SR 520

Urban Partnership Program

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| Secretary of Transportation | Deputy Secretary | Chief of Staff |

Joint Transportation Committee Workshop
June 2, 2009

**Washington State
Department of Transportation**

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 520 corridor in Western Washington.

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
Total Funding	**$154.5 million**

Adding transit to offer options

UPA will encourage more commuters to use transit alternatives

Urban Partnership Agreement monies will be used to:

• purchase 45 additional buses for the 520 corridor (utilizing 38,000 more service hours in the corridor);

• make improvements to Park and Rides (Redmond and South Kirkland);

• enhance passenger facilities (new shelters and lighting);

• install Real Time Information signs at bus stops

Technology to build smarter roadways

UPA will provide high-tech tools to improve the commute

Expand intelligent transportation system, to include:

• **Overhead variable speed limit signs –** improves safety by alerting drivers of backups down the road.

• **Variable lane control - ** alerts drivers to steer away from trouble spots and clear the way for emergency vehicle access.

• **Travel time signs** Allow drivers to make trip decisions.

M42 Birmingham, England

Seattle TRAVEL TIME

VIA 520   25 MIN

VIA 90   30 MIN
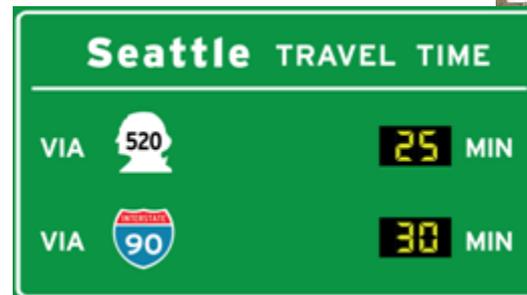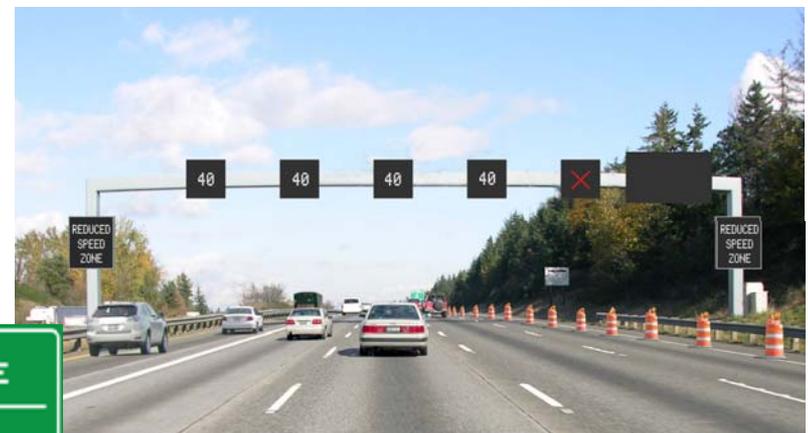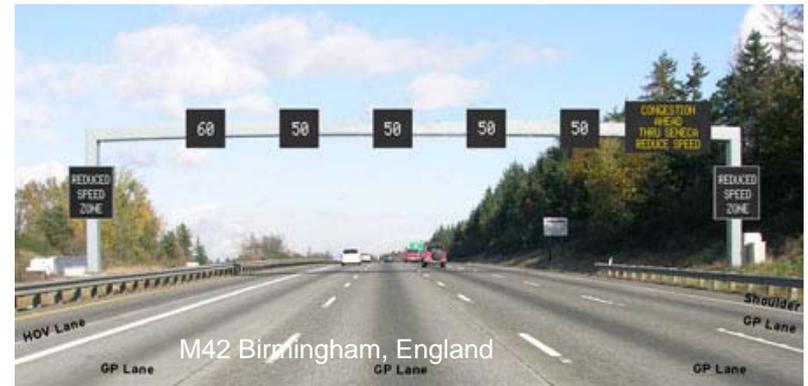
Telecommuting to reduce trips

UPA will encourage businesses to promote telecommuting, flex-time, and carpooling

The Urban Partnership builds on existing commute trip reduction programs and encourages:

- telecommuting and flexible schedules

- educational campaigns

- employer subsidies

- car/vanpooling

vanpool

Telework Seattle *join the movement*

Jump start your telework program with **free** assistance & technology. It's easy!

Variable tolling of existing bridge

UPA will lead some drivers to change their travel times, modes of transportation, routes, or destinations

What is being proposed for the UPA?

- existing highway would be tolled

- all electronic tolling - no toll booths

- variable toll - lower price in non-peak periods

- revenue to be invested in SR 520 corridor for bridge replacement

Integrated with existing infrastructure to the extent possible

Lake Washington Urban Partnership funding
Status of Fund Authorization

	Work Program	Funds in Hand	Requested To Be Released With Tolling Authorization	TOTAL
Cost	Tolling and ATM Design	$8,030,000		
	WSDOT Remaining Funds		$78,070,000	$86,100,000
	Transit/P&R	$2,163,650		
	King County Remaining Funds		$38,836,350	$41,000,000
	Ferry Projects	$7,900,000		
	Ferry Remaining Funds		$19,400,000	$27,300,000
	Total Funding Need	*$18,093,650*	*$136,306,350*	*$154,400,000*

520 Tolling Implementation Committee

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

- **Tolling the existing 520 bridge**

- **Tolling both I-90 and 520**

- **Providing incentives for transit and carpooling**

- **Implementing variable tolling as a way to reduce congestion**

- **Recommending mitigation measures for traffic diversion from 520 to other routes, including SR 522**
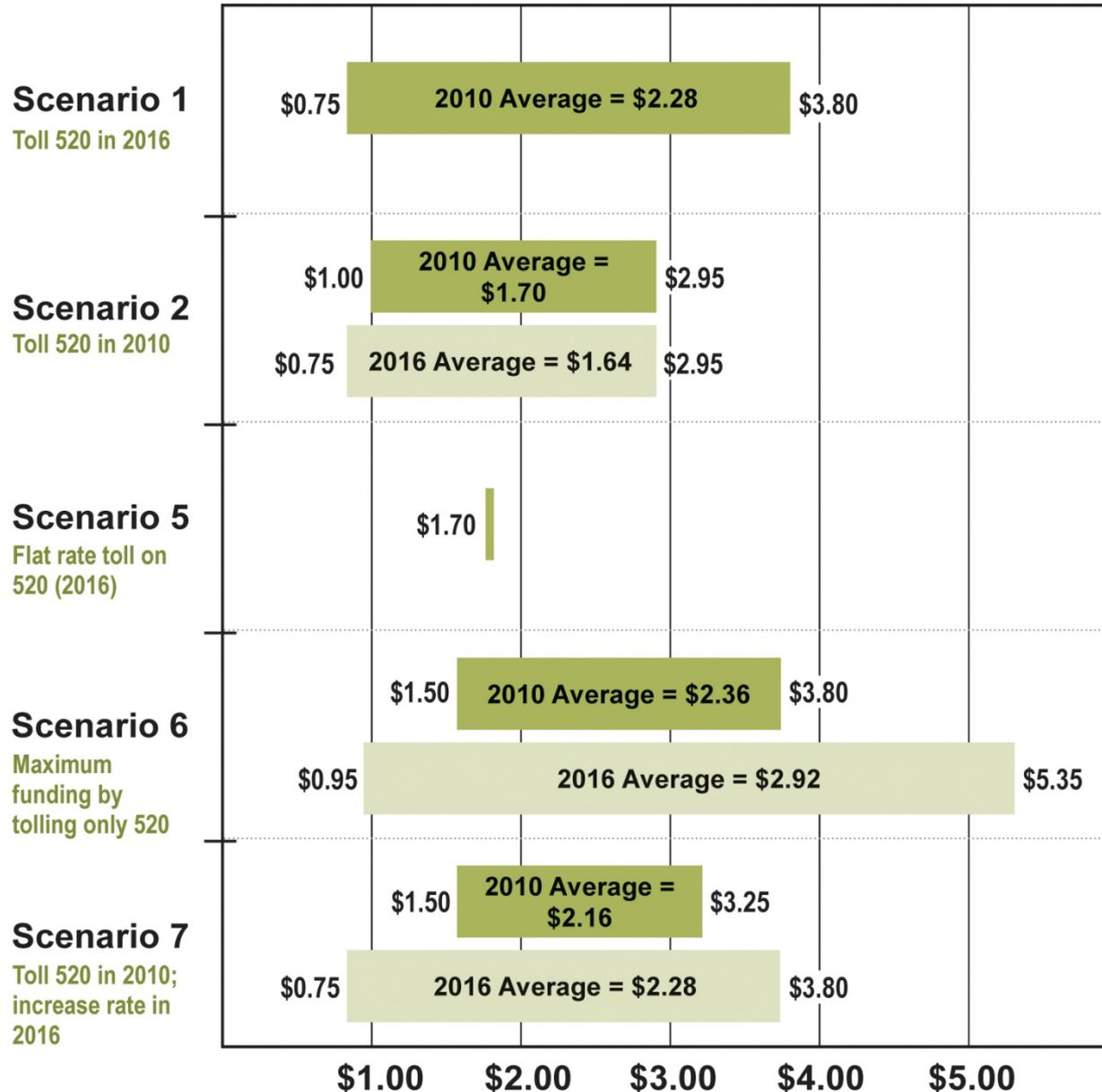

520 Tolling Implementation Committee

Tolling Report Prepared for the
Washington State Legislature
January 28, 2009
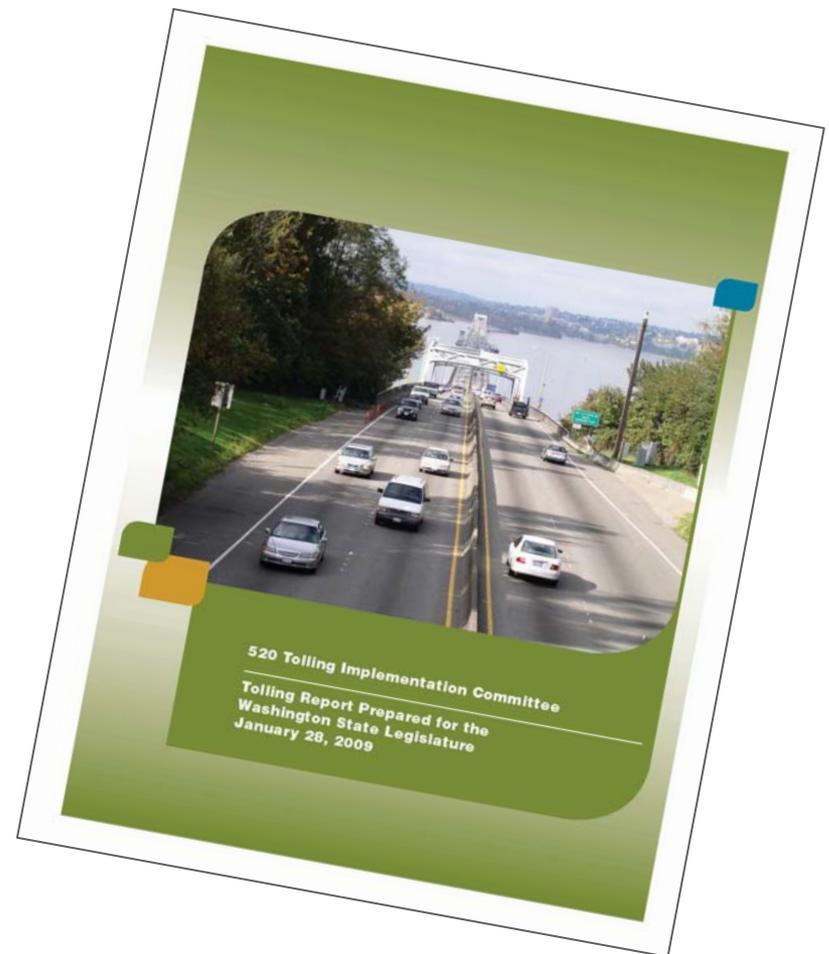
The Committee's final report went to the governor and legislature in January 2009.

Visit **build520.org** for details.

520 tolling scenarios evaluated

1	**Toll 520 in 2016, when project is complete**	
2	**Toll 520 in 2010, when construction begins**	
5	**Flat rate toll on 520 (in 2016)**	**520-Only**
6	**Maximize funding by tolling only 520**	
7	**Toll 520 in 2010; increase rate in 2016**	
3	**Toll both bridges in 2016**	
4	**Toll 520 in 2010 and 90 in 2016**	
8	**Toll 520 at a higher rate than 90 in 2016**	**Two-Bridge (520 & I-90)**
9	**Toll both bridges in 2010**	
10	**Full bridge toll on 520; HOT lanes on I-90**	

Toll ranges for 520-only scenarios (2007$)

Scenario 1
Toll 520 in 2016

$0.75 — 2010 Average = $2.28 — $3.80

Scenario 2
Toll 520 in 2010

$1.00 — 2010 Average = $1.70 — $2.95

$0.75 — 2016 Average = $1.64 — $2.95

Scenario 5
Flat rate toll on 520 (2016)

$1.70

Scenario 6
Maximum funding by tolling only 520

$1.50 — 2010 Average = $2.36 — $3.80

$0.95 — 2016 Average = $2.92 — $5.35

Scenario 7
Toll 520 in 2010; increase rate in 2016

$1.50 — 2010 Average = $2.16 — $3.25

$0.75 — 2016 Average = $2.28 — $3.80

$1.00 $2.00 $3.00 $4.00 $5.00
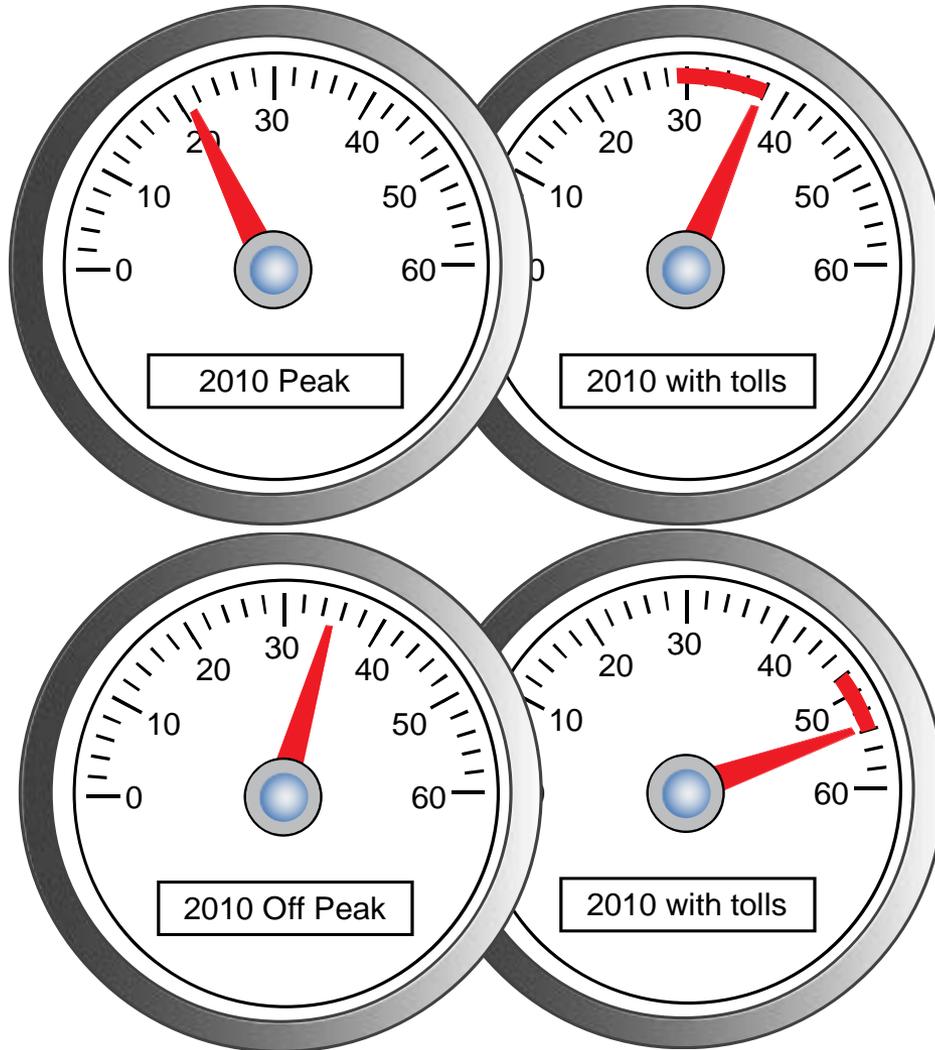
Notes:
- *All toll rates are one-way*
- *All tolls are 2007$*
- *2010 scenarios do not charge an overnight toll.*
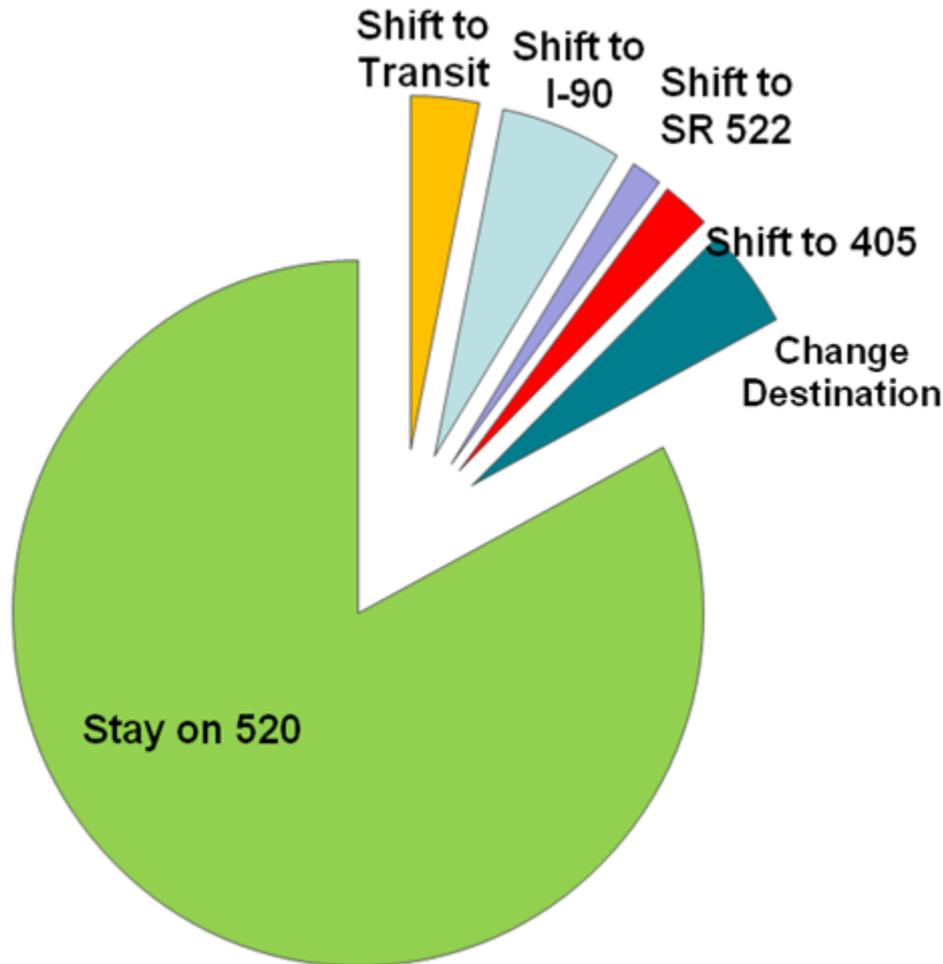
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Bridge funding raised from toll scenarios
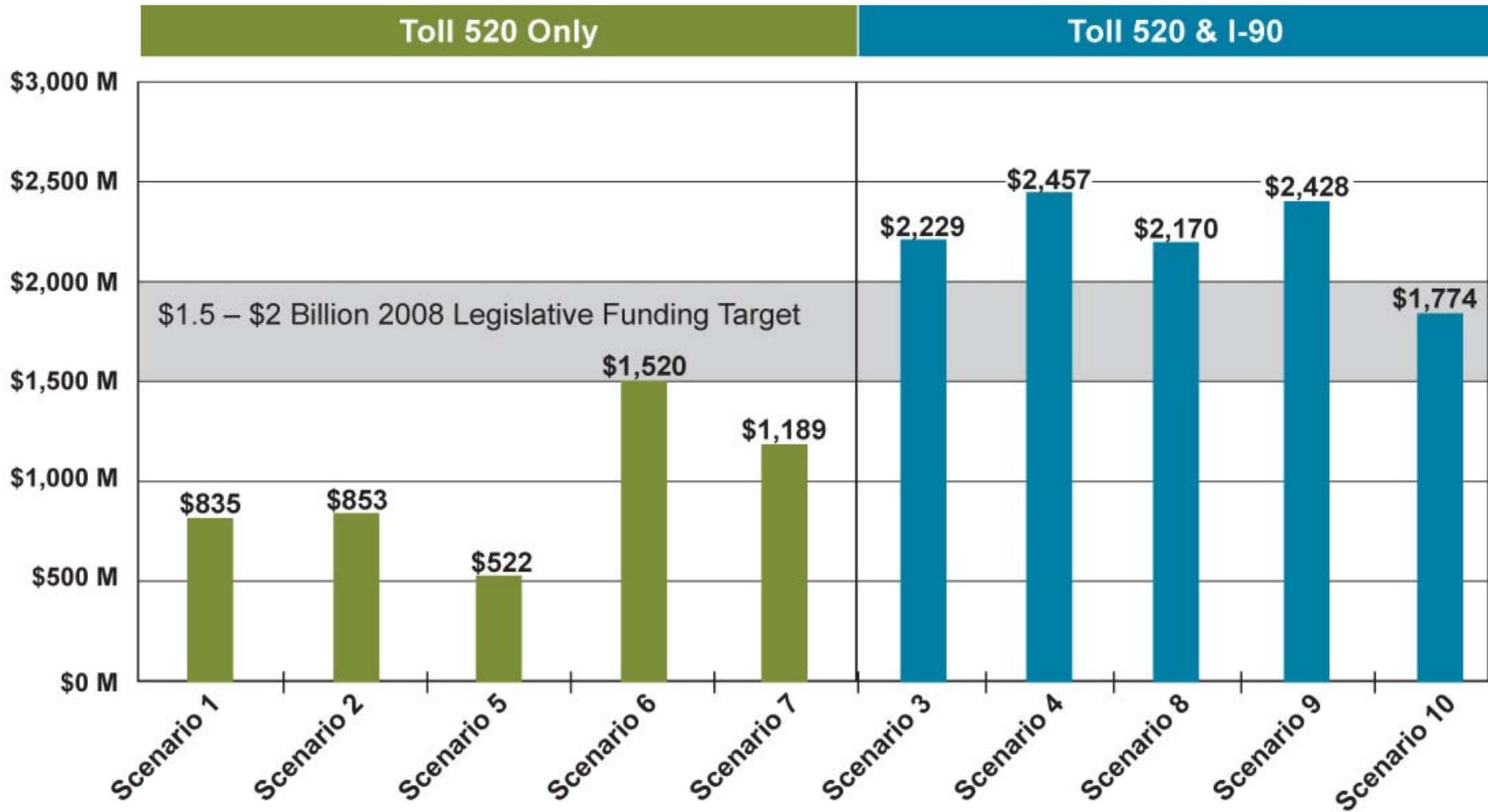
When tolls are in place, speeds improve

2010 Peak

2010 with tolls

2010 Off Peak

2010 with tolls

Examples: 520 bridge speed ranges in 2010; speeds with tolls, compared to roadway speed 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 520. 82% of person volume stay on 520 based on 2010 baseline 520 volume.

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

Examples of traffic diversion when tolling 520

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

Plus 1% on 522

Minus 17% to 26% on 520

Plus 3% to 7% on I-90

Plus 1% to 3% on I-405
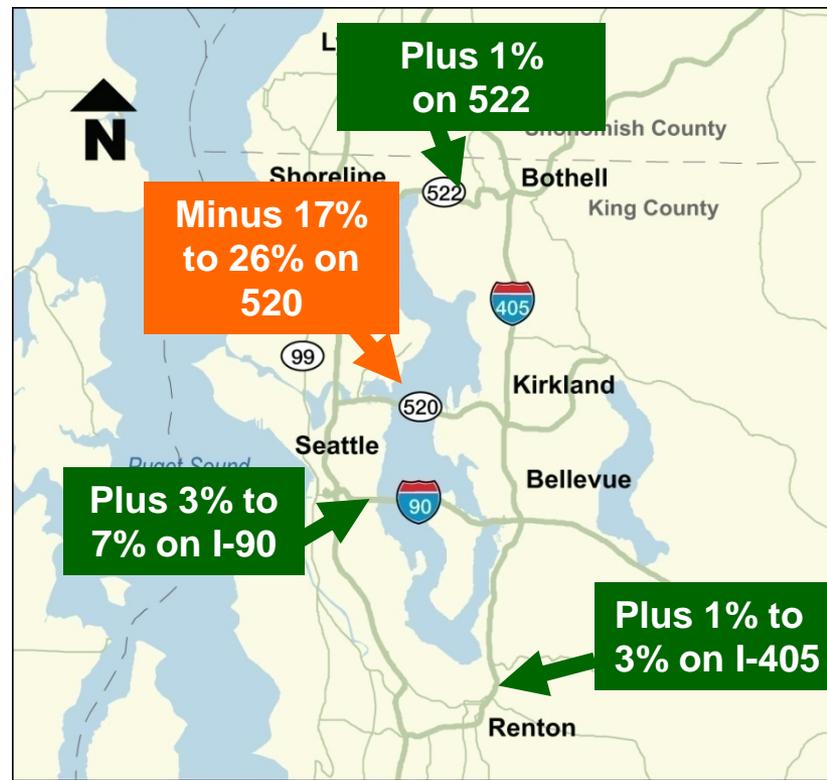
Public engagement

- **16,000 build520.org Website visitors**

- **7,800   web survey participants**

- **1,200   phone survey respondents**

- **8,000   written comments**

- **700   open house attendees**

- **1,000+ Sierra Club postcards**

- **3,300+ No Toll on I-90 petition signatures**

Random-sample phone survey found:

- Three-fifths supported tolling 520 to help fund bridge replacement

- Electronic tolling increased support

- Variable rate tolling increased support

- Most supported early tolling when they considered its beneficial effect on toll rates and financing costs

- Most supported early tolling when they considered its beneficial effect on travel speeds

- Majority support for tolling I-90 in addition to 520, but strong opposition from I-90 users

SR 520 Tolling

Telephone Survey Report

Prepared for the SR 520 Tolling Implementation Committee

PRR

January 20, 2009