Puget Sound Gateway Program
SR 167 and SR 509 Completion Projects

Steering Committee Meeting
November 28, 2018

CRAIG J. STONE, PE
KARL WESTBY
BRENT BAKER
STEVE FUCHS, PE
ANDREY CHEPEL, PE

GATEWAY PROGRAM ADMINISTRATOR
TRAFFIC LEAD, GATEWAY
TOLLING AND FINANCE, GATEWAY
SR 167 PROJECT MANAGER
SR 509 ACTING PROJECT MANAGER
Agenda

• Program-level updates
  ▪ Construction and Implementation Plan
  ▪ MOU/ Interlocal Agreements
  ▪ Tolling/ Toll Scenarios
  ▪ Schedule acceleration

• Project updates
  • SR 167
  • SR 509

• Next steps
Construction and Implementation Plan

Develop outline and major topic areas
• Feb – March 2018

Define updated preferred scenario
• March 28 & April 5, 2018

Identify delivery packages, expenditure and sequencing plans
• April - June 2018

Submit Construction & Implementation Plan
• September 2018

Delivered on Sept. 28, 2018
Gateway Funding Spheres

$130 M local contribution

$20 M from INFRA grant assumed in $130 M local contribution

$1,565 M Connecting Washington funds

$180 M toll funding

Potential INFRA Grant
Local Contributions

MOU Development Process

Concur on goals, partnership principles and responsibilities
- October 4, 2017

Approach to Benefit Framework and Partner Roles
- December 13, 2017

Partner Concurrence on MOU
- January-March 2018

Delivered on June 28, 2018

Approach to Benefit Framework and Partner Roles
- December 13, 2017

Ratify MOU
- April – June 2018
MOU – Accomplished

Stephen P. Metruck
Executive Director
Port of Seattle

John Wolfe
Chief Executive Officer
Port of Tacoma

Dow Constantine
County Executive
King County

Bruce Dammeier
County Executive
Pierce County

David E. Hill
Mayor
City of Algona

Nancy Backus
Mayor
City of Auburn

Michael Matthias
City Manager
City of Des Moines

Daryl Eide
Mayor
City of Edgewood

Jim Ferrill
Mayor
City of Federal Way

Hyun Kim
City Manager
City of Fife

Dana Ralph
Mayor
City of Kent

Shanna Styron-Sherrell
Mayor
City of Milton

Leanne Guer
Mayor
City of Pacific

Kevin Yamamoto
City Manager
City of Puyallup

Joseph Scorcio
City Manager
City of SeaTac

William L. Pugh
Mayor
City of Sumner

Elizabeth A. Pauli
City Manager
City of Tacoma

Roger Millar
Secretary of Transportation
Washington State Department of Transportation
# Partner Commitments – Direct Contributions

<table>
<thead>
<tr>
<th>Partner Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Fife</td>
<td>$1,600,000</td>
</tr>
<tr>
<td>City of Tacoma</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>City of Kent</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>City of SeaTac</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>City of Puyallup</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>City of Des Moines</td>
<td>$500,000</td>
</tr>
<tr>
<td>City of Edgewood</td>
<td>$500,000</td>
</tr>
<tr>
<td>City of Sumner</td>
<td>$500,000</td>
</tr>
<tr>
<td>Pierce County</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>King County</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Port of Seattle</td>
<td>$30,000,000</td>
</tr>
<tr>
<td>Port of Tacoma</td>
<td>$30,000,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$76,100,000</strong></td>
</tr>
</tbody>
</table>
## Grants

### Stage 1 Grant Assumptions

<table>
<thead>
<tr>
<th>Project</th>
<th>App Year</th>
<th>Planned</th>
<th>Obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal INFRA (local share)</td>
<td>2019</td>
<td>$20,000,000</td>
<td></td>
</tr>
<tr>
<td>Interurban Trail</td>
<td>2017</td>
<td>$1,400,000</td>
<td>$1,400,000</td>
</tr>
<tr>
<td>FMSIB 70th Ave E</td>
<td>2018</td>
<td>$5,000,000</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>FMSIB Port of Tacoma Spur</td>
<td>2020</td>
<td>$5,000,000</td>
<td></td>
</tr>
<tr>
<td>PSRC Veterans Extension</td>
<td>2018</td>
<td>$4,500,000</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>PSRC Port of Tacoma Spur</td>
<td>2018</td>
<td>$4,500,000</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>TIB 70th Avenue E</td>
<td>2018</td>
<td>$5,000,000</td>
<td></td>
</tr>
<tr>
<td>TIB Veterans Extension</td>
<td>2019</td>
<td>$5,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td>$45,400,000</td>
<td>$14,400,000</td>
</tr>
</tbody>
</table>

### Stage 2 Grant Assumptions

<table>
<thead>
<tr>
<th>Project</th>
<th>App Year</th>
<th>Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR167/Valley Avenue</td>
<td>2022</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>SR167/Meridian Avenue</td>
<td>2022</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>SR 167 Stage 2</td>
<td>2022</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>SR 509 Stage 2</td>
<td>2022</td>
<td>$4,000,000</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td>$14,000,000</td>
</tr>
</tbody>
</table>

**Total Grants**

|                   |          | $59,400,000 | $14,400,000 |

+ Direct Local Contributions

|                   |          | $76,100,000  |

**STRATEGY TOTAL**

|                   |          | $135,500,000 |
## Interlocal Agreement Timeline

<table>
<thead>
<tr>
<th>Construction Stage</th>
<th>ILA Deadline</th>
<th>ILAs Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR 167 Stage 1A</td>
<td>End of 2018</td>
<td>• Fife</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Port of Tacoma</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tacoma</td>
</tr>
<tr>
<td>SR 509 Stage 1B</td>
<td>End of 2019</td>
<td>• Des Moines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Kent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• King County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Port of Seattle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• SeaTac</td>
</tr>
<tr>
<td>SR 167 Stage 1B</td>
<td>End of 2020</td>
<td>• Edgewood</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fife</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Port of Tacoma</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tacoma</td>
</tr>
<tr>
<td>SR 509 Stage 2</td>
<td>End of 2024</td>
<td>• SeaTac</td>
</tr>
<tr>
<td>SR 167 Stage 2</td>
<td>End of 2024</td>
<td>• Pierce County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Puyallup</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sumner</td>
</tr>
</tbody>
</table>
Local Permits

• Land Use/Essential Public Facilities
• Critical Area Ordinance
• Shoreline Substantial Development/Conditional Use
• Landscaping/Tree Removal
• Grading
• Noise Variance/Extended Hours

Question: Should the Program pay for permit fees and design review?
Tolling
# Tolling Roles and Responsibilities in Washington State

<table>
<thead>
<tr>
<th>Washington State Legislature</th>
<th>Transportation Commission</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Authorizes toll facilities</td>
<td>- Sets toll rates and exemptions</td>
</tr>
<tr>
<td>- Determines how toll revenue is spent</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WSDOT</th>
<th>Office of State Treasurer</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Plans, builds and operates toll facilities</td>
<td>- Arranges financing and issues debt</td>
</tr>
</tbody>
</table>
Agency Request for Toll Authorization

• One omnibus bill for I-405/SR 167 Corridor and Puget Sound Gateway
• Toll authority for:
  o SR 167 between North Meridian Avenue in Puyallup and I-5 in Fife
  o SR 509 Spur between I-5 in Fife and SR 509 in Tacoma
  o SR 509 between South 188th Street and I-5 in SeaTac
• Toll rates will be variable by time of day to maintain travel time, speed and reliability
• Toll rates may adjust to reflect inflation
• Toll revenue will go into a Puget Sound Gateway facility account in the state treasury
• Surplus property revenues go to the account, including existing SR 509 R/W in SeaTac and Des Moines
Gateway Toll Points

SR 509

SR 167 & SR 509 Spur

PUGET SOUND
# Toll Policy Test Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>SR 509</th>
<th>SR 167</th>
<th>SR 509 Spur*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Base Condition</td>
<td>All vehicles tolled based on number of axles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Commercial Trucks Equal</td>
<td>All vehicles tolled at the same rate (no axle multipliers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 SR 509 Spur: Commercial Trucks Free</td>
<td>All vehicles tolled based on number of axles</td>
<td></td>
<td>3+ axle vehicles free</td>
</tr>
<tr>
<td>4 Commercial Trucks Free</td>
<td>2 axle vehicles tolled</td>
<td>3+ axle vehicles free</td>
<td></td>
</tr>
<tr>
<td>5 SR 509 Spur: Free</td>
<td>All vehicles tolled based on number of axles</td>
<td>All vehicles free</td>
<td></td>
</tr>
<tr>
<td>6 HOV 2+ Free</td>
<td>Vehicles with 2+ occupants free with Good To Go!</td>
<td>all other vehicles tolled based on number of axles</td>
<td></td>
</tr>
<tr>
<td>7 Non-Tolled: Managed by Vehicle Class</td>
<td>Single occupant 2-axle vehicles prohibited</td>
<td>all HOVs with Good To Go! &amp; vehicles with 3+ axles free</td>
<td></td>
</tr>
<tr>
<td>8 Non-Tolled</td>
<td>All vehicles toll free</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Also known as Port of Tacoma Spur
**Traffic Performance by Scenario**

- Percentage changes in total traffic relative to Base Condition
- Lower tolls for some vehicles generally yield higher traffic volumes

<table>
<thead>
<tr>
<th>Scenario</th>
<th>SR 509</th>
<th>SR 167</th>
<th>Port of Tacoma Spur</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Base Condition</td>
<td>All vehicles tolled based on number of axles</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2</strong> Commercial Trucks Equal</td>
<td>All vehicles tolled at the same rate (no axle multipliers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> Port of Tacoma Spur: Commercial Trucks Free</td>
<td>All vehicles tolled based on number of axles</td>
<td>3+ axle vehicles free</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>4</strong> Commercial Trucks Free</td>
<td>2 axle vehicles tolled</td>
<td>3+ axle vehicles free</td>
<td></td>
</tr>
<tr>
<td><strong>5</strong> Port of Tacoma Spur: Free</td>
<td>All vehicles tolled based on number of axles</td>
<td>All vehicles free</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>6</strong> HOV 2+ Free</td>
<td>Vehicles with 2+ occupants free with Good To Go!</td>
<td>all other vehicles tolled based on number of axles</td>
<td></td>
</tr>
<tr>
<td><strong>7</strong> Non-Tolled: Managed by Vehicle Class</td>
<td>Single occupant 2-axle vehicles prohibited</td>
<td>all HOVs with Good To Go! &amp; vehicles with 3+ axles free</td>
<td></td>
</tr>
<tr>
<td><strong>8</strong> Non-Tolled</td>
<td>All vehicles toll free</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Traffic Percentage Difference* |
|-------------------------------|-----------------|-----------------|
| SR 509 | SR 167 | Port of Tacoma Spur |
| Base Condition = 100% | | |
| + 0.3% | + 0.2% | + 0.5% |
| N/A | + 2% | + 14% |
| + 7% | + 7% | + 17% |
| N/A | + 0.8% | + 64% |
| + 17% | + 11% | + 12% |
| - 34% | - 52% | - 37% |
| + 103% | + 77% | + 93% |

Source: Stantec  
* Average of results from FY 2025 and FY 2045, excludes FY 2025 ramp-up adjustments  
** As presented at June Steering Committee
Gross Toll Revenue Performance by Scenario**

- Percentage changes in total gross toll revenue relative to Base Condition
- Lower tolls for some vehicles generally yield lower gross toll revenues

<table>
<thead>
<tr>
<th>Scenario</th>
<th><strong>SR 509</strong></th>
<th><strong>SR 167</strong></th>
<th>Port of Tacoma Spur</th>
<th>Gross Revenue Percentage Difference*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Base Condition</td>
<td>All vehicles tolled based on number of axles</td>
<td></td>
<td></td>
<td>Base Condition = 100%</td>
</tr>
<tr>
<td>2 Commercial Trucks Equal</td>
<td>All vehicles tolled at the same rate (no axle multipliers)</td>
<td></td>
<td></td>
<td>– 3%</td>
</tr>
<tr>
<td>3 Port of Tacoma Spur: Commercial Trucks Free</td>
<td>All vehicles tolled based on number of axles</td>
<td>3+ axle vehicles free</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>4 Commercial Trucks Free</td>
<td>2 axle vehicles tolled</td>
<td>3+ axle vehicles free</td>
<td></td>
<td>– 16%</td>
</tr>
<tr>
<td>5 Port of Tacoma Spur: Free</td>
<td>All vehicles tolled based on number of axles</td>
<td>All vehicles free</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>6 HOV 2+ Free</td>
<td>Vehicles with 2+ occupants free with Good To Go!</td>
<td>all other vehicles tolled based on number of axles</td>
<td></td>
<td>– 18%</td>
</tr>
<tr>
<td>7 Non-Tolled: Managed by Vehicle Class</td>
<td>Single occupant 2-axle vehicles prohibited</td>
<td>all HOVs with Good To Go! &amp; vehicles with 3+ axles free</td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>8 Non-Tolled</td>
<td>All vehicles toll free</td>
<td></td>
<td></td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Source: Stantec  * Average of results from FY 2025 and FY 2045, excludes FY 2025 ramp-up adjustments
** As presented at June Steering Committee
## Toll Policy Scenarios to Carry Forward

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Compliance / Enforcement</th>
<th>$180M Funding Capacity</th>
<th>System Policy Consistency</th>
<th>Freight Supportive</th>
<th>Facility Performance</th>
<th>Adjacent Facility Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Base Condition</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Commercial Trucks Equal</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>SR 509 Spur: Comm'l Trucks Free</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Commercial Trucks Free</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>SR 509 Spur: Free</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>HOV 2+ Free</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Non-Tolled: Managed by Vehicle Class</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Non-Tolled</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Legend: **Better** 5 4 3 2 1 **Worse**

✓ Selected for further analysis at June 2018 Steering Committee
National Trends on Truck Tolls / Exemptions

- No examples of toll facilities where commercial trucks are toll-free
- Industry trends run counter to offering truck toll exemptions
  - Rhode Island has implemented truck-only tolls at 12 locations to fund bridge and structure replacement
  - In October 2018, Indiana implemented a 35% toll increase for trucks on the Indiana Toll Road (I-90 / I-80) with no changes in auto tolls
  - Governor-elect of Connecticut supports truck-only tolls for repairing infrastructure
  - Georgia, Virginia, West Virginia, Missouri, Illinois and Ohio have all studied truck-only toll lanes or toll facilities
  - TxDOT offered a temporary truck toll discount where trucks on SH 130 (sections 5 & 6) paid the same as a car as a measure to initially attract trucks to this facility; discount expired after one year on 3/30/2014
### Rhode Island Truck-only Toll Classifications

<table>
<thead>
<tr>
<th>CLASS 1</th>
<th>Motorcycles</th>
<th>CLASS 5</th>
<th>Two Axle, Six Tire, Single Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CLASS 6</td>
<td>Three Axle, Single Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CLASS 7</td>
<td>Four or More Axle, Single Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CLASS 8</td>
<td>Four or Less Axle, Single Trailer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CLASS 9</td>
<td>5-Axle Tractor Semitrailer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CLASS 10</td>
<td>Six or More Axle, Single Trailer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CLASS 11</td>
<td>Five or Less Axle, Multi-trailer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CLASS 12</td>
<td>Six Axle, Multi-trailer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CLASS 13</td>
<td>Seven or More Axle, Multi-trailer</td>
</tr>
<tr>
<td>CLASS 2</td>
<td>Passenger Cars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLASS 3</td>
<td>Four Tire, Single Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLASS 4</td>
<td>Buses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- GREY SHADING - NON TOLLED VEHICLES
- WHITE SHADING - TOLLED VEHICLES

[Source: WSDOT]
Findings for Gateway Toll Scenario 4

• A truck toll exemption lowers the toll-paying traffic by 11% relative to Scenario 1
  – Total traffic including toll-free trucks is 7% higher than Scenario 1

• Potential gross toll revenue is 15% less than Scenario 1
  – Revenue decrease exceeds percentage drop in toll traffic because trucks pay an axle multiple of the auto toll
  – Revenue decrease is likely understated due to conservative assumptions regarding average number of axles by class
    o Medium trucks — assumed average of 2.11 axles per truck
    o Large (tractor-trailer) trucks — assumed average of 4.17 axles per truck

• Net toll revenue is 20% less than Scenario 1
  – Equates to a 20% smaller toll capital funding contribution
Freight Supportive: Scenario 5

– Does the scenario support the freight objectives of the corridors? **No, in comparison to scenarios 1 and 2, Scenario 5 does not support the freight objectives for the corridor.**

2030 Traffic Daily Volume Change: Scenario 5 vs. Scenarios 1 and 2

Compared to Scenarios 1 and 2, Scenario 5 (POT Spur Free) results in the following:

- Increased delay for freight trips
- 10,800 additional daily trips on POT Spur
- Daily, it attracts 2.5 passenger trips for every freight trip
- During peak truck periods, it attracts 4 passenger trips for every freight trip
Facility Performance: Scenario 5

- Does the scenario effectively manage demand / prevent congestion? **No,** Scenario 5 does not manage demand or prevent congestion as well as scenarios 1 and 2.

2045 Traffic PM Peak Conditions: Scenario 5 vs. Scenarios 1 and 2

Compared to Scenarios 1 and 2, Scenario 5 (POT Spur Free) results in the following:

- Increased vehicle and truck use west of I-5
- Increased overall congestion at key study intersections
- 10-27% increase in truck delay at key freight intersections*
- Potential for additional congestion west of I-5 associated with future regional transportation improvements
Adjacent Facility Impacts: Scenario 5

– Does the scenario impact other facilities, including I-5? **Yes, compared to scenarios 1 and 2, Scenario 5 impacts other facilities, including I-5.**

**2045 Traffic PM Peak Volumes: Scenario 5 vs. Scenarios 1 and 2**

Compared to Scenarios 1 and 2, Scenario 5 (SR 509 Spur Free) results in the following:

- Increased pressure on I-5
- Attracts 100-400 additional peak hour trips at interchange area
- FHWA approval concerns
- Removal of traffic management tool and inability to manage unforeseen traffic conditions or growth
Providing a toll exemption for commercial trucks results in up to 20% less net toll revenues over the forecast horizon.
Conclusion

Do Scenarios 4 and 5 meet the essential need for the project?

• Scenarios 4 and 5 reduce the ability for freight to move reliably through the project area compared to Scenarios 1 and 2.

• Scenario 4 results in up to 20% less toll revenue. Scenarios 1, 2, and 5 produce similar toll revenues and meet funding requirements.

• WSDOT recommends screening out Scenarios 4 and 5 and moving forward with Scenarios 1 and 2.

• Scenarios 1 and 2 have similar performance and WSTC will evaluate these scenarios through the rate-setting process.
Schedule Acceleration Analysis

Determine cost inputs, CEVP and CCI
- Nov 2017 – Apr 2018

Travel demand and toll funding analysis
- Dec 2017 – May 2018

Determine funding and phasing opportunities and constraints
- March - June 2018

Issue report identifying acceleration benefits
- September 2018

Delivered on Sept. 28, 2018

Puget Sound GATEWAY Program

Benefits of Program Acceleration
September 2018

Prepared by
Washington State Department of Transportation
Puget Sound Gateway Program

WSDOT
### Schedule Acceleration Benefits Summary

<table>
<thead>
<tr>
<th>Funding Constrained Baseline</th>
<th>$1.983 B Program Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case 1 Modest Acceleration</td>
<td>$28 M Inflation Cost Savings</td>
</tr>
<tr>
<td></td>
<td>$73 M Additional Net Toll Revenues</td>
</tr>
<tr>
<td></td>
<td>22 M Person-Hours Saved</td>
</tr>
<tr>
<td></td>
<td>179 M VMT Saved</td>
</tr>
<tr>
<td></td>
<td>$611 M in Economic Net Benefits, with NPV of $179 M</td>
</tr>
<tr>
<td>Cases 2 &amp; 2B Medium Acceleration</td>
<td>$43 M Inflation Cost Savings</td>
</tr>
<tr>
<td></td>
<td>$109 M Additional Net Toll Revenues</td>
</tr>
<tr>
<td></td>
<td>33 M Person-Hours Saved</td>
</tr>
<tr>
<td></td>
<td>271 M VMT Saved</td>
</tr>
<tr>
<td></td>
<td>$893 M in Economic Net Benefits, with NPV of $275 M</td>
</tr>
<tr>
<td>Case 3 Maximum Acceleration</td>
<td>$80 M in Inflation Cost Savings</td>
</tr>
<tr>
<td></td>
<td>$183 M in Additional Net Toll Revenues</td>
</tr>
<tr>
<td></td>
<td>65 M Person-Hours Saved</td>
</tr>
<tr>
<td></td>
<td>581 M VMT Saved</td>
</tr>
<tr>
<td></td>
<td>$1.7 B in Economic Net Benefits, with NPV of $608 M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calendar Year</td>
<td>'19</td>
<td>2020</td>
<td>2021</td>
<td>2022</td>
<td>2023</td>
<td>2024</td>
<td>2025</td>
<td>2026</td>
<td>2027</td>
<td>2028</td>
<td>2029</td>
<td>2030</td>
</tr>
<tr>
<td>Construction Period</td>
<td>SR 509 Stage 1 Open</td>
<td>SR 167 Stage 1 Open</td>
<td>SR 509 Stage 2 Open</td>
<td>SR 167 Stage 2 Open</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **2 Years**
- **3 Years**
- **5.5 Years**
- **4.5 Years**

<table>
<thead>
<tr>
<th>Case</th>
<th>Maximum Acceleration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case 3</td>
<td>$80 M in Inflation Cost Savings</td>
</tr>
<tr>
<td></td>
<td>$183 M in Additional Net Toll Revenues</td>
</tr>
<tr>
<td></td>
<td>65 M Person-Hours Saved</td>
</tr>
<tr>
<td></td>
<td>581 M VMT Saved</td>
</tr>
<tr>
<td></td>
<td>$1.7 B in Economic Net Benefits, with NPV of $608 M</td>
</tr>
</tbody>
</table>

- **SR 509 Stage 1 Open**
- **SR 167 Stage 1 Open**
- **SR 509 Stage 2 Open**
- **SR 167 Stage 2 Open**
Funding Constrained Baseline Sources & Uses of Funds

- Capital expenditures timed to match legislative funding
- Incorporates latest June 2018 inflation indices
- Funding gap shown in FY 2031; anticipated to be filled earlier with a federal contribution
- Stage 2 open to traffic with tolling in January 2031 (mid FY 2031)
- Toll funding needed up to 1.5 years before Stage 2 operations
- Represents the basis of comparison for the three acceleration cases

Future federal contribution
Acceleration Case #1: Modest Acceleration Sources & Uses of Funds

- Stage 2 opens 2 years earlier in mid FY 2029 (January 2029)
- Capital expenditures accelerated without leveraging CW State funds
- $44 M of early CW State funds delayed until FY 2024 due to accelerated local funds
- Toll funding needed up to 2.5 years before Stage 2 operations
- Need $114 M federal grant (INFRA) in FY 2025-26 ($20 M local contribution)
- $20 M in “unused” CW State funds left in FY 2030
Acceleration Case #2: Medium Acceleration Sources & Uses of Funds

- Stage 2 opens 3 years earlier in mid FY 2028 (January 2028)
- $129 M of later CW State funds advanced from FY 2028 to FY 2025
- $44 M of early CW State funds delayed until FY 2024
- Toll funding needed 1.5 years before Stage 2 operations
- Need $98 M federal grant (INFRA) in FY 2025-26 ($20 M local contribution)
- $20 M in “unused” CW State funds left in FY 2030
Acceleration Case #2B: Medium Acceleration Sources & Uses of Funds

- Stage 2 opens 3 years earlier in mid FY 2028 (January 2028)
- $115 M of later CW State funds advanced one year from FY 2028 to FY 2027
- $44 M of early CW State funds delayed until FY 2024
- Toll funding needed up to 3.5 years before Stage 2 operations
- $98 M federal grant (INFRA) in FY 2025-26 ($20 M local contribution)
- $20 M in “unused” CW State funds left in FY 2030
Acceleration Case #3: Maximum Acceleration Sources & Uses of Funds

- SR 167 Stage 2 opens 4.5 years earlier in FY 2027 (July 2026)
- SR 509 Stage 2 opens 5.5 years earlier in FY 2026 (July 2025)
- $346 M of later CW State funds advanced by 2 biennia into FY 2023-25
- Toll funding needed up to 3 years before Stage 2 operations
- $130 M federal grant (INFRA) in FY 2021-22 ($20 M local contribution)
- $89 M in “unused” CW State funds in FY 2028 & 2030 could provide a “return” for advancing CW State funds in other years
Net Toll Revenue (Scenario 1)

There are at least 22 years, and as many as 27 years in which net toll revenues are projected to be at least $40 million, which is more than sufficient to pay debt service on $180 M of capital funding.

Note: Toll Scenario 1 excludes any toll escalation over the forecast period.
Financial Benefits of Project Acceleration

- Construction Inflation Cost Savings
- Additional Gross Toll Revenues
- Unused Connecting Washington Funds
- Additional Toll + Facility O&M Costs
- Short Term Loan Borrowing Costs

Net Financial Benefit of $283 M

Net Financial Benefit of $147 M

Net Financial Benefit of $165 M

Net Financial Benefit of $121 M

Case 1: Modest Acceleration (2 years earlier)
Case 2: Medium Acceleration (3 years earlier)
Case 2B: Medium Acceleration Alternative (3 years earlier)
Case 3: Maximum Acceleration (4.5 & 5.5 years earlier)
SR 167 Update
SR 167 Phase 1 Construction Stages

Stage 1a
70th & I-5

Stage 1b
SR 509 Spur

Stage 2
SR 167

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SR 167 Right-of-Way**

- **Stage 1a**: Design Phase
- **Stage 1b**: Design Phase
- **Stage 2**: Design Phase

**Construction Phases**

- **Stage 1a**: 2021-2025
- **Stage 1b**: 2021-2025
- **Stage 2**: 2021-2028

*Future Sound Transit Station (Location TBD)*
SR 167 Phase 1 Construction Stages

• Stage 1a:
  – Reconstructs 70th Ave bridge over I-5
  – Builds new connection at SR 99 and widens SR 99
  – Builds new Interurban Trailhead
  – Partial demolition of Tacoma PEO

• Stage 1b:
  – Builds SR 509 Spur freeway from I-5 to SR 509
  – Builds 54th Ave/SR 509 Spur interchange
  – Builds I-5 Diverging Diamond Interchange (DDI)
  – Constructs Riparian Restoration Program (RRP) along Hylebos Cr.
  – Builds Wetland Mitigation sites
  – Builds toll point (8th St. E. vicinity)

• Stage 2:
  – Builds SR 167 freeway from I-5 SR 161 in Puyallup
  – Constructs Valley and Meridian interchanges
  – Builds toll point (26th St. E. vicinity)
  – Constructs RRP along Wapato Cr.
Stage 1a: A Closer Look

- Reconstruct 70th Avenue E. over I-5; includes a shared-use path
- Widen SR 99 for left turn channelization, bike lanes, drainage, planter strips, sidewalk, and a new traffic signal
- Add a waterline from 20th St. to SR 99
- Construct a new trailhead parking facility and a section of new trail for the Interurban Trail
SR 167 Right-of-Way 2018
SR 167 Bicycle/Pedestrian Connections

- Established subcommittee to engage on non-motorized project elements
- Ensure interested citizens and organizations:
  - Are informed about concepts for non-motorized use
  - Can provide input on those concepts
  - Can help shape those concepts into more refined designs
- Meeting 3-4 times between January and July 2019
Tacoma to Puyallup Regional Trail Connection

• WSDOT is participating in Cohort group that will:
  – Investigate the feasibility of a non-motorized transportation facility to connect Tacoma to Puyallup
  – Consider concept alignments
    • River Road
    • Levee Road
    • SR 167
  – Identify environmental clearance requirements
  – Build cross jurisdictional buy-in on the route and design
SR 167 Accomplishments

• FHWA completed legal sufficiency review of NEPA Re-Evaluation
• Issued Stage 1a Request for Qualifications
• Held Stage 1a Submitters Meeting
• Issued permit to Olson Brothers for stockpiling surplus fill
• Sent Access Report to local jurisdictions
• Continue to acquire right-of-way, over 80% by area
• Participated in summer outreach activities
Next Steps

• Complete NEPA Re-Evaluation December 2018
• Obtain environmental permits prior to construction
• Prepare Interlocal Agreements with Fife, Tacoma, and Port of Tacoma
• Complete a project video with 3D visualizations
• Hold Limited Access Hearing January 31, 2019
• Issue Request for Proposals February 28, 2019
• Issue Notice to Proceed to Design-Builder July 2019
• Continue right-of-way acquisition process
• Continue design for Stage 1b, including Riparian Restoration Program
SR 509 Update
SR 509 Construction Stages

--- Stage 1b
--- Sea-Tac Airport access
--- Stage 2
--- Lake to Sound Trail
--- Sound Transit

### SR 509 Right-of-Way

**Stage 1a**
SR 99 (Sound Transit)

**Stage 1b**
I-5 to 28th/24th

**Stage 2**
28th/24th to S 188th

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **RIGHT-OF-WAY**
- **DESIGN**
- **CONSTRUCTION**
- **DESIGN**
- **CONSTRUCTION**
SR 509 Phase 1 Construction Stages

- **Stage 1a (built by Sound Transit):**
  - Builds new SR 99 Bridge
  - Builds retaining walls along I-5 between the guideway and the southbound collector/distributor

- **Stage 1b:**
  - Reconstructs the I-5/SR 516 interchange including the connection to Veterans Drive
  - Reconstructs the S. 216th St. Bridge
  - Builds new northbound I-5 auxiliary lane and southbound I-5 collector/distributor
  - Builds toll point (S. 210th St. vicinity)
  - Builds two lanes in each direction between 28th/24th Ave S. and a new I-5/SR 509 interchange

- **Stage 2:**
  - Builds two lanes in each direction between 28th/24th Ave S. and S. 188th St.
  - Builds folded diamond interchange at S. 188th St.
  - Builds southbound auxiliary lane on I-5 between SR 516 and S. 272nd St.
SR 509 ROW Acquisition Dashboard

<table>
<thead>
<tr>
<th>'17-'19 Legislative Funding</th>
<th>$47,263,518</th>
<th>ROW Funding Expended</th>
<th>$3,936,683</th>
<th>ROW Funding Remaining</th>
<th>$43,326,835</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Parcels Cost (PFE)</td>
<td>$55,470,253</td>
<td>Planned ROW Expenditure '17-'19</td>
<td>$55,370,253</td>
<td>Status Through</td>
<td>October '18</td>
</tr>
</tbody>
</table>

Status Through: October 2018
- Planned Value: $23,987,889 53%
- Actual Cost: $3,936,683 8%
- Earned Value: $3,008,561 6%
- Cost Variance: -$928,122 -2%
- Schedule Variance: -$520,979,328 -44%
- Cost Perform. Index: 0.764
- Sched. Perform. Index: 0.125

**Planned Value:** $23,987,889

**Actual Cost:** $3,936,683

**Earned Value:** $3,008,561

**Cost Variance:** -$928,122

**Schedule Variance:** -$520,979,328

**Cost Perform. Index:** 0.764

**Sched. Perform. Index:** 0.125

**Cumulative Total**

- Planned: $47.3 M
- Actual: $0
- EV: $10
- Biennial Budget: $20
- Number of Parcels: 50

**ACQUISITION**

- Total Parcels ('17-'19): 67
- Title Reports Complete: 66
- ROW Plans Complete: 57
- Appraisals Started: 59
- Appraisals Complete: 54
- Appraisal Reviews Complete: 49
- Offers Made: 40
- Offers Accepted: 11
- Condemnations Started: 2
- Condemnations Complete: 0
- Possession & Use: 1
- Parcels Acquired: 5

**RELOCATION**

- Total Parcels with Relocations: 17
- Parcels with Relocations Started: 13
- Parcels with Relocations Vacated: 3

**DEMOLITION**

- Total Parcels with Demolition: 29
- Parcels with Demolition Complete: 0

**Graphs**

- Line graph showing cumulative total from 07/1/17 to 04/1/19.
- Bar graph showing number of parcels completed by phase.

**Percentage:**

- Planned Value: 53%
- Actual Cost: 8%
- Earned Value: 6%
- Cost Perform. Index: 0.764
- Sched. Perform. Index: 0.125
SR 509 Accomplishments

- Completed Land Exchange Agreement with Sound Transit
- Finalized Lake to Sound Trail Funding Agreement with King County
- Obtained funding ILA with City of SeaTac
- Provided SR 509 plans to FWLE contract
- Posted SR 509 Plans to FTP
- Completed Phase 1 – 30% design
- Participated in summer outreach activities
SR 509 Next Steps

- Continue right-of-way acquisition
- Support Sound Transit during FWLE Final Design
- Continue coordination with King County regarding Lake to Sound Trail design
- Obtain design parameters/design approval
- Complete Fire and Life Safety Analysis for the tunnels
- Develop Stage 1b Conceptual Plans
- Develop Stage 1b RFQ/RFP
- Obtain environmental permits for Stage 1b
- Complete IJR update
- Complete project video with 3D visualizations
- Complete Stage 1b ILAs with local jurisdictions
- Finalize Construction Agreement with Sound Transit
Program Next Steps

- Re-apply for INFRA grant
- Toll authorization needed from Legislature
- Upcoming meetings
  - Executive Committee, December 6, SeaTac City Hall
More information:

Craig J. Stone, PE  
Puget Sound Gateway Program Administrator  
(206) 805-2899  
StoneC@wsdot.wa.gov

Steve Fuchs, PE  
SR 167 Project Manager  
(360) 357-2623  
fuchss@wsdot.wa.gov

Andrey Chepel, PE  
SR 509 Acting Project Manager  
(206) 805-2978  
chepela@wsdot.wa.gov