

How can we reduce project costs?

Finance plan options to reduce project costs

Project planners are reviewing options to make the project more affordable without sacrificing safety and our public and community commitments. Two cost reduction options described in the finance plan include building the floating bridge with fewer pontoons, and advancing the pontoon construction schedule. If both of these options are implemented, we could save approximately \$400 million. This would reduce the total project cost to \$3.98 billion.

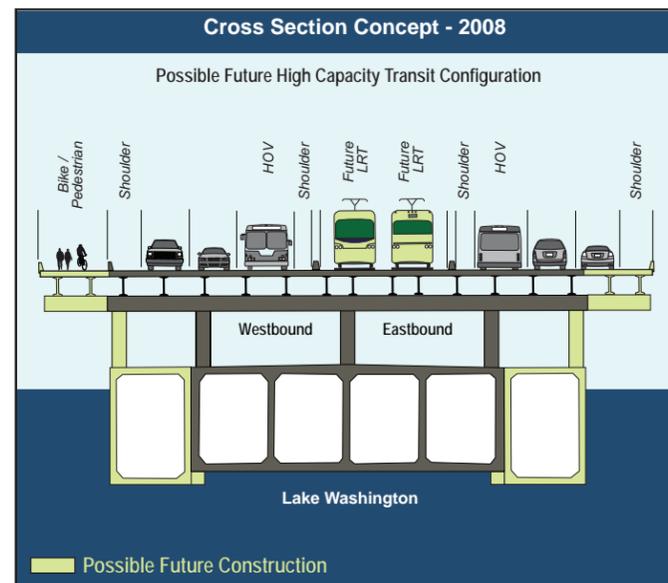
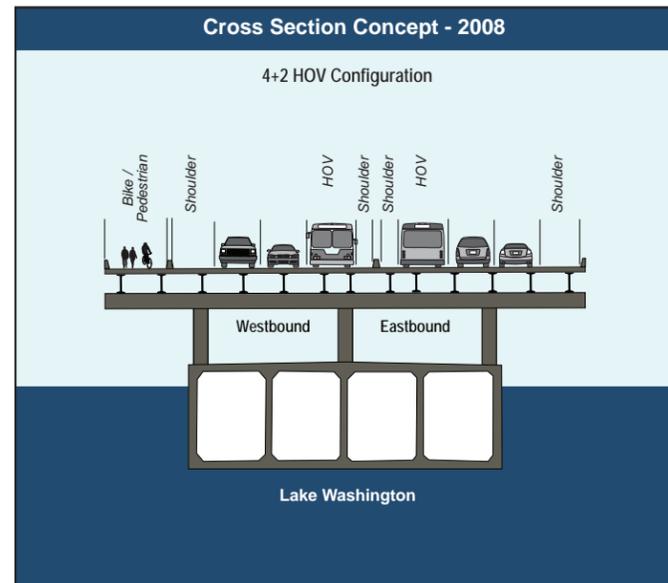
Build a 4+2 floating bridge with fewer pontoons

The preliminary design for the floating bridge included pontoons that could accommodate the weight of high capacity transit (in the form of light rail) in addition to four general purpose lanes and two HOV lanes. We have recently developed a revised floating bridge design concept that reduces the number of required

pontoons, allowing for construction cost savings. The reduced number of pontoons will provide the necessary buoyancy for four general purpose traffic lanes and two HOV lanes, as currently envisioned in the 4-2 configuration. These pontoons would be designed to allow for modifications to accommodate future rail in the corridor. These options are shown below.

Construct the pontoons ahead of schedule

We are also proposing to advance pontoon construction which would provide the ability to restore the traffic capacity of the existing SR 520 bridge in the case of a catastrophic failure. Advancing this work by almost three years over the original plan will reduce the cost of pontoon construction by not incurring as much inflation.



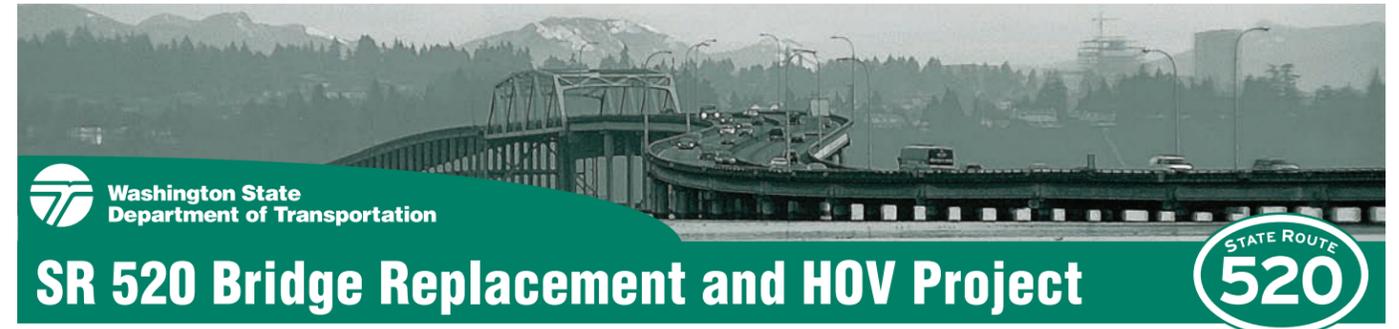
For More Information

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Funding the SR 520 project is a high priority for the state

Winter 2008

Committed to safety; investigating the best way to finance a new SR 520 corridor

The SR 520 bridge and approaches are at risk of being damaged or destroyed in a severe windstorm or earthquake during the next 20 years. As one of only two Lake Washington floating bridges, more than 150,000 people travel on SR 520 every day. The corridor is critical to our state's economy and must be replaced.

The Washington State Department of Transportation (WSDOT) submitted a finance plan to the governor and the legislature in January 2008 as required by Engrossed Substitute Senate Bill (ESSB) 6099. The finance plan evaluates state funding sources identified in the 2007-2009 state transportation budget and tolling the SR 520 corridor to fund the SR 520 Bridge Replacement and HOV Project. We found that a gap exists between the cost of the project and the funding sources available. The finance plan suggests potential revenue sources to narrow the funding gap.

Finance plan key findings

- **A funding gap exists.** There is still a gap between the amount of identified funding and actual project costs. The challenge lies not just in filling the gap, but in matching project needs and schedule with timing of available funds.

- **Tolling SR 520 could contribute substantial project funding.** Tolling SR 520 after the new bridge is open to drivers in 2018 could generate between \$850 million and \$1.5 billion for the project. Policy makers would need to adopt a toll strategy that balances the number of vehicles traveling in the corridor with the amount of revenue generated from tolls.
- **Pre-completion tolling jump-starts project funding.** Tolling SR 520 from mid 2009 until the new bridge opens to drivers in 2018 could generate an additional \$480 to \$570 million.
- **Design changes and early pontoon construction could save \$400 million.** The current project cost estimate is \$4.38 billion for the 6-Lane Alternative with the Pacific Interchange option. With cost savings, including design changes and early pontoon construction, the project is estimated to cost \$3.98 billion.

Legislative requirements

The finance plan fulfills the requirements of ESSB 6099 by evaluating a variety of funding sources. ESSB 6099 states that the "project finance plan must include state funding, federal funding, at least one billion dollars in regional contributions and revenue from tolling" and must "be tied to the estimated cost of the recommended project solutions..."



What are the project funding needs and funding sources?

	<i>Millions of Dollars</i>
TARGET PROJECT NEED	
2006 Project Cost Estimate ¹	\$4,380 M
Less: Savings from Design Change & Early Construction of Pontoons ²	(\$400 M)
2007 Project Cost Estimate	\$3,980 M
SOURCES OF FUNDS <i>(based on the Governor's 2008 Supplemental Budget)</i>	
State Gas Tax (Nickel & TPA Packages, & Other State)	\$554 M
Allocation from WSDOT "Risk Pool" ³	\$1,072 M
Previously Committed Federal Bridge Funds	\$114 M
State Sales Tax Deferral or Transfer (similar to TNB) ⁴	\$180 M
Subtotal State/Federal Contribution	\$1,920 M
Shortfall / Funding Gap	\$2,060 M
Funding from Tolls	
SR 520 Tolls (beginning at completion in mid-2018) ⁵	\$850 M to \$1,520 M
Pre-Completion Tolling (toll existing bridge mid-2009 to mid-2018) ⁶	\$480 M to \$570 M
Tolling I-90	To Be Determined
<p>Note: The information in this table does not account for gaps caused by potential mis-matched timing in which project needs occur prior to funding availability.</p> <p>¹ 2006 estimate of probable costs for the 6-Lane Alternative with the Pacific Interchange option as reviewed by the Expert Review Panel.</p> <p>² The magnitude of cost savings depends both on design changes and on advancing certain construction activities to avoid the impacts of inflation; full savings requires early pontoon construction to be advanced to the 2009-11 and 2011-13 biennia.</p> <p>³ The Governor's 2008 Supplemental Budget proposes full allocation of the risk pool to the SR 520 Project. The risk pool is funded from \$800 million in future federal bridge funding and \$272 million in future federal Surface Transportation Program (STP) funds.</p> <p>⁴ Statutory amendments would be required. A state sales tax deferral would be repaid with future toll revenues.</p> <p>⁵ Legislation ESSB 6099 suggested tolls on SR 520. The range of funding generated by tolls is influenced by a number of factors underlying the toll scenarios tested. Toll rates vary by scenario from \$5.83 to \$10.29 in 2007 dollars for a peak commute period round-trip (7-9 AM and 3-6 PM). All scenarios employ variable toll schedules that provide lower tolls at off-peak times.</p> <p>⁶ Assumes all pre-completion net toll revenue would be available for project needs. Pre-completion toll scenarios tested toll rates from \$5.83 to \$6.86 in 2007 dollars for a peak commute period <u>round-trip</u>. Pre-completion tolling would require legislative approval. The Urban Partnership Grant provides funding for tolling infrastructure.</p>	

How could tolls contribute to project funding?

Using tolls to balance traffic and revenue

We studied five tolling scenarios in the finance plan with different combinations of toll amounts and traffic-management goals. One of the examples – scenario four in the finance plan – was a balanced approach that would balance potential revenue with the amount of traffic served by the bridge. The balanced approach could generate approximately \$1.12 billion in revenue if tolls begin in 2018. Potential revenue and variable toll rates for the other scenarios we analyzed are also available in the finance plan.

The balanced approach includes the following:

- Tolling the full corridor from I-5 to I-405.
- Toll exemptions for transit and carpools carrying three or more people.
- 24/7 tolling. Drivers would be charged a toll at all times of the day throughout the week.
- Weekday round-trip toll of \$6.86 in 2007 dollars during peak commuting hours.
- Weekend round-trip tolls ranging from \$1.52 to \$3.04 in 2007 dollars, depending on the time of day.
- Financial backing from 30-year state-issued bonds.

SR 520 has been assumed to be a toll project since 2003. Toll revenues will be used to repay the principal and interest on state-issued project funding bonds after covering expenses. The finance plan analyzes different tolling scenarios to see how much revenue could be generated from tolls and how tolling could affect traffic on the bridge and in the surrounding roadways and communities.

Summary of tolling scenario factors

1. Toll rate and traffic diversion. Lower toll rates will encourage more drivers to use SR 520, but will raise less revenue. Higher toll rates will generate increased revenue, but could divert more traffic onto other roads to avoid paying the toll.

2. Toll location. Multiple toll locations could generate more funding. The finance plan examines tolling cross-lake trips only and corridor-wide tolling, between I-5 and I-405, so that both cross-lake trips and shorter trips on both sides of the lake are tolled.

3. Toll exemptions. All finance plan tolling scenarios exempt transit from paying tolls. In some scenarios, carpools carrying three or more people are also exempt when traveling in a HOV lane.

4. Financing options. Revenue financing costs could be higher or lower depending on the type of state bonds that are issued. State bonds backed by the motor vehicle fuel tax fund have lower financing costs and require a 30-year repayment schedule. Alternatively, "non-recourse" bonds backed solely by toll revenues may be issued with a 40-year repayment term, but have higher financing costs.

Next steps: define tolling policies

There are several policy decisions that will need to be made in addition to toll amounts and whether to toll the floating bridge or the entire SR 520 corridor between I-5 and I-405. Governor Chris Gregoire has asked the Legislature to appoint a three-person panel to help answer these questions.

Some tolling policy questions:

1. Should we include tolls on I-90 as part of a system of cross-Lake Washington travel?
2. What is the appropriate tradeoff between revenues and traffic, and what level of tolls will the public accept?
3. Should all SR 520 toll revenue be dedicated to the SR 520 Bridge Replacement and HOV Project, or should a portion of the revenue be used for transit operations or other purposes?