

## 509 Steering Committee Meeting Summary

Practical Design Workshop #3

June 9, 2016

### Participants:

Name	Organization
Alex Soldano	GTHGA
Dan Brewer	City of Des Moines
Brian Roberts	City of Burien
Carl See	Washington State Transportation Commission
Carolyn Logue	South Sound Chamber of Commerce
Cathal Ridge	Sound Transit
Charles Prestrud	NWR Systems Planning Manager
Florendo Cabudol	City of SeaTac
Geri Poor	Port of Seattle
Greg Lippincott	WSDOT
Kelly Peterson	City of Kent
Lindsey Handel	FHWA
Nic Longo	Port of Seattle
Rob Fellows	WSDOT
Sean Ardussi	PSRC
Tom Hooper	Port of Seattle
Rob Fellows	WSDOT
Will Appleton	SeaTac
Doug Levy	Outcomes by Levy (audience)
Brittany Jardow,	Outcomes by Levy (audience)
Brenda Campbell	Poulsbo RV (audience)
Russ Blount	City of Fife (audience)

### Staff:

- Craig Stone, Gateway Program Administrator
- Omar Jepperson, SR 509 Project Manager
- Karl Westby, SR 509 Project Team
- Bob Sicko, SR 509 Project Team
- Allison Hanson, SR 509 Project Team
- Wendy Taylor, SR 509 Project Team
- Tes Abraha, SR 509 Project Team
- Dan Holmquist, SR 509 Project Team
- Bonnie Kramer, SR 167
- Steve Fuchs, SR 167
- Thomas Slimak, SR 167
- Mike Rigsby, Puget Sound Gateway Program
- Ming-Bang Shyu, WSDOT
- Emily Mannetti, SR 509 Project Team
- Danika Frank, PRR

The SR 509 project was funded through the Connecting Washington Account in July 2015. Upon receiving funding, the Washington State Department of Transportation (WSDOT) reconvened the Executive and Steering committees for the project. The Steering Committee is charged with reviewing project concepts, designs and needs in order to help WSDOT identify the project scope and move through Practical Design.

### **Introduction and Project Context**

Craig Stone, Puget Sound Gateway Program Administrator, welcomed attendees and reviewed the agenda.

Next, Craig provided an overview of project activities, including that the team recently hired consultant support for the Puget Sound Gateway Program Management Office (PMO) and the SR 167 General Engineering Consultant (GEC). Mike Rigsby, PMO and SR 167 Consultant Project Manager, was introduced to the committee.

Craig also reminded the committee of the legislative intent that the project be a tolled facility and to undergo the practical solutions design process. He reviewed the funding limitations of the entire program and that it is a shared allocation between SR 509 and SR 167 of \$1.87 billion. He also highlighted that there is an expectation that \$310 million of that allocated funding will come from local contributions and toll revenue.

### **Scenario Comparison Introduction**

Craig then reintroduced the scenario concept and highlighted that the scenarios were developed to provide a range options. The options range from a very basic connection to a full build option. He also noted that the committee is encouraged to mix and match the different scenarios together to create refined scenarios for further evaluation.

Craig then reviewed key questions and considerations that project team is considering and seeking input and prioritization from the committee. He asked the committee to continue to consider the following as scenarios and performance results were reviewed:

- How many lanes are included on SR 509?
- What level of tolling is considered?
- How are managed lanes considered and included?
- What degree of forward compatibility should be included in the design?
- What degree of potential impact to I-5 is acceptable?
- Where are local connections most important?
- How is South Access to the Airport accommodated?

Dan Holmquist, Consultant Project Engineer, then transitioned into discussing the specific details of each of five scenarios, which range from “closing the gap” to “full build”.

**Scenario 1:**

Dan provided an overview of Scenario 1 using the vicinity map provided in attendee's packet of materials. He noted that this scenario was developed to test very limited connectivity and a three lane option. Then he opened the discussion to questions and comments.

- *Port of Seattle:* What level of tolling is assumed? The team responded they assume this level will be \$1 off peak, \$2 during the peaks.
- *City of Burien:* Does the committee have the option of choosing a part of a scenario they do not like, for example, having the ramp speed limit adjusted between 45 miles-per-hour and 60 miles-per-hour. The team explained they would highlight where adjustable elements were included in the scenarios
- *Port of Seattle:* The Port asked what lane configuration the new 28/24th will accommodate. The team responded by noting it will be designed for 4 lanes on SR 509 with ability to accommodate 6, and that there will be 2 lanes in each direction on the City arterial with a turn lane.

**Scenario 2**

Next, Dan walked the group through Scenario 2 – Limited Connectivity. This option is four lanes and provides enhanced connections as compared to Scenario 1.

- *City of Burien:* The City noted that they have concerns regarding weave points on SR 509, and asked if they would have an impact on how the scenarios perform. The project team noted that, yes, they are tracking these movements through modeling tools (specifically the regional model) though they still have a lot of refinement to do as they move forward.

**Scenario 3**

Next, Dan reviewed Scenario 3 with the committee. Scenario 3 is considered Moderate Connectivity and is similar in design to the Gateway concept.

- *Port of Seattle:* The Port requested more information on the right of way differences between scenarios 1 versus scenarios 2 and 3 in the 200<sup>th</sup> Street area. The team responded with the following:
  - Scenario 1: only purchases what is necessary, then surpluses the rest
  - Scenario 2: purchases the right of way for the EIS footprint
  - Scenario 3: keeps what WSDOT presently owns and purchases only what is needed for Phase 1, but retain the right of way at 200<sup>th</sup>.
- *City of Burien:* The City asked if WSDOT has looked into the possibility of purchasing property rights which would preclude a high rise building from being constructed on land that would be needed for a full buildout. The team responded that they have not considered it, but suspect it would be a very costly option.

**Scenario 4**

Dan then reviewed Scenario 4 – Full Connectivity. The committee had no questions regarding this option.

**Scenario 5**

Finally, Dan reviewed Scenario 5 – Full Build. He noted that this scenario is very similar to the EIS concept, but includes some additional connectivity and features.

- *Port of Seattle*: The Port asked, regarding scenarios 1 through 4 versus scenario 5, if walls are being placed in a way that would preclude a future build out. The team noted that they considered a variety of degrees of forward compatibility within the scenarios, but that scenario 5 would be a full build out and would require no forward compatibility.
- *Port of Seattle*: The Port wanted further information on tolling, specifically entrance/exit points and costs. The team noted that there would be a toll on 28th/24th between I-5 and 200<sup>th</sup> and north of that (before getting off or on the freeway).

### **Scenario Comparison – Essential Performance Metrics Ratings Review**

The meeting then transitioned to Performance Evaluations, addressed by Craig, Omar Jepperson, SR 509 Project Manager, and Karl Westby, SR 509 Traffic Lead. The team explained that they evaluated each scenario based on the performance metrics identified at the second Steering Committee meeting. Scenarios were evaluated using a Popular Mechanics style rating of poor, fair, moderate, good and very good. The team also noted that the results of the ratings were relative between the scenarios.

Karl reintroduced the Essential Performance Metrics. He explained each metric, the methodology for review, and how the scenarios were rated. Essential Performance Metrics included:

- Improve throughput and lower levels of congestion on new SR 509 facility
- Maintain or improve I-5 operations between S. Spokane St and SR 18
- Reduce hours of delay in the project subarea network
- Reduce travel time between Sea-Tac Airport and the area south of S. 200<sup>th</sup> St.
- Improve travel time reliability between Sea-Tac Airport and the area south of S. 200<sup>th</sup>
- Reduce travel time between Urban Centers and Manufacturing Industrial Centers in South King County
- Improve travel time reliability between Urban Centers and Manufacturing Industrial Centers in South King County
- Improve economic vitality
- Support local and regional comprehensive land use planning and development
- Reduce number of serious injury and fatal crashes (I-5 and SR 509)

A summary of evaluation results can be found in the Scenario Comparison Table at the end of this summary and a detailed review of discussion can be found in *Appendix A: Performance Metrics Review and Discussion* on page 7.

### **Scenario Comparison – Contextual Performance Metrics Ratings Review**

Omar Jepperson then reviewed the Contextual Performance Metric ratings. He emphasized that Essential ratings are the most important and will guide the recommendation of the preferred scenario, but that the surrounding context needs to be considered to avoid undue impacts on the surrounding communities.

Omar provided an overview of each metric, the methodology for scoring, and how it was rated. The performance metrics he reviewed included:

- Reduce the number of serious injury and fatal crashes on local arterials
- Support multimodal choices to Sea-Tac Airport and Kent-Des Moines Link Light Rail Station
- Improve intermodal relationships between the seaport, airport and manufacturing/industrial centers

- Reduce pedestrian vehicle exposure
- Improve continuity and consistency of pedestrian and bicycle facilities
- Reduce area of impact to sensitive areas
- Maintains forward compatibility with future highway widening
- Reduce right of way impact
- Compatibility with Sound Transit Federal Way Link Extension

A summary of evaluation results can be found in the Scenario Comparison Table and a detailed review of discussion can be found in *Appendix A: Performance Metrics Review and Discussion* on page 7.

### **Preliminary Cost Review**

Next, Dan Holmquist introduced the methodology for preparing cost information. He explained the costs were based on major items, such as bridges, earthwork and pavement. He noted that programmatic and project development costs are consistent across the five scenarios. Assumptions for cost estimates included using a base year of 2016 and a four percent risk applied to address project unknowns.

- *Washington State Transportation Commission*: Will toll costs be included in these cost assessments? The team responded with yes, this does include toll costs.

Craig then provided some additional information about elements of a shared project budget that the committee needs to continue to consider. He explained that the cost difference between SR 509 and SR 167 likely will not be an even 50-50 split of the budgeted \$1.87 billion, and that SR 167 is approximately three times the length of SR 509.

Dan then reviewed the preliminary cost estimates for the varying elements between scenarios. There was limited discussion with minor clarifying questions.

### **Key Takeaways of the Performance Results**

At the conclusion of the metrics and cost review, Craig noted some key differentiators and takeaways. They included:

- Scenarios 1 and 2 do not perform as well as scenarios 3, 4 and 5
- Traffic performance of scenarios 3, 4 and 5 are similar
- Cost of Scenario 5 is twice that of Scenario 3 and about the same as the entire Gateway budget

### **Scenario Refinement Discussion**

Craig directed attendees again to the key questions for refinement and encouraged them to consider the scenarios, their rating results, and help guide WSDOT in how best to refine the scenarios.

- *City of Des Moines*: The city asked, given that scenarios 1 and 2 did not have a high cost-benefit ratio, is there any reason to continue to consider them? The team explained that they may not advance their design, but for practical solutions purposes, they need to remain potential options. The team also indicated that the final solution will likely be a combination of elements from many scenarios.
- *FHWA*: FHWA noted that there are foreseeable safety issues with the dual auxiliary lane southbound from SR 516 south to 272<sup>nd</sup> Street. The team communicated that this is an issue to take into consideration.

- *South Sound Chamber of Commerce*: The Chamber expressed concern regarding an ability to adequately measure all the details and small pieces of every option. They indicated a desire for a more thorough break down of all the elements. The team explained that they are focusing current energies on the bigger picture and as they move forward, and with advanced modeling, they will be able to provide more specific performance details.
- *FHWA*: FHWA noted that changing access can change performance and that the team should look at how access to three lanes versus four lanes changes performance. The team agreed.
- *Port of Seattle*: The Port asked that if there is a goal for the number of scenarios to carry forward from the meeting. The team stated that three scenarios would be ideal.
- *South Sound Chamber of Commerce*: The Chamber suggested they select Scenario 3 as it comes in near “budget” and is four lanes. Then the team can mix and match options to a base of Scenario 3. The team stated that given practical design principles, designing to a budget is not ideal, but they could create a range of affordable options centered on Scenario 3 or a four lane option.
- *City of Burien*: The City suggested that the WSDOT team use Scenario 3 as a baseline and do the mix and match exercise. He noted that this would allow Steering Committee members to then take those options to their electeds and receive feedback prior to further refinement. The team agreed this would be an acceptable approach, and the majority of the committee agreed.

#### **Summary of Progress Related to Key Questions:**

The Steering Committee agreed to focus on providing a four lane facility with tolling for demand management and some revenue generation. The project will have a goal of no adverse impacts to I-5. The project will not provide for the center HOV direct access in this project but will provide the ability to build this function in the future and the project will not preclude a wishbone south of SR 516.

#### **Action Items**

- Take a further look at safety related delays
- Contextual Metrics: Sensitive Area Impact: Consider including air quality impact
- Consider 4-lane freight-standard
- Consider how local access changes performance (3 verses 4 lanes)
- Consider differences in performance and cost for 45 MPH vs 60 MPH ramps
- Consider and illustrate cost differences between “not precluding” and “accommodating”
- Provide more detail on cost differences between right of way options
- Provide pre-information on the three, semi-finalized options via email (prior to mid-August meeting)

Craig concluded the meeting by reviewing the anticipated schedule of meetings for the Steering Committee and Executive Committee. He noted that SR 167 is on a similar timeline and that the August meeting may be a joint meeting of the SR 509 and SR 167 Steering Committees. He thanked everyone for their time and commitment.

### **Appendix A: Essential Performance Metrics Rating Discussion**

Karl Westby, SR 509 Traffic Lead, reintroduced the Essential Performance Metrics. He explained each metric, the methodology for review, and how the scenarios were rated. Essential Performance Metrics included:

- Improve throughput and lower levels of congestion on new SR 509 facility
- Maintain or improve I-5 operations between S. Spokane St and SR 18
- Reduce hours of delay in the project subarea network
- Reduce travel time between Sea-Tac Airport and the area south of S. 200<sup>th</sup> St.
- Improve travel time reliability between Sea-Tac Airport and the area south of S. 200<sup>th</sup>
- Reduce travel time between Urban Centers and Manufacturing Industrial Centers in South King County
- Improve travel time reliability between Urban Centers and Manufacturing Industrial Centers in South King County
- Improve economic vitality
- Support local and regional comprehensive land use planning and development
- Reduce number of serious injury and fatal crashes (I-5 and SR 509)

A summary of review and discussion is below:

#### **Mobility: SR 509 Performance**

Karl Westby then moved on to discuss the SR 509 Performance.

- *FHWA*: FHWA asked what will be the opening year on the project. The team said they used forecast years of 2025 and 2045. They went on to note that, with tolling, they have the ability to manage volumes as necessary.
- *Port of Seattle*: The Port ask what the level of service means. The team explained that it means you are approaching capacity. With tolling you can moderate to some extent. Furthermore, there is a fair difference between scenario 1 and 2.
- *Alex Soldano*: Is there any reason to break out 5 and 5 free? The team responded this was done to show how tolling may change the operations and performance.
- *City of Burien*: The City mentioned that when looking at scenarios 3 and 4, the differences in local connectivity and ramp circulation do not seem to have much of an impact on operation. They asked if this has to do with volume on 3 lanes. The team responded with yes, there are opportunities to revise this, but they do not want to overload it, and will need to set toll rates.
- *Port of Seattle*: The Port asked if any of the performance metrics get to marginal costs. The team commented that yes, they have metrics looking at cost/benefit and overall costs.

Discussion of HOV access to the airport

- *FHWA*: FHWA asked if the team looked at what they need to do for Scenario 5 free, and why they only looked at general purpose traffic. The project team explained that Scenario 5 has HOVs, but they are their own facility. Additionally, they did not become salient in the performance of SR 509 congestion.

Karl transitioned into I-5 performance northbound in the morning in 2025. It was noted that speeds were evaluated at several screen line locations.

- An attendee asked if the team's baseline is for no-build in 2025. The team responded that it was.

Karl moved onto I-5 performance northbound in the evening, where they see more congestion.

- *FHWA*: FHWA asked what it would take to get performance on I-5 to "very good". The team explained you can add capacity up to two initial lanes on I-5, but you have a hard time getting to the "very good" level. FHWA followed up by asking if they could run this without SR 509 in 2025. The team noted that yes, these are showing the differences between doing nothing, and doing one of the five scenarios.
- *FHWA*: FHWA asked if the team considered breaking off north-bound and south-bound performance. The team responded they are not, but there is some mixing and matching of improvements in the packages that will likely happen.

#### **Mobility: Subarea Delay**

- *City of Burien*: The City noted that looking at North subarea delay, the team mentioned there was diversion on SR 509. They additionally noted the high volume of traffic moving onto this corridor, and asked if the delay on SR 509 relates to the overall subarea. The team explained that the north subarea is a lot smaller, so its metric is going to be smaller which is why a more drastic difference is noted. All of SR 518, part of I-405, and part of SR 167 are part of that subarea.
- *FHWA*: FHWA asked if, for scenario 5, since you have it tolled and un-tolled, what will that mean for both of those different scenarios for delays. The project team explained they are evaluating scenarios 1 through 5 and that for information purposes, they looked at scenario 5 without tolls.
- *FHWA*: FHWA asked, since all the scenarios are similar, is the team considered removing this as a metric. The team stated they did not, because they wanted to include all the information, as it is valuable to see that they are all similar and there is no difference.

#### **Mobility: Travel Time from the Airport**

- An attendee asked if they could use any route for looking at travel time. The project team replied yes, they captured all route options.
- An attendee asked if they have projects from the local agencies of what to project in 2045. The team stated that local projects and plans are factored into all of the scenarios.
- *Alex Soldano*: What level was projected for the build out of light rail? The team said, assuming the Sound Transit 3 plan, they did a sensitivity test on what 2045 looks like with and without it.

#### **Mobility: Reliability from the Airport**

- *Port of Seattle*: The Port noted the difference in language being used, and asked to clarify if they mean "from the airport" or "between" the airport. The team clarified that "from" is correct, as it is the metric which was used.

#### **Mobility: Travel Time and Reliability between Centers**

- *South Sound Chamber of Commerce*: The Chamber asked if it is only SR 509 they are taking into account for these metrics. The team responded with yes, they are only taking 509 into account.

**Economic Vitality: Economic Benefit**

- An attendee asked if the information takes into account HOV performance. The team noted that it does.

**Economic Vitality: Comprehensive Land Use Planning and Development**

Karl noted how ratings were determined, and then requested input from local agencies on this criteria, since they are most familiar. There were no comments on this metric.

**Safety: Number of Serious and Fatal Crashes**

- An attendee asked if, specific to the freeway facility, the scenarios change safety in any way. The team explained that the assessment was that scenarios 1 and 2 have speed issues with merging to one lane, and weaving lanes had higher potential of safety issues.
- An attendee noted when looking at the overall safety between scenarios 3, 4, and 5, it seems as though scenario 5 brings more access off local roadways and seems more likely that regional safety might be significantly improved. The team agreed.

**Contextual Performance Ratings**

Omar provided an overview of each metric, the methodology for scoring, and how it was rated. The performance metrics he reviewed included:

- Reduce the number of serious injury and fatal crashes on local arterials
- Support multimodal choices to Sea-Tac Airport and Kent-Des Moines Link Light Rail Station
- Improve intermodal relationships between the seaport, airport and manufacturing/industrial centers
- Reduce pedestrian vehicle exposure
- Improve continuity and consistency of pedestrian and bicycle facilities
- Reduce area of impact to sensitive areas
- Maintains forward compatibility with future highway widening
- Reduce right of way impact
- Compatibility with Sound Transit Federal Way Link Extension

Conversations and questions on the Contextual Performance Ratings was limited. Conversation was limited to the following contextual performance measures.

**Mobility: Choices to Airport and Kent/Des Moines Station**

- *City of Des Moines:* The City asked if you take small segments from one scenario and move to another, will they change the metrics. The team noted they would discuss in the “refined scenario” options.

**Environment: Reduce Impact to Sensitive Areas**

- *City of Des Moines:* The City asked how the team came to a “moderate” rating for scenario 5, and asked what it is being compared to. The team explained they had a range from no-build/no-impact to full-build of a six lane facility, so the team was scoring them relative to each other based on size, width, etc.
- *Alex Soldano:* Alex asked how each of these scenarios might be changed by eliminating the marking of a single prism, and where they would keep the two right of ways compared to single

right of way. The team said there are some situations where they are looking at two prisms and two structures, or four lanes on one prism.

- *FHWA*: FHWA asked if the environmental impact includes air quality. The team noted they did not include that, and have focused on the wetlands. FHWA said they think it would be important to include air quality.

**Other: Compatibility with Sound Transit Federal Way Link Extension (FWLE)**

- *FHWA*: FHWA asked how this relates to forward compatibility. The team explained that they are almost inversely related. If they are provided more space for highway improvement in the future, it is generally less forward compatible because the space is not available for highway use in the future.
- *Outcomes of Levy*: Doug wanted to clarify that in Scenario 4 there is direct access to transit (to the Kent/Des Moines station). The team stated there is access off the ramp that improves connectivity to the station and multimodal transportation. However, in this performance metric, we are evaluating key interface points, and how compatible the SR 509 project is with future FWLE construction, not whether SR 509 connects to the station.
- *City of Burien*: The City wonders what will happen if ST3 does not make it on the ballot. Sound Transit) responded by stating that it will still be the same footprint.