



April 14, 2010

CERTIFIED MAIL / RETURN RECEIPT #7009 2820 0001 7283 4113

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

Re: SR 520 SDEIS

Dear Ms. Young:

C-025-001 This letter presents Seattle Yacht Club's ("SYC"), formal response and comments, including all attachments, on the Supplemental Draft Environmental Impact Statement ("SDEIS") issued on January 22, 2010 regarding the SR 520, I-5 to Medina Bridge Replacement and HOV project (project). We have reviewed the documents closely and believe the proposed project will have direct and indirect impacts on Seattle Yacht Club ("SYC") both during and after construction. In order to mitigate these impacts, SYC request that the additional analysis and mitigation identified in this letter be included in the Supplemental Final Environmental Impact Statement ("SFEIS").

C-025-002 **1 - SUMMARY OF COMMENTS**

SYC, a not-for-profit Washington corporation formed in 1909, owns and operates a historically designated clubhouse and marina located in Seattle's historic Montlake neighborhood. The SYC clubhouse, marina, and grounds are listed on the National Register of Historic Places (NRHP). This SYC property is located within the Area of Potential Effect (APE) on Portage Bay and is immediately adjacent to that section of SR 520 that is referred to in the SDEIS as the Portage Bay Bridge ("Bridge"). In addition to our concerns over the impacts to our building and grounds we are particularly concerned about the impacts to Portage Bay and area of traditional significance to the members of our Club.

C-025-003 SYC does not object to the rebuilding of SR 520 between I-5 and Medina. Representatives of the Club have engaged in constructive discussions with WSDOT and its Montlake neighbors about this project for over a decade. Despite the efforts of the community to provide input in the design through the mediation process and other forums, the omissions and lack of specificity in the SDEIS make it difficult to properly assess the potential impacts and adverse effects. The project is presented with indeterminate details on tolling and funding sources and minimal construction detail. None of the State's proposals adequately address the impacts of the proposed project on the neighborhoods immediately adjacent to the Bridge or SYC's historic property.

C-025-001

Since the SDEIS was published, FHWA and WSDOT have developed a Preferred Alternative that is similar to Option A, but incorporates design refinements that respond to community and stakeholder reaction to the SDEIS. WSDOT, through the Section 106 process (36 CFR 800), has continued to coordinate with consulting parties, including the Seattle Yacht Club, to identify ways to minimize or mitigate the effects of transportation corridor construction and operation on the historic properties that are near the corridor.

The Section 106 consulting party process has resulted in a Programmatic Agreement that records the stipulations agreed upon to resolve the adverse effect of the project. The WSDOT planning process is outlined in Chapter 1 of the Final EIS. Chapter 2 of the Final EIS includes a description of the Preferred Alternative. The Final EIS also includes the Final Cultural Resources Assessment and Discipline Report which reflects public comments and contains new analysis.

C-025-002

Comment noted. Responses to the comments that relate to specific concerns are provided per topic in the following.

C-025-003

The SDEIS provided a comprehensive analysis of effects on the environment based on the design information available at that time. The Final EIS provides further information about project funding, tolling, and construction. Section 1.10 describes project costs, including mitigation costs, and funding sources. Section 1.11 describes how tolling will be used on SR 520 and the effects tolling would have on travelers and adjacent communities. Chapter 3 describes construction of the Preferred Alternative. The Recreation Discipline Report Addendum enhances the discussion of recreational boating from the original report. The Final Cultural Resources Assessment and Discipline Report addresses project

- C-025-004** SYC has serious concerns about the proposed project and its expected impact on its historic property and operations. Some of SYC's concerns include:
- Impacts during construction, including limitations of access to the Club via water and land, increased dirt, air pollution, noise, etc.
 - The proposed widening and relocation to the north of the existing bridge.
 - Environmental degradation such as air and water pollution and noise, among others.
 - The impact of tolling on our members' and guests' access to our facilities and adjacent recreational waterfront.
 - Degraded north / south travel times from north Capital Hill to Seattle Children's Hospital will inhibit our members' and guests' access to our facility though added congestion of this corridor.
 - Interference with SYC traditional cultural activities at our Portage Bay property and adjacent waters.
 - The cumulative impacts that degrade our facility such that our membership and revenues from rentals will be reduced.

- C-025-005** Omissions and lack of specificity in the SDEIS make it difficult, and sometimes impossible, to properly assess the potential impacts and adverse effects upon SYC. We understand the purpose of the EIS process is to make it possible for potentially impacted parties to better understand how a project will or might affect them. Yet, in this case, where the project is presented in the SDEIS as a group of alternative and competing plans and because each alternate has different road widths, interchanges, access ramps, and heights; with indeterminate tolling and funding; and unknowable construction details due to the decision to pursue a design-build contract; the potential of the EIS process is not realized.

2 - SPECIFIC COMMENTS

- C-025-006** **The Bridge Footprint**
The SDEIS does not include any GPS coordinates or other specific markers that allow the project's proposed locations to be determined. All of the proposed options provide for a wider, higher and more northerly positioned bridge carrying more traffic. Each of these bridge features will increase the noise, air pollution and visual impacts on our property. The Bridge, as shown in drawings in the SDEIS, Exhibit 2-6 on page 2-11, appears to come right to the edge of those portions of Portage Bay used for Opening Day and our permanent moorage. More specificity regarding the proposed bridge location is required in order to adequately review and comment. Any new Bridge needs to be located within the footprint of the existing bridge.

- C-025-007** **Recreational access to Portage Bay, in the Montlake Cut, Arboretum Waterways and Union Bay**
A significant failing of the SDEIS is the presentation of issues relating to recreation in the Recreation Discipline report. At page 4-28, the full page list of "Recreation Resources in the Project Vicinity" fails to even mention Portage Bay. Portage Bay, the Montlake Cut, Arboretum waterways and Union Bay are vital and heavily used recreational areas for water related activities including swimming, fishing, kayaking, canoeing, and for crew team practices and races. Portage Bay is the central feature of the boating activities of rowing clubs, canoe and kayak rentals, at least three marinas, and the houseboats on the shores of Portage Bay and Lake Union. Portage Bay is used for many events that are vital to the Club's activities including Opening Day, the Junior Sailing program, Special People's Cruise, sailboat

effects on Seattle Yacht Club's historic property. The Social Elements Discipline Report Addendum provides more detail about project effects on neighborhoods and on mitigation measures.

C-025-004

Comment noted. These comments are addressed in detail later in this response.

C-025-005

The EIS process, as defined by NEPA and SEPA, is expressly intended to evaluate a reasonable range of alternatives that meet the project's purpose and need. This was accomplished in the Draft EIS and SDEIS. Since the SDEIS was published, FHWA and WSDOT have developed a Preferred Alternative based on feedback from agencies, Native American tribes, community organizations, and the public. The Final EIS presents the effects of the Preferred Alternative in comparison to the No Build Alternative. The addenda to the discipline reports (Attachment 7 to this Final EIS) provide further detail about potential effects. The response to Comment C-025-003 includes information about funding, tolling, and construction.

C-025-006

Due to the addition of HOV lanes and the need to meet modern safety standards, it is not possible for the new Portage Bay Bridge to remain within the footprint of the existing bridge. Since the SDEIS was published, FHWA and WSDOT have developed a Preferred Alternative that incorporates key features, including an alignment shift to the south at the east end of the Portage Bay Bridge, that respond to the concerns expressed in this comment. A large map showing the Portage Bay Bridge footprint is in Chapter 2 of the Final EIS. Also described in Chapter 2, WSDOT analyzed the advantages and disadvantages of raising or lowering the roadway profiles. WSDOT also worked to reduce

- C-025-007** races, and family sail nights. Despite the importance of these activities to the SYC and the community, the SDEIS does not review the impacts of construction on these activities. Nor does it review the long-term impact of any new bridge on the recreational activities after construction.
- C-025-008** The failure to speak to the impacts on Portage Bay is also in evidence at page 3-3. There, all of the “typical construction equipment” is listed. However, no barges are included. Without any attempt to describe the numbers, placement, and duration of barges in Portage Bay, it is impossible to assess their impact. Barges located in Portage Bay have the potential of adversely impacting Opening Day, junior sailing programs, small boat racing programs, marina, and restaurant operations. Assessing the degree of impact is impossible as the SDEIS does not include any analysis of how WSDOT will avoid or minimize adverse effects to recreation from construction in Portage Bay.
- C-025-009** Additionally, the Montlake Cut is the only marine access from Lake Washington to Portage Bay, Lake Union, the Ship Canal and Puget Sound. Thousands of recreational boat trips through the Cut are made each year. Yet it is also not listed in the SDEIS as a recreational resource. The SDEIS indicates on pages 106-107 that the Montlake Cut and the second bascule bridge will be closed for a period of three weeks during construction. If this closure occurs during the Opening Day time period holding that event would be impossible. The SDEIS makes no mention of scheduling this work to avoid or minimize adverse effects. There may also be long-term impacts to the SYC through increased limitations on the movement of sailboats and other large vessels that are taller the 46'-0" between Lake Washington and Portage Bay with the requirement of opening a second Montlake bridge.
- C-025-010** A significant failing of the SDEIS is the presentation of issues relating to recreation in the Recreation Discipline report.
- C-025-011** **Noise:**
Allowable noise levels are set by the City of Seattle and we expect the construction process and end design to meet those requirements. While we agree that noise is a *direct* effect since it is detected by people only while close to the SR 520 corridor, for SYC there are also probable *indirect* effects for SYC from the increase in noise from the bridge being closer and with more lanes of traffic. Specifically these impacts include less SYC club usage in all forms with resultant economic impacts of less moorage revenue, less banquet revenue, and less outside restaurant revenue as moorage holders and club patrons respond to the lessened desirability of mooring boats and holding events at the Club.

The SDEIS's assumptions about transit usage and the proportion of quieter vehicles on the road over time are indefensible claims for this report time frame of 2030 (only 20 years). An analyst could just as easily conclude there will be more noise resulting from population growth and more vehicles and mass transit vehicles on the road.

The technical report at pages 5-6 shows the no build bridge as 60 feet wide but the 6 lane at 115+ feet wide (and this does not include the width of the westbound 520 Montlake on-ramp) putting all that traffic and noise much closer to SYC than in the no build alternative. This proximity will certainly increase noise and pollution at the Club.
- C-025-012** Finally, the SDEIS states that construction would produce noise and vibration, especially from major construction activities such as pile driving, demolishing existing structures, hauling, and concrete

the footprint of the project wherever possible while complying with safety and operational standards. Noise, air quality, and visual effects associated with the Preferred Alternative are discussed in Chapter 5 of the Final EIS.

C-025-007

The Recreation Discipline Report Addendum enhances discussion and analysis of recreational boating in the original report. See the Affected Environment and Potential Effects sections of the Addendum in Attachment 7 to the Final EIS.

C-025-008

Barges would be used for staging during construction of the Portage Bay Bridge. Barges stationed in Portage Bay would be located within the limits of construction defined for the project (see Chapter 3 of the Final EIS). Barges would also use Portage Bay and the Ship Canal, via the Montlake Cut, to access Lake Washington. Pages 3-14 through 3-17 of the SDEIS describe the construction of the Portage Bay Bridge. An updated description for the Preferred Alternative is in Chapter 3 of the Final EIS. Barges that would be used for construction in Portage Bay would be stationed so as to not interfere with access to and from the two yacht clubs. The Recreation Discipline Report Addendum provides information on overall mitigation anticipated for recreational effects from use of barges. WSDOT will continue to coordinate with Seattle Yacht Club to ensure that Opening Day activities are not adversely affected by construction and that effects on other Seattle Yacht Club activities are minimized as much as possible. The Recreation Discipline Report Addendum (Attachment 7 to the Final EIS) contains a more detailed discussion.

The Section 106 Programmatic Agreement (Attachment 9 to the Final EIS) and the Mitigation Measures section of the Navigable Waterways Discipline Report Addendum (in Attachment 7 to the Final EIS) state that

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- C-025-012** pumping. During heavy construction periods, noise levels could reach very high levels (85 to 105 A-weighted decibels [dBA]) at 50 to 100 feet from the activities, and these effects would be above the traffic sound levels normally experienced within 500 feet of the right-of-way. We believe short-term and long-term measures are needed to avoid any increased noise arising from the Portage Bay Bridge.
- C-025-013** **Air Pollution**
The SDEIS fails to address several critical issues relating to air pollution raised by this project as outlined below. Without addressing these issues the general report is inadequate, incomplete and unacceptable.
- The SDEIS does not review the Ozone Impacts per EPA standards for this project.
 - The SDEIS does not review Air Toxic Impacts for this project does not present an adequate assessment.
 - The SDEIS does not address the deposition of Air Toxic particles for this project.
- C-025-014** **Tolls**
Another significant limitation of the SDEIS is an analysis of the impact of this project from the planned tolling. In the DSEIS, WSDOT makes the assumption that no tolling would be imposed under the "No Build" Option. This is contradictory in that the SDEIS states that tolling was authorized by the Legislature in order to manage congestion (page 1-33) even though under the current statute it is limited to a preconstruction toll. WSDOT fails to analyze whether, with a toll operated in a manner to reduce traffic congestion, a four lane configuration might be adequate for the Project needs. This is in violation of WSDOT's duty to avoid and minimize the impact on historic Montlake Neighborhood and SYC and a material defect in the SDEIS.
- C-025-015** Additionally, the lack of specific information about the potential tolling rates makes it impossible to fully analyze the impacts of those tolls on the SYC. The uncertainties of tolling are compounded by the fact that the Legislature has authorized only preconstruction tolling and the final tools have not yet been determined. The SDEIS states its assumption that a maximum toll rate of \$3.81 would apply but indicates that the actual rates have not been determined (page 1-34). Regardless of the final rate, tolling has the potential to severely impact the continued operation of the Club as approximately 30% of our members reside east of Lake Washington. Many of these members may choose to find other locations to moor their boats and patronize businesses that do not require paying a toll.
- C-025-016** **Access to the Club**
Land Access
The SYC is also concerned that the SDEIS provides inadequate concern for limitations to the Montlake neighborhood and Portage Bay during construction. The SDEIS acknowledges that local street operations will be affected but provides only general statements on those affects and/or potential remediations. Access to our facilities is critical for our continued public and member operations. The SDEIS does not provide sufficient detail to permit an intelligent analysis of these impacts.
- C-025-017** Marine Access
Additionally, the SDEIS completely omits navigation issues for the boating and recreation community during the construction period other than vague comments on bridge related closures. The ability to access SYC from the water side and for boats to move freely through Portage Bay is crucial to general Club activities, the operation of the sailing school, and events sponsored for the community events such

WSDOT would suspend in-water barge work and pontoon towing in Portage Bay on Opening Day, as well as one week before and one week after Opening Day. Please see Section 6.14 of the Final EIS and the Navigable Waterways Discipline Report Addendum for the mitigation measures that specifically address navigation channels.

C-025-009

The Recreation Discipline Report Addendum has an updated discussion and analysis of recreational boating, including recreational use of Portage Bay. Please see the Affected Environment and Potential Effects sections of the Addendum in Attachment 7 to the Final EIS. The comment incorrectly characterizes the closures of the Montlake Cut. The discussion on page 6-107 of the SDEIS states that the Ship Canal at the Montlake Cut would be closed for a total of 6 days spread over a period of at least 9 days. The discussion also states that curing the concrete deck of the new bascule bridge would require 3 weeks, during which the bascule bridge could not be raised and would therefore restrict passage of vessels with a vertical clearance of more than 46 feet. However, this restriction would not occur with the design refinements in the Preferred Alternative. If the final design includes a concrete bridge deck, each leaf would be cast separately so that one leaf may remain open during curing. Please see Section 6.14 of the Final EIS for more details.

WSDOT will continue to coordinate with Seattle Yacht Club to ensure that Opening Day activities are not adversely affected by construction. WSDOT has committed to suspending in-water barge work and pontoon towing in Portage Bay on Opening Day, as well as one week before and one week after Opening Day. Please see Section 6.14 of the Final EIS and the Navigable Waterways Discipline Report Addendum (Attachment 7 to the Final EIS) for the mitigation measures that specifically address navigation channels.

The Preferred Alternative includes a second bascule bridge parallel to

C-025-017 as Opening Day. Any changes to access to the waters of Portage Bay would have significant impacts on club revenues and our ability to maintain our historic facility.

C-025-018 **Impact on Club Operations**
The ability to maintain the historic structure is dependent upon the economic and operational viability of the Club. The SDEIS at page 61 of the Land Use, Economics, and Relocations Discipline Report states "Operation (of the completed 520 project) would not indirectly affect the REGIONAL economy, except through beneficial effects of improved transportation efficiency." The SDEIS omits an analysis of LOCAL economic effects of the project. It ignores entities like SYC that are located within the construction zone and immediately adjacent to the completed Project, focusing instead on entities at commuter beginning or end points.

C-025-019 The SDEIS does state on page 62 (under the "Social Elements" section) of the technical report that
Construction effects on adjacent communities would include increases in noise, dust, traffic congestion and lane closures; partial closures of sidewalks and bicycle routes/pedestrian trails; and visual clutter in residential, business, and park areas adjacent to construction zones. These effects could temporarily affect community cohesion and limit connections to community resources, patronage at neighborhood businesses, or use of recreational amenities.
We agree with this description of adverse effects but also believe some of the effects would extend beyond the construct period and become permanent rather than temporary in nature. The much larger bridge (a 115+ foot wide bridge plus additional encroachment towards SYC and into Portage Bay from the proposed westbound on-ramp onto 520 from the Montlake Interchange vs. the 60 foot wide no-build alternative) will significantly change the visual environment at the club. This additional visual obstruction and an almost certain increase in noise, filth, and air pollution will have reduce the appeal of the SYC as a facility for banquets, dining, moorage, and social interaction. The loss of this appeal will cause a significant negative economic impact on the SYC.
SYC's operational and economic viability depends on the revenues generated by members and guests having good access to our facility. SYC is a member operated club rather than professionally managed. Member committees decide and implement Club policies. Access and usage limitations would directly and immediately impair the member committees' ability to manage its historic structure and traditional activities.

C-025-020 The analysis for the "Economic Activity" section of the technical report only focuses on macro level economic impacts and omits micro or local level economic impacts. This omission makes a review of this issue impractical at this time.

C-025-021 **Cultural Resources Analysis**
The SYC believes that the impacts to Cultural Resources, required under NEPA and under Section 106, have not been fully examined. The Cultural Resources report underestimates the effects to the National Register listed Seattle Yacht Club due to the significantly increased encroachment of the new Portage Bay Bridge. The project will result in adverse effects under 36CFR 800.5 as it will "diminish the integrity" by significantly degrading the setting and feeling of the property. The report also fails to consider how cumulative effects from visual changes, disruptions to access during construction, and long-term

the existing Montlake bridge, as did SDEIS Option A. Bridge height would be similar to the existing Montlake bridge, and effects on navigation would be minimal because of the similar designs and the ability to synchronize opening the existing and proposed bridges. Please see Chapter 2 of the Final EIS for a description of the Preferred Alternative and page 46 of the Navigable Waterways Discipline Report for a discussion of project effects on waterway operation.

C-025-010

The Recreation Discipline Report does, in fact, present issues related to recreation. The discussions that deal with recreational boating have been updated in the Affected Environment and Potential Effects sections of the Recreation Discipline Report Addendum (Attachment 7 to the Final EIS).

C-025-011

As shown in Exhibit 5.7-3 of the SDEIS, noise walls along the Portage Bay Bridge would reduce noise levels at the Seattle Yacht Club to below the FHWA Noise Abatement Criteria with Options A, K, and L. The Preferred Alternative includes a number of noise management strategies and innovative noise reduction strategies along the corridor that respond to public concerns about noise (see Section 2.5 of the Final EIS). Included in the project design for the Preferred Alternative are 4-foot traffic barriers with noise absorptive coating, which would reduce noise levels in the area of the Seattle Yacht Club by several decibels compared to the No Build Alternative. Noise modeling results for the Preferred Alternative are described in the Noise Discipline Report Addendum (Attachment 7 to the Final EIS) and in Section 5.7 of the Final EIS. With Options A, K, and L, use of the walls would eliminate direct effects, thus there would be no indirect effects. With the Preferred Alternative, because operation of the project would not contribute directly to an increase in noise, it would also not contribute to an indirect effect. Noise analysis performed for the SDEIS and Final EIS have been

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C-025-021 | modifications to mooring and sailing classes may result in economic losses that would result in a change in use of the historic property.

C-025-022 | WSDOT has also failed to consider the importance of Portage Bay as a property of cultural significance to the members of the SYC. Our community has utilized Portage Bay continuously for over 90 years to practice traditional boating activities. The sheltered, freshwater marine environment is essential to the continued operation of our sailing program, a key means by which we transmit knowledge of boating. Portage Bay is also integrally linked to our Club as it is the location of our Opening Day Celebrations. The events are an essential aspect of our group's heritage. The SYC is preparing a determination of eligibility for the eligibility of Portage Bay as a traditional cultural property to submit to the Washington Department of Archaeology and Historic Preservation. We expect that WSDOT will work with us to ensure that the project does not effect our traditional use of Portage Bay.

CONCLUSION

C-025-023 | In conclusion, the SYC is disheartened by WSDOT's failure to meet its statutory obligation to adequately consider and document its efforts to avoid and minimize the impacts of the project. As a result, the potential of the EIS process to allow members of the public to understand the alternatives and provide meaningful comments on how these alternatives will impact our community is not realized. However, SYC remains hopeful that if there is to be a new Portage Bay Bridge that it will be environmentally responsible and not destructive of the neighborhoods through which it passes. We hope that WSDOT will address the concerns raised in this letter so that the resulting project will remain within the footprint of the existing bridge, offer access and exits no less favorable than those that now exist and of similar size, create no further degradation of water and air resources, maintain or improve existing noise levels, and have no adverse visual impact over that already existing. Such a bridge would not have cumulative effects that exceed the impacts on the community of the existing bridge and would not interfere with SYC traditional culture and activities in the waters of Portage Bay.

Should you have questions or wish to discuss these comments, please contact Steve Hall, SYC's General Manager. His phone is (206) 325-1000.

Attached are more detailed comments addressing specific aspects of the SDEIS.

Sincerely,



Larry McCarthy, Commodore
Seattle Yacht Club

cc: Jack McCullough, Esq., McCullough Hill PS
Kimberly Demuth, Entrix, Inc.

Attachments included

consistent with current FHWA methodology, which is the accepted standard for modeling and mitigation of highway traffic noise.

C-025-012

The SDEIS and Noise Discipline Report provided a comprehensive analysis of effects from traffic noise based on the project design and construction information available at that time. The Noise Discipline Report Addendum provides further information on construction noise effects and mitigation measures. The Seattle Yacht Club would be within approximately 350 feet of pile driving activities that could occur over a period of 24 non-consecutive months. Pile driving would occur primarily at the beginning of construction, during work bridge installation and that work is most likely to occur between September and January.

Evaluating and managing noise related to construction is an ongoing process for WSDOT that only ends when construction ends. WSDOT would obtain a noise variance prior to start of work if the work exceeded allowable levels established City of Seattle code. It is anticipated that the applicable construction permits and approvals obtained from the City of Seattle for construction would help manage pile driving activities to account for the surrounding environment and that best management practices would be implemented to minimize noise generated from pile driving.

C-025-013

EPA standards for ozone are implemented through regional analysis rather than through project-level analysis. Accordingly, ozone was analyzed as part of the Environmental Impact Statement for Transportation 2040, the regional transportation plan, and is not required to be addressed in this project-level analysis.

A quantitative mobile source air toxics (MSAT) analysis was performed for the Preferred Alternative and the No Build Alternative and is included

Because the following pages of this item are difficult to read, a full page version of this item is included at the end of the response to comments on the SDEIS in the printed version, and in a separate PDF file in the DVD and online version.

	<u>Comment</u> Page/line	<u>Name</u>	<u>Comment by WSDOT</u>	<u>Reviewer comment</u>
C-025-024	Cultural Resources Discipline - Vol 1 iii	E. Van	Once a preferred alternative design has been selected and more detailed construction effects can be evaluated, additional effects determination on historic properties --can be made	This should be noted for follow-up.
C-025-025	vi	E. Van	Comment by WSDOT re pontoon towing	Towing could possibly have an adverse impact on sailing classes or the Special Peoples Cruise.
C-025-026	ix	E. Van	Listing of affected historic properties	SYC not listed
C-025-027	95	E. Van	The SYC is a recreational and cultural institution that supports and enhances the residential quality of the neighborhood (Montlake Historical District)	WSDOT quote that can be used in response letter.
C-025-028	135	E. Van	Once a preferred alternative is selected and construction details can be evaluated, construction effects on historic properties will be thoroughly analyzed before publication of the final EIS"	Note that this does not say that the effects will be discussed with consulting parties nor suggest possible additional mitigation.
C-025-029	X 43	E. Van	Potential Detour Routes. All options would close Lake Washington Blvd. ramps.	The current west bound ramp onto Montlake Blvd. provides the only safe access to SYC. The Lake Washington ramp provides no ability to access a left turn lane to Hamlin. This area will also be a haul route.
C-025-030	140	E. Van	Inwater construction activities are allowed only from Octobe 1 through April 15.	There is no discussion of barge traffic nor anchoring which could adversely impact SYC public sail classes, Opening Day and Special
C-025-031	164	E. Van	Discusses the absence of in-water construction activities from April 15 through Oct. 1	See comment next above.

in the Air Quality Discipline Report Addendum (Attachment 7 to the Final EIS). The analysis shows that differences in MSAT emissions between the Preferred Alternative and No Build are negligible and that all MSAT emissions are expected to decrease significantly from existing conditions. Although available models do not address the deposition of air toxics, the overall reduction in MSAT emissions indicates that deposition of air toxics would also be reduced.

C-025-014

The comment is correct in stating that the SDEIS transportation analyses did not assume tolling of the No Build Alternative. As explained on page 1-37 of the SDEIS, the SR 520 Variable Tolling Project will implement tolling on SR 520 in 2011 for the primary purpose of managing traffic congestion. This toll would remain in place until the construction of the SR 520, I-5 to Medina project and would then be replaced with new tolls adopted by the Transportation Commission to provide project funding in accordance with the financing plan. Although the state Legislature has authorized allocation of revenues from the Variable Tolling Project to fund the SR 520 Pontoon Construction Project and the SR 520, Medina to SR 202: Eastside Transit and HOV Project, the toll would be removed when the bonds for those projects are repaid, which is expected to be before 2030. Therefore, if the SR 520, I-5 to Medina project were not built, there would be no toll in effect in 2030, which is the year used to compare the No Build Alternative and the Build alternatives. This is why the baseline No Build Alternative assumption is that the SR 520 corridor would not be tolled.

The 4-Lane Alternative evaluated in the 2006 Draft EIS was assumed to be tolled, and was determined not to meet the project purpose and need. As discussed in Chapter 2 of the Final EIS, tolled and "transit-optimized" 4-lane alternative options also would not satisfy the project purpose and need, and therefore have not been advanced for the project. The EIS process, as defined by NEPA and SEPA, is intended to evaluate a

reasonable range of alternatives that meet the project's purpose and need. See Chapter 2 of the Final EIS for further information.

C-025-015

As stated on page 1-34 of the SDEIS, actual toll rates will be established based a financing plan adopted by the Legislature, with rate structure determined by the Transportation Commission. The Final EIS analyses assumed a maximum passenger car toll of \$3.81 in 2007 dollars, which is the same as that assumed and reported in the SDEIS. This estimate represents a reasonable assumption based on project financing studies conducted to date for consideration by the Legislature and Transportation Commission. Detailed information about the range of tolling scenarios considered in these studies is publicly available in the SR 520 Program library, <http://www.wsdot.wa.gov/Projects/SR520Bridge/Library/technical.htm>, under Finance Reports, and on the Tolling Implementation Committee web-page, <http://www.wsdot.wa.gov/Partners/Build520/choices.htm>. Section 1.11 of the Final EIS provides further discussion of tolling.

C-025-016

The SDEIS provided a comprehensive analysis of effects based on the project design and construction information available at that time. Chapter 10 of the Final Transportation Discipline Report, included in Attachment 7 to the Final EIS, provides further discussion of access to the Montlake and Portage Bay area during construction.

C-025-017

The Recreation Discipline Report and the Navigable Waterways Discipline Report discussed navigation issues for the recreational boating community during construction based on the project information available at that time. The addenda to these discipline reports, included in Attachment 7 to the Final EIS, provide updated descriptions of effects

	Document Page/line	Name	Comment by WSDOT	Reviewer comment
C-025-032	P 169 Cultural Resources Discipline - Vol 1	E. Van	Pontoon Construction and Transport. Pontoons would not be towed on Opening Day and there would be no room for other boats during towing.	Opening Day activities occur 1 week prior and 1 week after Opening Day. Interference with activities at that time would adversely impact Opening Day itself.
C-025-033	P 194	E. Van	Mitigation. Discusses cleaning of historic buildings at the conclusion of construction.	Construction is expected to last four years for the Montlake Interchange and Portage Bay bridge. Mitigation should include annual inspection and cleaning, if warranted.
C-025-034	P 195	E. Van	Mitigation. WSDOT would coordinate with SYC so that pontoon towing would not interfere with Opening Day or other important social maritime activities.	How and when? What about barges with build-materials moving in and out or anchored in Portage Bay?
C-025-035	P 196-7	E. Van	List of mitigation properties.	SYC is not included in the list.

From:
Sent:
To: Kip Cramer
Cc:
Subject: SR 520 SDEIS and Section 4(f)/6(f)Evaluation; comments onKip<

Comments:

C-025-036

1. The references to the Seattle Yacht Club are included as an Historical Property in the Montlake Historical District. No mention is made for the disruption of the Club's OPERATIONS I.E. (a) Food and Beverage Revenue impacts, both during construction and the completed project. and, (b) disruptions to member usage of the facilities (docks , special functions (wedding receptions), and Opening Day, et al). These potential revenue changes could bring the Club into financial distress both in terms of current member obligations, and make it harder for the Club to attract new members to insure its continuation as a viable facility.

2. These items of omission may be addressed in other sections of the SDEIS , but, they are not in this section.

3. The SDEIS indicates that any and all impacts are de minimus, for the section reviewed here. For this facility to be only minimally impacted flies in the face of commonsense .

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to recreational boating and navigation channels, respectively, based on additional construction scheduling and sequencing information that was developed for the Preferred Alternative after the SDEIS was published. Temporary work bridges in Portage Bay could limit recreational boat access to and from areas south of the Portage Bay Bridge. Please see the response to Comment C-025-008 regarding barges in Portage Bay during construction.

C-025-018

This comment is actually in reference to page 7-20 of the SDEIS. Page 61 of the Land Use, Economics, and Relocations Discipline Report addressed the economic effects of project construction and page 81 addressed the economic effects of project operation. Both discussions include an analysis of local effects based on the predicted level of traffic congestion, reduced parking, and noise levels. Section 6.2 of the Final EIS addresses the Preferred Alternative and describes the expected construction-related traffic congestion in the I-5 and Montlake areas and how entities within the construction zone could be economically affected. Additional information is also provided on how construction will be staged such that traffic congestion and delays will be minimized.

C-025-019

Chapter 6 of the SDEIS focused on the construction effects that the 6-Lane Alternative options would have on traffic, communities, and ecosystems. Chapter 5 of the SDEIS focused on the types of permanent effects discussed in the comment and includes an analysis of the visual environment, including views looking southwest from the Northwest Fisheries Science Center toward Portage Bay Bridge. Chapter 5 also noted that the project is expected to reduce air pollution compared to the No Build Alternative and would improve water quality by collecting and treating stormwater.

WSDOT will continue to work with the Seattle Yacht Club, through the

Seattle Yacht Club Comments on
SR 520 Bridge Replacement HOV Project SDEIS Report
(Construction Windows) (2)

C-025-037 | Subject: Adverse Effects on Cultural Resources

Reference: Chapter # 3, Page 3 - 7
Section #4(f)/6(f) Evaluation, Page 17

Standing: Seattle Yacht Club (SYC) is a **Consulting Party** to the planning and construction of the SR 520 bridge replacement project. SYC is a historic site and is listed on the **NRHP**. As such, SYC has applied for and was granted "**Consulting Party**" status by WSDOT and there by qualify for Section 106 protections. In addition, WSDOT is obligated to make a 4(f) analysis that requires them to avoid, minimize or mitigate any use of a historic property.

Cultural
Element:

C-025-038 | Seattle Yacht Club realizes that the SR 520 project contractors must have access and egress to the SR 520 highway rights of way in order to accomplish the bridge replacement and other activities.

In Chapter #3, page 3-7, WSDOT explains that certain agencies require that contractors cannot perform "In Water" construction work in the Lake Washington Ship Canal from October 1 through April 15 of each year. In draft Section # 4(f)/6(f) Evaluation of the SDEIS, WSDOT explains that the Pontoon Towing will take place during the months of March through April.

Attachment #7, titled "Cultural Resources Discipline Report for the SDEIS", at page 140 explains how the Window of Opportunity for not working in the water and for towing bridge pontoons into Lake Washington from Aberdeen conveniently do not conflict with the cultural activities of the club. This assertion by WSDOT is not correct and therefore SYC is Adversely Effectuated.

C-025-039 | SYC appreciates that WSDOT will **not** be towing pontoons on and during Opening Day of Boating Season. Our Sailing Instruction classes run 5 days a week from 9:00 am to 3:00 pm each day, generally mid June until Labor Day. Our Marina is open 24/7. To facilitate SYC cooperation with the bridge replacement project, SYC would appreciate receiving any notices that WSDOT and/or the contractor can give on Ballard Locking Operations associated with their vessels and/or Pontoon Towing.

NEPA and Section 106 processes, to avoid, minimize, and mitigate the project's adverse effect. No access interruptions are expected at this point, and any disruption to Seattle Yacht Club activities would be minimized. For example, WSDOT would suspend pontoon towing in Portage Bay on Opening Day and the week before and after Opening Day, and WSDOT is working to allow access to the southern portion of Portage Bay for smaller watercraft via a constructed underpass on the work bridges. WSDOT has determined that the integrity of the historic property would not be diminished by operation of the project, but would be temporarily diminished by construction (see the Final Cultural Resources Assessment and Discipline Report in Attachment 7 of the Final EIS).

Once completed, the SR 520, I-5 to Medina project will improve mobility, access, neighborhood connectivity, air quality, and water quality in the project area. Depending on the mitigation measures agreed to by neighboring property owners, it also has the potential to substantially reduce noise in the corridor. Although construction may result in long periods of disruption, WSDOT is committed to working with neighborhoods and affected property owners to minimize these effects as much as possible.

Regarding the appeal of the SYC facilities, potential future behavior of its members and patrons, and inferred potential economic effects on the SYC, the NEPA process avoids speculative conclusions regarding the future actions of specific individuals or groups where supporting evidence is lacking. However, through the Section 106 consultation process, WSDOT determined that construction may temporarily diminish the integrity of the Seattle Yacht Club as a historic property. If not mitigated, the construction impacts causing potential access and usage limitations could result in an economic effect to the facility. If reduced patronage were to occur from the access and usage limitations, the Club's ability to manage its historic structure and conduct its traditional

C-025-039

SYC would be pleased if WSDOT would give notice to Mr. Brian Ledbetter of the Seattle Yacht Club so that he can coordinate the Waterfront Activities with the needs of WSDOT and their contractors.

C-025-040

The Seattle Yacht Club objects to any bridge design and/or construction activity that further encroaches into the navigable waters of Portage Bay; especially in those areas designated by Section 106 as an **Areas of Potential Effect (APE)**. Seattle Yacht Club's sailing culture is and will be **Adversely Effected** under Options A, K and L by the SR520 Bridge Replacement and HOV Project during construction. The Club fully expects the Memorandum of Agreement to include provisions that will completely mitigate all **Cultural Resource** conflicts arising from the SR 520 bridge project.

3/24/2010

activities, which are protected as a character defining feature under Section 106, may be affected. Measures to avoid, minimize and mitigate these effects are stipulated in the Programmatic Agreement.

C-025-020

Please see the response to Comment C-025-018 regarding local economic effects.

C-025-021

The SDEIS provided a comprehensive analysis of effects based on the design information available at that time. The effects mentioned in the comment would be considered direct effects, rather than cumulative effects, under NEPA and SEPA (please see the definition of cumulative effects on page 2 of the Indirect and Cumulative Effects Discipline Report). The Final Cultural Resources Assessment and Discipline Report (Attachment 7 to the Final EIS) includes an additional, more in-depth analysis of project effects to cultural resources, including the Seattle Yacht Club, that was conducted for the Preferred Alternative. See the Potential Effects section of the discipline report in Attachment 7 to the Final EIS. This analysis was conducted with the aid of extensive involvement by the Section 106 consulting parties, including the Seattle Yacht Club, and its findings are reflected in the Programmatic Agreement for the project (Attachment 9 of the Final EIS). For information on the involvement of the consulting parties in the project following publication of the SDEIS, see the Final Cultural Resources Assessment and Discipline Report.

Access to the Seattle Yacht Club will be maintained during construction. Chapter 10 of the Final Transportation Discipline Report (Attachment 7 to the Final EIS) provides additional analyses of local street conditions and congestion issues during construction. The SDEIS analyzed congestion and access-related issues for their potential to have an effect on local businesses and local economic activity, and more information

DRAFT

Air Quality Discipline Report Review

- C-025-041** | The Air Quality Discipline report and the DEIS discussion and conclusions based on this report are deficient and must be redone. Specific deficiencies are:
1. Ozone impacts were not addressed. The region is currently undergoing a reclassification to non-attainment by USEPA. A non-attainment designation will require strict additional controls on VOC sources even consideration of reduced auto use within the region. Offsets for any projected increases VMT will have to be mitigated.
 2. The impacts of the air toxics emissions associated with the 520 bridge replacement were not properly addressed. The existing high risk associated with current diesel particulates (DP) will be negatively influenced by the proposed project alternatives. Any such increases are probably not acceptable risks to the community adjacent to the proposed property.
 3. The added cancer risk associated with the construction phase of the project was not quantified. A constructive time frame of seven or more years would add 10% to a lifetime cancer risk.
 4. The deposition of air toxics is not adequately addressed. Roadway runoff is partially mitigated by collection and treatment techniques. However, the direct aerial deposition into the aquatic environment is not mentioned or

has been provided for the Preferred Alternative. While disruption caused by construction would have some effect on local businesses, with the proposed mitigation measures, the effects would not be severe (see the Land Use, Economics, and Relocations Discipline Report and its addendum in Attachment 7 to the Final EIS). With the Preferred Alternative, Seattle Yacht Club would not lose temporary or permanent moorage space (see the response to Comment C-025-176), and the project would not require any temporary or permanent acquisition of club property. Long-term or permanent adverse economic effects on local businesses are not expected to result from the project (see the Land Use, Economics, and Relocations Discipline Report and its addendum). While sailing classes may not have access to some portions of Portage Bay during construction due to the presence of work bridges and barges, long-term or permanent modifications to the Seattle Yacht Club's sailing classes are not expected to result from the project (see the Recreation Discipline Report and its addendum in Attachment 7 to the Final EIS). As noted in the responses to previous comments, WSDOT has committed to suspending in-water barge work and pontoon towing in Portage Bay on Opening Day, as well as one week before and one week after it.

As required by Section 106 of the National Historic Preservation Act, WSDOT will implement mitigation measures for any project effect that would potentially diminish the integrity of a historic property. Those measures are contained in the Programmatic Agreement (Attachment 9 of the Final EIS).

C-025-022

The possibility of identifying Portage Bay as a Traditional Cultural Property (TCP) based on its history of boating use was considered during discussions between WSDOT and the Section 106 consulting parties, including the Seattle Yacht Club. As a result of these discussions, the parties agreed to not treat Portage Bay as a TCP, however the area of potential effects was been expanded to include all

C-025-044

discussed. Dioxins/ furans are a listed toxic air pollutant by USEPA. They are emitted by mobile sources, in particular diesel engines. They readily bioaccumulate. They surely impact sensitive ecosystems. This may be a broader oversight, but should be discussed in the DEIS in a qualitative manner.

These four issues are discussed in more detail:

C-025-045

Ozone Impacts

EPA is currently in the administrative process of designating the Puget Sound region as non-attainment for ozone. The region is in non-attainment of the current 8-hour standard of 75 ppb based on monitoring data from the Enumclaw Mud Mountain site. EPA is tightening the standard to a level between 60 and 70 ppb. There are no definitive strategies available to comply with such options short of restrictive auto use. Conformity and offsets will be required. Hence, any increase in traffic associated with the 520 project alternatives will have to be offset somewhere in the region.

The DEIS will have to be redrafted to address this issue and not simply defer it to future permitting consideration.

C-025-046

Air Toxics

The current cancer risk of diesel particulate exposure in the PS region is at unacceptable levels based on analyses by PSCAA and DOE. Levels of DP in the air translates to a cancer risk of more than 400 chances per million according to these Agencies. 100 chances per million is the accepted criteria for cleanup of Superfund sites.

The DEIS fails to assess the air toxics impacts of the alternative options by claiming that the projected traffic counts are below a stated

navigable waters of Portage Bay.

Effects on Portage Bay are described in the Water Resources Discipline Report, Navigable Waterways Discipline Report, and Recreation Discipline Report and have been updated for the Preferred Alternative in the addenda to these reports (see Attachment 7, to the Final EIS). Adverse effects related to Portage Bay are documented through the NEPA process, with mitigation measures outlined in the Final EIS.

C-025-023

Since the SDEIS was published, FHWA and WSDOT have developed a Preferred Alternative that is similar to Option A, but incorporates design refinements that respond to community and stakeholder reaction to the SDEIS. The design of the Preferred Alternative addresses many of the concerns that have arisen regarding transportation (on-ramp and off-ramp) considerations, water and air quality, noise, visual quality, and recreational boating effects. However, due to the addition of HOV lanes and the need to meet modern safety standards, it is not possible for the new Portage Bay Bridge to remain within the footprint of the existing bridge. See Chapter 2 of the Final EIS for a description of the planning process and the Preferred Alternative.

C-025-024

The SDEIS provided a comprehensive analysis of effects based on the project design and construction information available at that time. The Final Cultural Resources Assessment and Discipline Report (Attachment 7 to the Final EIS) provides further analysis of construction effects to historic properties, which was conducted for the Preferred Alternative.

C-025-025

Please see the response to Comment C-025-008.

C-025-046

threshold specified by FHWA Guidance, i.e., 144,000 VPD. This guidance does not apply to the 520 project situation. The claim in the Discipline Report that current Federal DP emission regulations regarding diesel fuel sulfur reduction and off road vehicle emissions will mitigate further impacts are not defensible. Neither the DOE nor PSCAA have set a goal for reducing the air toxics risks in the Region. Oregon DEQ has set One in a million risk per pollutant. DEQ has conducted a comprehensive modeling project for the Portland Region, which maps the risk levels by geographical location, including near freeways and interchanges. This modeling protocol is directly applicable to the 520 DEIS project. The results of such modeling will reflect the potential cancer risk impacts of the 520 alternatives, including the potential risk benefits of reduced traffic volumes in the 520 corridor.

C-025-047

Construction Related and Toxic Risks

Construction machinery is mostly diesel powered. Ambient DP levels will increase to levels above existing levels during the 7 or more years of bridge construction. The incremental exposure that will occur during construction will be in addition to the 70 year lifetime assumed for day to day exposure. These risks were not quantified in the Discipline Report, as they should have been.

Air Toxics Deposition

As described above.

C-025-026

The list on this page is of Exhibits within the Cultural Resources Discipline Report, not of affected historic properties.

C-025-027

The statement about Seattle Yacht Club was included in the Cultural Resources Discipline Report to describe nonresidential resources in the Montlake Historic District.

C-025-028

In the spring of 2010, with the announcement of the Preferred Alternative, WSDOT intensified the outreach process for the Section 106 consulting parties. The Seattle Yacht Club participated in both group and individual meetings with WSDOT representatives to discuss possible effects from the Preferred Alternative that may alter or diminish the integrity of historic properties, and potential mitigation measures. The consulting parties were provided opportunities to review and comment on effects and to suggest and review mitigation measures, as well as to review and comment on the Programmatic Agreement itself. Potential construction effects were discussed as part of this process. The Final Cultural Resources Assessment and Discipline Report (Attachment 7 to the Final EIS) contains additional information on involvement of the consulting parties and the evaluations conducted for the Preferred Alternative. Mitigation measures are stipulated in the Section 106 Programmatic Agreement (Attachment 9 of the Final EIS).

C-025-029

Access to East Hamlin Street and to the Seattle Yacht Club will be maintained during construction. The intersection of the westbound off-ramp at Montlake Boulevard would be reconfigured during construction and would allow for access to the northbound left-turn lane onto Hamlin. Chapter 10 of the Final Transportation Discipline Report provides

Seattle Yacht Club Comments on
SR 520 Bridge Replacement HOV Project SDEIS Report
(Filtb) (7)

Subject: Adverse Effects on Cultural Resources
(Deposition of solid Particulate Pollutants)

Reference: Chapter # 3, Pages 3 – 11 Air Quality
Chapter # 4, Pages, 4 – 53 Air Quality
Chapter # 5, Page 5, 5 – 112 Air Quality
Chapter #6, Page, 6 – 72 Air Quality

Standing:

Seattle Yacht Club (SYC) is a **Consulting Party** to the planning and construction of the SR 520 bridge replacement project. SYC is a historic site and is listed on the **NRHP**. As such, SYC applied for and was granted “**Consulting Party**” status by WSDOT and there by qualify for Section 106 protections. In addition, WSDOT is obligated to make a 4(f) analysis that requires them to avoid, minimize or mitigate any use of a historic property.

Cultural
Element:

Governor Gregoire and the Washington State Legislature want WSDOT to recognize that building highways through communities causes considerable disruption to the inhabitants. For that reason the Governor signed into law a request that the Mediation panel prepare a Projects Impacts Plan (PIP) that included a Health Impacts Analysis (HIA). A HIA is a project feature that is not required by the traditional NEPA/SEPA Statement.

The HIA report has been prepared and submitted to Governor Gregoire by the Seattle/King County Health Department and the Puget Sound Clean Air Agency. The HIA report found that there are several affects resulting from the construction of a highway through a neighborhood that can affect the health of the nearby residents. For example a highway may be constructed through a neighborhood that cuts off a popular hiking/biking trail. This results in a reduced exercise opportunity for the residents and thus an increase in health risks.

Particulate Matter (PM) measuring 2.5 to 10 Microns can be found along the roadway of SR 520. PM is a fine powdery material composed of ground up tires, brake pad linings and unburned diesel fuel. PM when inhaled presents a health risk.

additional analyses of local street conditions and congestion issues during construction.

C-025-030

The effects of barge traffic on marine activities are discussed in detail in the Navigable Waterways and Recreation discipline reports and their addenda. See the response to Comment C-025-008.

C-025-031

Please see the response to Comment C-025-008.

C-025-032

The statement attributed to page 169 of the Cultural Resources Discipline Report is not in the discipline report. The discipline report does not say that there would be “no room for other boats during towing” as stated in the comment. Please see the responses to Comment C-025-008. WSDOT would suspend in-water barge work and pontoon towing in Portage Bay and the Montlake Cut on Opening Day, as well as one week before and one week after Opening Day.

C-025-033

Best management practices will be implemented to avoid or minimize dust resulting from the construction activities in Portage Bay. These measures could include covering loads, wetting disturbed areas, using wind fencing, or spraying exposed soil with water or other dust suppressant (see the Air Quality Discipline Report). An updated list of mitigation measures designed to safeguard historic properties is contained in the Section 106 Programmatic Agreement and in a Community Construction Management Plan (Attachment 9 to the Final EIS), which the Section 106 consulting parties helped develop.

C-025-048

C-025-049

C-025-049

In addressing Air Quality, the Federal Government sets the allowable concentration levels for gaseous pollutants that are emitted from automobiles and other sources. Preventative measures must be taken that keep the air quality within the concentration standards. Solid particulates (PM) in smoke from sources such as fireplaces are not strictly regulated. But in fact, air stagnation alerts are broadcasted on the nightly news.

SR 520 generates large volumes of particulate matter. Depositions of these homogenous collections of particulates are visible nearly every where one might look adjacent to SR 520. Certainly citizen's health is affected when they breathe in these materials. But more antagonizing than breathing these pollutants is their constant deposition on roofs, sidewalks, parking lots, cars, boats and sundecks. This is truly a Health Impact.

Besides being a clear Impact on the neighborhood, it is a nuisance. Consider when you want to have a deck or patio party. Either surface will have to be pressure washed before having the party. Even with covered moorage the particulate matter filters in and onto the boats which then have to be washed off or your clothing will become contaminated. This black filth generated by SR 520 is everywhere. The closer to SR 520 the more filth you have to deal with. Boat owners, whether sail or power driven, go to considerable expense to keep their boats clean. There is a saying in the boating community, "Cleanliness is next to Godliness."

The Seattle Yacht Club objects to any bridge design and/or construction activity that does not include provisions to control the deposition of solid particulate pollutants, especially in those areas designated by the Section 106 as **Areas of Potential Effect** (APE). Seattle Yacht Club's boating culture is and will be **Adversely Effected** under Options A, K and L by the SR520 Bridge Replacement and HOV Project during construction. The Club fully expects the Memorandum of Agreement to include provisions that will mitigate all **Air Quality** conflicts arising from the SR 520 Portage Bay bridge project.

3/24/2010

C-025-034

The exact schedules for pontoon towing and barge traffic have not yet been determined. However, as stated in the Navigable Waterways Discipline Report Addendum (Attachment 7 to the Final EIS), WSDOT would suspend in-water barge work and pontoon towing in Portage Bay on Opening Day, as well as one week before and one week after Opening Day. Steps to notify the club about pontoon towing and barge traffic are described in the Programmatic Agreement (Attachment 9 to the Final EIS).

C-025-035

The section to which this comment refers is entitled, "How could the project mitigate unavoidable adverse effects to historic properties of the built environment?" As described in the text, this was not intended as an exhaustive list of properties receiving mitigation or a comprehensive list of mitigation measures, but a general overview of possible suggestions for mitigation. Specific mitigation measures for the Preferred Alternative, developed through discussions with the consulting parties in the Section 106 process, are detailed in the Programmatic Agreement (Attachment 9 to the Final EIS).

C-025-036

Please see the response to comment C-25-019. The results of WSDOT's economic analysis under NEPA and SEPA did not show that the Preferred Alternative would have an economic impact on the Seattle Yacht Club (see the Land Use, Economics, and Relocations Discipline Report and its addendum in Attachment 7 to the Final EIS).

Through the Section 106 consultation process, WSDOT determined that construction may temporarily diminish the integrity of the Seattle Yacht Club as a historic property. If not mitigated, the construction impacts causing potential access and usage limitations could result in an economic effect to the facility. If reduced patronage were to occur from

Seattle Yacht Club Comments on
SR 520 Bridge Replacement HOV Project SDEIS Report
(Opening Day)

Subject: Adverse Effects on Cultural Resources (1)

Reference: Chapter # 5, Page 5-82 to 5-87 Cultural Resources- Portage Bay.
Chapter # 6, Page 6-57 & 6-59 Cultural Resources-Portage Bay.

Standing: Seattle Yacht Club (SYC) is a **Consulting Party** to the planning and construction of the SR 520 bridge replacement project. SYC is a historic site and is listed on the **NRIIP**. As such, SYC applied for and was granted "**Consulting Party**" status by WSDOT and there by qualify for Section 106 protections.

Cultural
Element:

C-025-050

Each year on the first Saturday in May, Seattle Yacht Club sponsors "The Opening Day of Boating Season" (Opening Day). This festive event kicks off the season long calendar of boating activities. The program for the day starts with a Commissioning Ceremony that recognizes the Commodores from over 100 visiting Yacht Clubs from the Pacific Northwest and Canada. The ceremony is followed by an International Rowing Regatta sponsored by the University of Washington Crew that features the Windemere Cup challenge race. Rowing crews from all over the world have been invited to challenge race. The regatta is followed by the World Famous Parade of Boats through the Montlake Cut that lasts up to four hours. Decorated boats are judged and receive awards for design decoration in many categories. Thousands of spectators line the race course and Montlake Cut in their boats to view the festivities. Opening Day is the last "free to the public" major event left in Seattle. The waters of Portage Bay and the Montlake Cut are an excellent venue for these events.

Opening Day has been staged each year since before the turn of the past century. First held on Elliott Bay, Opening Day was moved to Portage Bay and the Montlake Cut on May 1, 1920, ninety years ago. Nearly a full week of activities proceeds and follows Opening Day. The Canadian Yacht Clubs participate in an International Exchange that reaches across our common border.

C-025-051

The Seattle Yacht Club objects to any bridge design and/or construction activity that further encroaches into the navigable waters of Portage Bay and the Montlake Cut; especially in those areas designated by Section 106 as **Areas of Potential Effect (APE)**. Seattle Yacht Club's boating culture is and will be **Adversely Effected** under Options A, K and L by the SR 520 Bridge Replacement and HOV Project both during construction and in commercial operation. The Club fully expects the Section (106) Memorandum of

the access and usage limitations, the Club's ability to manage its historic structure and conduct its traditional activities, which are protected as a character defining feature under Section 106, may be affected.

Measures to avoid, minimize and mitigate these effects are stipulated in the Programmatic Agreement.

C-025-037

Section 4(f) stipulates that WSDOT cannot use a "...Section 4(f) property unless a determination is made under paragraph (a) or (b) of this section. (a) The Administration determines that: (1) There is no feasible and prudent avoidance alternative, as defined in §774.17, to the use of land from the property; and (2) The action includes all possible planning, as defined in Title 23 Code of Federal Regulations (CFR) Part 774.17, to minimize harm to the property resulting from such use; or (b) The Administration determines that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a de minimis impact, as defined in Title 23 CFR Part 774.17, on the property."

The Seattle Yacht Club is not addressed in the Section 4(f) evaluation because it would not experience a Section 4(f) use—that is, WSDOT would not acquire or use any of the property for the project. Therefore, WSDOT is not required to evaluate avoidance and minimization alternatives for this resource under Section 4(f).

C-025-038

As described in the SDEIS, WSDOT is required to adhere to the in-water work windows set forth by natural resource agencies. WSDOT will perform construction activities in the lakes and bays only during those times. The comment incorrectly characterizes the statement on page 140 of the Cultural Resources Discipline Report regarding effects on Seattle Yacht Club marine activities. Page 140 stated that construction work

C-025-051

Agreement to include provisions that will completely mitigate all **Cultural Resource** conflicts arising from the SR 520 bridge project.

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bridges and barges “might occasionally interfere with Seattle Yacht Club marine activities in Portage Bay.” However, the Programmatic Agreement will ensure that pontoon towing and barge traffic are suspended during, and do not interfere with, the Opening Day of boating season ceremonies. The Programmatic Agreement also outlines the steps for notifying the Seattle Yacht Club about upcoming towing and traffic throughout the construction phase of the project. Also, please see the Mitigation Measures section of the Navigable Waterways Discipline Report Addendum (Attachment 7 to the Final EIS).

C-025-039

WSDOT noted on page 51 of the Navigable Waterways Discipline Report that the U.S. Coast Guard could electronically distribute a “Local Notice to Mariners” to alert local commercial and recreational boating communities about temporary navigation channel closures. The Navigable Waterways Discipline Report Addendum (Attachment 7 to the Final EIS) provides further detail. Steps for notifying the Seattle Yacht Club about pontoon towing and barge traffic are outlined in the Programmatic Agreement (Attachment 9 to the Final EIS).

C-025-040

WSDOT, through the Section 106 consulting party process, has coordinated with affected parties to identify ways to minimize or mitigate the effects of corridor construction and operation on historic properties. The consulting party process resulted in a Programmatic Agreement that details the measures taken to avoid, minimize or mitigate those effects.

C-025-041

Please see the response to Comment C-025-013. EPA standards for ozone are implemented through regional analysis rather than through project-level analysis.

Seattle Yacht Club Comments on
SR 520 Bridge Replacement HOV Project Report
(Montlake Mess) (6)

Subject: Adverse Effects on Cultural Resources (Hamlin/Shelby access/egress)

Reference: Chapter # 4, Pages, 4-1
Chapter # 5, Page 5-1
Chapter #6, Page, 6-1

Standing: Seattle Yacht Club (SYC) is a **Consulting Party** to the planning and construction of the SR 520 bridge replacement project. SYC is a historic site as listed on the **NRHP**. As such, SYC applied for and was granted "**Consulting Party**" status by WSDOT and there by qualify for Section 106 protections. In addition, WSDOT is obligated to make a 4(f) analysis that requires them to avoid, minimize or mitigate any use of a historic property.

Cultural
Element:

C-025-052

The "Montlake Mess" is a traffic congested situation that was created in the area adjacent to the south end of the Montlake bascule bridge on Montlake Boulevard at the intersections of East Hamlin Street and East Shelby Street. Both Hamlin and Shelby Streets have fully operational traffic control green/red stop signal lights. The Montlake Mess serves as a de facto interchange for the intersection of Lake Washington Blvd, SR 520 and Montlake Blvd with eight on/off ramps. Back-up congestion exists several hours each day. It is a life threatening experience for Hamlin/Shelby residents entering or leaving this area of Montlake Blvd.

The Seattle Yacht Club membership's only access or egress to their historic clubhouse and moorages is from this severely congested Boulevard via East Hamlin and East Shelby Streets. Cars heading north on Montlake Blvd from Shelby St. experience extremely long waits for a green light before entering north bound traffic.

Our examination of the SR 520 SDEIS indicates that nothing has been presented in the highway designs of Option A or Option L to relieve congestion on Montlake Blvd except for a second bascule bridge that will make the congestion even worse.

The Seattle Yacht Club objects to any bridge design and/or construction activity that further adds to the congestion that presently exists, especially in those areas designated by Section 106 as **Areas of Potential Effect (APE)**. Seattle Yacht Club's historic boating culture is and will be **Adversely Effected** under Options A and L by the SR520 Bridge Replacement and HOV Project during construction. The Club fully expects the

C-025-042

The Air Quality Discipline Report Addendum (Attachment 7 to the Final EIS) includes a quantitative mobile source air toxics analysis for operation of the project. Diesel particulate emissions are being addressed through vehicle technology improvements and are expected to decline noticeably in the future even if vehicle miles traveled were to increase.

C-025-043

The Potential Effects section of the Air Quality Discipline Report Addendum (Attachment 7 to the Final EIS) includes a quantitative analysis of construction air quality effects related to the Preferred Alternative. However, this analysis is informational only, because there are no state or local guidelines for evaluating the degree of impact from construction pollutant emissions. Air quality guidance from the U.S. Environmental Protection Agency and Washington State Department of Ecology has been formulated to protect human health and the environment. WSDOT will continue to follow these guidelines throughout design and construction of the project. No scientific basis exists for the type of risk quantification suggested by the comment.

C-025-044

Please see the response to Comment C-025-013 regarding mobile source air toxics analysis. The analysis conducted for the Air Quality Discipline Report Addendum (Attachment 7 to the Final EIS) addresses the U.S. Environmental Protection Agency's seven priority mobile source air toxics.

C-025-045

Please see the response to Comment C-025-013, which explains how the ozone standard is implemented. Also, please note that traffic

C-025-052

Memorandum of Agreement to include provisions that will completely mitigate all **Cultural Resource** conflicts arising from the SR 520 bridge project. The Seattle Yacht Club perceives that Option K, similar to a previous option referred to as the Pacific Street Interchange plan, would in fact relieve a major portion of the congestion at the University of Washington and the western portal of the SR 520 program.

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volumes on SR 520 are expected to decrease with the project compared to the No Build Alternative.

C-025-046

The Air Quality Discipline Report Addendum (Attachment 7 to the Final EIS) includes a quantitative analysis of mobile source air toxics, or MSATs. Under EPA policy, MSATs are currently addressed through vehicle technology improvements, and emission levels are expected to decline noticeably in the future despite increased travel. MSAT emissions for SR 520 were estimated based on vehicle volume, vehicle speed, and roadway length. The analysis shows that estimated 2040 emissions for both the Preferred Alternative and the No Build Alternative would decrease significantly compared to the same types of emissions in 2008.

The Portland Air Toxics Assessment was an interagency effort to characterize air toxics in the Portland area to develop local emission-reduction strategies. This type of study is regional in nature and is therefore beyond the scope of the SR 520 project. Quantitative modeling of MSATs satisfies all regulatory requirements for project-level analysis.

C-025-047

Please see the responses to comments C-025-013 and C-025-043. The Air Quality Discipline Report Addendum (Attachment 7 to the Final EIS) includes a quantitative analysis of construction air quality effects.

C-025-048

The Health Impact Assessment recommended measures that could be incorporated to improve the region's overall quality of health, rather than attributing specific health outcomes to the project itself. However, protecting human health is the one of the reasons behind many of the studies conducted in the preparation of an EIS. The Recreation

Discipline Report Comment Summary

Discipline Report:		Environmental Justice		
Report	Page #	Line #'s	Reviewer	Comment
C-025-053	3	4-19	B Shafer	These two paragraphs state reasons why the project should be implemented even though low income populations would experience disproportionately high and adverse effects because of tolling. No discussion is provided of alternatives to tolling, such as increasing gas taxes or property taxes. Additional information detailing the reasons for selecting tolling over other funding sources needs to be added. The additional information should address the impact of these alternative funding sources on low-income populations.
C-025-054	94	3-10	B Shafer	This paragraph states that WSDOT "might target transit improvements....." to mitigate the burden tolls would present to low-income or LEP drivers. This statement does not describe any proposed mitigation that WSDOT would be obligated to undertake. This paragraph should be deleted or rewritten to indicate specific actions that WSDOT will take to mitigate the impact on low-income or LEP drivers. It should be noted that the preferred alternative eliminates the transit station in the Montlake area which currently may be used by low-income or LEP individuals.
C-025-055				

Discipline Report and its addendum identify project-specific construction effects on bicycle and pedestrian trails. The Transportation Discipline Report discusses construction effects on nonmotorized transportation facilities. While construction of the project would involve temporary closures to some bicycle and pedestrian trails, once completed, it would, as described in the Health Impact Assessment, improve opportunities for bicycle and pedestrian recreation by providing a bicycle/pedestrian lane across the floating bridge, with connections to regional trails (see Chapter 2 of the Final EIS).

C-025-049

The characteristics and health effects of criteria pollutants, including particulate matter, are described in Attachment 1 to the Air Quality Discipline Report. WSDOT's analysis was conducted using air quality guidance from the U.S. Environmental Protection Agency and Washington State Department of Ecology, which has been formulated to protect human health and the environment. See the response to Comment C-025-013 regarding deposition of air toxics from operation of the project. A reduction in deposition of particulate matter is also expected in 2030, compared to existing conditions, due to a predicted reduction in particulate matter emissions (see page 29 of the Air Quality Discipline Report).

Best management practices will be implemented to avoid or minimize the deposition of solid particulate pollutants from construction. The Programmatic Agreement provides information on, and includes by reference, a Community Construction Management Plan (Attachment 9 to the Final EIS) for construction effects on properties within the project area.

C-025-050

Comment noted.

Indirect and Cumulative Effects

(Chapter 7 SDEIS, and associated Discipline Report)

Key Findings:

- C-025-056** | The SDEIS omitted Portage Bay as a major recreational asset/location and therefore did not adequately study and mention potential indirect and cumulative effects on entities and operations in this location. This area is a major boating and water activities center in the region. It is adjacent to 520 currently and is further encroached on during and after the construction of a new *wider* 520 bridge. The encroachment is even *greater* when including the longer/*wider* westbound Montlake 520 on-ramp. With significant yacht club operations and community activities ranging from Opening Day, moorage, banquet and restaurant operations, sailing school, family sailing programs, special people's cruise, and other community events too numerous to mention, there will clearly be direct and indirect effects of the 520 expansion on usage and economics that clearly need to be protected as much as possible.
- C-025-057** |
- C-025-058** | The SDEIS mainly analyzes the 520 project from a "commuter" suburb-to-city viewpoint and omitted and/or did minimal analysis of impacts to assets/entities in the *middle* of 520 around the Portage Bay area. This is more than a just a spot people drive by on their commute to work and is indeed a recreational, social, historic, and economic destination in itself and deserves more consideration in terms of construction impacts.
- C-025-059** | The SDEIS does not mention the extra width of the proposed westbound Montlake on-ramp to 520 that would further encroach on the Fisheries property and move the bridge that much closer to SYC. The negative impacts of greater noise, filth, visual degradation, and economic impact from less desirable moorage, reduced banquet revenues and reduced revenue from outdoor restaurant operations are foreseeable.
- C-025-060** | The SDEIS does not analyze the I-5/520 interchange bottleneck in this section and therefore does not correctly consider indirect effects that could impact the Portage Bay environment and entities such as The Seattle Yacht Club and Queen City Yacht Club. With population growth and two more mass transit lanes carrying more mass transit vehicles, it is foreseeable that this bottleneck will get worse and therefore have a negative impact on air quality, noise, access/egress, economics, etc. for the Portage Bay area in general and the yacht clubs specifically.
- C-025-061** | The SDEIS addresses construction related effects from a macro view (e.g. Puget Sound region economic impacts, point-to-point regional commuter transportation, etc.) and therefore omitted analysis of significant impacts at the micro or neighborhood level for the Portage Bay area.

C-025-051

The Recreation Discipline Report Addendum (Attachment 7 to the Final EIS) provides a new analysis of effects on recreational boating in Portage Bay and includes mitigation measures to minimize or mitigate the effects. Mitigation measures related to the Seattle Yacht Club's status under Section 106 are included in the Programmatic Agreement in Attachment 9 to the Final EIS.

C-025-052

The effects on traffic resulting from the design options presented in the SDEIS were discussed in Chapters 5 and 6 of the Transportation Discipline Report. Chapter 6 of the Transportation Discipline Report described in detail how traffic conditions on Montlake Boulevard would be improved by Options A, K, and L. The Final Transportation Discipline Report in Attachment 7 to the Final EIS provides new analyses of congestion and access restrictions around Portage Bay under the Preferred Alternative. The Preferred Alternative would improve traffic operations on the SR 520 corridor as a result of improved shoulders, lane configurations, and ramp designs. This improvement would benefit traffic operations on Montlake Boulevard by reducing the level of congestion from SR 520 that affects Montlake Boulevard traffic flow.

The Preferred Alternative would also improve access to SR 520 from Montlake Boulevard and from SR 520 to the north via the new bascule bridge, enhancing traffic circulation and alleviating some congestion in the Shelby/Hamlin area. In addition, the Hamlin Street U-turn would be removed and replaced with better access for northbound traffic. The reconfigured intersection of the westbound off-ramp at Montlake Boulevard would allow access to the northbound left-turn lane onto Hamlin, thereby improving access to Hamlin Street and the Seattle Yacht Club.

Construction of the Preferred Alternative would improve traffic conditions

Because the following pages of this item are difficult to read, a full page version of this item is included at the end of the response to comments on the SDEIS in the printed version, and in a separate PDF file in the DVD and online version.

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that: ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate**. (page 2 of technical report)
 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

C-025-062

Report	Page #	LINE #'s	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, pg 8 Ch 4, pg 4-33 Ch 5, p 5-53	16	Erik Sabiers	Baseline Conditions	The process for setting Baseline Conditions was stated to be completed from Field Surveys, Interviews, and Literature searches (tech report pg. 24, last line). Portage Bay, Seattle Yacht Club, Queen City YC, etc. were omitted. We are not aware of ANY surveys or interviews that were done with SYC or QCYC for setting baseline conditions. In fact, Portage Bay in general and SYC, QCYC, etc. were entirely omitted in the SDEIS (ch. 4 "The Project Area's Environment") as a Recreational Center, a big omission, considering the SDEIS Ch 4, pg 4-33 DOES reference the UW Waterfront Activities Center and the Canoe House. Further, in the "Recreation" section 5.4 of Chapter 5 of the SDEIS starting on p 5-53, again Portage Bay, including SYC and QCYC, are omitted as a recreation center, despite the fact that the UW recreational facilities and others ARE referenced. Portage Bay hosts 2 very active yacht clubs, acts as a base for Opening Day of boating season, is a base for various sailing activities ranging from an active youth sailing school to family sailing evenings, and is also an origination point and gathering place for many other community water and non-water based activities and events. It is difficult to correctly assess the potential affects to a resource and to analyze unintended consequences/indirect effects when the resource itself is NOT recognized in the first place.

on Montlake Boulevard. For example, the reconstruction of the SR 520 eastbound on-ramp at Montlake to include a second general purpose lane would improve traffic operations on Montlake Boulevard southbound substantially, reducing the current southbound back-ups. There would be no adverse effect to access to the Seattle Yacht Club. Please see Chapters 5 and 6 of the Final Transportation Discipline Report for discussions of the improvements proposed as part of the Preferred Alternative and their effects on freeway and local traffic operations in the Montlake Area. Please see the responses to comments C-025-008, C-025-019, and C-025 regarding Section 106 effects.

C-025-053

Since publication of the SDEIS, WSDOT and its federal, state, and local transit agency partners have committed to implementing measures to address the effects of tolling in general, as well as tolling of the SR 520 bridge, on low-income populations. As discussed in the Environmental Justice Discipline Report Addendum (in Attachment 7 to the Final EIS), these include measures such as investing in targeted transit improvements and conducting additional public outreach regarding tolling. The Addendum as well as the Final EIS also note that, with these measures in place, the project would not generate adverse effects to low-income and LEP populations from tolling, and therefore no mitigation is proposed.

Regional planning by the Puget Sound Regional Council and extensive financial analysis for the SR 520 program indicate that tolling is the most appropriate method for funding SR 520 and other regional undertakings. As discussed in pages 1-31 through 1-33 of the SDEIS, the state legislature has secured a number of available funding sources to help pay for the SR 520 program. More information on funding sources for the State's transportation budget can be found at <http://www.wsdot.wa.gov/Partners/Build520/funding.htm>, and in the 6392: Design Refinements and Transit Connections Workgroup

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that: ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate**... (page 2 of technical report)
 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

Report	Page #	LINE #'s	Reviewer	Topic	Comment
C-025-063	Indirect & Cumulative Effects Ch 7, pg 8 Ch 7, Pg 17 Ch 5, Sec 5.1, p 5-4	18	Erik Sabiers	Traffic Growth	Some Indirect Effects are partly predicated on the SDEIS's assumptions about traffic growth in Ch. 5. Put plainly, we believe the SDEIS's assumptions (Ch. 5, Sec 5.1, p 5-4, last paragraph) about daily vehicle traffic will prove to be incorrect in the long term and the SDEIS's conclusions that <i>"the 6-lane alternative would actually result in a small net decrease in daily vehicle traffic demand on SR 520"</i> because the <i>"addition of the toll, improved HOV reliability, and reduced travel times would increase the incentive to carpool or take the bus"</i> are highly speculative and unsubstantiated and further do not particularly take into consideration travel for activities other than the suburb-to-Seattle work commute.
		8 Last Paragraph			
C-025-064					The SDEIS's opinions defy logic. The SDEIS's own projections in Ch 5, p 5-2, show population growth in the area is expected to be 1.1 Million by 2030 and population in the region is expected to increase from approximately 3.6 million in 2007 to nearly 5 million in 2040 as documented in Vision 2040. Absurdly, p. 50 of the tech report says "the project will not generate additional regional traffic, particularly as it is not increasing the capacity for single-occupancy vehicles." Population trends WILL generate additional traffic and additional lanes for mass transit WILL add additional vehicles...the mass transit vehicles themselves (see Ch 7, page 18, line 16).

Recommendations Report (Attachment 16 of the Final EIS) for the SR 520 Legislative Workgroup at <http://www.wsdot.wa.gov/partners/sr520legislativeworkgroup/recommendations.htm>.

For a complete discussion about the potential effects of tolling on environmental justice populations, please refer to the SR 520 Variable Tolling Project Environmental Assessment, published in March 2009.

C-025-054

Since publication of the SDEIS, WSDOT and its federal, state, and local transit agency partners have committed to implementing measures to address the effects of tolling in general, as well as tolling of the SR 520 bridge, on low-income populations. As discussed in the Environmental Justice Discipline Report Addendum (in Attachment 7 to the Final EIS), these includes measures such as investing in targeted transit improvements and conducting additional public outreach regarding tolling. The Addendum also notes that, with these measures in place, the project would not generate adverse effects to low-income and LEP populations from tolling, and therefore no mitigation is proposed.

C-025-055

The effect of the project on transit was analyzed in the Environmental Justice Discipline Report. With the removal of the Montlake Freeway Transit Station, buses destined for or originating from I-5 would have continued on SR 520 without exiting at the SR 520/Montlake Boulevard interchange. University District bus routes would have continued to operate with direct service to Seattle as they do today. The discipline report noted that the Sound Transit Link rail project, currently scheduled to open in 2016, would eventually provide service between the university area and downtown Seattle. The finding was that all connections that are made today would have been accommodated under all options of the SDEIS.

Discipline Report Comment Summary

Discipline Report: Environmental Justice

Report	Page #	Line #'s	Reviewer	Comment
C-025-065	3	4-19	B Shafer	These two paragraphs state reasons why the project should be implemented even though low income populations would experience disproportionately high and adverse effects because of tolling. No discussion is provided of alternatives to tolling, such as increasing gas taxes or property taxes. Additional information detailing the reasons for selecting tolling over other funding sources needs to be added. The additional information should address the impact of these alternative funding sources on low-income populations.
	94	3-10	B Shafer	This paragraph states that WSDOT "might target transit improvements...." to mitigate the burden tolls would present to low-income or LEP drivers. This statement does not describe any proposed mitigation that WSDOT would be obligated to undertake. This paragraph should be deleted or rewritten to indicate specific actions that WSDOT will take to mitigate the impact on low-income or LEP drivers. It should be noted that the preferred alternative eliminates the transit station in the Montlake area which currently may be used by low-income or LEP individuals.

Since the SDEIS, a Preferred Alternative has been developed by FHWA and WSDOT that involves replacing the Montlake Freeway Transit Station with transit access on the proposed Montlake lid. The lid design was revised since the SDEIS in part to accommodate freeway transit connections. In the future, transit access will no longer be from the Montlake Freeway Transit Station and will be slightly different during peak and non-peak hours. During the peak period transit service is planned to provide more direct access to and from the University. For example, travelers would need to board a bus near the University hospital transit stop as the bus would then go directly onto SR 520 without any further stops. However, during off peak hours, buses would leave SR 520 and stop on the Montlake lid to pick up riders and then return to SR 520.

The revised transit system in the Montlake area would not adversely affect low income or LEP persons since access to transit would be maintained. University District bus routes would also continue to operate as they do now, with direct service. The Final Transportation Discipline Report (see Attachment 7 of the Final EIS) contains more information related to transit improvements and the effect of removing the Montlake Freeway Station on the transit system. The Environmental Justice Discipline Report Addendum (see Attachment 7 of the Final EIS) provides additional information on the effects of transit changes on low income and LEP persons.

C-025-056

Expected effects of project operation and construction on parks and recreational facilities along the Portage Bay portion of the SR 520 right-of-way were addressed in the SDEIS in Sections 5.4 and 6.4, respectively. The Recreation Discipline Report Addendum (Attachment 7 to the Final EIS) and Final EIS Sections 4.4, 5.4, and 6.4

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. ... typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate**. (page 2 of technical report)
 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

C-025-066

Report	Page #	LINE #'s	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, pg 8 Ch 4, pg 4-33 Ch 5, p 5-53	16	Erik Sabiers	Baseline Conditions	The process for setting Baseline Conditions was stated to be completed from Field Surveys, Interviews, and Literature searches (tech report pg. 24, last line). Portage Bay, Seattle Yacht Club, Queen City YC, etc. were omitted. We are not aware of ANY surveys or interviews that were done with SYC or QCYC for setting baseline conditions. In fact, Portage Bay in general and SYC, QCYC, etc. were entirely omitted in the SDEIS (ch. 4 "The Project Area's Environment") as a Recreational Center, a big omission, considering the SDEIS Ch 4, pg 4-33 DOES reference the UW Waterfront Activities Center and the Canoe House. Further, in the "Recreation" section 5.4 of Chapter 5 of the SDEIS starting on p 5-53, again Portage Bay, including SYC and QCYC, are omitted as a recreation center, despite the fact that the UW recreational facilities and others ARE referenced. Portage Bay hosts 2 very active yacht clubs, acts as a base for Opening Day of boating season, is a base for various sailing activities ranging from an active youth sailing school to family sailing evenings, and is also an origination point and gathering place for many other community water and non-water based activities and events. It is difficult to correctly assess the potential affects to a resource and to analyze unintended consequences/indirect effects when the resource itself is NOT recognized in the first place.

provide additional discussions and analyses of recreational boating and of Portage Bay as a recreational boating resource.

C-025-057

See the responses to comments C-025-018 and C-025-020 regarding economic effects. See also the response to Comment C-025-021 regarding moorage and effects on Seattle Yacht Club activities.

C-025-058

Effects specific to Portage Bay/Roanoke and other neighborhoods are discussed in detail throughout the SDEIS, as well as in the Social Elements Discipline Report. Recreational, social, historic, and economic effects were described in the corresponding discipline reports in the SDEIS and updated in the corresponding discipline report addenda to the Final EIS. Also see Section 6.4 the Recreation Discipline Report Addendum (Attachment 7 to the Final EIS) for analysis of the effects on recreational boating in Portage Bay.

C-025-059

Section 5.2 of the SDEIS and the Land Use, Economics, and Relocations Discipline Report identified the project effects to land use on the Northwest Fisheries Science Center under the SDEIS design options. The Preferred Alternative, developed since the SDEIS was published, would avoid displacing buildings at the NWFSC, allowing its operations to continue. This southward shift in the alignment also benefits the Seattle Yacht Club by moving the highway farther from the club property.

Regarding economic effects on the Seattle Yacht Club, see the responses to comments C-025-018 and C-025-020. Regarding noise, see the response to Comment C-025-011. Regarding air pollution and visual quality effects, see the response to Comment C-025-019.

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that: ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate**. (page 2 of technical report)
 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

C-025-067

Report	Page #	LINE #'s	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, pg 8 Ch 7, Pg 17 Ch 5, Sec 5.1, p 5-4	18 8 Last Paragraph	Erik Sabiers	Traffic Growth	<p>Some Indirect Effects are partly predicated on the SDEIS's assumptions about traffic growth in Ch. 5. Put plainly, we believe the SDEIS's assumptions (Ch. 5, Sec 5.1, p 5-4, last paragraph) about daily vehicle traffic will prove to be incorrect in the long term and the SDEIS's conclusions that <i>"the 6-lane alternative would actually result in a small net decrease in daily vehicle traffic demand on SR 520"</i> because the <i>"addition of the toll, improved HOV reliability, and reduced travel times would increase the incentive to carpool or take the bus"</i> are highly speculative and unsubstantiated and further do not particularly take into consideration travel for activities other than the suburb-to-Seattle work commute.</p> <p>The SDEIS's opinions defy logic. The SDEIS's own projections in Ch 5, p 5-2, show population growth in the area is expected to be 1.1 Million by 2030 and population in the region is expected to increase from approximately 3.6 million in 2007 to nearly 5 million in 2040 as documented in Vision 2040. Absurdly, p. 50 of the tech report says "the project will not generate additional regional traffic, particularly as it is not increasing the capacity for single-occupancy vehicles." Population trends WILL generate additional traffic and additional lanes for mass transit WILL add additional vehicles...the mass transit vehicles themselves (see Ch 7, page 18, line 16).</p>

Regarding the potential behavior of the Seattle Yacht Club's members and patrons, and inferred potential economic effects on the club, see the response to Comment C-025-019.

C-025-060

The I-5/SR 520 interchange is included in the travel demand model and the freeway simulation models used to analyze project effects (see the Transportation Discipline Report in Attachment 7 to the SDEIS). The effects of congestion at I-5 were described in detail in Chapter 5 of the Transportation Discipline Report and have been updated in the Final Transportation Discipline Report (Attachment 7 to the Final EIS) to reflect the effects of the Preferred Alternative. Results generated using these models are used in all project analyses affected by transportation conditions, including air quality, noise, land use, and economics. For the Portage Bay area, these effects are direct effects of the project and can be found in the relevant discipline reports. The effects of background population growth are not caused by the project; they are presented as part of the No Build Alternative analyses in 2030 and are not considered to be direct or indirect effects of the project. Current transit service projections do not assume that there will be more transit service on SR 520 with the Preferred Alternative than there would be with the No Build Alternative.

C-025-061

Please see the response to Comment C-025-58. The SDEIS provided a comprehensive analysis of effects based on the project design and construction information available at that time. This analysis has been updated for the Final EIS in response to community and stakeholder reactions to the SDEIS and to accommodate the design revisions made for the Preferred Alternative.

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that: ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate**... (page 2 of technical report)
 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

Report	Page #	LINE #'s	Reviewer	Topic	Comment
C-025-068	Indirect & Cumulative Effects Ch 7, pg 8 Ch 7, Pg 17 Ch 5, Sec 5.1, p 5-4 continued	18 8 Last Paragraph	Erik Sabiers	Traffic Growth	The combination over time WILL mean greater traffic. More population and associated cars + more transit lanes and associated more transit vehicles = more traffic. Lastly, the SDEIS does not adequately discuss and address the bottlenecked I-5/520 interchange. As the Seattle Times points out on Friday 3-10-2010 on the front page: "The New 520 bridge won't solve I-5 merge mess." Senator Ed Murray says "the 520 project is based on a traditional suburb-to-Seattle commute pattern that is becoming obsolete." He also says the plan does not "adapt to the fact that I-5 is full." More traffic approaching an unsolved I-5 bottleneck equals more congestion around Montlake/Portage Bay.
C-025-069	Indirect & Cumulative Effects Ch 7, Pg 17	24	Erik Sabiers	Transportation	UW Medical Center Master Plan - improvements are likely to occur at same time as 520 construction (pg 51 of technical report). This would create cumulative congestion at the time of the projects AND permanently in the area.
C-025-070	Indirect & Cumulative Effects Ch 7, Pg 17	24	Erik Sabiers	Transportation	UW Campus Master Plan - improvements are likely to occur at same time as 520 construction. This will create cumulative congestion during the projects AND permanently in the area.
C-025-071	Indirect & Cumulative Effects Ch 7, Pg 17	25	Erik Sabiers	Transportation	North Link Light Rail Station at Husky Stadium - improvements will be going on at the same time as 520 construction resulting in cumulative congestion during the projects.

C-025-062

The indirect and cumulative effects discussion in the SDEIS was taken from the Indirect and Cumulative Effects Discipline Report, which was developed from project design and construction information that was available at that time. However, since the SDEIS was published, WSDOT, in consultation with resources agencies, stakeholders, and community groups such as the Seattle Yacht Club, has designed a Preferred Alternative that addresses many of the issues raised by reviewers of the SDEIS. The Final Indirect and Cumulative Effects Discipline Report (Attachment 7 to the Final EIS) provides analysis of the Preferred Alternative. Also, please see the response to Comment C-025-056.

C-025-063

The comment is incorrect in stating that the indirect effects disclosed in the SDEIS are partly predicated on the SDEIS's assumptions about traffic growth. Traffic growth is a background condition and is not caused by the project; it is based on land use plans that are adopted by local jurisdictions and incorporated into the regional travel demand model maintained by the Puget Sound Regional Council. This model is used throughout the region to generate estimates of travel demand that are then used in modeling specific project improvements. Background growth is presented as part of the No Build Alternative analyses in 2030 and is not considered to be a direct or indirect effect of the project.

The analysis of traffic operations for the 6-Lane Alternative, as reported in the SDEIS and its discipline reports, was based on detailed analysis using validated models and standard methods. The analysis used the best available data for population, employment, and transportation system conditions in the Puget Sound Region. More information about travel demand modeling and transportation analysis methodology is contained in Chapters 3, 4, 5, and 11 of the Transportation Discipline Report (Attachment 7 to the SDEIS).

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that: ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate**... (page 2 of technical report)
 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

C-025-072

Report	Page #	LINE #'s	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, pg 8 Ch 7, Pg 17 Ch 5, Sec 5.1, p 5-4 continued	18 8 Last Paragraph	Erik Sabiers	Traffic Growth	The combination over time WILL mean greater traffic. More population and associated cars + more transit lanes and associated more transit vehicles = more traffic. Lastly, the SDEIS does not adequately discuss and address the bottlenecked I-5/520 interchange. As the Seattle Times points out on Friday 3-10-2010 on the front page: "The New 520 bridge won't solve I-5 merge mess." Senator Ed Murray says "the 520 project is based on a traditional suburb-to-Seattle commute pattern that is becoming obsolete." He also says the plan does not "adapt to the fact that I-5 is full." More traffic approaching an unsolved I-5 bottleneck equals more congestion around Montlake/Portage Bay.
Indirect & Cumulative Effects	Ch 7, Pg 17	24	Erik Sabiers	Transportation	UW Medical Center Master Plan - improvements are likely to occur at same time as 520 construction (pg 51 of technical report). This would create cumulative congestion at the time of the projects AND permanently in the area.
Indirect & Cumulative Effects	Ch 7, Pg 17	24	Erik Sabiers	Transportation	UW Campus Master Plan - improvements are likely to occur at same time as 520 construction. This will create cumulative congestion during the projects AND permanently in the area.
Indirect & Cumulative Effects	Ch 7, Pg 17	25	Erik Sabiers	Transportation	North Link Light Rail Station at Husky Stadium - improvements will be going on at the same time as 520 construction resulting in cumulative congestion during the projects.

C-025-064

The SDEIS stated that additional demand for transit options would occur with or without the project. It does not state that added lanes for transit would generate additional vehicles, as implied in the comment. Additional transit trips across the lake would be based on regional demand and would thus be a background condition rather than a project effect. Population growth and associated growth in travel demand within the region would occur with or without the project (see the response to Comment C-025-063).

C-025-065

This is a duplicate of comments C-025-053, C-025-054, and C-025-055. Please see the responses to those comments.

C-025-066

This is a duplicate of Comment C-025-062. Please see the response to that comment and to Comment C-025-056.

C-025-067

This is a duplicate of Comments C-025-063 and C-025-064. Please see the responses to those comments.

C-025-068

Please see the response to Comment C-025-060. Also see the discussion of the project purpose and need in Section 1.2 of the SDEIS.

C-025-069

The Final Transportation Discipline Report (in Attachment 7 to the Final EIS) provides an updated discussion of other nearby construction that could take place concurrently with the I-5 to Medina Project, including the types of effects and potential timing.

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that: ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. ... typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate** ... (page 2 of technical report) ... Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

Report	Page #	LINE #'s	Reviewer	Topic	Comment
C-025-073	Indirect & Cumulative Effects Ch 7, Pg 17	32	Erik Sabiers	Transportation	Truck traffic traveling through the 520 construction zone. This will be an issue affecting Montlake/SYC access as the SDEIS states.
C-025-074	Indirect & Cumulative Effects Ch 7, Pg 17	34	Erik Sabiers	Transportation	Additional Lane closures and road detours. This will be an issue affecting Montlake/SYC access as the SDEIS states.
C-025-075	Indirect & Cumulative Effects Ch 7, Pg 17	38	Erik Sabiers	Transportation	The SDEIS states that other projects in addition to the 520 project will cause short term and permanent modifications to access. What will they be? There is no direct mention of specific modifications for SYC to address or respond to. With respect to just the 520 project, actual design features are still being debated, so it is impossible for SYC to respond to actual design features when they are not put forth in the SDEIS.
C-025-076	Indirect & Cumulative Effects Ch 7, Pg 18 Ch 7, Pg 25	2, 7 37	Erik Sabiers	Transportation	The SDEIS states cumulatively that traffic would improve after construction and during regular operation. This is based on pure speculation and cannot be substantiated. Based on population trends and the I-5/520 bottleneck alone, the SDEIS's statements are questionable. See comment re: traffic & congestion under the second entry above.
C-025-077	Indirect & Cumulative Effects Ch 7, Pg 18	16, 19	Erik Sabiers	Transportation	The SDEIS states there will be "Additional Buses" and "Increased frequency of bus service" along the 520 corridor. This will increase vehicles on the road and increase filth and noise and reduce air quality.

WSDOT reviewed the construction schedules for the SR 520, I-5 to Medina project, Sound Transit's University Link and North Link light rail projects, the University of Washington Medical Center expansion, the University of Washington's Rainier Vista project and Husky Stadium Renovation project, the Seattle Children's Hospital Cancer and Critical Care Expansion, and other ongoing or planned projects in the vicinity of SR 520 to identify the potential for concurrent construction effects relating to overlapping haul routes and other relevant aspects of the environment. Section 6.18 of the Final EIS describes concurrent construction effects. WSDOT determined that there would be potential for the Rainier Vista project, Husky Stadium Renovation project, and University light rail station construction along with the SR 520, I-5 to Medina project to contribute to concurrent haul traffic along the SR 520 corridor between I-5 and the SR 520/Montlake Boulevard East interchange associated with. The effect would start in 2012 and extend through late 2015, but would depend on the specific construction activities under way and the quantities of materials being hauled to and from the construction sites. The extent of potential haul-related effects on traffic congestion and air quality cannot be predicted on the basis of currently available information. However, all four of the concurrent construction projects will operate in accordance with construction management plans with requirements for managing and coordinating haul traffic.

WSDOT actively coordinates its projects with each other as well as other jurisdiction projects and special events to identify and minimize potential concurrent construction effects. This is an ongoing process that involves more frequent and detailed coordination as activities get closer in time. Since unforeseen conditions can result in changes from original plans, this process accounts for the possible schedule variations.

Regarding potential permanent effects, the Indirect and Cumulative Effects Discipline Report (in Attachment 7 to the SDEIS) included the

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

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 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

Report	Page #	LINE #'s	Reviewer	Topic	Comment
C-025-078	Indirect & Cumulative Effects Ch 7, Pg 18	27, 28	Erik Sabiers	Transportation	The SDEIS states "Tolling would reduce demand for use of the SR 520 corridor by single occupancy vehicles." Therefore the SDEIS AGREES with our thought that Eastside SVC members will make the drive less frequently because of tolls and therefore have a negative economic and social impact to the club. These trips are not commuter trips so the likelihood of using mass transit is not as viable.
C-025-079	Indirect & Cumulative Effects Ch 7, Pg 18	34, 35	Erik Sabiers	Transportation	Mitigation such as traffic control, public outreach, details on street closures, etc. might only have limited relief on SVC activities because we are in the MIDDLE of the construction zone and this type of mitigation seems more referenced to commuter point-to-point and not with respect to the communities in center of the construction zone.
C-025-080	Indirect & Cumulative Effects Ch 7, Pg 20	9	Erik Sabiers	Transportation	The SDEIS states that the 520 project "would convert existing land uses to transportation right-of-way" and that this would only be a "small portion of the total land in the Puget Sound region over the next 30 years." We disagree with the reference point being the total Puget Sound region. Some of these conversions to transportation right-of-way could occur IN Montlake and therefore could have an impact on access/egress to the Seattle Yacht Club on Hamlin and affect the club in terms of usage and economics.

UW Medical Center Master Plan as a reasonably foreseeable future action (see page 38 and Attachment 1 to the discipline report); however, in the Final EIS this master plan is addressed as part of the University of Washington Campus Master Plan.

The purpose of identifying reasonably foreseeable actions is to determine the cumulative effect on a resource, rather than to create a comprehensive list of projects. Council on Environmental Quality (CEQ) and WSDOT guidance does not provide explicit requirements for how to identify other present and reasonably foreseeable actions. Rather, it allows agencies to determine the level of analysis appropriate for their projects. The CEQ guidance does not require an inclusive list of projects, but instead suggests evaluating both individual actions, when they are reasonably well known, and groups of actions, which are typically included in documents such as transportation plans and master plans.

The SDEIS included an extensive group of reasonably foreseeable future actions (projects). In the Final EIS, WSDOT determined that, consistent with the CEQ and WSDOT guidance, most of these projects would be more appropriately evaluated within groups of reasonably foreseeable actions. To identify groups of reasonably foreseeable actions, WSDOT relied on adopted regional and local land use and transportation plans, consistent with CEQ guidance. These plans provide information on the intended development of jurisdictions and transportation networks over a long planning horizon, encompassing multiple future projects that collectively have the potential to influence resource trends.

These regional planning documents (such as PSRC's Vision 2040 and Transportation 2040), local planning documents (such as the City of Seattle Comprehensive Plan) provide estimates of future growth and development that encompass many individual projects. Therefore, it is appropriate for the cumulative effects analysis to rely on these planning

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

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 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

C-025-081

Report	Page #	LINE #'S	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, Pg 20	24	Erik Sabiers	Economic Activity	(Also page 61 of the technical report) The SDEIS states "Operation (of the completed 520 project) would not indirectly affect the REGIONAL economy, except through beneficial effects of improved transportation efficiency." This omits an analysis of LOCAL economic effects of the project. This ignores entities like SYC who are in the middle of the construction zone (and who would be affected during and after construction) as opposed to entities at commuter beginning or end points. The SDEIS does state on page 62 (under the "Social Elements" section) of the technical report that "construction effects on adjacent communities would include increases in noise, dust, traffic congestion and lane closures; partial closures of sidewalks and bicycle routes/pedestrian trails; and visual clutter in residential, business, and park areas adjacent to construction zones. These effects could temporarily affect community cohesion and limit connections to community resources, patronage at neighborhood businesses, or use of recreational amenities."

documents in identifying regional trends rather than to attempt to catalogue all foreseeable projects in the region. In this way, actions such as those mentioned in the comment, although not evaluated individually, were considered as part of the trends affecting the resources into the future.

In the SDEIS, the reasonably foreseeable actions were presented on maps. In the Final EIS, the projects are presented in a list for greater clarity. See Chapter 7 of the Final EIS for further discussion of how reasonably foreseeable actions were identified.

C-025-070

Please see the response to Comment C-025-069. The UW Campus Master Plan is also considered in the analyses of indirect and cumulative effects.

C-025-071

Please see the response to Comment C-025-069 regarding construction effects from concurrent projects. WSDOT is working closely with Sound Transit to ensure that any overlapping construction activities will be coordinated.

C-025-072

This set of comments is a duplicate of comments C-025-068 through C-025-071. Please see the responses to those comments.

C-025-073

Comment noted.

C-025-074

Comment noted.

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that: ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate**... (page 2 of technical report)
 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

C-025-082

Report	Page #	LINE #s	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, Pg 20 continued	24	Erik Sabiers	Economic Activity	We agree with this but also believe some of what is stated will be permanent and not temporary in nature. A 115+ ft wide bridge (PLUS additional encroachment towards SYC and into Portage Bay from the proposed longer westbound on-ramp onto 520 from the Montlake Interchange) vs. the 60 ft wide no-build alternative would bring noise, filth, air pollution, and visual obstruction that much more into Portage Bay and towards SYC and will have an impact on banquet, restaurant, moorage, and social operations of clubs like SYC an QCYC that will carry an meaningfully negative economic impact. It seems the analyst for the "Economic Activity" section of the technical report only focused on macro level economic impacts and omitted micro or local level economic impacts.

C-025-075

The SDEIS provided a comprehensive analysis of effects based on the project design information available at that time. Please see the response to Comment C-025-069 regarding construction effects from concurrent projects. Access to East Hamlin Street and to Seattle Yacht Club will be maintained during construction. The intersection of the westbound off-ramp at Montlake Boulevard would be reconfigured during construction and would allow for access to the northbound left-turn lane onto Hamlin. Chapter 10 of the Final Transportation Discipline Report, included in Attachment 7 to the Final EIS, provides further discussion of access to the Montlake and Portage Bay area during construction.

The Preferred Alternative would improve traffic operations on the SR 520 corridor as a result of improved shoulders, lane configurations, and ramp designs. This improvement would benefit traffic operations on Montlake Boulevard by reducing the level of congestion from SR 520 that affects Montlake Boulevard traffic flow.

The Preferred Alternative would also improve access to SR 520 from Montlake Boulevard and from SR 520 to the north via the new bascule bridge, enhancing traffic circulation and alleviating some congestion in the Shelby/Hamlin area. In addition, the Hamlin Street U-turn would be removed and replaced with better access for northbound traffic. The reconfigured intersection of the westbound off-ramp at Montlake Boulevard would allow access to the northbound left-turn lane onto Hamlin Street, thereby improving access to Hamlin Street and the Seattle Yacht Club. Please see the response to Comment C-025-052 for further discussion. Also, please see Chapters 5 and 6 of the Final Transportation Discipline Report for discussions of improvements that are part of the Preferred Alternative in the Montlake area and the resulting effects.

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

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 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

C-025-083

Report	Page #	LINE #'S	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, Pg 21	6	Erik Sabiers	Social	Pg 62 of the technical report states that "construction effects on adjacent communities would include increases in noise, dust, traffic congestion and lane closures; partial closures of sidewalks and bicycle routes/pedestrian trails; and visual clutter in residential, business, and park areas adjacent to construction zones. These effects could temporarily affect community cohesion and limit connections to community resources, patronage at neighborhood businesses, or use of recreational amenities." First, Portage Bay, SVC, QCYC, etc. should be recognized as the major recreational and social assets they are (instead of being omitted in the SDEIS as such). Second, some of these effects of construction would also exist post-construction and should be mitigated as much as possible to protect the social and historical community and related activities.

C-025-076

Please see the response to Comment C-025-060. Travel demand and operations modeling for the project was conducted according to accepted methodology and takes adopted regional land use plans into account.

C-025-077

Any increase in bus service was assumed to be a background condition in the transportation analysis (please see the Transportation Discipline Report in Attachment 7 to the SDEIS) as well as in the noise and air quality analyses. Thus the effects of both the No Build Alternative and the project as discussed in the SDEIS accounted for this increase in bus service. Because additional transit service allows a larger number of person-trips in the same corridor without expanding single-occupancy-vehicle capacity, it supports a net reduction in noise and pollution compared to the No Build Alternative.

C-025-078

The SDEIS stated that tolling and increased transit opportunities would reduce demand for use of the SR 520 corridor by single-occupancy vehicles. No conclusions were drawn with regard to Eastside Seattle Yacht Club members. When supporting evidence is lacking, the NEPA process avoids speculative conclusions regarding the future actions of specific individuals or groups.

C-025-079

The project will use a variety of measures to ensure continued access to the Seattle Yacht Club during construction. Construction traffic control plans, public information, and related activities are created to help people who live and work in or near construction zones, as well as those who travel through these areas on a regular basis. Advance planning and information will allow all travelers to be aware of changing

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

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Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

Report	Page #	LINE #'s	Reviewer	Topic	Comment	
C-025-084	Indirect & Cumulative Effects	Ch 7, Pg 23 Ch 7, Pg 24	23, 24 13	Erik Sabiers	Recreation	The SDEIS says "most indirect effects on park and recreational resources would be positive by encouraging greater use of recreational resources, improving connectivity and linkages between parks, and improving noise levels and visual quality in certain location." Separately, Pg 5/6 of the technical report shows the no build bridge at 60ft wide but the 6 lane at 115+ ft wide (and this does not include the width of the westbound 520 Montlake on-ramp). First, the SDEIS ignores SYC, QCYC, and Portage Bay in general as a major recreation center for the area and therefore didn't consider the construction impacts appropriately to this area. Indeed, construction and the operating end-result could "DIScourage" rather than "encourage" greater use of Portage Bay/SYC/QCYC because of greater noise, worse air quality, worse visual effects from a bridge built that much further into Portage Bay and closer to SYC, greater congestion because the I-5/520 interchange bottleneck is not being improved materially, and worse problems with access/egress.
C-025-085						

conditions, make informed travel decisions, and choose available alternatives. See also the responses to comments C-025-029 and C-025-052 regarding access to the Seattle Yacht Club.

C-025-080

The indirect and cumulative effects analysis is expressly intended to evaluate effects on a regional level. Please see the response to Comment C-025-021 regarding local-scale efforts on access, economic activity, and property acquisitions. See the response to Comment C-025-052 regarding transportation improvements affecting access to the Seattle Yacht Club under the Preferred Alternative.

C-025-081

Please see the response to Comment C-025-080. The types of local effects mentioned in the comment would be considered direct effects. The response to Comment C-025-018 identifies where these types of effects are discussed in the project documents.

C-025-082

The types of effects mentioned in the comment would be considered direct effects. Please see the responses to comments C-025-080 and C-025-081. Once completed, the SR 520, I-5 to Medina project will improve mobility, access, neighborhood connectivity, air quality, and water quality in the project area. Depending on mitigation measures agreed to by neighboring property owners, it also has the potential to substantially reduce noise in the corridor. Although construction may result in long periods of disruption, WSDOT is committed to working with neighborhoods and affected property owners to minimize these impacts as much as possible. Regarding the appeal of the Seattle Yacht Club facilities, potential future behavior of the club's members and patrons, and inferred potential economic effects on the club, please see the response to Comment C-025-019.

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

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Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

C-025-086

Report	Page #	LINE #'s	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, Pg 23 Ch 7, Pg 24 continued	23, 24 13	Erik Sabiers	Recreation	Second, The SDEIS seems to focus mostly on macro level beginning-to-endpoint commuter type impacts and focuses little on effects to recreational areas like Portage Bay/SVC/QCYC that are in the middle of the 520 line where "connectivity," aesthetics, and air/noise/etc. would likely not be improved but rather worsened over the short and long-term. Noise walls, appealing exterior noise wall design and vegetation, quiet pavement, street sweepers, minimizing width of the westbound 520 Montlake on-ramp, etc. all could be important project features to minimize negative or invasive impacts of 520 construction and expansion.

C-025-083

Please see the response to Comment C-025-056 regarding recreational use of Portage Bay and construction mitigation measures to reduce effects to navigation channels used for recreational boating.

The Social Elements Discipline Report listed community services that include schools, religious institutions, social institutions, government facilities, fire and emergency medical, police, and utilities. A private club is not considered a community service under NEPA. Temporary and permanent effects on the Seattle Yacht Club were described in the Recreation Discipline Report, Cultural Resources Discipline Report, and the Land Use, Economics, and Relocation Discipline Report. Updates to most of these reports have been produced as addenda and are attached to the Final EIS (Attachment 7).

C-025-084

The types of concerns mentioned in the comment would be considered direct effects, which is why they are not discussed in the Indirect and Cumulative Effects Discipline Report. Please see the response to Comment C-025-056 regarding recreational use of Portage Bay and construction mitigation measures to reduce effects to navigation channels used for recreational boating. The analysis in the Recreation Discipline Report Addendum (Attachment 7 to the Final EIS) discusses project effects on the Seattle Yacht Club and the Queen City Yacht Club, along with effects on public recreational facilities.

Air quality in 2030 is expected to improve with or without the project and would not exceed the National Ambient Air Quality Standards (see pages 28 through 32 of the Air Quality Discipline Report). Please see the response to Comment C-025-011 regarding the effectiveness of noise walls in the area with Options A, K, and L, and the reduction in noise that would occur with the Preferred Alternative due to inclusion of four-foot

Discipline Report Comment Summary

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 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

Report	Page #	LINE #'s	Reviewer	Topic	Comment
C-025-087	Indirect & Cumulative Effects Ch 7, Pg 25 Ch 7, Pg 26	21	Erik Sabiers	Visual and Aesthetics	The SDEIS states "the project would not produce indirect effects on visual quality and aesthetics because all changes to structures, landforms, and vegetation would be confined to direct impacts within the project area along the SR 520 corridor." We find this incorrect for the Portage Bay area since a larger footprint bridge (including the width of the westbound 520 Montlake on-ramp) with it's related increases in noise, fith, and visual effects encroaching on SYC, QCYC, moorage, and Portage Bay in general would definitely produce indirect effects related to SYC club usage and related economics. Some indirect effects specifically could be lesser usage of facilities in general in the Portage Bay area, less desire for moorage, fewer club banquets held, effects on the sailing school and programs, etc. Minimizing these effects somewhat via context-sensitive architectural and design standards and vegetation (per page 26, line 22), narrowing the westbound 520 Montlake on-ramp, and utilizing noise walls, quiet pavement, and street sweepers could be helpful project features.
		22			
C-025-088					

concrete traffic barriers with noise absorptive coating in the project design.

C-025-085

Please see the response to Comment C-025-060 regarding the I-5/SR 520 interchange. Chapter 5 of the Final Transportation Discipline Report includes an updated analysis of the effects of the Preferred Alternative on SR 520 congestion approaching the SR 520/I-5 interchange.

C-025-086

The types of local effects mentioned in the comment would be considered direct effects and are addressed in Chapters 5 and 6 of the SDEIS and Final EIS. Since the SDEIS was published, FHWA and WSDOT have developed a Preferred Alternative that is similar to Option A, but incorporates design refinements that respond to community and stakeholder feedback on to the SDEIS. These refinements would reduce adverse effects such as those noted in the comment and would provide a number of mitigative features suggested by interaction with the community, including four-foot concrete traffic barriers with noise-absorptive coating, a realigned Montlake on-ramp, stormwater treatment. Please see Chapter 2 of the Final EIS for a description of the Preferred Alternative.

Quieter concrete pavement is included as a design feature for Option A, Option K, and the Preferred Alternative; however, because it is not an FHWA-approved mitigation measure and because future pavement surface conditions cannot be determined with certainty, it is not included in the noise model for the project.

C-025-087

Please see the response to Comment C-025-086. Also see the response

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

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C-025-089

Report	Page #	LINE #'s	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, Pg 26	35	Erik Sabiers	Cultural	The SDEIS "did not identify any indirect effects on cultural resources" yet the technical report on page 82 states "construction-related effects on historic properties in the project vicinity could include increased noise, fugitive dust, vibration, and visual quality effects. Temporary street closures would cause traffic detours that could increase traffic in and around identified historic properties. These effects would be minimized through mitigation measures that protect building facades, comply with local noise regulations, and maintain access." SYC's historical status should not be ignored. SYC is a cultural resource and this includes traditional activities like Opening Day as well as many other events and gatherings.

to Comment C-025-084 regarding air quality effects and C-025-011 regarding noise effects.

C-025-088

The design of the Preferred Alternative has been undertaken in a context-sensitive manner. Design elements include a reduced posted speed limit across the Portage Bay Bridge and median plantings on the Portage Bay Bridge, which would create a boulevard feel for this segment of SR 520 and help integrate the roadway into the surrounding landscape. Aesthetic treatments for the Portage Bay Bridge will be designed with input from project stakeholders, including the Seattle Yacht Club. As noted in the response to Comment C-038-086, Chapter 2 of the Final EIS provides a description of the Preferred Alternative including a description of noise reduction strategies that are part of the Preferred Alternative.

C-025-089

The quoted statement is a conclusion on indirect and cumulative effects at a regional level, not at the project level. WSDOT recognizes the historical status of the Seattle Yacht Club and continues to address the Seattle Yacht Club as a historic property under Section 106 of the National Historic Preservation Act of 1966. As noted in the Cultural Resources Discipline Report, the Seattle Yacht Club is a contributing element to the Montlake Historic District and is individually listed in the National Register of Historic Places.

In April 2009, WSDOT invited the Seattle Yacht Club to engage in the Section 106 process as a consulting party and has since been working with the club to identify measures to reduce potential impacts from the project on the historic property. The consulting party process resulted in a Programmatic Agreement that records the stipulations agreed upon to resolve the adverse effect of the project (see Attachment 7 to the Final Cultural Resources Assessment and Discipline Report). As discussed in

Discipline Report Comment Summary

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Report	Page #	LINE #'s	Reviewer	Topic	Comment
C-025-090	Indirect & Cumulative Effects	Ch 7, Pg 28	Erik Sabiers	Noise	WSDOT considers all noise-related effects to be direct. While we agree that noise is a direct effect since it is detected by people only while close to the SR 520 corridor, for SYC and QCYC there are also probable indirect effects such as less SYC club usage in all forms including related economic impacts of less moorage revenue, less banquet revenue, and less outside restaurant deck revenue as moorage holders and club patrons recognize the lessened desirability of mooring boats and holding events at the clubs. Further, the SDEIS's assumptions about transit usage and proportion of quieter vehicles on the road over time seem like unsubstantiated claims for this report time frame of 2030 (only 20 years). An analyst could just as easily conclude there will be more noise resulting from population growth and more vehicles and mass transit vehicles on the road. Also, Pg 5/6 of the technical report shows the no build bridge at 60ft wide but the 6 lane at 115+ ft wide (and this does not include the width of the westbound 520 Montlake on-ramp) putting all that traffic and noise that much closer to SYC/QCYC than in the no build alternative.
C-025-091					Finally, the technical report on pg 85 states that construction would produce noise and vibration, especially from major construction activities such as pile driving, demolishing existing structures, hauling, and concrete pumping. During heavy construction periods, noise levels could reach very high levels (85 to 105 A-weighted decibels [dBA]) at 50 to 100 feet from the activities, and these effects would be above the traffic sound levels normally experienced within 500 feet of the right-of-way. We believe short-term and long-term measure are needed to control the potential negative effects of increased noise.

the Navigable Waterways Discipline Report Addendum (Attachment 9 to the Final EIS), WSDOT has agreed to suspend pontoon towing through Portage Bay during the Seattle Yacht Club's traditional Opening Day ceremony, as well as one week before and one week after it to avoid affecting this annual event.

C-025-090

Once completed, the SR 520, I-5 to Medina project will improve mobility, access, neighborhood connectivity, air quality, and water quality in the project area. Depending on the mitigation measures agreed to by neighboring property owners, the project also has the potential to substantially reduce noise in the corridor. Although construction may result in long periods of disruption, WSDOT is committed to working with neighborhoods and affected property owners to minimize these impacts as much as possible. Please see the response to Comment C-025-019 regarding potential economic effects on the Seattle Yacht Club.

See the response to Comment C-025-011 regarding noise effects. The Preferred Alternative includes a number of noise management strategies along the corridor that respond to public concerns about noise (see Section 2.5 of the Final EIS). Included in the project design for the Preferred Alternative are 4-foot traffic barriers with noise absorptive coating, which would reduce noise levels in the area of the Seattle Yacht Club by several decibels compared to the No Build Alternative. Traffic and noise analyses performed for the SDEIS and Final EIS have been consistent with current FHWA methodology, which is the accepted standard for modeling and mitigation of highway traffic noise.

C-025-091

Please see the response to Comment C-025-012 regarding construction noise effects and mitigation measures.

In addition to measures identified in the Noise Discipline Report

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that: ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate**... (page 2 of technical report)
 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

C-025-092

Report	Page #	LINE #'s	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, Pg 29	14	Erik Sabiers	Air Quality	We agree that the project would produce indirect effects on air quality during the construction period from hauling construction materials and from particulate release from excavation of fill material. Adverse fifth affects the SYC clubhouse, boats who moor at SYC, outside banquet activity, the sailing school, and outside restaurant deck revenue. However, the SDEIS completely ignores any potential long-term increase in air quality despite the fact that p 88 of the technical report states that "emissions would occur over the long term" and that "expanded transit...would help offset INCREASES in vehicle emissions from HIGHER traffic volumes." Greater congestion at the West side I-5/520 bottleneck from increased overall traffic on 520 would increase noise, CO levels, and fifth. Lastly, for a given level of noise and air quality, just the fact that the bridge footprint would creep further north and substantially further north at the location of the westbound 520 Montlake on-ramp makes it worse for the Portage Bay recreational area.

Addendum (Attachment 7 to the Final EIS), site-specific solutions for mitigating construction and operation noise will be developed by WSDOT during detailed engineering design, along with the involvement of community and neighborhood organizations.

C-025-092

The types of localized air quality concerns mentioned in the comment would be considered direct effects and were discussed in the Air Quality Discipline Report and Chapter 5 of the SDEIS. Operation of the SR 520, I-5 to Medina project would not generate negative direct or indirect effects to air quality. The Indirect and Cumulative Effects Discipline Report (in Attachment 7 to the Final EIS) has been revised to clarify air quality effects from transportation. The report notes that during project operation, vehicle emissions would decrease compared to existing conditions, despite an increase in vehicle miles traveled (VMT). This is due to the general increase in vehicle speed due to reduced congestion as well as in advancements in vehicle and fuel technology.

The SR 520, I-5 to Medina project would result in lower vehicle emissions than No Build, even with higher future travel demand because a larger proportion of the trips would use transit and because improved traffic flow would reduce idling in the corridor compared to the No Build Alternative. The higher travel demand itself is a function of planned population and employment growth in the region, not of the SR 520 project. The emissions analyses conducted for long-term project operation indicated that all design options would meet NAAQS in 2030, the project analysis year (see the Air Quality Discipline Report and its addendum, which is Attachment 7 to the Final EIS).

See the response to Comment C-025-011 regarding the expected noise reduction in the Portage Bay area. Please see the response to Comment C-025-019 regarding potential economic effects to the Seattle Yacht Club.

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that: ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. ... typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate**... (page 2 of technical report)
 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

Report	Page #	LINE #'S	Reviewer	Topic	Comment
C-025-093	Indirect & Cumulative Effects Ch 7, Pg 29	33	Erik Sabiers	Air Quality	The SDEIS statement that <i>"the project is not expected to create any new violations, nor increase the frequency of an existing violation of the CO standard"</i> seems like an unsubstantiated statement and is unlikely to be true since more traffic on the bridge from the Eastside will still bottleneck on the West side right at Portage Bay and the I-5/520 interchange and cause worse air and noise pollution and filth. Nothing in the Technical report discusses the West side I-5/520 bottleneck PLUS a larger footprint bridge PLUS population growth PLUS more transit vehicles on the road EQUALING the potential for lower air quality.
C-025-094	Indirect & Cumulative Effects Ch 7, Pg 32	9	Erik Sabiers	Water	The SDEIS states that the project would not have an adverse effect on water quality because storm water runoff would be mitigated. The technical report is ONLY referencing storm water treatment and does not consider or analyze effects of tire and road filth that occurs during dry weather which ultimately settles on nearby structures and surface water. This disturbs water quality in Portage Bay, affecting the environment and recreational activities such as SYC sailing school.

C-025-093

Conclusions presented in the SDEIS and Final EIS concerning local and regional air quality effects are based on the quantitative modeling of criteria pollutants using standard methodology, as described in the Air Quality Discipline Report. The air quality analysis used the results of the transportation analysis as inputs. The transportation analysis is based on a travel demand model and freeway simulation model that include the I-5/SR 520 interchange (see the response to Comment C-025-060). The analysis found that the project would not result in any violations of the NAAQS; in fact, concentrations of CO at worst-case intersections would be well below the standard for the No Build Alternative and all design options in 2030. See Exhibits 15 and 16 in the Air Quality Discipline Report (Attachment 7 to the SDEIS) and the Project Effects section of the Air Quality Discipline Report Addendum (Attachment 7 to the Final EIS).

C-025-094

The types of airborne pollutants described in the comment derive from a number of sources, and vehicular traffic is only one contributor. Because the majority of pollutants in roadway-derived stormwater are associated with particulates that are not easily airborne, it is unlikely that the operation of the project would affect existing or future levels of airborne pollutants. To the extent that pollutants on the roadway surface are collected and treated in stormwater, overall pollutant levels in the project area would be lower with the project than without it.

Discipline Report Comment Summary

Discipline Report: **Indirect and Cumulative Effects Analysis**

Indirect effects (sometimes called secondary impacts or effects) are defined as effects that: ... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. typically involve a chain of cause-and-effect relationships that can take time to develop and can occur at a distance from the project site. This makes some indirect effects difficult to predict accurately, although they must be reasonably foreseeable, and usually requires a **qualitative estimate**. (page 2 of technical report)
 ...Other indirect effects can take months or years to become apparent (page 23 of technical report)

Cumulative Effects - WSDOT does NOT mitigate cumulative effects because it does not have jurisdiction over the many non-WSDOT projects that contribute to them. Ch 7, p 7-1, line 6.

C-025-095

Report	Page #	LINE #s	Reviewer	Topic	Comment
Indirect & Cumulative Effects	Ch 7, Pg 39		Erik Sabiers	Navigation	This section of the SDEIS and the technical report completely omits navigation issues for the boating and recreation community during the construction period other than bridge related closures. The ability to access SYC, QCYC, etc. from the water side is crucial to general club activities and finances not to mention specific community events such as Opening Day, Sailing School, etc.

C-025-095

Please see the response to Comment C-025-007. The Recreation Discipline Report Addendum enhances discussion and analysis of recreational boating in the original report.

	Comment Page/line	Commentator		Reviewer comment
		Name	Comment by WSDOT	
C-025-096	SDEIS Report, Ch 7 Indirect and Cumulative Effects p 7-5	E. Van	Assumption - WSDOT considered construction to be short term and temporary. Therefore, only direct or indirect effects of operating the facility would contribute to cumulative effects	Both construction and operation of the project may have the effect of removing significant parking at the NOAA property utilized in connection with Opening Day activities. Construction and location of the project in Portage Bay may adversely affect the Opening Day operations.
C-025-097	p 7-18	E. Van	The report discusses construction period mitigation measures impacting a number of institutions.	The historic Seattle Yacht Club is not included in the discussion.
C-025-098	p 7-21	E. Van	Social Elements Effects. No indirect effects would result from the project	Impact of tolling and construction may adversely affect usage of Seattle Yacht Club impacting its cultural contribution to the community.
	Attachment 7 Discipline Reports Indirect and Cumulative Effects			
C-025-099	p7, Option A	E. Van	"would include a transit-only off-ramp from westbound 520 to northbound Montlake Blvd."	No auto exit ramp to Montlake Blvd to provide access to Seattle Yacht Club (SYC). No description of eastbound exit to Montlake traveling north.
C-025-100	p18-19 Cumulative Effects	E. Van	"--the analysts considered only direct or indirect effects of operating the completed facility as potential project contributions to cumulative effects."	This gives no consideration to the combination of construction activities coupled with tolling that would cumulatively affect the activities of SYC, a historic structure.
C-025-101	p30-31 History of the Project - Montlake	E. Van	A description of development of the area known as Montlake.	It contains no mention of the historic nature of the area, including SYC.

C-025-096

Since the SDEIS was published, FHWA and WSDOT have developed a Preferred Alternative that incorporates design refinements that respond to community and stakeholder input. The Preferred Alternative would avoid removal of the buildings at the Northwest Fisheries Science Center (see the Land Use, Economics, and Relocations Discipline Report Addendum in Attachment 7 to the Final EIS). Fifty-three parking stalls within and near current WSDOT easement that is used by NOAA would be affected during construction, and the 38 stalls within the WSDOT easement would not be available following completion of construction. However, WSDOT and NOAA are discussing an agreement or other mechanism that would allow the NWFSC to use the area under the new structure for parking after completion of construction, and are also discussing appropriate mitigation for parking effects on NOAA during construction. This mitigation discussion is not expected to be finalized until after this Final EIS is published. WSDOT will continue to coordinate with Seattle Yacht Club to ensure that Opening Day activities are not adversely affected by construction. WSDOT is working with Section 106 consulting parties and other affected communities to develop a Community Construction Management Plan (Attachment 9 to the Final EIS) for construction effects on properties in the project area, including the Seattle Yacht Club. Please see the response to Comment C-025-008 for a discussion of mitigation related to Opening Day.

C-025-097

The SDEIS did not discuss mitigation measures for effects on institutions. Rather, it proposed coordination of a traffic control plan with WSDOT, the City of Seattle, Sound Transit, the University of Washington, and emergency service providers. The agencies mentioned all provide transportation facilities or services or are public entities. The SDEIS and Final EIS discuss the historic standing of the Seattle Yacht Club in Sections 4.6, 5.6, and 6.6, Cultural Resources, and in the Cultural Resources Discipline Report. Mitigation measures based on the

	Comment Page/line SDEIS Report, Ch 7 Indirect and Cumulative Effects	Commentator		Reviewer comment
		Name	Comment by WSDOT	
C-025-102	p58 Land Use	E. Van	"No substantial change to the overall urbanized land use pattern in Seattle would occur, and no indirect effects on land use pattern would occur."	There is no discussion on the dilatory impacts that would occur on the Montlake interchange neighborhoods and the SYC.
C-025-103	p63-64 Social related cumulative effects	E. Van	The report concluded there would be no long term adverse effect on social elements. Therefore, no assessment was pursued.	There was no mention of the potential effects on the social nature of historic properties.
C-025-104	p70-76 Effects on Recreation	E. Van	There is significant discussion re the effects on recreation re parks, and the UW.	There was no discussion on effects on boating or sailing in Portage Bay, sailing classes, Open-Day parade nor the Special Peoples Cruise. Opening Day was mentioned on page 74-75, but there was no discussion on the effects of the project or efforts to mitigate the effects.
C-025-105	p 82 Direct and Indirect on Cultural Resources	E. Van	Effects on historic properties would be minimized through mitigation measures that would protect building facades, comply with local noise regulations and maintain access.	There has been no attempt to engage discussions on mitigation with SYC.
C-025-106	p 82 Direct and Indirect effects on Cultural Resources	E. Van	"There are no identified indirect effects to cultural resources"	Indirect effects on cultural resources of the Seattle Yacht Club will include impacts on usage of the property during construction and as a result of tolling which will adversely impact usage of the property: usage of the sailing facilities, and interaction with the community at large, all of which contribute to the historic nature of the property.

Seattle Yacht Club's status as a Section 106 property are stipulated in the Section 106 Programmatic Agreement (Attachment 9 to the Final EIS).

C-025-098

Although construction may result in long periods of disruption, WSDOT is committed to working with neighborhoods and affected property owners to minimize these impacts to the greatest possible extent. Regarding tolling, please see the response to Comment C-025-078.

C-025-099

The comment references the general project description in the Indirect and Cumulative Effects Discipline Report, which is not intended to provide details about specific vehicle movements. As described Chapter 2 of the Final EIS, the Preferred Alternative is a similar configuration to the existing interchange, with a number of enhancements to benefit transit access and overall traffic flow. It includes ramps for general-purpose vehicles, as well as transit vehicles. Please see Chapter 6 of the Transportation Discipline Report for details about specific vehicle movements in the Montlake interchange area.

C-025-100

The text cited in the comment pertains only to the analysis of indirect and cumulative effects. Chapter 6 of the SDEIS and Final EIS evaluate construction effects of the project and associated mitigation. Please see the response to Comment C-025-097. Regarding tolling, construction, and future behavior of the Seattle Yacht Club's members and patrons, the NEPA process avoids speculative conclusions regarding the future actions of specific individuals or groups when supporting evidence is lacking.

	Comment	Commentator		Reviewer comment
	Page/line	Name	Comment by WSDOT	
C-025-107	SDEIS Report, Ch 7 Indirect and Cumulative Effects p 90 - 91 Air Quality	E. Van	The discussion on air quality does not mention <u>particulate matter</u> , such as tire rubber fragments or exhausts	Air quality should include particulate matter, such as from tires and exhaust that are carried on the prevailing wind and deposited on the historic property.
C-025-108	p 99	E. Van	Water resources - concludes no adverse effect because of storm water runoff treatment.	Does not discuss impacts due to contaminants carried by air.
C-025-109	p 122 Navigation	E. Van	Channels would be closed at times but construction would be staged so that channels would not be closed on the same day. A local notice to mariners would be issued by the Coast Guard.	The channels are not identified precluding specific comment. However, there is no mention of keeping channels open for the conduct of Opening Day or Sail class activities.

C-025-101

The historic nature of the Montlake area is discussed in the Historic Context section of the Cultural Resources Discipline Report. The report goes on to note that the Seattle Yacht Club is an individually listed property, as also contributing to the Montlake Historic District.

C-025-102

Please see the response to Comment C-025-080.

C-025-103

The comment concerns effects on historic properties. WSDOT found that there would be direct effects to the Seattle Yacht Club as a historic resource during construction of the project, as described in the response to Comment C-025-019 and other previous comments. The Final Indirect and Cumulative Effects Discipline Report (Attachment 7 to the Final EIS) summarizes direct effects on the Seattle Yacht Club as a historic resource; however, they are fully described in the Final Cultural Resources Assessment and Discipline Report.

C-025-104

Please see the responses to comments C-025-007 and C-025-008. The Final EIS and the Final Indirect and Cumulative Effects Discipline Report in Attachment 7 of the Final EIS include discussions of boating-related activities and events.

C-025-105

WSDOT, through the Section 106 consulting party process, continues to coordinate with affected parties to further identify potential ways to minimize the effects of corridor construction on the historic properties they steward. The consulting party process has resulted in a Programmatic Agreement that records the stipulations agreed upon to

	Comment	Commentator		Reviewer comment
	Page/line	Name	Comment by WSDOT	
	Attachment 7 Discipline Reports Land Use, Economics and Relocation			
C-025-110	Exhibit 31	E. Van	Identification and location of business and institutions	The Exhibit does not identify the locations of MOHAL, NOAA nor the SYC, all of which may be severely impacted.
C-025-111	p 4	E. Van	The 6 lane alternative would temporarily increase congestion and affect access to businesses and residents. Some businesses could experience fluctuations in retail sales.	There is no mention of loss of revenue impact on SYC, which may limit the ability to maintain the historic facility.
C-025-112	p 23	E. Van	SYC is mentioned as a yacht club.	There is no mention that the club is also an historic property. It presumes unimportance.
C-025-113	p 62	E. Van	The report discusses minor revenue losses from construction and night-time lane closures that would have a minor effect on local business revenues.	Many of SYC revenue activities occur in the evenings, when loss of revenue could severely impact revenue necessary to support the facility.
C-025-114	p 102-103	E. Van	WSDOT states that signage that clearly marks detour routes and indicates that stores are open during construction will be provided.	The report mentions QCYC and the UW but not SYC. Also mitigation is underway for adverse impacts to several businesses/institutions but not SYC.
C-025-115	p 103	E. Van	QCYC is mentioned for mitigation for temporary lost moorage and the UW for special events.	SYC should be included for mitigation for events such as Opening Day weekend, sailing activities and other events, such as the Special Peoples Cruise.
C-025-116	p 113	E. Van	Negative Effects remaining after completion from land use acquisitions	There is no mention of continuing negative effects from land use invasive effects.

resolve the adverse effect of the project (see Attachment 9 to the Final EIS).

C-025-106

The effects described in the comment would be direct effects. WSDOT found that there would be direct effects to the Seattle Yacht Club as a historic resource during construction of the project, as described in the responses to previous comments. The Final Indirect and Cumulative Effects Discipline Report (Attachment 7 to the Final EIS) summarizes direct effects on cultural resources; however, they are fully described in the Final Cultural Resources Assessment and Discipline Report.

C-025-107

The analysis of air quality in the Air Quality Discipline Report discussed particulate matter and concluded that levels of this pollutant, along with other regulated pollutants, would remain within the NAAQS in the project design year of 2030. Therefore, no indirect negative effects would occur.

C-025-108

Please see the response to Comment C-025-094. Because the majority of pollutants in roadway-derived stormwater are associated with particulates that are not easily airborne, it is unlikely that the operation of the project would affect existing or future levels of airborne pollutants.

C-025-109

The channels referred to are the east and west navigation channels of the floating bridge. Please see the response to Comment C-025-008 regarding effects on and mitigation measures for Opening Day and other Seattle Yacht Club activities.

C-025-110

This exhibit has been revised in the Land Use, Economics, and

	Comment Page/line	Commentator		Reviewer comment
		Name	Comment by WSDOT	
	Attachment 7 Discipline Reports Land Use, Economics and Relocation			
	Seattle's Comprehensive Plan			
C-025-117	IU 241, p 1-12, item 1.	E. Van	"All environmental effects would be mitigated according to governmental regulations. The 6-Lane Alternative would be consistent with this policy."	The report does not discuss mitigation for adverse impacts to historical properties.
C-025-118	IU 269, p 1-14, item 2.b.	E. Van	Mentions the Seattle policy for Lake Union and Portage Bay to protect the views in all environments.	WSDOT makes no comment about the impacts on the city view of the bridge and intersections
C-025-119	IU 269, p 1-15, item TG 7	E. Van	Regarding protection of neighborhood streets from through traffic. WSDOT concludes the -----would not substantially change local traffic patterns.	What does "substantially" mean? SVC needs protection for accessibility.

Relocations Discipline Report Addendum (Attachment 7 to the Final EIS) to identify the locations of the Museum of History and Industry, the Northwest Fisheries Science Center, and the Seattle Yacht Club.

C-025-111

The Effects section of the Land Use, Economics, and Relocations Discipline Report addressed the economic effects of project construction and operation. The discussions include an analysis of local effects based on the predicted level of traffic congestion, reduced parking, and noise levels. Although construction may result in long periods of disruption, WSDOT is committed to working with neighborhoods and affected property owners to minimize these impacts as much as possible. Please see the response to Comment C-025-019 regarding potential economic effects on the Seattle Yacht Club.

C-025-112

The historic status of the Seattle Yacht Club property is described in detail in the Cultural Resources Discipline Report.

C-025-113

The errata sheet to the Land Use, Economics, and Relocations Discipline Report adds yacht clubs to the list of businesses that receive much of their revenue during the evening (see Attachment 1 to the Land Use, Economics, and Relocations Discipline Report Addendum, which is in Attachment 7 to the Final EIS). See the response to Comment C-025-036. Through the Section 106 consultation process, WSDOT determined that construction may temporarily diminish the integrity of the Seattle Yacht Club as a historic property. Measures to avoid, minimize and mitigate these effects are stipulated in the Programmatic Agreement.

C-025-114

The mitigation listed on pages 102 and 103 of the Land Use, Economics,

Seattle Yacht Club Comments on
SR 520 Bridge Replacement HOV Project SDEIS Report
(Dock Zero) (3)

Subject: Adverse Effects on Cultural Resources

Reference: Chapter # 5, Page 5-82 to 5-87(Cultural Resources, Portage Bay)
Chapter #6, Page 6-57 & 6-59(Cultural Resources, Portage Bay)

Standing: Seattle Yacht Club (SYC) is a **Consulting Party** to the planning and construction of the SR 520 bridge replacement project. SYC is a historic site and is listed on the **NRHP**. As such, SYC applied for and was granted "Consulting Party" status by WSDOT and there by qualify for Section 106 protections.

Cultural
Element:

C-025-120

Each year, Seattle Yacht Club invites Yacht Clubs from all over the Pacific Northwest and Canada to come celebrate "The Opening day of Boating Season" (Opening Day). This festive event kicks off the season long calendar of boating activities. The program for the day starts with a Commissioning Ceremony that recognizes the Commodores from over 100 visiting Yacht Clubs from all over the Pacific Northwest and Canada. An International Invitational Rowing Regatta featuring the Windemere Challenge Cup sponsored by the University of Washington Crew follows the ceremony. The World Famous Parade of Boats through the Montlake Cut lasts up to four hours following the crew races.

Many of the visiting Yachtsmen travel great distances to participate in Opening Day. As such SYC, the Queen City Yacht Club and several other clubs in the adjacent areas attempt to provide guest moorage for the visitors. SYC erects a temporary dock as guest moorage in the quiet, (except for SR 520 noise) well protected waters of Portage Bay for our visitors. The waters of Portage Bay are an excellent venue for these Opening Day activities

C-025-121

The Seattle Yacht Club objects to any bridge design and/or construction activity that further encroaches into the navigable waters of Portage Bay; especially in those areas designated by the Section 106 as an **Areas of Potential Effect (APE)**. Seattle Yacht Club's sailing culture is and will be **Adversely Affected** under Options A, K and L by the SR520 Bridge Replacement and HOV Project during construction. The Club fully expects the Memorandum of Agreement to include provisions that will completely mitigate all **Cultural Resource** conflicts arising from the SR 520 bridge project.

3/24/2010

and Relocations Discipline Report is specific to properties that would be affected by property acquisitions. There would be no property acquired from the Seattle Yacht Club. However, detour signage and other construction access measures would be used as needed to ensure that adverse effects to the Seattle Yacht Club would be minimized.

C-025-115

Measures to minimize effects on Seattle Yacht Club events are discussed in response to previous comments. No physical effects would occur on Seattle Yacht Club facilities or moorage.

C-025-116

The Land Use, Economics, and Relocations Discipline Report did not contain a statement regarding negative effects remaining after completion of land use acquisitions. It did include a section titled "What negative effects would remain after mitigation?" This section described permanent acquisitions of right-of-way required for the design options. Indirect effects that might result later from such acquisitions were described in the Indirect and Cumulative Effects Discipline Report.

C-025-117

See the Section 106 Programmatic Agreement (Attachment 9 to the Final EIS) for the stipulations the provide mitigation measures specific to historic properties.

C-025-118

The text in Item 2.b actually states "Provide for some open water and protect views of the lake and Bay in all environments in Lake Union and Portage Bay." Effects on views were described in the Visual Quality and Aesthetics Discipline Report and updated in its addendum, which is Attachment 7 to the Final EIS.

Seattle Yacht Club Comments on
SR 520 Bridge Replacement HOV Project SDEIS Report
(Sailing Classes) (5)

Subject: Adverse Effects on Cultural Resources

Reference: Chapter # 5, Page 5-58 & 59 Cultural Resources - Portage Bay
Chapter # 6, Page 6-58 & 85 Cultural Resources - Portage Bay

Standing: Seattle Yacht Club (SYC) is a **Consulting Party** to the planning and construction of the SR 520 bridge replacement project. SYC is a historic site and is listed on the **NRHP**. As such, SYC applied for and was granted "**Consulting Party**" status by WSDOT and there by qualify for Section 106 protections.

Cultural
Element:

C-025-122 | Great effort has been put forth by the Seattle Yacht Club to preserve its traditions and culture. Each summer since its establishment in 1892, the Club has sponsored sailing classes and regattas to preserve the Art and Science of sailing. These sailing classes on Portage Bay are available to all youths of the Seattle and Puget Sound vicinity. Sailing education consists of boating safety, boat handling, sailing equipment utilization, rules of competition and sailing tactics. Many Olympic and International class competitors have graduated from this sailing education program. Portage Bay waters are an excellent venue for these purposes.

C-025-123 | The Seattle Yacht Club objects to any bridge design and/or construction activity that further encroaches into the navigable waters of Portage Bay or interferes with the conduct of these sailing classes, especially in those areas designated by the Section 106 as **Areas of Potential Effect (APE)**. SYC's sailing culture is and will be **Adversely Effected** under Options A, K and L by the SR520 Bridge Replacement and HOV Project both during construction and in commercial operation. SYC fully expects the Memorandum of Agreement to include provisions that will completely mitigate all **Cultural Resource** conflicts arising from the SR 520 bridge replacement project as they relate to the conduct of SYC's sailing education program.

3/24/2010

C-025-119

"Substantially" in this instance means that local street travel patterns would not change enough to adversely affect traffic operations. Please see the response to Comment C-025-052 regarding improvements in access to the Seattle Yacht Club with the project.

C-025-120

Comment noted. The Recreation Discipline Report Addendum has been revised to include additional information on Seattle Yacht Club activities.

C-025-121

Please see the responses to comments C-025-007, C-025-008, and C-025-051.

C-025-122

Please see the response to Comment C-025-123.

C-025-123

Please see the responses to comments C-025-007, C-025-008, and C-025-051.

Seattle Yacht Club Comments on
SR 520 Bridge Replacement HOV Project SDEIS Report
(Access/egress to Slips) (4)

Subject: Adverse Effects on Cultural Resources

Reference: Chapter # 4, Pages, 4 – 77, Navigation
Chapter # 5, Page 5, 5 - 151
Chapter #6, Page, 6 - 107

Standing: Seattle Yacht Club (SYC) is a **Consulting Party** to the planning and construction of the SR 520 bridge replacement project. SYC is a historic site and is listed on the **NRHP**. As such, SYC applied for and was granted “**Consulting Party**” status by WSDOT and there by qualify for Section 106 protections. In addition, WSDOT is obligated to make a 4(f) analysis that requires them to avoid, minimize or mitigate any use of a historic property.

Cultural
Element:

C-025-124 Seattle Yacht Club realizes that the contractors must have access and egress to the SR 520 highway rights of way in order to accomplish the bridge replacement and other activities. In like manner, the SYC boat owners must have access and egress to their moorages. Any blockage of the fairways leading to the moorages by boats, barges and other floating materials will adversely affect the Seattle Yacht Club. It would appreciate any notices that WSDOT and or the contractor can give to enable its cooperation in the bridge replacement project. It would also appreciate timely notices regarding WSDOT's Pontoon Towing and Ballard Lock Operation to minimize any effect on its activities.

C-025-125 The Seattle Yacht Club objects to any bridge design and/or construction activity that further encroaches into the navigable waters of Portage Bay, especially in those areas designated by the Section 106 as **Areas of Potential Effect (APE)**. Seattle Yacht Club's sailing culture is and will be **Adversely Effected** under Options A, K and L by the SR520 Bridge Replacement and HOV Project during construction. The Club fully expects the Memorandum of Agreement to include provisions that will completely mitigate all **Cultural Resource** conflicts arising from the SR 520 bridge project.

3/24/2010

C-025-124

Please see the response to Comment C-025-008. WSDOT is committed to working with the Seattle Yacht Club to minimize construction effects to the fullest extent with efficient project construction.

C-025-125

Please see the responses to comments C-025-007, C-025-008, and C-025-051.

Seattle Yacht Club Comments on
SR 520 Bridge Replacement HOV Project SDEIS Report
(Indirect & Cumulative Effects) (8)

Subject: Indirect & Cumulative Effects on Cultural Resources

Reference: Chapter # 7, Page 7-81 to 7-85 (Cultural Resources, Portage Bay)
Discipline Report - Indirect & Cumulative Effects Analysis

Standing: Seattle Yacht Club (SYC) is a **Consulting Party** to the planning and construction of the SR 520 bridge replacement project. SYC is a historic site and is listed on the **NRHP**. As such, SYC applied for and was granted "Consulting Party" status by WSDOT and there by qualify for Section 106 protections.

Cultural
Element:

C-025-126

Chapter 7 of the SR 520 Bridge Replacement and HOV, SDEIS report addresses the Indirect and Cumulative Impacts. We noted that WSDOT uses the words "Impacts" and "Effects" interchangeably. At page 7-1 Indirect Effects are defined as those Impacts that are the result of a previous or distant action. Cumulative Impacts are effects that result from a collective or incremental set of actions. WSDOT declares that it does not mitigate Cumulative Impacts because it does not have jurisdiction over all of the contributing actions that result in the cumulative effects. That may not always be the case.

C-025-127

The SDEIS is suppose to identify all effects a proposed action might have on the environment or the effected area's resources, such as the SR 520 project. Impacts such as direct effects, indirect effects, operational effects, construction effects, permanent effects, positive effects, adverse effects all operating in an effected area.

C-025-128

Indirect and cumulative Impacts are considered to identify to the public the effects that a resource might experience in addition to those that are revealed by the normal project assessments

C-025-129

WSDOT examined a number of disciplines using FHA prescribed methodologies. Seattle Yacht Club found that the cultural resources they have great concern with did not have an indirect and cumulative effects assessment. Portage Bay is a cultural resource that the Seattle Yacht Club and the Boating Community depends upon to maintain their many historic activities associated with our traditional cultural properties such as Opening Day of Boating Season each Spring

C-025-126

The comment is incorrect in how it characterizes indirect and cumulative effects. Please see the definitions of indirect and cumulative effects on pages 7-1 and 7-2 of the SDEIS. While it is the policy of both WSDOT and FHWA not to attempt to mitigate cumulative effects unilaterally, it is also true that WSDOT does mitigate the direct and indirect effects of transportation improvement projects. By mitigating direct and indirect effects, WSDOT ensures that project contributions to cumulative effects are avoided or minimized. In this way, WSDOT does mitigate cumulative effects to the fullest extent available within its jurisdiction. Please see the responses to comments C-025-007, C-025-008, and C-025-051.

C-025-127

As required by NEPA and SEPA, the SDEIS described direct effects, including operational and permanent effects (Chapter 5), construction effects (Chapter 6), and indirect and cumulative effects (Chapter 7), along with the significance of these effects.

C-025-128

Please see the definitions of indirect and cumulative effects on pages 7-1 and 7-2 of the SDEIS.

C-025-129

Cultural resources have been considered in the Indirect and Cumulative Effects Discipline Report (Attachment 7 to the SDEIS) and the Final Indirect and Cumulative Effects Discipline Report (Attachment 7 to the Final EIS). Effects on navigation in Portage Bay are described in the Recreation Discipline Report and its addendum (Attachment 7 to the Final EIS). Although Portage Bay is linked to the historic character of the Seattle Yacht Club and lies within the Area of Potential Effects, it is not in itself a historic property as defined by Section 106.

C-025-130

Seattle Yacht Club objects to any bridge or highway design that further encroaches into Portage Bay. That would be an adverse effect that degrades that Historic nature of the Montlake Community and the waters of Portage Bay.

4/10/2010

C-025-130

Please see the responses to comments C-025-064 and C-025-051.

February 18, 2010

Subject: Review of SR 520 EIS Navigable Waters Discipline Report

C-025-131 The undersigned was requested to review subject document from the point of view of the impact of the proposed SR 520 Bridge and feeder routes on the interests of the Seattle Yacht Club, its properties and activities with respect to Navigable waters. I have completed my review and offer the following comments (previously communicated verbally to Messrs. Bob Ranzenbach, Gary Stone and Commodore Ed Jennerich, QCYC and Vice President, RBAW).

Attachment 7, Section 12 of the SR 520 Environmental Impact Statement was prepared by Parametrix, Inc. for Washington State Department of Transportation and the Federal Highway Administration. This document deals with the potential impact of the construction of and resulting SR 520 floating bridge proposed to replace the existing SR 520 Albert D. Rossellini Floating Bridge over Lake Washington and the feeder routes crossing Portage Bay and the Montlake Cut as well as the routes through navigable waters of the Pacific Ocean, Juan De Fuca Straights, Puget Sound and Lake Washington Ship Canal to be traversed by sections of the new SR 520 Bridge from the point of manufacture to the point of installation in Lake Washington. The report limits consideration to the established navigable channels in the various bodies of water involved through which commercial and recreational marine traffic normally pass to traverse the involved bodies of water.

C-025-132 The impact of the new bridge and feeder bridges or construction thereof does not consider the impact on bodies of water used by recreational, commercial and emergency service marine traffic associated with either the normal activities of Seattle Yacht Club and/or the Queen City Yacht Club and/or waterfront properties or moored houseboats and other marine commercial and/or recreational users of waters adjacent to the navigable channels in the affected bodies of water.

The major change in SR520 affecting navigable waters is the removal of the draw span mitigated by raising the clearance height of the eastern high rise passage under the bridge to approximately 70 feet vertical clearance. The impact would be limiting only to the passage of vessels and other watercraft with a superstructure, mast, boom or other top hamper exceeding 70 feet in height from passage to Lake Washington south of SR 520.

Some inconvenience to marine traffic will be experienced during the construction of an additional Montlake Cut bridge but closures are to be limited to a few days during the construction period.

The report lacks details of the impact on waters and shorelines outside the navigation channel through Portage Bay. While the construction of temporary construction bridges both north and south of the existing Portage Bay bridge while that bridge is rebuilt is described in the report, the extent of such temporary bridge's incursion into Portage Bay waters to the North of the existing bridge is not defined nor is the presence of floating cranes, barges, etc. to be used in the reconstruction mentioned, much less defined as to position and impact.

C-025-131

The Navigable Waterways Discipline Report addresses navigation channels in the project vicinity and through which pontoons and other materials needed for construction of the project would be transported. Sections of the bridges would be constructed in place and would not be transported through the water bodies mentioned in the comment. Effects on boating in other portions of these water bodies, to the extent that it would be affected, are described in the Recreation Discipline Report, with an expanded discussion in the addendum to the report (Attachment 7 to the Final EIS).

C-025-132

The removal of the draw span, changes to the east and west navigation channels, and closures of the Montlake Cut during construction of the second bascule bridge are described in the Navigable Waterways Discipline Report. The Affected Environment section of the Navigable Waterways Discipline Report characterizes the commercial and recreational vessel use of affected navigation channels. The Potential Effects section describes construction and permanent effects on the navigation channels and vessels that use those channels, including commercial and recreational marine traffic. The discipline report describes the effects of pontoon and barge transport on commercial and recreational vessels. The Social Elements Discipline Report describes marine emergency services and effects on those services.

The normal activities of waterfront properties (including the Seattle Yacht Club) and moored houseboats would be expected to include recreational boating, as well as commercial and industrial marine activities associated with commercial and industrial waterfront properties. Maps that illustrate the construction work bridges in Portage Bay, the floating construction equipment positions, and the duration of stay for the Preferred Alternative are included in Chapter 3 of the Final EIS. Barges and temporary construction work bridges stationed in Portage Bay would

C-025-132 The major threat to Seattle Yacht Club and similarly to Queen City Yacht Club properties and operations could potentially be loss of moorage space for SYC's Dock "0" used during Opening Day of Yachting on the first weekend of May annually as well as access to permanent moorage on the South sides of both yacht clubs' fixed moorage facilities. Such loss would create a loss of revenue for SYC and QCYC in displaced moorage, restriction of visitor moorage and related club use revenues and hinder normal marine/on-the-water club programs currently conducted in the Portage Bay waters.

Further, no mention is made of the potential impact on the shorelines of Portage Bay, waterfront properties and floating home moorages caused by temporary structures and floating construction equipment.

I conclude that a full assessment of the potential impact cannot be determined without the additional information required to determine the position of temporary structures associated with the "construction bridges" and the floating construction equipment positions and duration of stay associated with the temporary bridges.

Viggo C. Bertelsen, Jr.

be located within the limits of construction defined for the project (see Chapter 3 of the Final EIS). See the Construction Techniques and Activities Discipline Report Addendum (Attachment 7 to the Final EIS) for additional information regarding temporary work bridges. The Land Use, Economics, and Relocations Discipline Report describes temporary and permanent property acquisitions required for the project; no floating home communities would be affected. Seattle Yacht Club's Dock 0 would not lose moorage space, nor would there be loss of access to the permanent moorage on the south side of the Seattle Yacht Club's fixed moorage facilities.

The Recreation Discipline Report Addendum (Attachment 7 to the Final EIS) provides an expanded discussion of effects on recreational boating, including recreational use of Portage Bay. WSDOT would avoid in-water construction activities that could affect boating-related events on and around Opening Day. WSDOT will work with the Seattle Yacht Club to ensure that the project will minimize effects to access or activities at the club. Please see the response to Comment C-025-008 for further discussion of mitigation measures for construction effects on recreational boating.

	<u>Comment Page/line</u>	<u>Commentator Name</u>	<u>Comment by WSDOT</u>	<u>Reviewer comment</u>
	Attachment 7 Discipline Reports Social Elements			
C-025-133	p 1	E. Van	NEPA requires a systematic, interdisciplinary approach when considering environmental and community factors in decision making,--	An important element for our focus
C-025-134	p 20	E. Van	Affected areas include the Montlake Historic District	The report does not mention the Seattle Yacht Club, an historic facility.
C-025-135	p 21	E. Van	Map of the study area identifies many major features.	The map does not identify MOHA, NOAA, or the Seattle Yacht Club, an historic facility.
C-025-136	p 30-43	E. Van	Discussion of the existing social characteristics of the study area	There is no mention of the waterside activities nor the Seattle Yacht Club and its historic nature.
C-025-137	p 47	E. Van	A comment that construction activities associated with the project could cause residents and users of facilities to avoid the disrupted areas.	These activities could severely impact usage and financial structure bearing on the ability of the Seattle Yacht Club to maintain its historic property.
C-025-138	p 48	E. Van	Exhibit 14, Detour routes. Shows 520 exit westbound onto Montlake northbound.	Believe this will create heavy, slow traffic adversely impacting usage of the Seattle Yacht Club, an historic facility, without adequate traffic control.
C-025-139			Exhibit 15. Construction staging. Displays work bridges in Portage Bay.	Possible waterway access restrictions to Seattle Yacht Club facilities.

C-025-133

The analysis of effects on social elements was conducted using accepted WSDOT and FHWA methodology, which considers other disciplines, including land use, aesthetics, noise, air quality, and recreation.

C-025-134

The discussion in the Affected Environment section of the Social Elements Discipline Report referred to in the comment was focused specifically on neighborhoods in the study area. The historic nature of the Montlake neighborhood was discussed in the report, and the Seattle Yacht Club was noted as being part of the Montlake neighborhood. A discussion of the historic standing of the Seattle Yacht Club was provided in the Cultural Resources Discipline Report.

C-025-135

For the Draft EIS and SDEIS, neighborhood characteristics and community services were identified within the study area radius. According to accepted WSDOT and FHWA methodology for social elements, community services include schools, religious institutions, social institutions, government facilities, fire and emergency medical, police, and utilities. Private facilities such as yacht clubs would not be considered community services. Project effects on the Seattle Yacht Club and maps showing its location were included in the Cultural Resources Discipline Report and the Land Use, Economics, and Relocation Discipline Report.

C-025-136

Please see the response to Comment C-025-138. Waterside activities are discussed in the Recreation Discipline Report and its addendum, which is in Attachment 7 to the Final EIS. The historic nature of the

SR 520- Attachment No. 8
Supplemental Draft Environmental Impact Statement
Review Comments

by: Jeff Howard
3/14/10

C-025-140 Attachment no. 8 to the SR 520 SDEIS is a summary of the development history of the project, which started in 1998. This summary discusses alternatives considered and rejected, as well as the three Montlake alternatives studied in more depth. This document does not contain specific technical issues, so the comments are limited to the overall alternatives considered, and their potential impact to SYC.

The relative impacts to SYC are primarily related to the horizontal distance between the proposed Portage Bay viaduct and the SYC main station facilities, with closer distances having the most significant negative impacts. The horizontal distance and viaduct height will impact most of the direct environment issues, including noise, visual, air quality, fugitive dust and road debris.

As shown on Exhibit 9 (page 76) of Attachment No. 8, the existing 4 lane highway is 60 feet wide. As shown on Exhibit 10 (page 76), the proposed 6-lane alternative is 115 feet wide at the Evergreen Point bridge section, or almost twice as wide.

The proposed Portage Bay bridge is even wider. The extent of the extra width, and the distance to SYC facilities will depend on which of the three final Montlake alternatives (A, K or L) is chosen, and if the interchange includes exclusive transit lanes and flyer stops.

From the standpoint of distance, Alternative A, the Montlake Interchange, with bus transit stops is the worst, and the Pacific Interchange alternatives (K and L), would be the best because they move the existing Montlake Interchange further east. As discussed on pages 64 and 66, the Montlake Interchange requires 9 lanes across Portage Bay (6 normal lanes plus two auxiliary lanes and one westbound acceleration lane from the Montlake Freeway transit station. **These three additional lanes would add approximately another 60 feet to the Portage Bay bridge, bringing the total width to about 175 feet, or about three times wider than the current bridge.**

C-025-141 The other issue that is not addressed in Attachment 8 is the proposed esthetics of the Portage Bay bridge. Exhibit 4, page 56 shows sound walls on both sides of the bridge. What will these walls look like? How high? Bridge profile?

Seattle Yacht Club is discussed in the Cultural Resources Discipline Report.

C-025-137

The comment incorrectly characterizes the statement in the discipline report. The text in the Social Elements Discipline Report states that "...construction activities associated with the proposed project could cause residents to avoid the disrupted areas, creating additional barriers." The statement is of a general nature and describes potential effects to community cohesion. It is not specific to the Seattle Yacht Club property. Please see the response to Comment C-025-019 regarding access to and use of the Seattle Yacht Club during construction and potential economic effects on the club.

C-025-138

Expected intersection operations and congestion effects and proposed traffic control related to SR 520/Montlake interchange construction activities have been updated for the Preferred Alternative, and additional detail has been provided. Please see Chapter 10 of the Final Transportation Discipline Report (Attachment 7 to the Final EIS).

C-025-139

Please see the responses to comments C-025-008 and C-025-135.

C-025-140

The concern regarding nine lanes on Portage Bay relate to an alternative that is no longer under consideration. Attachment 8 to the SDEIS, Range of Alternatives and Options Evaluated, provided a high-level summary and overview of the major events in the project's development and did not include any detailed mapping or discussion about Options A, K, or L. Attachment 8 describes the 6-Lane Alternative studied in the 2004 Draft EIS (without the second Montlake Bridge option), which would have

included nine lanes on the Portage Bay Bridge itself. Table 2-6 in the SDEIS showed that the Draft EIS 6-Lane Alternative would have been 154 feet wide at the Portage Bay area midpoint. The 6-Lane Alternative design options evaluated in the SDEIS reduced this area to six lanes (101 feet wide) under Options K and L, and six lanes plus an auxiliary lane (110 feet wide) under Option A (see Table 2-6). The width in this area under the Preferred Alternative is 105 feet. Please see the response to Comment C-025-006 regarding the identification of a Preferred Alternative with an alignment shift to the south at the east end of the bridge. The Preferred Alternative also provides a narrower footprint for the Portage Bay Bridge compared to Option A and a managed shoulder rather than an auxiliary lane, reducing shoulder widths and providing a landscaped median (see Chapter 2 of the Final EIS).

C-025-141

Attachment 8 to the SDEIS described the evaluation of project alternatives and was not intended to provide detailed design information for the project. The Visual and Aesthetics Quality Discipline Report and its addendum (Attachment 7 to the Final EIS) provide analyses of the visual effects of the design options for the Portage Bay Bridge. Attachment 1 to the discipline report (in Attachment 7 to the SDEIS) includes visualizations that were created for the analysis. To show the project with and without noise walls, the visualizations of Options A and K included noise walls, while the visualizations of Option L did not. The analysis has been updated for the Preferred Alternative in the Visual and Aesthetics Quality Discipline Report Addendum (see Attachment 7 to the Final EIS). With the Preferred Alternative, noise walls are not recommended in this area.