Washington State Department of Transportation

SoundTransit

FINAL MEETING SUMMARY
SR 520 BRIDGE REPLACEMENT & HOV PROJECT
TECHNICAL COMMITTEE
MUSEUM OF HISTORY AND INDUSTRY, SEATTLE, WA
MARCH 26, 2003 – 9:00 – 11:00 A.M.

Welcome and Agenda Review; Meeting Objectives

Les Rubstello, WSDOT, opened the meeting and welcomed the Technical Committee. The objectives of the meeting were to provide information on project funding opportunities and tolling studies, review the alternatives being considered, and make recommendations for a list of alternatives to be studied in the EIS.

Les acknowledged the request of Jonathan Dubman, Montlake Community Club and SR 520 Advisory Committee Member, to make a statement. Jonathan addressed the project's fiscal situation, tolling, and his concerns with the 6-lane and 8-lane alternatives (his full statement is available as an appendix).

Review of Project Funding Opportunities

Maureen Sullivan, WSDOT, reviewed project funding opportunities. Yesterday, the House Transportation Committee proposed a 3-cent gas tax package. Of this package, $4 million was set aside for the SR 520 EIS. This $4 million would pay for an EIS that included the 4-lane and modified 6-lane alternatives. This would not be enough money for inclusion of the 8-lane or full 6-lane alternatives, which would require $11 million. Recent traffic information has found that an 8-lane alternative will not function without a solution to the congestion created on I-5. The Senate Transportation Committee will propose their own funding package, which is said to have $11 million set aside for this project's EIS, and would include the analysis of the full 6-lane and 8-lane alternatives. Neither the $4 million from the House or $11 million from the Senate will pay for any design work. The House and Senate will begin negotiations with each other soon on what the final gas tax amount and project list will be. WSDOT has been providing information to both committees, but cannot and does not take a position on any budget alternative.

The Puget Sound Regional Council (PSRC) provided an additional $1 million to this project. It will be used to develop the transportation discipline report and tolling study. The Regional Transportation Improvement District (RTID) still has a range of funding possibilities, however, current proposals include $600 million for SR 520. A vote will be held in either November 2003 or 2004. Additional funding for the project will have to come from the state or federal levels and/or toll revenue.

WSDOT expects to continue to apply for federal grants. This facility will be past its design life before funding is available, which stresses the urgent need. In light of the legislative and RTID

funding proposals, the project needs to focus on what might truly be possible as it moves forward into the EIS process. All large-scale regional projects have gone through this process, including the Alaskan Way Viaduct, I-405, and SR 509.

Questions and Comments:
Ann Martin, King County Department of Transportation: Will $4 million complete the EIS?
Yes, the $4 million will be enough to complete the EIS, if the only alternatives evaluated are the 4-lane and modified 6-lane alternatives.

Update on SR 520 Tolling Studies

Earlier work in tolling was preliminary and provided a high-level comparison of potential revenue on SR 520, analyzed with and without tolling on I-90. In response to RTID inquiries, the project is evaluating tolling at a more in-depth level. Brent Baker, Parsons Brinckerhoff, provided an update on the tolling study for SR 520, which is underway. The objectives of the study are to:

- Better understand the SR 520 travel market and willingness to pay tolls;
- Refine revenue projections and demand impacts, including the existing PSRC model with updated procedures and assumptions, augmented with value of time and toll elasticity information gained from Stated-Preference Survey research; and
- Focus on 6-lane scenario (HOV – 3+ toll-free).

The expected outcomes of the study are twofold. The first is to obtain a range of toll scenarios and revenue projections, including: a baseline toll; "economically efficient" tolls set to minimize congestion and optimize network; and revenue emphasizing alternatives, which would include variable tolls structures set to meet revenue targets and gauge maximum revenue potential. The second outcome will be to determine net revenue projections to be included in the project's financial planning.

Les Rubstello compared the Tacoma Narrows Bridge to SR 520. Tacoma Narrows has decided on three electronic lanes and six booths in one direction (for SR 520 this would translate to twelve booths). The current project design has very little impact east of the east shoreline, however, adding toll booths would change that. At this time, there are no all-electronic toll roadways in the United States. WSDOT is assuming that the technology and acceptance for an all-electronic toll bridge will be available at the time of implementation.

Brent Baker described a case study in Australia. There, the user can prepay tolls or pay within 24 hours over the Internet. There is also a fine for violating a toll. The administrative structure of this system is variable, such as, allowing for infrequent users. Maureen added that a lot of cities use transponders on rental cars as part of the rental fee.

The status of the current tolling study for SR 520 is:

- Design stated-preference survey exercise and develop survey instrument;

- Field computer-based survey this week, including on-site at 15 public locations (malls, DOL sites, office buildings) and employer facilities, and seven additional employers via the internet; and
- Compile results at end of May and report in June.

During the public surveys, each participant will answer 9 multiple-choice questions tailored to their most recent trip across the SR 520 bridge (If they have not traveled SR 520 in the last two weeks they will not complete the survey). For example, participants are provided with four options to the question, "Which would you choose?"

- SR 520 bridge: travel time 40 minutes; toll $1.00
- SR 520 bridge on public bus: travel time 55 minutes; fare $2.00
- SR 520 bridge in carpool of 3 or more: travel time 45 minutes; no toll
- I-90: travel time 1 hour and 5 minutes; no toll

Committee members will be provided the survey results when it has been completed.

Questions/Comments:

- Ann Martin: Will transportation efficiency be highlighted more than revenue?
- Terry Marpert, City of Redmond: What do other places charge to get an economically efficient toll as opposed to a toll to minimize congestion? Are the elasticities the same? *It is hard to understand the operating objectives of tolling systems. Many have a financing objective or, at the time of implementation, there may have been a network impact objective. Ranges found around the country for economically efficient tolls varied from 8 cents per mile to upwards of 50 cents per mile. The cost depends on whether the objective is to maintain a flow (operating target) or hit a revenue target.*
- Terry Marpert: Would SR 520 consider a two-mile span at 50 cents per mile? *We are looking at SR 520 as a toll bridge. The user would need to cross the bridge portion of SR 520. The average trip on SR 520 is 6 miles, so most people are crossing the lake.*
- King Cushman, PSRC: What pricing structure would apply to the 6-lane option? *The analysis is set up for HOV 3+ to be toll free and SOVs and HOV-2 to pay tolls.*
- Mitch Wasserman, City of Clyde Hill: Would results differ depending on the location of the tolling area? For example, assuming it was at the two ends of SR 520 and not specifically at the bridge? *The location does play a role in the results because there are not many local trips and most cross the lake. The bridge location is simpler to analyze and may discourage travel through the local neighborhoods.*
- Doug Schulze, City of Medina: Please clarify what is meant by "may discourage travel through the local neighborhoods?" *The model assumes 100% electronic tolling. The consensus is that by the time tolling is implemented, manual toll collection facilities will no longer be built. This affects diversion in several ways. If the bridge is tolled and the majority of the trips are traveling the full distance between 1-5 and I-405, prices would be adjusted to account for that trip. If tolling is priced per mile, there could be the impetus for diversion to evade several miles of the toll.*
- Doug Schulze: The study should include tolling beginning other places, such as Bellevue Way and 84th Avenue, not just on the bridge.

- King Cushman: Because the user is paying for the privilege of access to SR 520, prices should not be adjusted based on the trip's beginning point. If a driver is going to cross the lake, they are going to cross it. The trade-off is going way out of the way. The study should be completed first, before an analysis of where location points should be.
- Mitch Wasserman: The analysis should take into account King's comments.
- Len Newstrum: I-405 is looking at the electronic management of lanes. It seems like SR 520 could also manage the HOV lanes. How much effect would that have on throughput? *HOT lanes give drivers a choice between paying a toll on SOVs/HOV-2s and not paying a toll on HOV3/transit.*
- Ann Martin: Can the capacity that is leftover in the HOV lane be sold? *The study is looking at an economically efficient toll, which keeps the general purpose lanes moving, so there will be no capacity remaining in the HOV lane.*
- Len Newstrum: Is your assumption that the general purpose lanes will always be flowing? *That is the pricing objective. There would likely be a pricing schedule during different times of the day.*
- Mitch Wasserman: How much revenue are we trying to gain from this source? *$400-450 million is the current revenue goal over a 10-year period, bonded. In almost any scenario some of the funding for this facility will come from tolling.*
- King Cushman: What is the opening date of tolls? *2014.*
- King Cushman: Are you looking beyond 2014? *Projections are made to 2030. We are assuming that other RTID projects are in place, and there is a managed lane facility on I-405.*
- Sheldon Jahn, City of Medina: Are you considering placing tolls on other cross-lake facilities such as I-90? *Right now, there is no discussion regarding the placement of tolls on I-90. This does not mean it will not happen. There has been some discussion that it could be a test case.*
- King Cushman: Will Mike Cummings be involved in this larger tolling study? *Yes, he will be part of the coordination effort.*
- King Cushman: State law allows tolls to be used for repayment of bonds and, when the bonds are paid, the tolls are then removed. Tolls can act as a form of growth management by preventing congestion from getting worse. Keeping tolls in place is a way to manage and maintain the system past 10 years by providing a source of revenue. What are the implications of looking at tolls as a system maintenance tool? Will there be a recommendation from the study that the state law change? *Maintaining tolls, even after the facility is paid for, may be a means of operation and maintenance. That is a topic for future discussion.*
- David Allen: Is the purpose of the study to find out how much money can be generated or is it the movement of traffic? *The primary objective is to see how much money can be generated and the secondary objective is to study traffic movement. This information will be used in the EIS.*
- Len Newstrum: Is there a comparison of stated-preferences verses actual outcomes? *This is a highly specialized field. We have designed it to get value–time information. The objective here is to get some public input.*
- Ann Martin: Are the surveys at major employers? *We use Commute Trip Reduction participating companies to get the list of employers.*

- King Cushman: PSRC is currently conducting a pricing study and survey, which will add information to literature and databases on the matter.
- Eric Chipps, Sound Transit: Why would a driver choose to travel the SR 520 bridge by bus when the travel time is higher than a car? *This question is being asked to SOVs or HOV-2s. These do show a small advantage in time compared to the bus.*

Review Alternatives Being Considered by the Project

Les Rubstello reviewed last year's progress on selecting and designing the project's alternatives. In January 2002, the Executive Committee voted to move forward the 4, 6, and 8-lane alternatives into the EIS, and in September the Committee voted on 6 lanes as the preliminary preferred alternative to assist WSDOT in talking to RTID. To better meet the funding levels expected in R-51, WSDOT proposed a "6-lane Phase One Project" for R-51. In November 2002, R-51 failed, and WSDOT proposed a "Modified 6-lane Project" which is a smaller, but complete project. In December 2002, WSDOT received 2030 traffic numbers, which shed doubt on the feasibility of the 8-lane alternative given the degradation to I-5 due to increased volumes. In March 2003, PSRC provided $1 million to complete the transportation discipline report.

The EIS alternatives currently under consideration are: 8 lanes, I-5 to West Lake Sammamish Parkway; 6 lanes, I-5 to West Lake Sammamish Parkway; modified 6 lanes, I-5 to Bellevue Way; and 4 lanes, I-5 to Bellevue Way. WSDOT distributed a "SR 520 EIS Alternatives Matrix" detailing the components of each alternative and the estimated cost to complete the EIS and build the project. The 6- and 8-lane alternatives are similar, with the exception of the tunnel underneath the Montlake Cut, which is only part of the 8-lane alternative.

Les acknowledged the debate over NEPA's requirement to study all feasible alternatives and the question was raised as to whether or not a $6 billion alternative is feasible. Updated cost information will be available in June 2003.

Recommendations for List of Alternatives to be Studied in EIS

Based on the information presented, Les asked the committee to provide feedback on the list of alternatives to be studied in the EIS. He asked the committee to consider what elements may need to be added to the modified 6-lane alternative. The project team would like to provide this information to the Executive Committee at their next meeting. To follow precedence, the Executive Committee would not "vote" on an alternative because this decision was not put on the table at the last meeting; it too, will be a discussion meeting. The goal is to come to an understanding of what is practical.

The majority of those present reached consensus that the 4-lane and modified 6-lane alternatives should be pursued in the EIS and components of the full 6-lane alternative be included to create the possibility of another modified 6-lane alternative. Of those present, Terry Marpert and Jonathan Freedman had some reservations concerning the removal of the 8-lane alternative altogether. In summary, there is little desire, although some, to include the 8-lane alternative in the EIS. The committee would like to see the full 6-lane alternative move forward, not because it

is practical from a funding perspective, but because there may be important pieces that warrant consideration.

Les asked the group, if they would like to meet again to go through the details prior to any further data coming out. In general, the group felt another meeting was unnecessary. As the project moves forward with the EIS, the committee would like to see some of the components of the 6-lane alternative isolated and a new version of a modified 6-lane alternative.

Comment/Questions:

- Mitch Wasserman: At the last Technical Committee meeting, there was a buffer between the general purpose and HOV lanes. Why is the buffer now gone? *The HOV lanes are on the outside because most of the transit direct access points were removed. Metro felt transit would work better on the outside, and the 4-foot buffer was no longer needed.*
- Mitch Wasserman: What has changed in the modified 6-lane alternative since last we met? *The 4-foot buffer along the right side has been removed.*
- King Cushman: Clarify the access proposed at the SR 520 and I-5 interchange. *The full 6- and 8-lane alternatives have a reversible ramp to and from the north and south to the express lanes. All four alternatives have a ramp so that HOVs can move to the southbound express lanes.*
- King Cushman: All of the alternatives should include travel both ways into the reversible express lanes on I-5, so that HOVs are allowed both ways on I-5.
- Ann Martin: Please more provide more detail on the costs for including the various options in the EIS. *WSDOT had an estimate of $9 million to complete the EIS from a consultant for the original alternatives, with the 8-lane alternative costing $4.5 million. So, if the 8-lane alternative is not included, the cost of the EIS will be approximately $5 million. PSRC provided $1 million, so the $4 million on the matrix represents the money still needed by the project.*
- Bernard Van de Kamp, City of Bellevue: Could an EIS on the full 6-lane, modified 6-lane and 4-lane alternatives be done for $5 million? *It is a possibility because the modified 6-lane is a subset of the other alternatives.*
- Ann Martin: How long is the EIS analysis considered valid after it is complete? *If the action considered in the EIS is not acted on within 3 years of its completion, the federal government will ask the sponsoring agency to re-evaluate whatever has changed during that time.*
- Ann Martin: Thinking about the future, how might the cumulative impact of an extension or widening of the facility, such as for HCT, be addressed in the EIS? *HCT has been addressed programmatically through a modal analysis completed 1.5 years ago, which will be appended to the EIS. In terms of the 8-lane alternative, if it were dropped, all of the work that has been completed to date would be included in the EIS.*
- King Cushman: The EIS should move forward with the 4-lane, modified 6-lane, and to the degree possible, evaluate beneficial components of the full 6-lane alternative. How long is the EIS process, if it is started this spring? *If the EIS includes the 4-lane and modified 6-lane, it will take about 1.5 years to complete the draft.*
- King Cushman: These projects were well funded at the regional level, so it is not unreasonable to move forward with the support of the region, if it is buying greater flexibility in the long run.

- Jonathan Freedman, U.S EPA: Discarding the full 6-lane or even the 8-lane without careful consideration at this point may be short-sighted, however, the changing fiscal landscape may be the biggest driver at this point.
- Terry Marpert: Does the Legislature have a proposal for raising the revenue for the EIS? *Yes, but not for construction of the project.*
- Terry Marpert: Is the preliminary preferred alternative identified in the EIS? *The preliminary preferred alternative will be revisited before beginning the draft EIS. The preliminary preferred alternative did help estimate project costs and would have helped move the project forward with design, if money became available.*
- David Allen: What was discarded from the 6-lane alternative for the modified version? *The following were removed: I-405 interchange improvements, Bellevue Way interchange improvements, and I-5 reversible to the north (tunnel) and removal of weaves on I-5 to SR 520.*
- Mitch Wasserman: What is the southbound weave fix? *Relocating the existing ramp from I-5 to SR 520 to the right side and then adding a lane down to the Stewart Street exit.*
- Mitch Wasserman: Do not preclude potentially good ideas by discarding them at this point.
- David Allen: Why is there not a bigger difference in cost between the 4-lane and modified 6-lane? *There is an additional $100 million cost to make the bridge 4 feet wider, as well as additional cost for 5 lids on the east and west sides of the lake. Also, originally there was a risk-related item as part of the bridge design element that had significant costs. That item has since been removed and is not reflected in the cost estimates. However, consideration needs to be given to inflation.*
- Eric Chipps: The project could end up costing anywhere from $4 to $6 million so looking at improvements on I-5 may not be too unreasonable. The project should look at the range of elements that need to be built.
- Kurt Buchanan, U.S. Fish and Wildlife: Last summer, lids were very costly. What is the purpose for continuing to consider these lids if they are expensive? *The cost of lids have been decreased to $30-50 million per lid because their size has been decreased.*
- Kurt Buchanan: Why isn't the project considering building a new Montlake Bridge and eliminating the current one? *There are two reasons: 1) the current bridge is on the historic register; and 2) the bridge would have to be closed for two years during a rebuild, which is not an acceptable solution. WSDOT discussed a temporary bridge with the community; however, there is opposition due to the fact that a new bridge would take out two homes.*
- Kurt Buchanan: All options listed have an expandable 30 feet. What is the expandable part? *The driving surface up above is expandable. The Hood Canal Bridge is an example. This expansion is included because the Executive Committee did not want to preclude high capacity transit in the future. The pontoons are not wider, but they will be able to carry additional weight of an expanded driving surface.*
- Jonathan Freedman: If committee members want more flexibility, is it possible to include a second modified 6-lane alternative?
- King Cushman: It appears that the consensus of the group is to look at the full 6-lane alternative, not because it is necessarily practical, but to identify positive attributes. The final alternative may be a combination of components. Our goal is to find the most positive attributes to benefit communities and lessen impacts.

- Mitch Wasserman: It may become more difficult to justify the project if the HOV lanes stop at Montlake.
- Len Newstrum: What is the cost to add a bike/pedestrian lane across the lake? *The bike path cost, from shore to shore, in 2014 dollars, is approximately $80 million.*
- Sheldon Jahn: Are there any alternatives that cost less than $2 billion? *There was discussion of just doing a pontoon replacement. After the earthquake and barge accident, it was discovered that the bridge is at risk shore-to-shore. If only that portion of the bridge is replaced, it would cost $1.3 billion. However, WSDOT does not feel a new bridge can be built without some benefit to communities. The 4-lane alternative is the alternative that just replaces the bridge.*
- Sheldon Jahn: Would an EIS be necessary if only the bridge shore-to-shore was replaced? *Yes, an EIS would be necessary.*
- King Cushman: What will be the baseline? It is not possible to do nothing in this corridor and have a responsible solution. *No action is just doing maintenance and leaving the structure as is. The consequences of this will be discussed in the EIS.*
- Ann Martin: No action should be framed in terms of what will happen if the bridge disappears.
- Terry Marpert: A cost-benefit analysis of the loss of the bridge should be included in the EIS. *A small-scale cost-benefit analysis is being developed as part of the RTID process. It will be provided to the Technical Committee when completed.*
- Kurt Buchanan: Risk factors need to be included in the EIS. In the period between the EIS and construction, what kind of budget does WSDOT need to minimize that risk?
- King Cushman: The Executive Committee should move forward with haste. With and without wars, almost every decade starts with a recession and picks up at midpoint. WSDOT should be ready to do something in 2004/5.

Public Comment

March 26, 2003

Comments to 520 Technical Committee

My name is Jonathan Dubman; I'm the President of the Montlake Community Club, chair of our Transportation Committee and member of this project's Advisory Committee, which has not been convened for a while - so I am commenting directly to you now.

Memories of the defeat of R-51 seem to be fading somewhat, so I'd like to inject some fiscal reality into today's discussion. The full 6 lane alternative is projected to cost about $6 billion, which is about triple the $2 billion that could be raised with the most ambitious proposal for 520 in the RTID, plus a revenue-maximizing toll.

I'd also like to remind this committee that the 8-lane alternative - which is even more unaffordable - was predicted to turn I-5 into a parking lot. Any new southbound lane on I-5 would have to be carried to Fort Lewis, and northbound, the situation is worse.

I won't even begin to address the community and environmental impacts of these two alternatives; we all know about that. The $2 billion 6-lane alternative is itself vulnerable on technical grounds, as it is projected to perform worse than the 4-lane alternative in both directions in the AM peak. Maybe that will change, but that's how close we are to overloading I-5 and other arterials.

As a constructive suggestion, may I suggest that this committee ask to see traffic modeling results that take pricing into account. The overwhelming likelihood is that this project will not go forward without a toll, and a toll could divert as much as 25% of the traffic. I predict we will find that with congestion pricing, an upgraded 4 lane facility
could handle more traffic than a 4, 6, or 8 lane facility without pricing - more than enough volume to overload I-5, which seems to be what some people are advocating. Thank you.

Jonathan Dubman

Meeting Attendees

Present	Name		ORGANIZATION
X	Allen	David	City of Seattle
X	Bowman	Jennifer	Federal Transit Administration
	Beaulieu	Peter	PSRC (alternate)
	Brooks	Allyson	Washingt on State Office of Archaeology and Historic Preservation
X	Buchanan	Kurt	Department of Fish and Wildlife
	Carr	Paul	Puget Sound Clean Air Agency
	Conrad	Richard	City of Mercer Island
X	Cushman	King	Puget Sound Regional Council
	Drais	Dan	FTA
	Dewey	Peter	University of Washington
X	Freedman	Jonathan	U.S. Environmental Protection Agency
X	Godfrey	Dave	City of Kirkland
	Grady	Mike	National Marine Fisheries Service
	Kennedy	Jack	U.S. Army Corps of Engineers
	Kennedy	Steve	Sound Transit
	Kennedy Smith	Helena	WSDOT
	Kenny	Ann	Washington Department of Ecology
	Kircher	Dave	Puget Sound Clean Air Agency
X	Leonard	Jim	Federal Highway Administration
X	Marpert	Terry	City of Redmond
X	Martin	Ann	King County Department of Transportation
	Nelson	Kitty	National Marine Fisheries Service
X	Newstrum	Len	Town of Yarrow Point
	Pratt	Austin	U.S. Coast Guard, 13th District
	Pratt	Cynthia	Washington Department of Fish and Wildlife
	Quan	Jennifer	US Fish and Wildlife Service
	Rave-Perkins	Krista	U.S. Environmental Protection Agency
	Sanchez	Susan	City of Seattle (alternate)
X	Schulze	Doug	City of Medina
	Sparrman	Goran	City of Bellevue
	Suggs	Sarah	WA Department of Ecology
X	Sullivan	Maureen	WSDOT – UCO
	Swanson	Terry	Washington Department of Ecology
	Teachout	Emily	U.S. Fish and Wildlife Service
X	Van de Kamp	Bernard	City of Bellevue
X	Wasserman	Mitch	City of Clyde Hill
	Willis	Joe	Town of Hunts Point

Project Team in Attendance:
Maureen Sullivan, WSDOT
Les Rubstello, WSDOT
Paul Krueger, WSDOT
Brent Baker, Parsons Brinkerhoff
Eric Chipps, Sound Transit
Joy Goldenberg, EnviroIssues

Public in Attendance:
Bob Tate, SR 520 Advisory Committee
Steve Broback, ECRD
Jonathan Dubman, Montlake Community Club

JHG