



520 Tolling Implementation Committee Presentation to the Joint Transportation Committee

August 12, 2008

Tolling Implementation Committee Members

Paula J. Hammond, P. E., Secretary, Department of Transportation

Bob Drewel, Executive Director, Puget Sound Regional Council

**Dick Ford, Commissioner, Washington State Transportation
Commission**

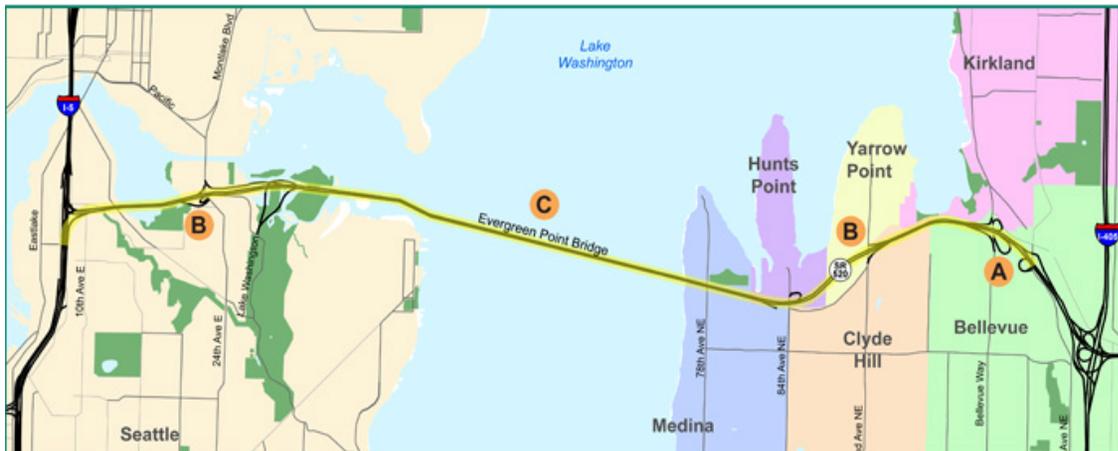
Committee charge

- Evaluate
 - Traffic diversion from 520 to other routes, including 522, and recommend mitigation
 - Advanced tolling technology
 - New applications of emerging technology to better manage traffic
- Explore opportunities to partner with the business community to reduce congestion and contribute financially
- Confer with mayors and city councils
- Conduct public work sessions and open houses to solicit citizen views on tolling the existing 520 bridge, tolling both 90 and 520, providing incentives for transit and carpooling, implementing variable tolling
- Provide a report to the governor and legislature in January 2009

Construction on a new 520 begins in 2009

New Bridge Open to Drivers in 2014

	<ul style="list-style-type: none"> Begin pontoon construction at existing site. Purchase 45 new buses for corridor. 		<ul style="list-style-type: none"> Begin early Eastside improvements. A Begin pontoon construction at new site. 		<ul style="list-style-type: none"> Begin floating bridge construction. C 		<ul style="list-style-type: none"> Open six-lane corridor to drivers. 			
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
		<ul style="list-style-type: none"> Begin construction of new pontoon construction site. Complete corridor environmental process. 		<ul style="list-style-type: none"> Begin corridor construction. B 		<ul style="list-style-type: none"> Open new bridge to drivers. 				<ul style="list-style-type: none"> Project complete.



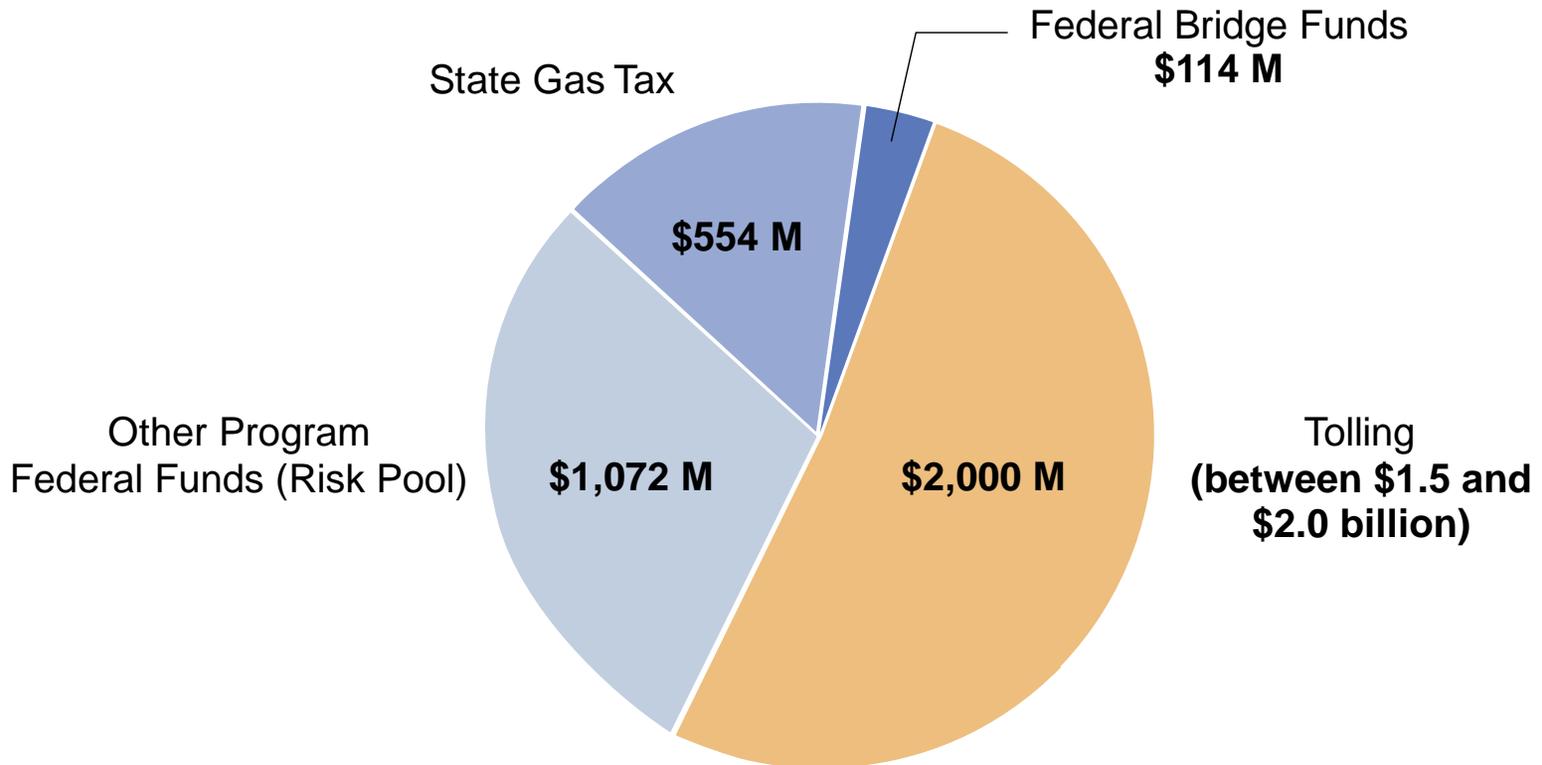
Project Cost Information

2006 cost estimate:	\$4.38 billion
Estimated savings:	\$500 - \$700 million*
New projected cost:	\$3.7 - \$3.9 billion

*Savings are due to accelerating project schedule and reducing the number of pontoons

How will we pay for a new bridge?

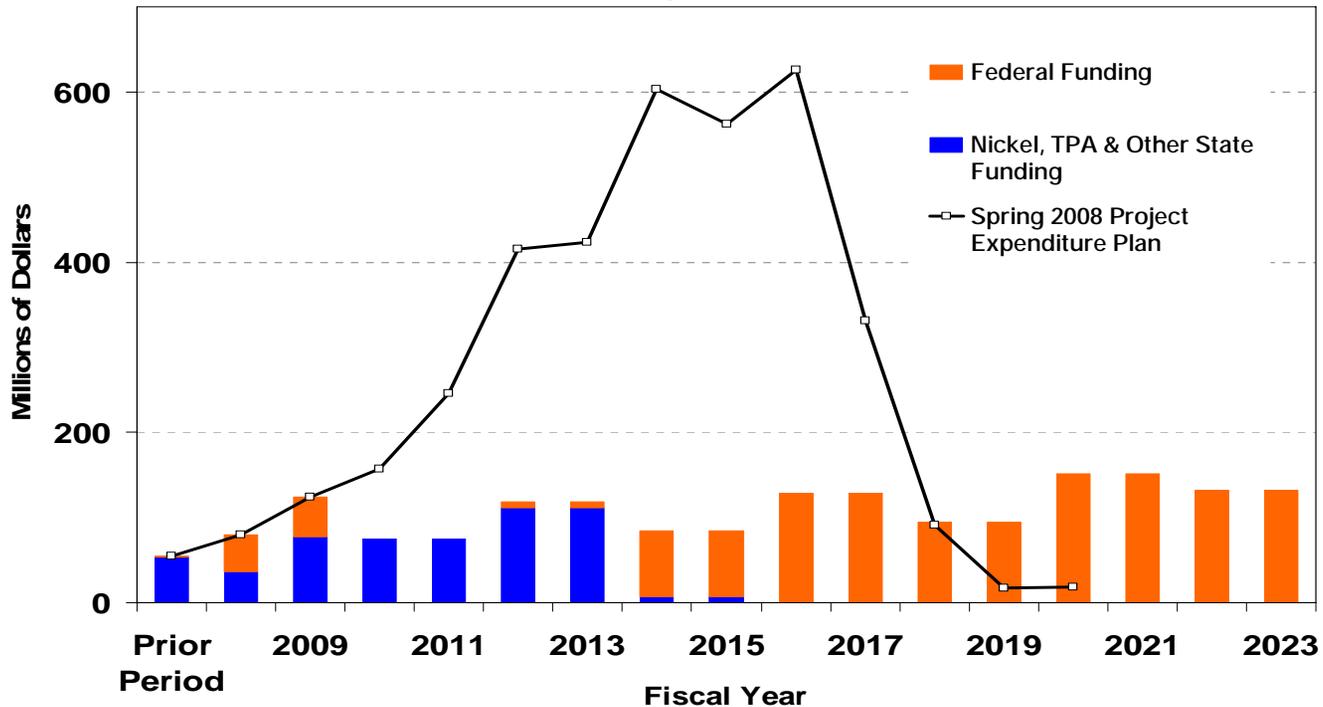
Funding sources identified by legislature in ESHB 3096 Project estimate: \$3.7 - 3.9 billion*



* Low end of range reflects \$180 million in sales tax deferral

Timing of available state and federal funds

SR 520 — Mismatch Between Identified Toll Funding and Project Needs



Not only must we consider the funding gap in total, we need to consider the timing of when money is needed.

Congestion benefits of electronic tolls that vary by time of day



- **Electronic tolling** eliminates:
 - congestion caused by toll booths;
 - toll booth related accidents;
 - need for additional costly right of way in this congested corridor; and
 - costly cash collection.
- **Variable tolling** reduces congestion by:
 - encouraging people who can to switch to off-peak times; and
 - encouraging as many people as possible to remain on the bridge during the off peak to minimize diversion to other routes
- **Paying Tolls:**
 - Majority of transactions will be *Good To Go!* account holders using transponders.
 - Vehicles without transponders have license plates photographed and can prepay or be invoiced for the toll, which will include an additional surcharge.

This is the committee's first step to gather public input on toll scenarios

- These are initial results from travel and financial models
- Results are based on assumptions:
 - cash flow need for the project
 - interest rates
 - when tolling begins

Changes to these assumptions will affect the results

- Toll rates and traffic information are useful for comparison purposes
- Public input will help identify next steps for the committee, including other toll scenarios, and inform development of a financial plan for the project

What evaluation criteria are being considered?

- The “reasonableness” of the tolls
- How much bridge funding is generated
- The diversion effects of tolls – people can choose to:
 - Stay on 520 but switch to carpool or transit
 - Stay on 520 but switch to different times
 - Travel on different routes
 - Choose a different destination – don’t have to cross the lake
- The performance of the bridge (potential congestion relief)
- The impacts tolls may have on low income bridge users

Which initial scenarios were examined?

- 1 Start tolling the new 520 bridge in 2016**

Only 520 is tolled • Tolling begins in 2016 when the 520 corridor is complete • Includes bridge and segment tolls • Highest toll rate for analysis purposes
- 2 Start tolling the 520 bridge in 2010**

Only 520 is tolled • Tolling the existing bridge begins in 2010 • No segment tolls • Lowest toll rate for analysis purposes
- 3 Start tolling the new 520 bridge and 90 bridge in 2016**

520 and I-90 are tolled • Tolling begins in 2016 when the 520 corridor is complete • Includes segment tolls beginning in 2016 on 520 and 90 • Moderate toll rate for analysis purposes
- 4 Start tolling the 520 bridge in 2010, and 90 bridge in 2016**

SR 520 and I-90 are tolled • Tolling the existing SR 520 bridge begins in 2010 • Includes segment tolls beginning in 2016 on 520 (when the corridor is complete) and 90 • Moderate toll rate for analysis purposes

Tolling Segments Under Consideration

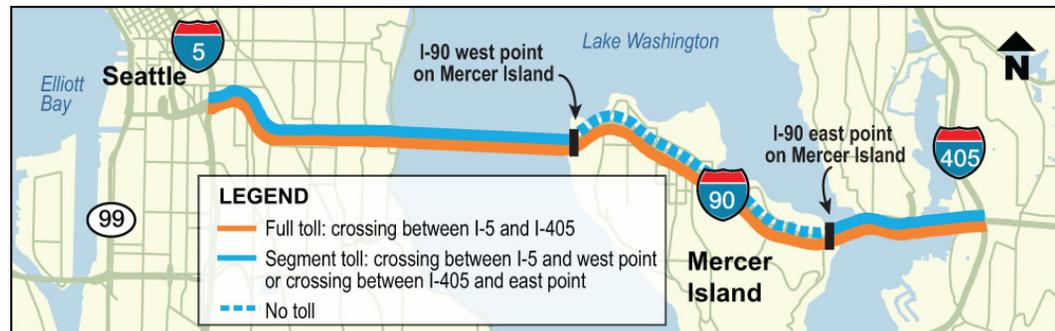
2010 Tolling on Existing 520 Bridge



2016 Tolling on New 520 Bridge



2016 Tolling on I-90



The big picture – what did we learn?

- Tolling 520 leads to changes in how people travel. The higher the toll rate, the more people change how they travel.
 - Some people change to carpools and transit
 - Traffic on alternate routes increases
 - Largest change is seen in people choosing not to cross the lake
- When 520 is tolled and more transit service is added, travel speeds on 520 increase, but there is little or no change on alternate routes.
- If 90 is also tolled, more drivers choose to stay on 520, but more traffic is seen on alternate routes.
- Of the four initial scenarios, none produce funding from tolls within the legislature's target of \$1.5 to \$2.0 billion. Two raise less and two raise more.
- Public input will be necessary to identify next steps.

520 Tolling Implementation Committee Evaluation Results for Initial Scenarios

July 23, 2008

The 520 Tolling Implementation Committee is charged by the legislature and governor (ESHB 3096) with evaluating issues related to tolling options on 520, and reporting back its findings to the 2009 legislature. A key part of the committee's work is developing data and describing the implications of tolling 520 so that the options can be evaluated, and the public can provide informed comments. The information below represents preliminary estimates of toll rates, funding, performance, and travel changes for four initial scenarios identified by the committee. These estimates are based on a series of assumptions; changes in assumptions will affect the estimates below. Public input is needed to identify next steps, including other tolling scenarios to evaluate.

Evaluation Criteria	2010 No Tolls	2016 No Tolls	Scenario 1	Scenario 2		Scenario 3		Scenario 4		
			Toll new 520 bridge in 2016	Toll current 520 bridge starting 2010		Toll new 520 bridge and 90 bridge starting 2016		Toll 520 bridge starting 2010, and 90 bridge in 2016		
			2016	2010	2016	2016 – 520	2016 – 90	2010	2016 – 520	2016 – 90
"Reasonableness" of Toll Rates* (Toll Rates are shown in 2007 dollars)										
Morning (5 – 9 AM)	N/A	N/A	\$3.05	\$2.15		\$2.60		\$2.60	\$2.60	
Mid-day (9 AM – 3 PM)	N/A	N/A	\$2.10	\$1.05		\$2.10		\$2.10	\$2.10	
Afternoon (3 – 7 PM)	N/A	N/A	\$3.80	\$2.95		\$3.25		\$3.25	\$3.25	
Evenings (7 – 10 PM)	N/A	N/A	\$1.95	\$1.30		\$1.95		\$1.95	\$1.95	
Nights (10 PM – 5 AM)	N/A	N/A	\$0.90	\$0.75 (after 2016)		\$0.90		No charge	\$0.90	
Weekends	N/A	N/A	Varies from \$.75 to \$1.50	Varies from \$0.75 to \$1.50		Varies from \$0.75 to \$1.50		Varies from \$0.75 - \$1.50	Varies from \$0.75 - \$1.50	
Segment	N/A	N/A	Varies from \$0.40 to \$0.80	N/A		Varies from \$0.40 to \$0.75		N/A	Varies from \$0.40 - \$0.75	
Estimated Bridge Performance – Travel Speeds in the Afternoon Commute (3-7PM)										
520	26 mph	25 mph	44 mph	40 mph	36 mph	34 mph		41 mph	34 mph	
90	35 mph	33 mph	29 mph	35 mph	28 mph	40 mph		33 mph	40 mph	
522	19 mph	17 mph	16 mph	18 mph	16 mph	16 mph		19 mph	16 mph	
Estimated Daily Travel Changes										
Choose HOV and transit	N/A	N/A	2.7%	3.2%	1.8%	2.6%	2.0%	3.6%	2.6%	2.0%
Choose a different time	N/A	N/A	1.1%	2.0%	1.7%	0.5%	1.1%	1.6%	0.5%	1.1%
Choose a different route	N/A	N/A	5.8%	7.2%	6.1%	4.6%		7.5%	3.9%	
90 (mid-span)	168,700	155,200	162,100	175,300	162,200	136,200		174,000	136,200	
522 (Kenmore at NE 61 st)	50,000	52,000	52,800	51,400	52,900	54,700		51,600	54,700	
5 (Downtown Seattle)	313,800	316,500	318,300	318,100	317,700	316,400		319,300	316,400	
405 (Downtown Bellevue)	247,600	261,100	261,200	249,900	261,500	259,400		249,400	259,400	
Choose a different destination (no lake crossing)	N/A	N/A	15.5%	1.7%	8.3%	22.3%		19.6%	22.3%	
Estimated Bridge Funding**										
			~\$835 million	~\$900 million		~\$2.3 billion		~\$2.5 billion		

*These are example toll rates for planning purposes. Actual toll rates will depend on a final finance plan and determined by the State Transportation Commission with approval by the State Legislature. .

**Financing assumptions include: Term: 30-year, general obligation/motor vehicle fuel tax bonds. Minimum Debt Service: Annual revenue 1.25 times debt service. Interest Rate: 5.9% for current interest bonds, 6.4% for capital appreciation bonds.

Public Open Houses

Public open houses to hear from the public

July 29 – UW Bothell North Creek Events Center

July 31 – Spirit of Washington Events Center (Renton)

August 5 – Naval Reserve at South Lake Union (Seattle)

August 6 – Bellevue City Hall

August 7 – Kirkland Performance Center

August 13 – Mercer Island Community Center

All meetings are from 5 to 7:30 p.m. Presentation at 6 p.m.

Comments on four initial tolling scenarios due to the committee by August 31.

What are we hearing at public open houses?

- General acknowledgement of need to replace the bridge and tolling as a part of funding strategy
- Concerns: toll rates, particularly for lower income households
 - diversion to alternate routes
 - segment tolls
- Support for added corridor transit service, possibly funded from tolls
- Questions: how long would tolls be in place?
 - how would tolls be paid if you don't have a transponder?
- Questions about model results—are gas prices factored in?
- Suggestions for additional scenarios to examine

Public Comment Period on Initial Scenarios

Send comments by August 31:

Web: www.build520.org

Email: info@build520.org

Postal Mail:

520 Tolling Implementation Committee
c/o Puget Sound Regional Council
1011 Western Avenue, Suite 500
Seattle, Washington 98104 -1035