

Pre-Construction Tolling of the SR 520 Floating Bridge

Craig Stone
Director, Toll Division

Paula Hammond
Secretary of Transportation

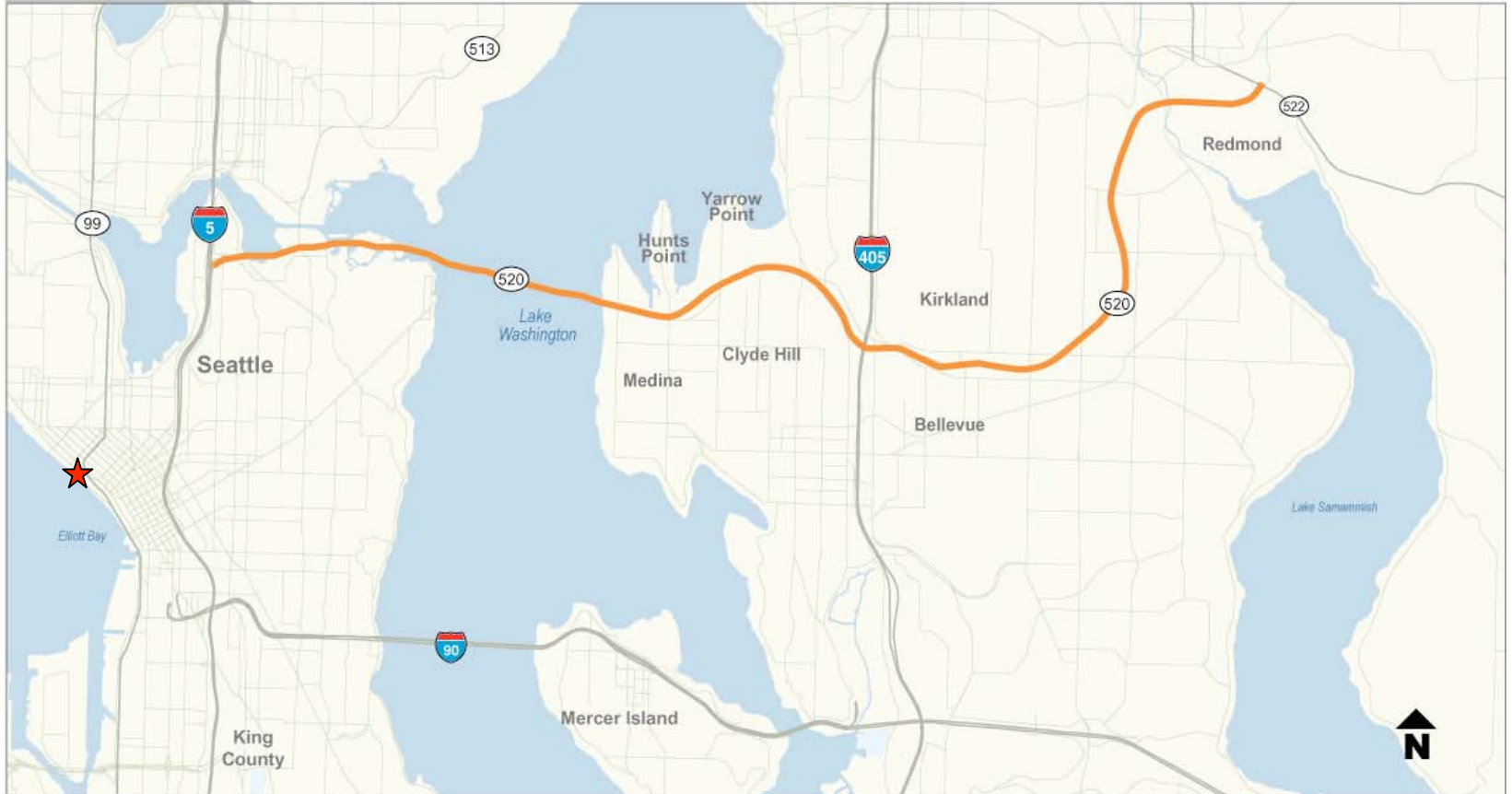
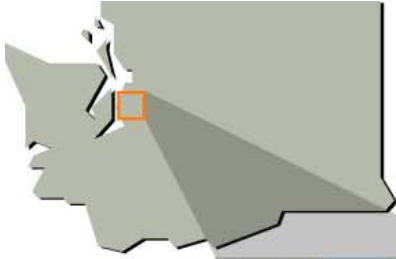
Dave Dye
Deputy Secretary

Steve Reinmuth
Chief of Staff

WASHTO 2009 Annual Meeting
Session 3 - Congestion Relief: Balancing Technology, Choice and Capacity
July 14, 2009

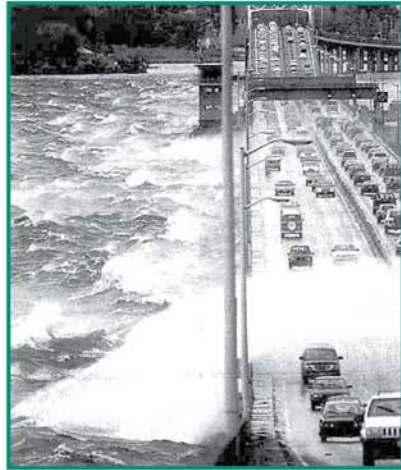


Where is SR 520?



Why does SR 520 need replacing?

SR 520 bridge is vulnerable to windstorms and earthquakes

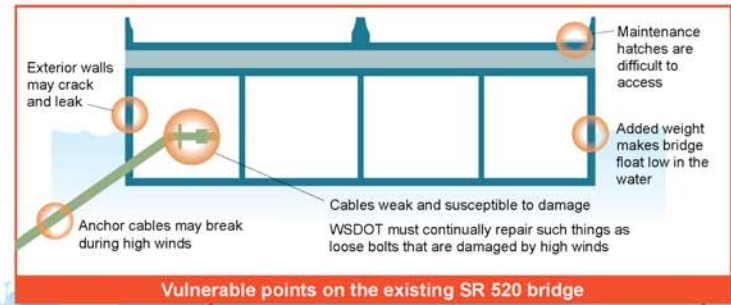


Waves batter the SR 520 bridge.

Current vulnerabilities

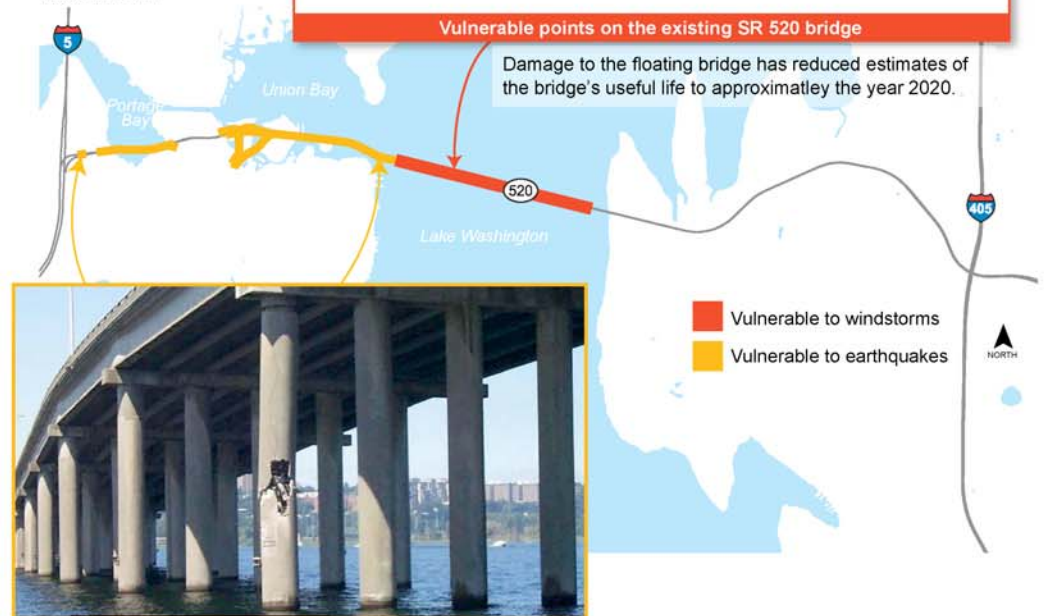


A torn cable joint found during a routine inspection in February 2006. The cables connect the floating bridge pontoons to their underwater lakebed anchors.

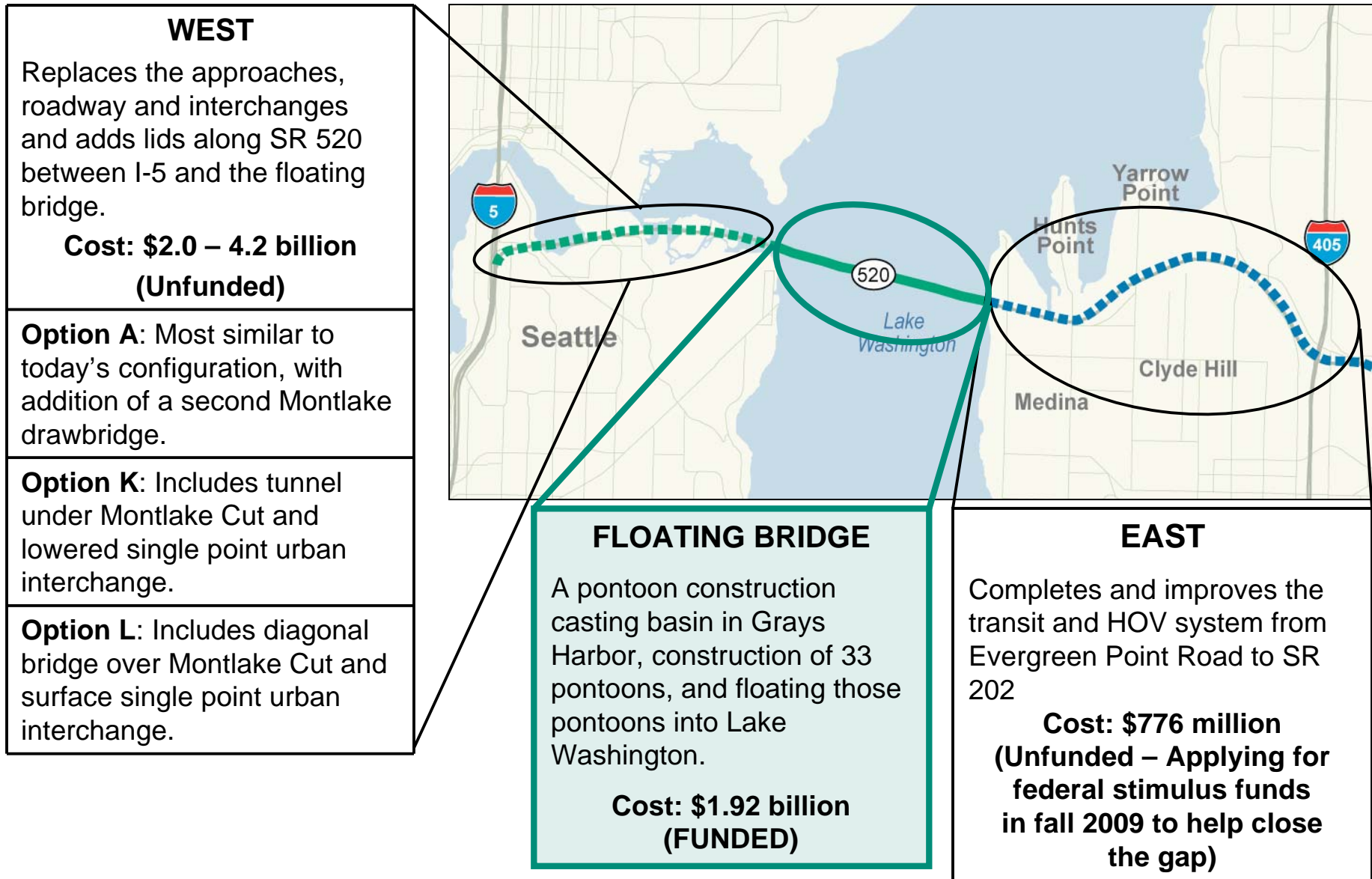


Vulnerable points on the existing SR 520 bridge

Damage to the floating bridge has reduced estimates of the bridge's useful life to approximately the year 2020.



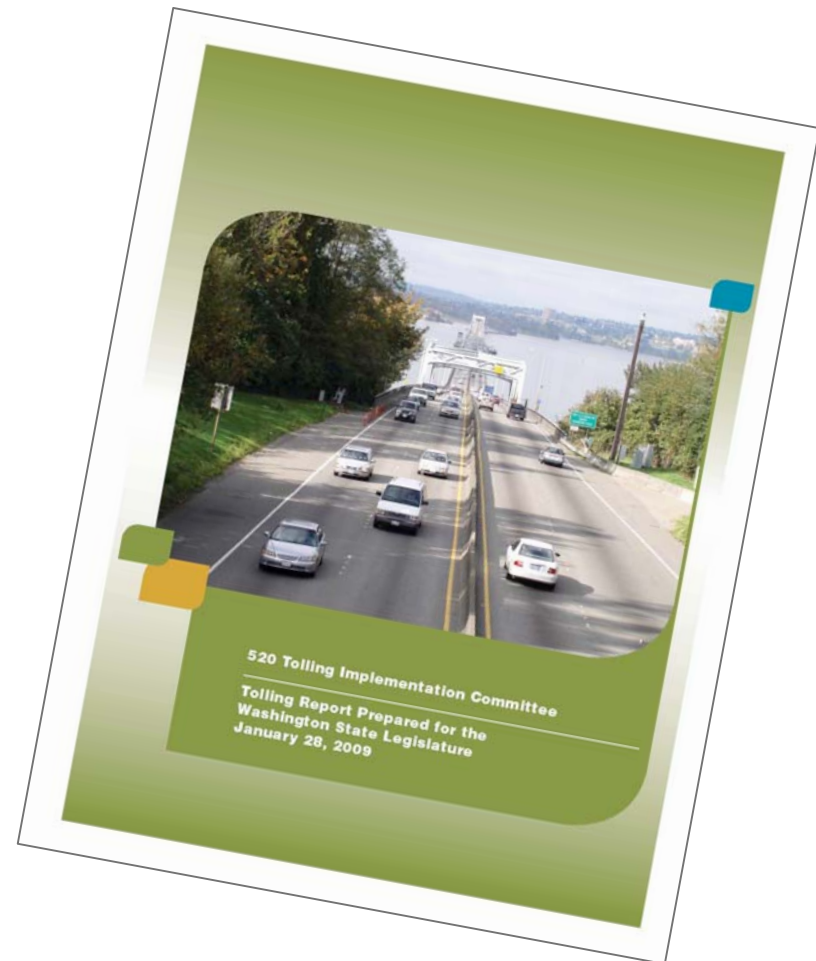
What is proposed for the new SR 520 corridor?



520 Tolling Implementation Committee

Legislature appointed a 520 Tolling Implementation Committee to engage the public on such issues as:

- Tolling the existing SR 520 bridge
- Tolling both I-90 and SR 520
- Providing incentives for transit and carpooling
- Implementing variable tolling as a way to reduce congestion
- Recommending mitigation measures for traffic diversion from SR 520 to other routes, including SR 522



The Committee's final report went to the governor and legislature in January 2009. Visit build520.org for details.

What is the current SR 520 program status?

- Gov. Gregoire authorized tolling on SR 520 bridge beginning in 2010.
- With tolling, the SR 520 program is currently funded for \$1.99 billion.
- **Pontoon construction timeline:**
 - **2010:** New casting basin in Grays Harbor.
 - **2012:** Building pontoons at the new site.
 - **2014:** Opening a new 4-lane bridge.
- **Pontoon contracting timeline:**
 - **June 22:** Issued RFQ.
 - **August:** Issue RFP.



Gov. Gregoire signs the SR 520 tolling bill in Grays Harbor.



A simulated image of tolling on the existing SR 520 bridge.

Current Tolling in Washington

Tacoma Narrows Bridge

- Both toll booths and electronic toll collection.
- 75% of traffic using electronic tolls.
- 85% of morning commuters have electronic toll accounts.
- 96% of all Gig Harbor households have *Good To Go!* accounts.
- 14 million transactions in first year.



SR 167 HOT lanes

- All electronic toll collection – no toll booths.
- Dynamic pricing based on traffic levels.
- More than 20,000 *Good To Go!* users have paid to use the SR 167 HOT lane.
- Average of 1,223 vehicles per day paid to use the HOT lanes.

Lake Washington Urban Partnership



Artist's rendering of what electronic tolling might look like on the existing SR 520 Bridge

Funded by:



U. S. Department of Transportation
Federal Highway Administration

Designed to reduce congestion through the “Four T’s”:

- **Transit**
- **Technology**
- **Telecommuting**
- **Tolling**

Awarded \$154.5 million to assist WSDOT, Puget Sound Regional Council and King County in applying these innovative approaches to reduce congestion in the SR 520 corridor in Western Washington.

LAKE WASHINGTON URBAN PARTNERSHIP

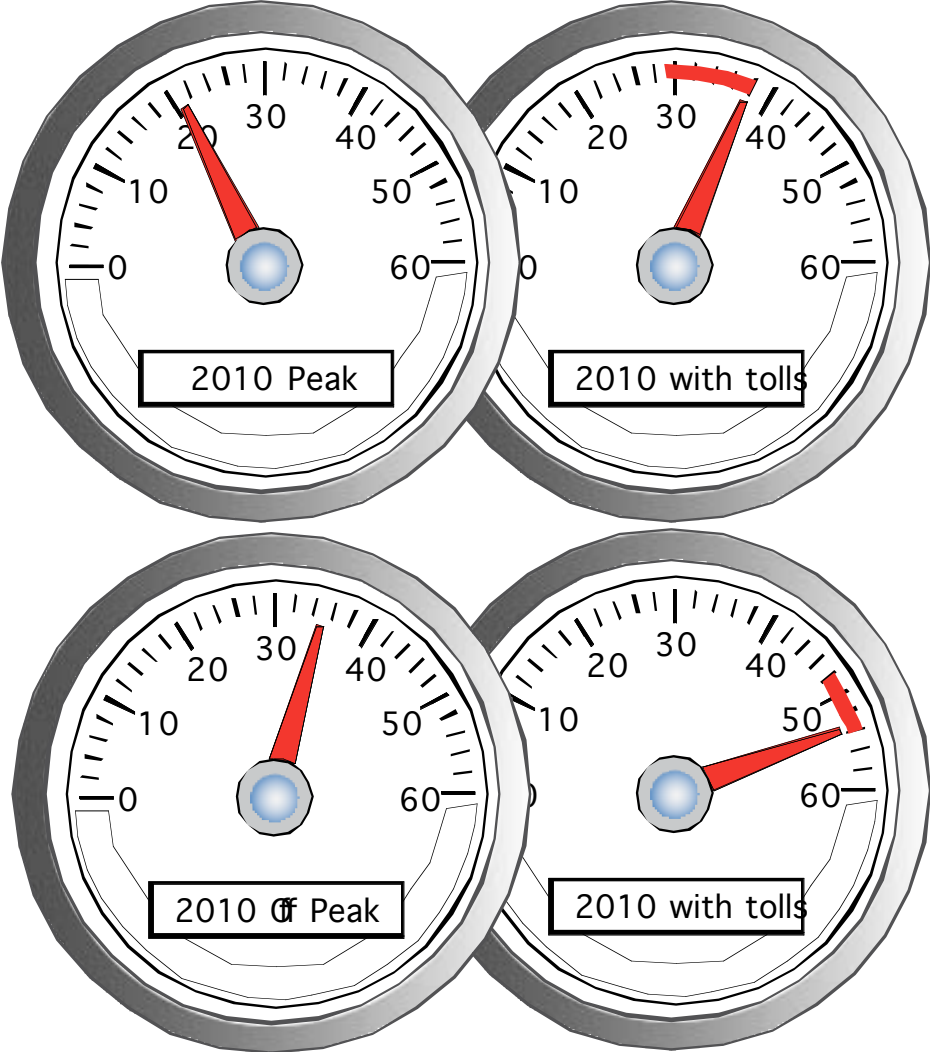


Lake Washington Urban Partnership funding

by funding element

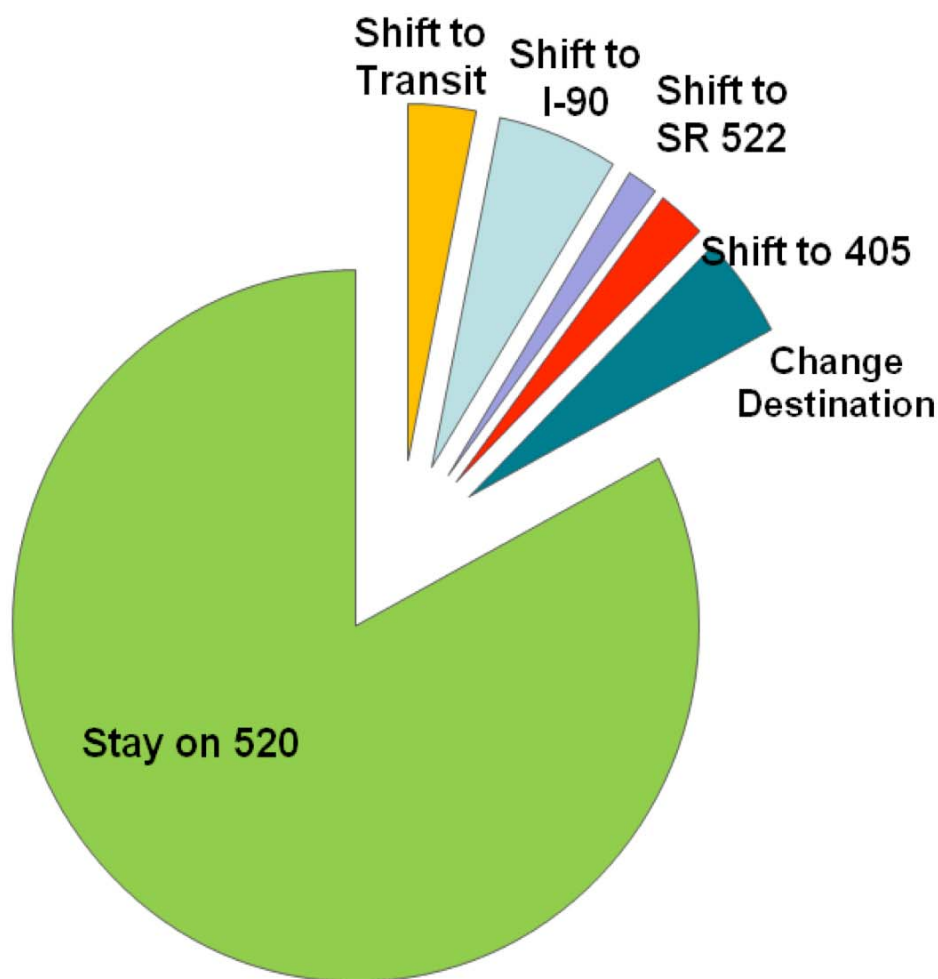
Transit (new buses and park & rides)	\$41 million
Technology (active traffic management systems)	\$23.1 million
Telecommuting (builds on existing TDM programs)	\$0
Tolling (variable tolling of existing bridge)	\$63 million
Ferry Projects (throughout the Puget Sound)	\$27.4 million
<i>Total Funding</i>	\$154.5 million

When tolls are in place, speeds improve



Examples: SR 520 bridge speed ranges in 2010; speeds with tolls, compared to roadway speeds without tolls

Some people make different choices – take transit, shift time of day or change destination

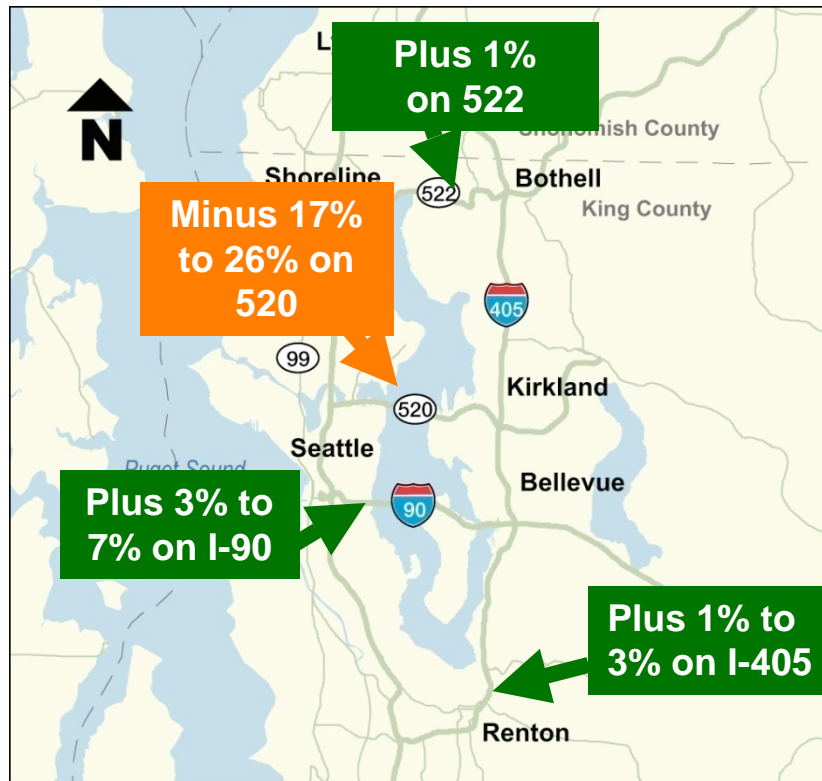


Total diversion under Scenario 6: Maximize funding by tolling only SR 520. 82% of person volume stay on SR 520 based on 2010 baseline SR 520 volume.

Route diversion – people may change their travel routes, but net effect is distributed across the system

Examples of traffic diversion when tolling SR 520

(2010, Scenario 7: Toll 520 in 2010, increase rate in 2016)



Three ways to pay on SR 520

1. **Good To Go!** – Transponders will work on SR 520 just as they do on the Tacoma Narrows Bridge and SR 167 HOT lanes.



Example of signs on toll road in Texas.



2. **Pre-paid video tolling** – Video toll users can have a pre-paid account just like *Good To Go!*, but instead of reading a transponder, video cameras read the license plate.
3. **Late-pay video tolling** – Those without a pre-paid account will receive an invoice in the mail. An infraction notice would be sent to those who fail to pay.

Three Tolling Procurements

- **Toll Equipment**, including toll tags and readers. WSDOT will purchase and supply to vendors.
- **Toll Collection System (TCS)** including civil structures, communications and system integration.
- **Customer Service Center (CSC)** including back office service provider.



Schedule to get to tolling on SR 520

