The 50 year old linked forests of trees between Portage Bay and I-5 are also part of a view corridor along SR 520 which has significant value both to neighbors and to the many travelers on 520 and on the city streets.

As with the South Forest Area, the SDEIS describes this area only as WSDOT right of way. However, this land is visually accessible to the public, has provided a park like buffer and green relief to the highway blight and a refuge for wildlife, which taken together are 4(f) functions. Thus, any diminishment of these lands and functions should have been evaluated in the SDEIS, even though it is WSDOT right of way.

The SDEIS fails to acknowledge that these trees lie within the construction area and some or all will be removed as part of the construction. All lie within the yellow construction zone. The SDEIS also fails to acknowledge that removing these trees adversely impacts Roanoke Park and the visual linkage to Bagley Viewpoint and Interlaken. The function of these lands and of these trees is to serve as a buffer from the adverse impacts of SRS20, both sound and visual blight. Removing them represents a significant impairment to these lands and significant damage to adjacent lands. These areas deserve 4(f) status. The loss of the trees represents a taking certainly qualifying as constructive use.

The SDEIS fails to evaluate alternatives which avoid this damage.
  o Back to minimum required width of SR520 already discussed.
  o Not placing temporary 10th Avenue Bridge in location planned. This could be the result of not replacing the 10th Avenue Bridge, or doing the replacement in a different way.

The SDEIS fails to evaluate alternatives which would minimize the damage.
  o Keeping construction equipment away from all trees not directly in the excavation path. This would require a significant change in the yellow construction zone.

The SDEIS proposals for mitigation are inadequate.
  o The proposed 10th and Delmar lid would mitigate some of this damage; however, that lid is not committed to. The proposed lid design also has issues which are discussed in Notes on the Proposed 10th Avenue to Delmar Lid, page 38.

(8) Bagley Stair Trail

See Exhibit 5.4-1 Permanent Park Acquisition at Bagley Viewpoint, Chapter 5 page 5-54.
The Bagley Stair Trail, immediately north of SR 520, links Bagley Viewpoint to the waterfront. It has been in use since 1908 as a treed parkland with a stair and path trail. These stairs are used frequently by residents for a variety of purposes, including as a to-downtown-Seattle route that connects to Colonnade Park via Miller at 10th. The value of this connection to walkers will increase as businesses continue to move into the South Lake Union area. Historically, the Bagley Stair Trail has been maintained by both the Seattle Park Department and by volunteers with recent work by WSDOT on its adjacent right of way.

The Bagley Stair Trail lies within the 520 construction area (Exhibit 27, Page 62 of Attachment 6.) The mature trees that protect the neighborhood from 520 noise and visual blight will be destroyed.

WSDOT took most of the public land adjacent to the stairs and path in 1962 and the SDEIS indicates that the remaining land would now become WSDOT right of way. The SDEIS fails to give this land 4(f) status, which is deserved because of its connection to the Bagley Viewpoint and its long use as public recreation land and Bagley Viewpoint related land.

This land functions as historical public land for recreational purposes. Turning it into an active construction zone represents constructive taking because for up to 6 years it will not be accessible and the actual path will be destroyed. Whether this path should be attached to a reincarnated Bagley Viewpoint will depend on the latter’s location.

The SDEIS fails to evaluate alternatives which avoid this damage.
- A 4 lane 520, or a 4 lane Portage Bay bridge, might permit avoidance.

The SDEIS fails to evaluate alternatives which would minimize the damage.
- This stair and pathway was not taken seriously by the SDEIS so there is no real planning for it, including the potential to keep it open during most of the construction period. All we know is that it lies in the construction zone and may be off limits for years. This combined with the taking of Bagley Viewpoint is clearly constructive use.

The SDEIS proposals for mitigation are inadequate.
- The SDEIS indicates on Ch 2, page 2-9 that the Bagley Stair Trail is important to local residents and suggests it might be rebuilt as part of the proposed new Delmar to 10th lid. However, this mitigation is not committed to and the SDEIS omits a clear description of where and how the trail will be re-built.

(9) Roanoke Street End Park and (11) Street End Parks
Street end parks (11) provide an important way for people to access and enjoy Seattle’s waterfront. Edgar Street End Park is adjacent to the Queen City Yacht Club. Hamlin Street End Park and Shelby Street End Park provide vistas out between the house boats and offer swimming and water access to neighbors as well as the houseboat residents. Neighbors have constructed and still maintain these parks.

The Bagley Stair trail leads, via Boyer Street, to the Roanoke Street End Park (9). While currently undeveloped, this area has been eyed by the community as a developable area for many years. The City of Seattle and its residents value highly all points of public access to Portage Bay, and SDOT is currently developing a street end park program that could support this area. The community has a history of turning these street ends into small parks, including sitting and wildlife viewing areas such as the one on the northwest side of Queen City Yacht Club.

Much of undeveloped Roanoke Street was acquired by WSDOT when it developed SR 520, but a narrow remnant remains as it reaches the water. SR 520, supported on pillars is about 60 feet above. In other locations this type of access has been developed for boat launching. Trees along this undeveloped remainder of Roanoke Street provide an SR 520 screen to neighbors to the north. Roanoke Street widens after it hits the water, and Queen City leases some of Roanoke Street for open moorage.

As part of the proposed SR 520, WSDOT plans to put a waste water treatment facility near this street end. The SDEIS omits consideration of the Roanoke Street End Park Area

This land will be taken by WSDOT into its right of way. That is a 4(f) taking.

- The SDEIS fails to evaluate alternatives which avoid this damage.
  - The Bagley Stair Trail led directly to the waterfront before the development of SR 520 blocked the trail with a retaining wall; this iteration of SR 520 should ameliorate that action by improving public access to the water at this location.

- The SDEIS fails to evaluate alternatives which would minimize the damage.
  - The work that is done at the water’s edge could be done in a way that enhanced future public access and offset the otherwise loss of public access that would result.

- The SDEIS proposals for mitigation are inadequate.
  - The SDEIS plans for waste water treatment omit consideration of this area as a public green space and historical public water access, creating the need to mitigate for future public access to the water. In particular, this area has great potential as a small boat launch location.

(10) Portage Bay
Portage Bay is a major recreational area, used for swimming, boating, University crew training, sailing lessons, private canoes and kayaks as well as power boats, bird watching, nature walks, etc. Many people travel around Portage Bay daily by foot or bike, or by road or by water. The deep open water in the middle of the Bay is owned by the State and is used primarily for water sports and recreation. Portage Bay is a destination recreation area for tourists, who are taken through on tour boats, and for many local day trips. The Bay is also the focal point of hundreds of houses on Capitol Hill, of other homes both north and south of 520, and of many facilities on the University of Washington campus.

The proposed expansion of 520 would adversely impact recreation on Portage Bay as well as adversely impact the historic neighborhoods in Montlake and Capitol Hill.

- The proposal would take property from Portage Bay. The law is clear that if a bridge has pillars in parkland it has to be treated as a 4(f) impact. See USDOT FHA Section 4(F) Policy Paper, Office of Planning, Environment and Realty Project Development and Environmental Review, March 1, 2005, page 27: “Question: do the requirements of Section 4(f) apply to bridging over a publicly owned public park, recreation area, wildlife or waterfowl refuge, or historic site? Answer: Section 4(f) will apply if piers or other appurtenances are physically located in the park, recreation area, wildlife, and waterfowl refuge, or significant historical property.” In this case, all of the area below the bridge, right of way and non-right of way is recreational area meriting 4f status.

- The proposal reduces the public’s ability to enjoy the remaining property, because of the added height and doubling of bulk, threatening shadows, and noise. The public has a right to a peaceful and serene experience while engaging in water activities in this natural public recreational area.

- The expansion will be detrimental to wildlife in Portage Bay.

The SDEIS acknowledges impacts to Portage Bay, but does not fully investigate the minimum impact that could be made on Portage Bay.

- SDEIS Chapter 7 page 7-25 acknowledges “the wider roadway, retaining walls, noise walls, and other structural features introduced by the 6 lane Alternative would create more urban character. The more urban visual character would add to the cumulative effect of other present and future planned development projects contributing to the increasingly urban visual quality of the study area.” This is a polite way of describing urban blight in a beautiful natural setting. By spinning the character of the