

# Projects for Evaluation

## JTC Public-Private Partnerships Study

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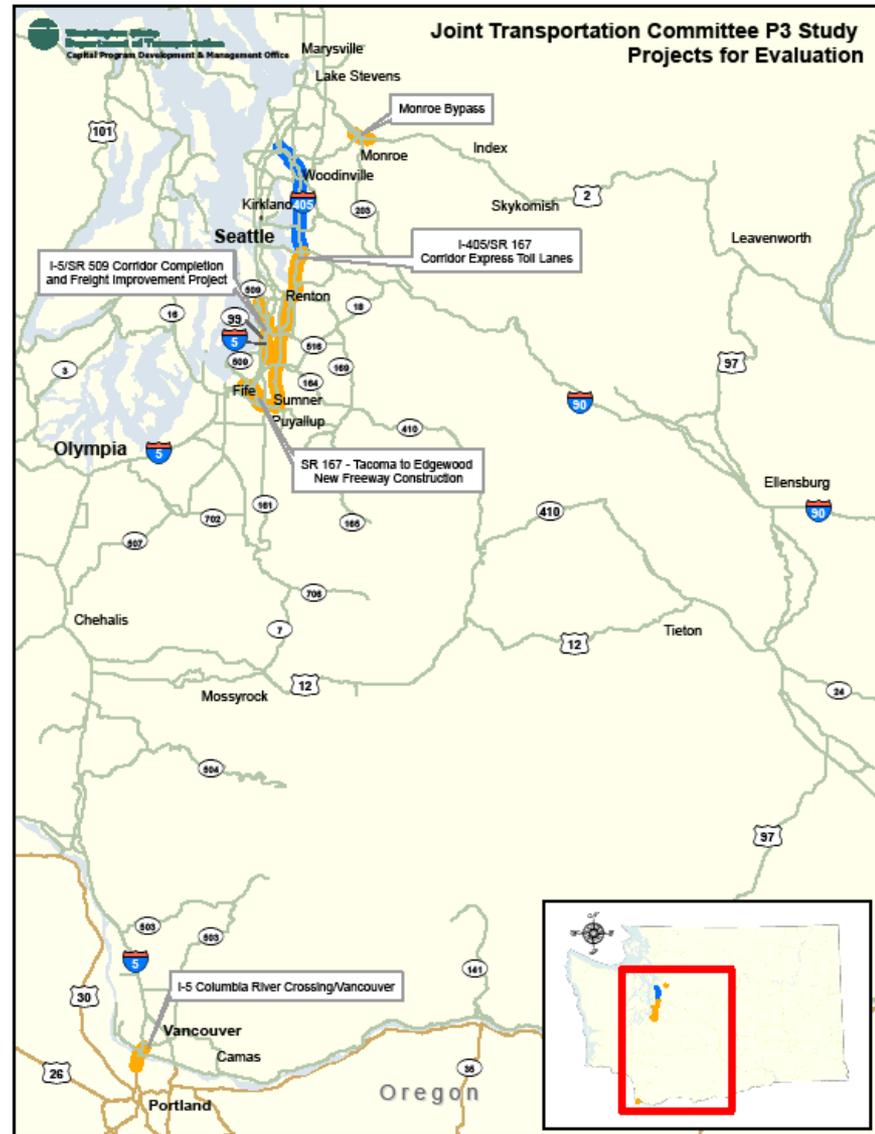
Secretary of Transportation

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# Projects for Evaluation

- US-2 Monroe Bypass
- I-405/SR 167 Express Toll Lanes
- SR 509 Extension
- SR 167 Tacoma to Edgewood
- Columbia River Crossing

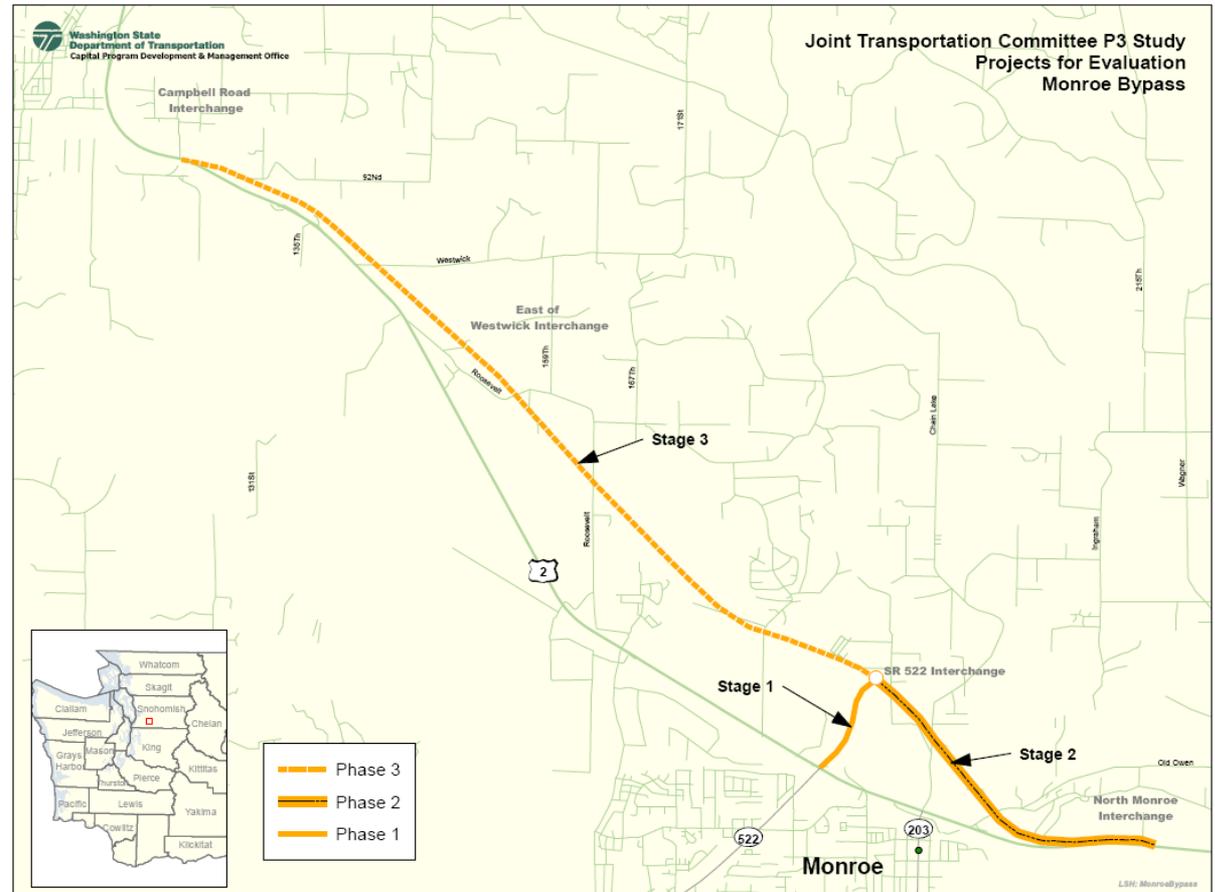


# Projects for Evaluation

- **Projects named for this study in ESHB 1175, Section 204**
- **Projects are at various stages of development**
- **Each project has different characteristics**
- **Some projects may be more suitable for P3 than others**
- **Basic project information – much more available**
- **Limited information on tolling**

# US-2 Monroe Bypass

- One of only 2 East-West all-weather highways in Washington
- High rates of growth in both population and thru traffic



# US-2 Monroe Bypass

- **US-2 west of Monroe currently 2 lanes, no median barrier**
- **Primary weekday commuter route**
- **Weekend tourism route**
- **Major freight route**
- **Currently stop and go in Monroe**
- **Safety concerns – collisions exceed statewide average**

# US-2 Monroe Bypass

- **Monroe – 272% growth 1990 – 2005**
- **Thru traffic 85% growth 1990 – 2006**
- **2010 Monroe Average Daily Traffic (ADT) 37,000**
- **Forecast 2030 ADT 50,000 – Stop and Go entire area**
- **5 ½ miles new alignment, planned as limited access**
- **Substantial community and stakeholder support**

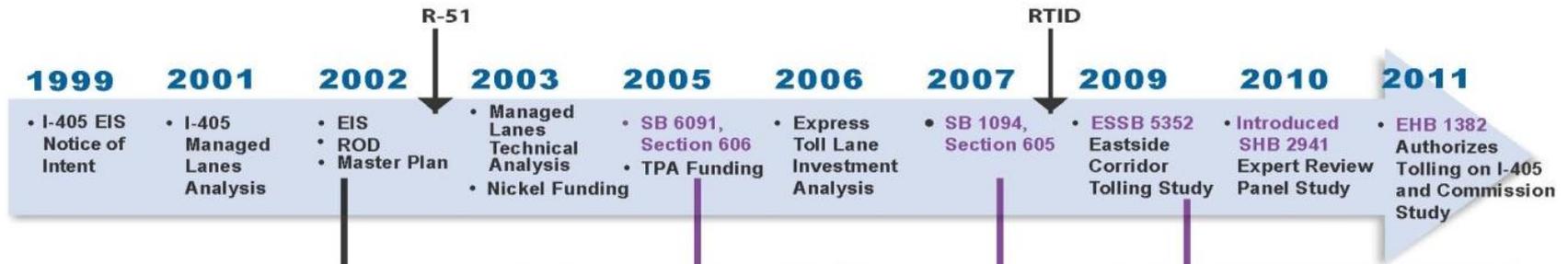
# US-2 Monroe Bypass

- Design 5% complete on stage 1, 0% on stages 2 & 3
- Right of Way acquisition about 90% complete
- Construction not funded
- 1996 estimate inflated to 2011 = \$326 million
- No revenue or tolling studies completed
- Project websites:

<http://www.wsdot.wa.gov/Projects/US2/RDP/>;

<http://www.wsdot.wa.gov/Projects/US2/RDP/monroebypass.htm>

# I-405/SR 167 Express Toll Lanes

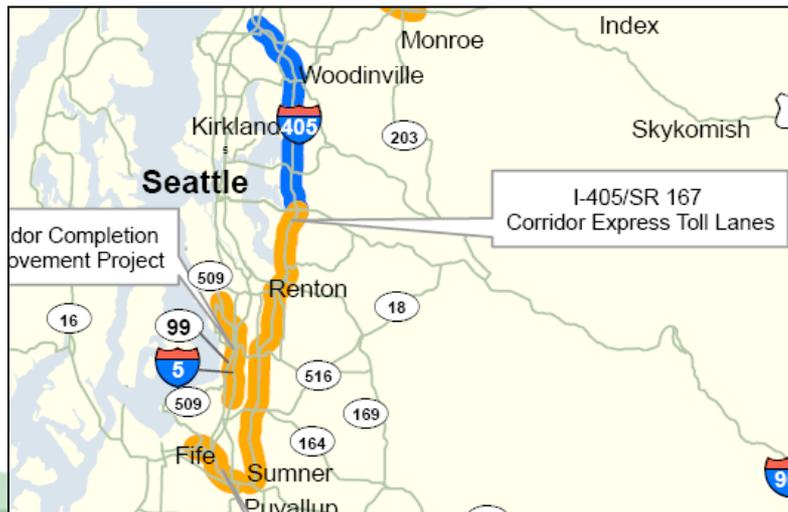


Executive committee recommended further consideration of managed lanes.

The Legislature intends that tolls be charged to offset costs of widening I-405, including a managed lane concept

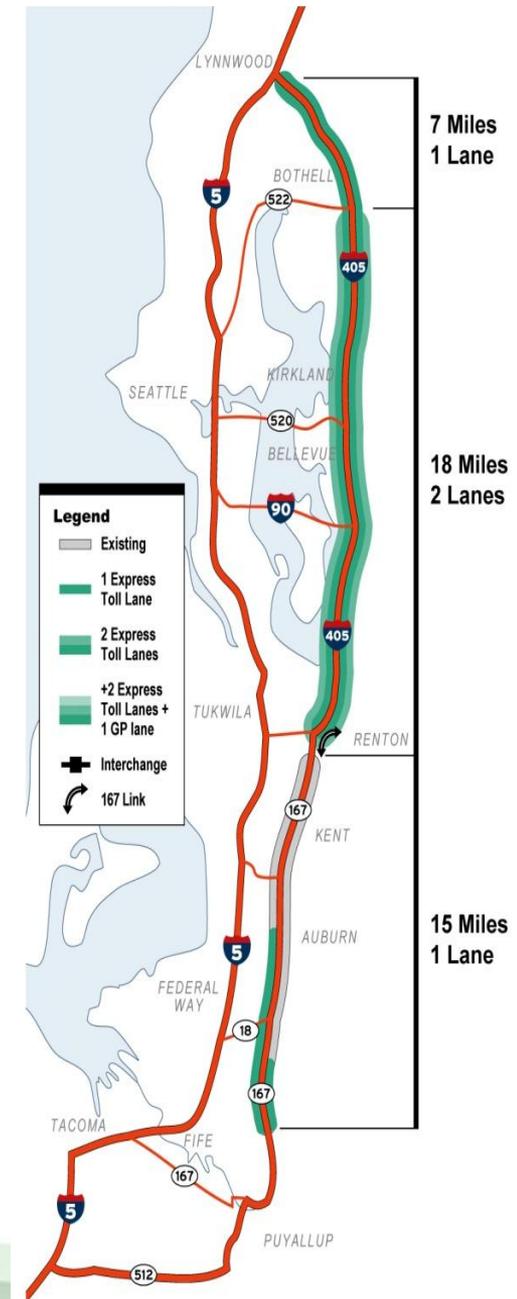
The Legislature intends that tolls be charged to offset costs of a managed lanes concept included in the widening of I-405

By January 2010, the department must prepare a traffic and revenue study for Interstate 405 in King county and Snohomish county that includes funding for improvements and high occupancy toll lanes, as defined in RCW 47.56.401, for traffic management. The department must develop a plan to operate up to two high occupancy toll lanes in each direction on Interstate 405.



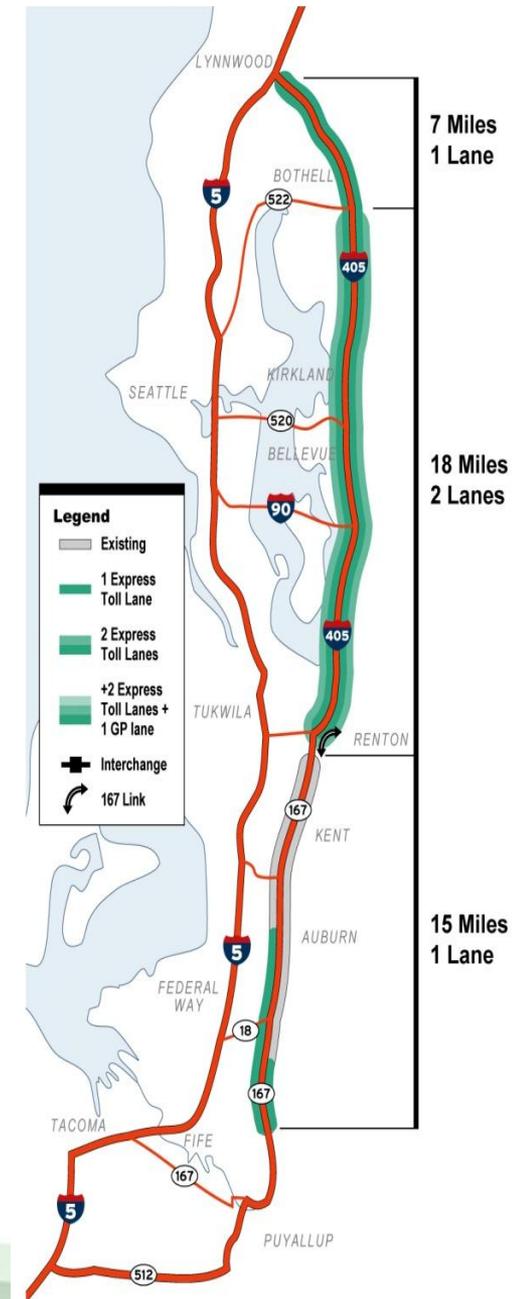
# I-405/SR 167 Express Toll Lanes

- I-405 currently 2 general purpose lanes, 1 HOV lane (2+)
- Extensive capacity improvements made during last several years
- SR 167 currently 2 general purpose lanes, one HOV lane (2+), or HOT lane on one part
- EIS complete, some updates might be necessary for some stages



# I-405/SR 167 Express Toll Lanes

- 5 options studied
- 40 mile corridor recommended by Executive Advisory Group
- One tolled lane each direction for 7 miles on north end, 15 miles on south end
- Two tolled lanes each direction from Renton north to SR 522 (18 miles)

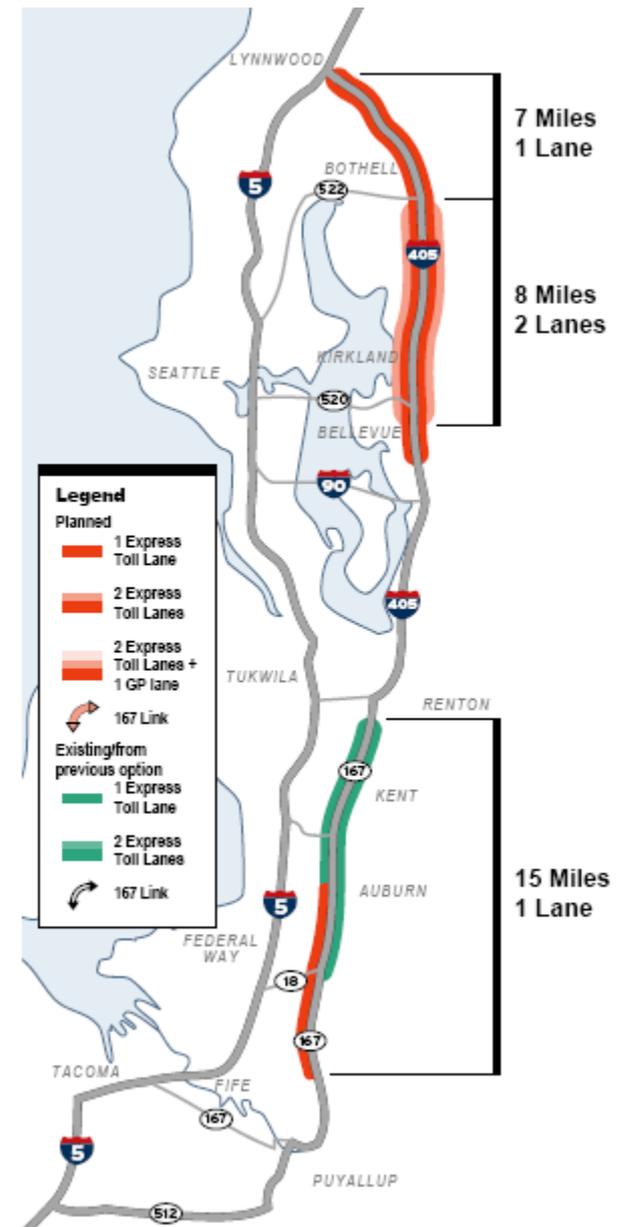


# I-405/SR 167 Express Toll Lanes

- Eastside Corridor estimated at 1.1 million trips per day now, 1.5 million by 2030
- Tolling study conducted, shows better performance with tolling than without (more people and cars)
- HOV 3+ would use tolled lanes free
- In addition to tolled lanes, there would be 2 general purpose, non-tolled lanes (3 lanes Bellevue to SR 522)
- Website: <http://www.wsdot.wa.gov/tolling/eastsidecorridor>

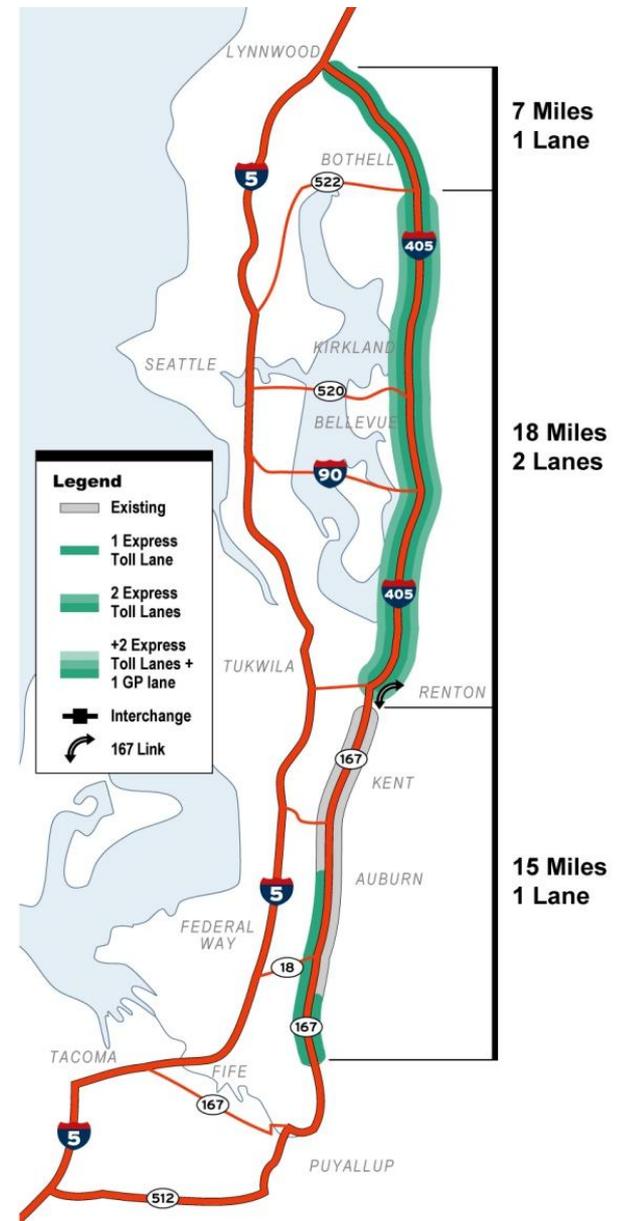
# I-405/SR 167 Express Toll Lanes - Funded

- SR 167 HOT Lanes pilot project complete, in operation
- SR 520 to I-5: \$383 million funded, RFP issued
- SR167 Southbound Managed Lane: \$82 million funded, construction in 2013



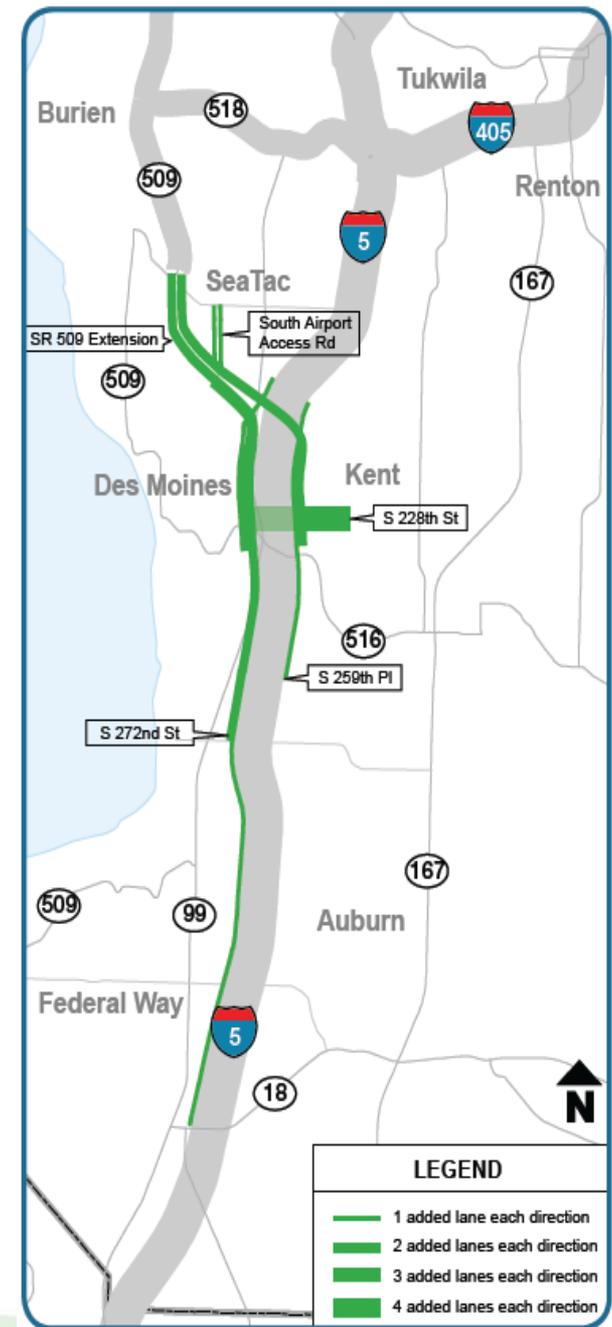
# I-405/SR 167 Express Toll Lanes – Not Funded

- SR 167 Direct Connection - \$490 million
- SR 169 to SR 520 - \$960 million
- SR 167 Northbound HOT lane extension - \$36 million
- Total \$1.49 billion still needed
- Tolling could provide \$965 million to \$1.5 billion



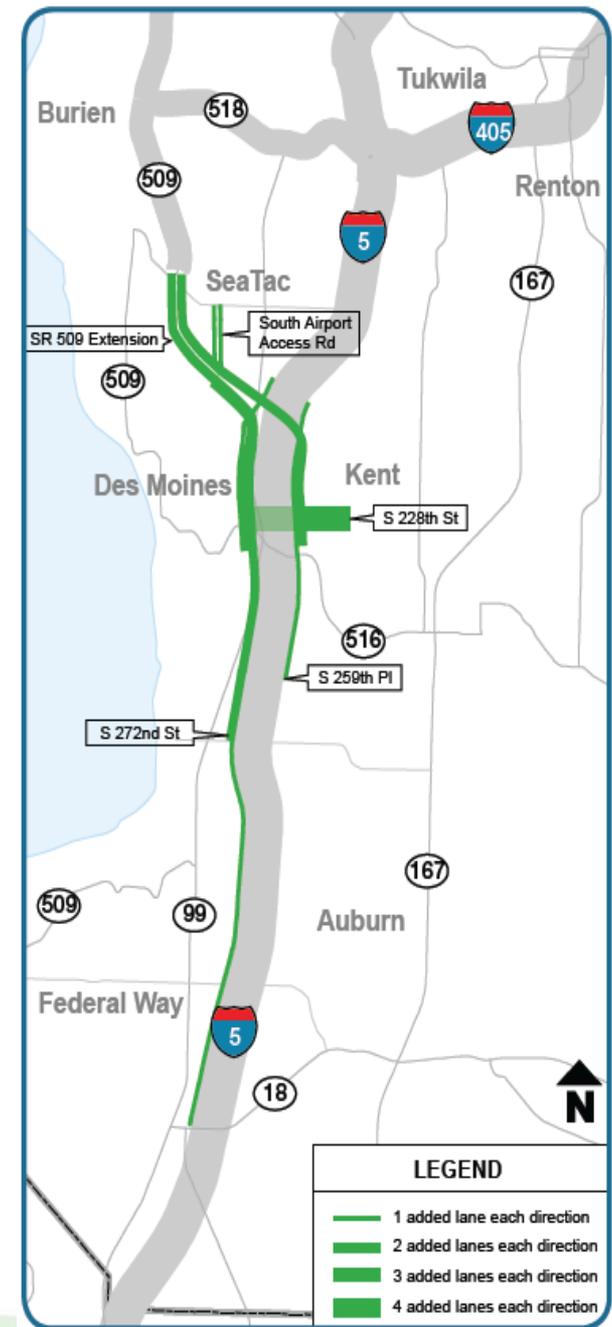
# SR 509 Extension

- Existing SR 509 is limited access freeway from south Seattle to south end of SeaTac Airport
- Connects to local streets at each end
- Project relieves traffic congestion, improves safety
- Addresses freight movement into and out of SeaTac Airport, Kent Valley
- Website:  
<http://www.wsdot.wa.gov/projects/i5/sr509freightcongestionrelief>



# SR 509 Extension

- Proposed project is a limited access freeway from south Seattle to I-5 in Kent/Des Moines area
- Various options would add lanes, interchanges along I-5
- EIS complete 2003
- Design 30% complete
- Right of Way 40% complete
- \$86 million spent, no further funding available



# SR 509 Extension Toll Feasibility Study

- **2009 Legislature directed a tolling feasibility study, completed September 2010**
- **Potential for variable tolling to generate revenues for needed transportation facilities within the corridor.**
- **Maximizing the efficient operation of the corridor**
- **Economic considerations for future system investments**

# SR 509 Extension Toll Feasibility Study Assumptions

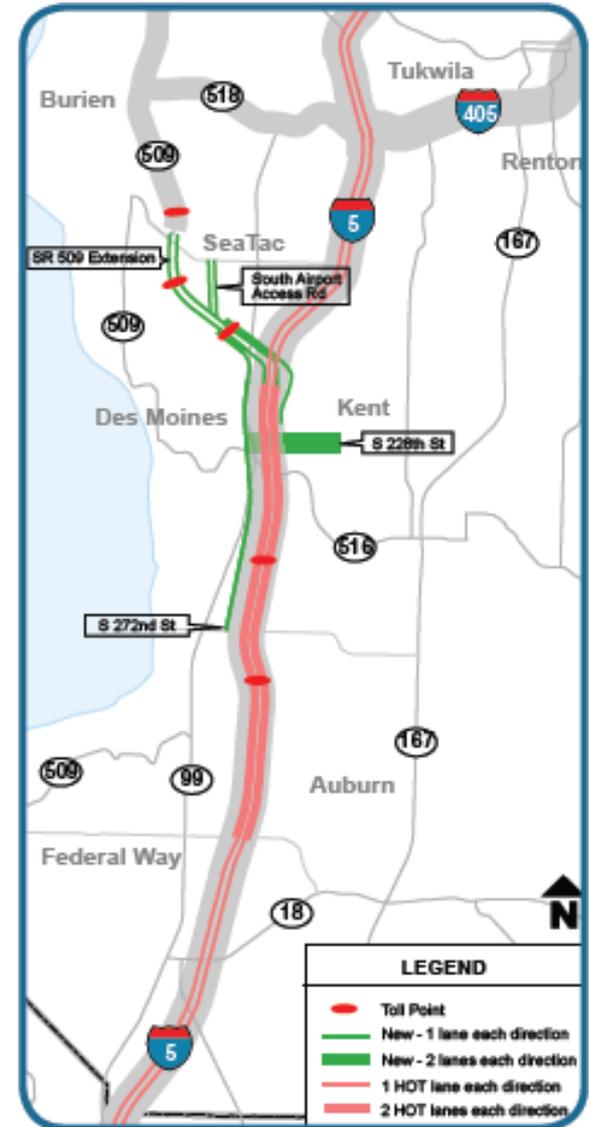
- Corridor construction starts in 2016, complete in 2020
- Toll collection starts in 2020 and continues through 2050
- All vehicles except transit pay a toll
- Toll rates are fixed by time of day based on the level of congestion
- Trucks pay higher tolls based on the number of axles

# SR 509 Extension Toll Feasibility Study

- 6 different options studied
- Options vary what is built, tolling concepts, mix of all tolled and tolled + HOT lanes on I-5
- No option recommended, but interest from Stakeholder Committee members focused on option 3a
  - Builds desired connections to Port of Seattle, SeaTac, Des Moines, and Kent, and an apparent toll funding contribution of 70% - 93%

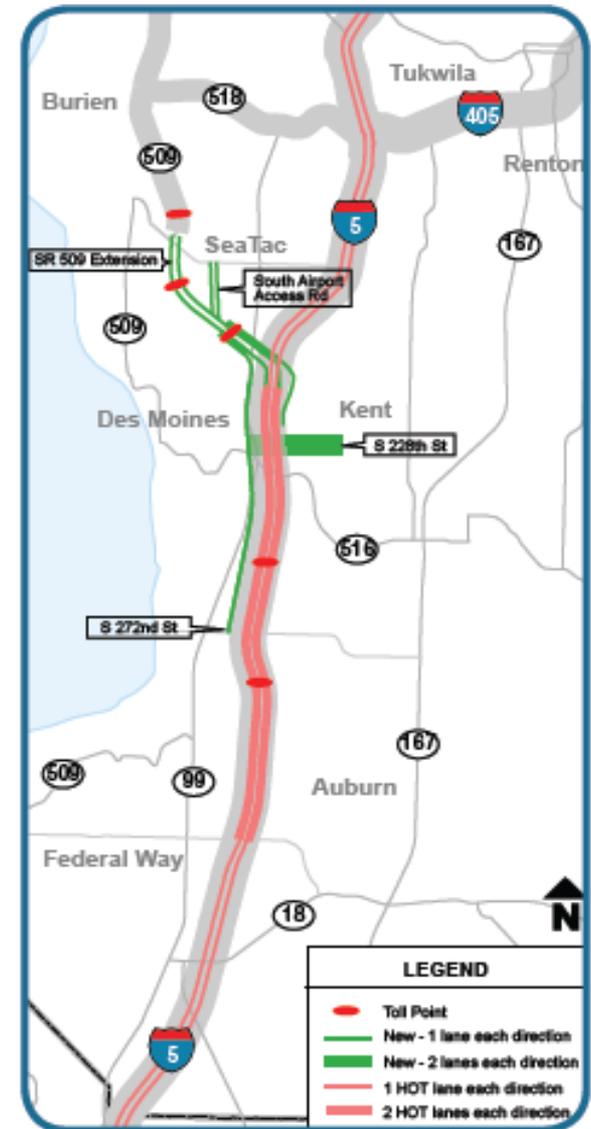
# SR 509 Extension Toll Feasibility Study- Option 3a

- One lane each direction S. 188<sup>th</sup> St. to S. 24<sup>th</sup> Avenue
- Two lanes each direction S. 24<sup>th</sup> Avenue to I-5
- Merges with planned I-5 HOT lanes, uses left shoulders on I-5 for 2<sup>nd</sup> HOT lanes during peak times
- Includes S. 228<sup>th</sup> St. connection into and out of Kent Valley



# SR 509 Extension Toll Feasibility Study

- Funded and invested to date - \$86 million
- Funding need range - from \$580 million to \$930 million
- Tolling could provide \$250 to \$605 million
- With tolling, remaining need is \$120 million to \$675 million



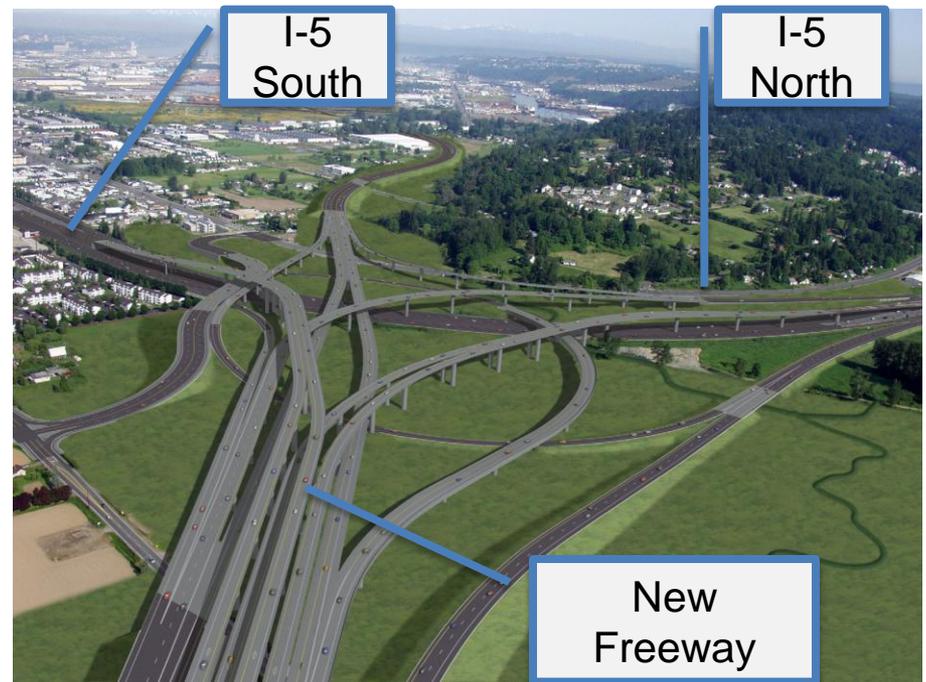
# SR 167 Tacoma to Edgewood

- New Freeway – 6 miles
- Planning began over 40 years ago
- Preferred corridor identified in 1999
- Final EIS complete 2006
- 3 lanes east of I-5, 2 lanes west of I-5



# SR 167 Tacoma to Edgewood Project Benefits

- Relieve congestion on local roads and other highways
- Move freight faster, more safely and more economically
- Improve regional mobility
- Enhance surface water quality and improve stream habitat



# SR 167 Tacoma to Edgewood Toll Feasibility Study

- 2009 Legislature directed a tolling feasibility study, completed September 2010
- Potential for variable tolling to generate revenues for needed transportation facilities within the corridor.
- Maximizing the efficient operation of the corridor
- Economic considerations for future system investments
- Website:  
<http://www.wsdot.wa.gov/projects/sr167/tacomatoedgewood/>

# SR 167 Tacoma to Edgewood Toll Feasibility Study

- 6 different options studied:
- Options vary what is built, tolling concepts, mix of tolling only SR 167 or 167 + 509 + I-5 HOT lanes
- No single option recommended
- Funding need range - from \$900 million to \$1.9 billion
- Tolling could provide \$265 to \$545 million
- With tolling, remaining need is \$537 million to \$1.6 billion

# Columbia River Crossing

- Project will replace seismically vulnerable bridges built in 1917 and 1958
- Eliminate bridge lifts for river traffic – no more “Stop lights” on I-5
- Add light rail between Portland and Vancouver
- Planned as toll facility



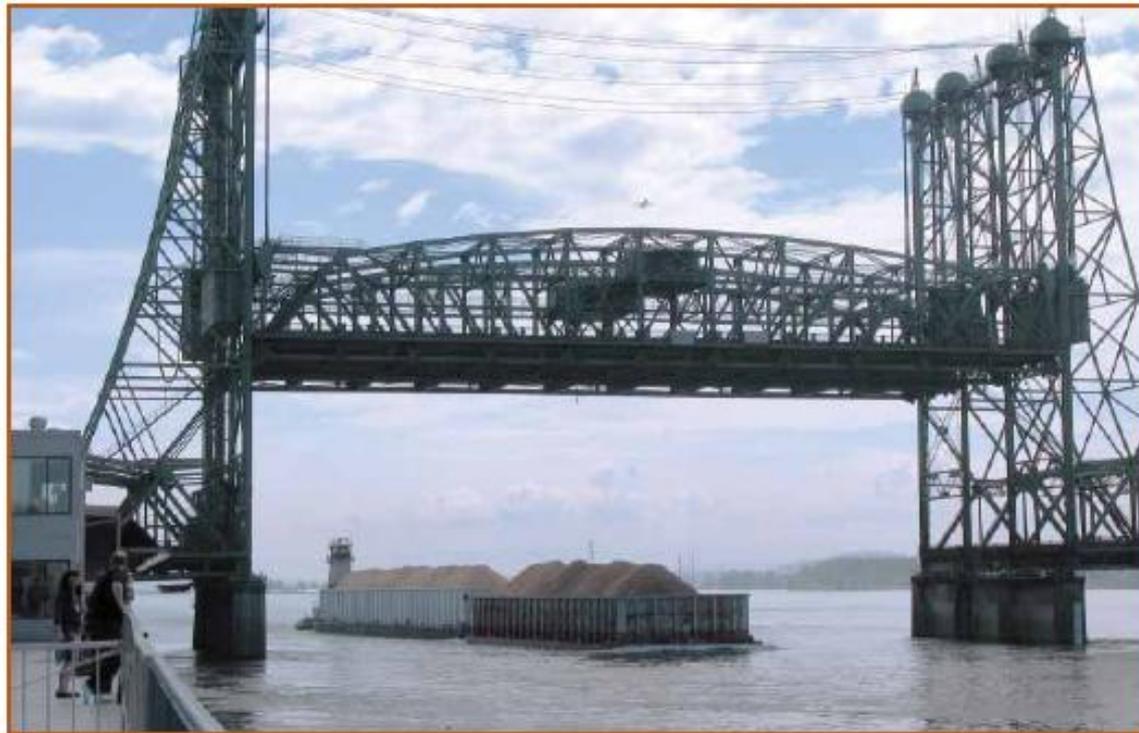
# Columbia River Crossing

- One of two crossings in Portland-Vancouver area
- I-205 bridge built in 1983
- I-205 bridge ADT is 88,000
- I-5 bridge ADT is 123,000



# Columbia River Crossing

- Bridge lifts average once per day, 20 minutes maximum
- All stop

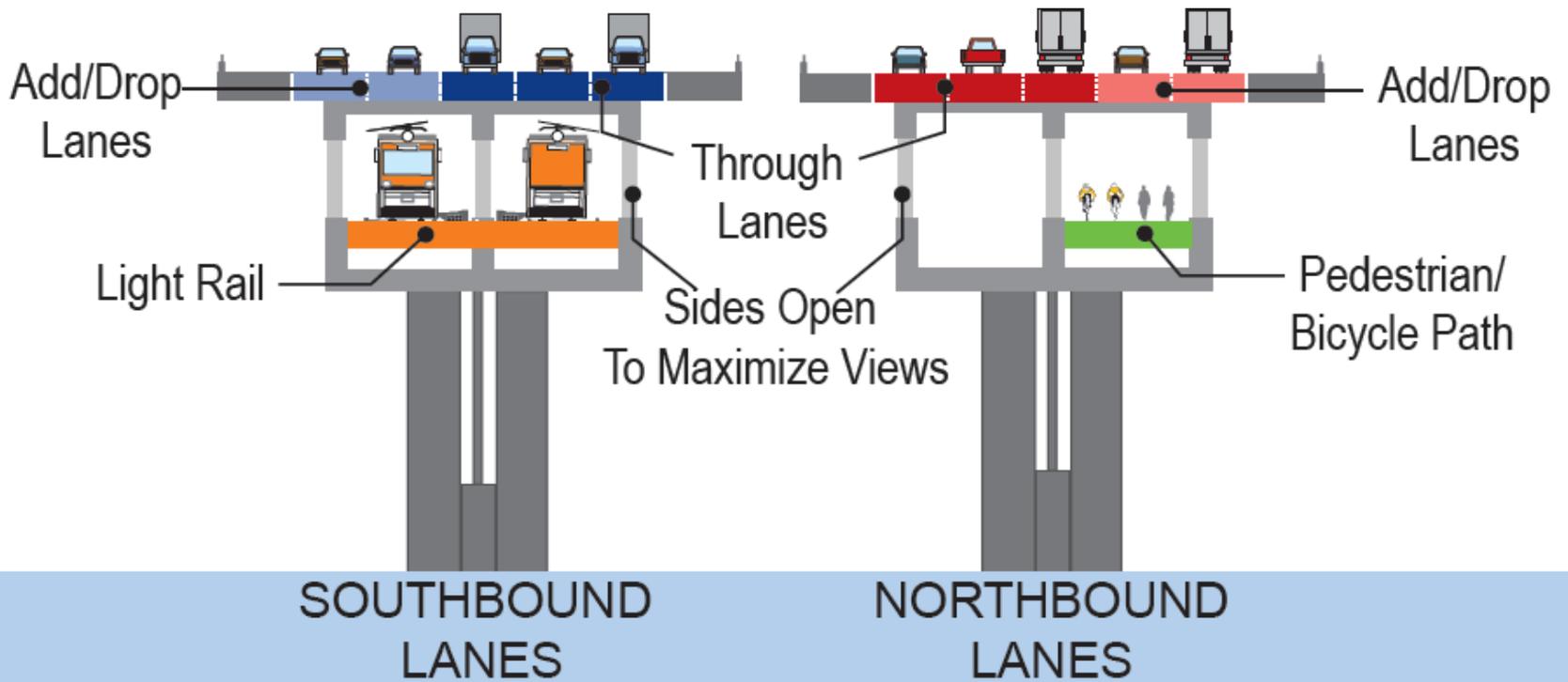


# Columbia River Crossing

- **Bridge Review Panel convened in 2010**
- **Several bridge types considered**
- **Evaluated cost, goals, environment, public concern**
- **Based on report, Oregon and Washington Governors recommended Composite Deck Truss Bridge**



# Columbia River Crossing



# Columbia River Crossing

**A deck truss bridge type selection minimizes impacts to:**

- **Construction schedule and risk**
- **Cultural and historic resources**
- **Marine traffic patterns**
- **Airspace of two airports**

# Columbia River Crossing

- **Draft EIS issued 2008**
- **Record of Decision (ROD) expected 2011**
- **Two states, two Federal Highways divisions, Federal Transit Administration, nine American Indian tribes**
- **Substantial public input**
- **Right of Way acquisition begins 2012**

# Columbia River Crossing

- **Current cost estimate for bridge with light rail, interchange and pedestrian/bicycle improvements on five miles of I-5:**

**\$3.2 to \$3.6 billion**

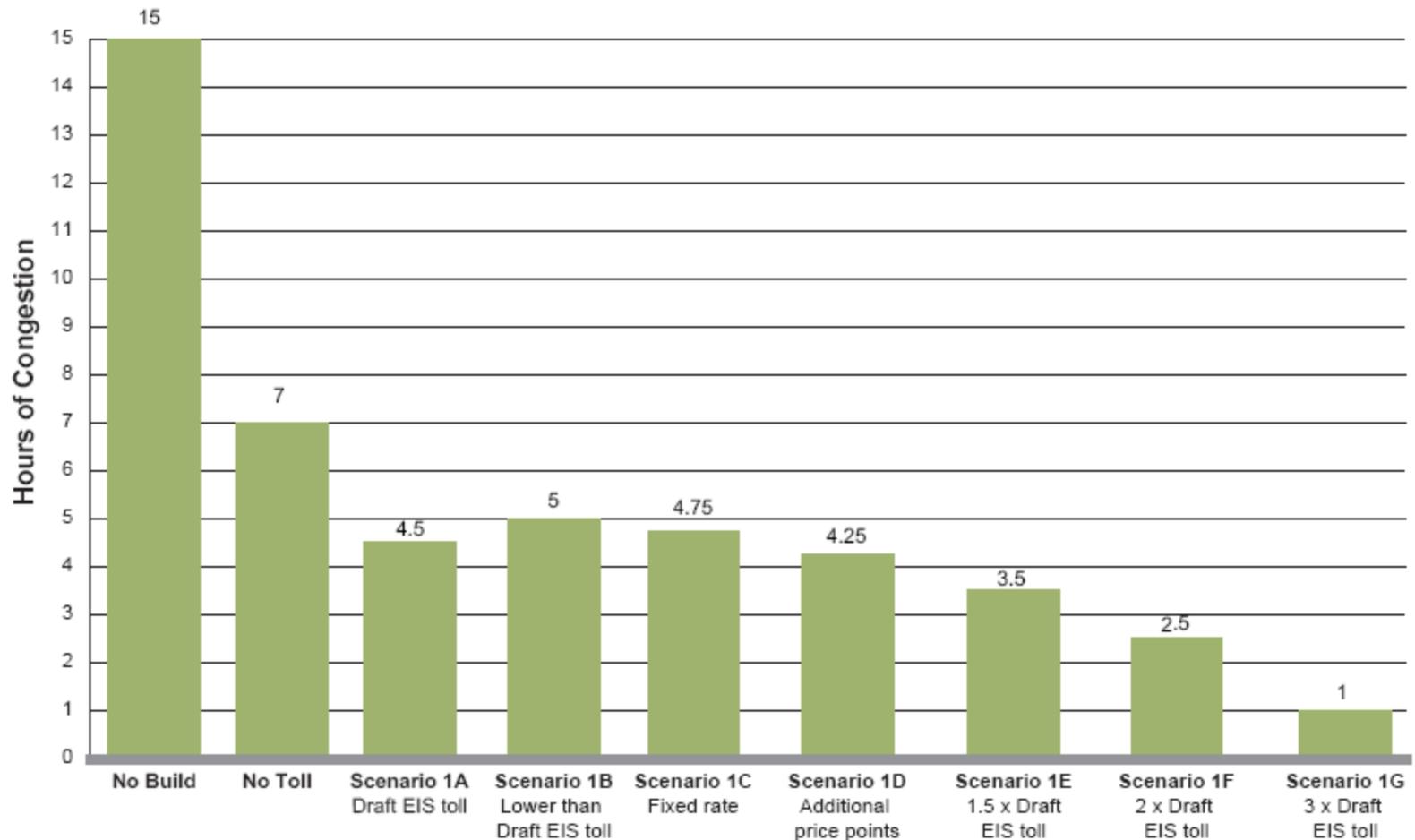
- **Tolling Study conducted 2010**
- **Ten tolling scenarios evaluated**
- **Tolling could provide between \$1 billion to \$3.36 billion, depending on scenario**
- **Project Website:** <http://www.columbiarivercrossing.org/Default.aspx>

## Toll Scenarios at a Glance

	Scenarios Analyzed	Tolls Collected	Toll Schedule Type	Tolling Start Date
Tolling I-5 Only	<b>Scenario 1A</b> <i>DEIS Toll Rate</i>	Each Way	Variable Toll Schedule	Mid 2018 (FY 2019)
	<b>Scenario 1B</b> <i>Lower than DEIS Toll Rate</i>			
	<b>Scenario 1C</b> <i>Flat Toll Rate</i>		Fixed Toll Schedule	
	<b>Scenario 1D</b> <i>Additional Price Points</i>		Variable Toll Schedule	
	<b>Scenario 1E</b> <i>1.5x DEIS Toll Rate</i>			
	<b>Scenario 1F</b> <i>2x DEIS Toll Rate</i>			
	<b>Scenario 1G</b> <i>3x DEIS Toll Rate</i>			
	<b>Pre-Completion Tolling<sup>1</sup></b> <i>DEIS Toll Rate</i>	Each Way	Variable Toll Schedule	Mid 2013 (FY 2014)
Tolling I-5 and I-205	<b>Scenario 2A</b> <i>DEIS Toll Rate</i>	Southbound Only <sup>2</sup>	Variable Toll Schedule	Mid 2018 (FY 2019)
	<b>Scenario 2B</b> <i>Lower than DEIS Toll Rate</i>			
	<b>Scenario 2C</b> <i>Lower I-205 Toll</i>			



## Hours of Congestion for I-5 Only Tolling Scenarios



# More Information

- **Monroe bypass** <http://www.wsdot.wa.gov/Projects/US2/RDP/>;  
<http://www.wsdot.wa.gov/Projects/US2/RDP/monroebypass.htm>
- **I-405/SR 167 corridor express toll lanes**  
<http://www.wsdot.wa.gov/tolling/eastsidecorridor>
- **I-5/SR 509 corridor completion and freight Improvement project**  
<http://www.wsdot.wa.gov/projects/i5/sr509freightcongestionrelief/>
- **SR 167-Tacoma to Edgewood**  
<http://www.wsdot.wa.gov/projects/sr167/tacomatoedgewood/>
- **I-5 Columbia River Crossing**  
<http://www.columbiarivercrossing.org/>