SR 520 Bridge Replacement and HOV Program

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Senate Transportation Committee
April 6, 2009

Washington State Department of Transportation

SR 520 Corridor Components

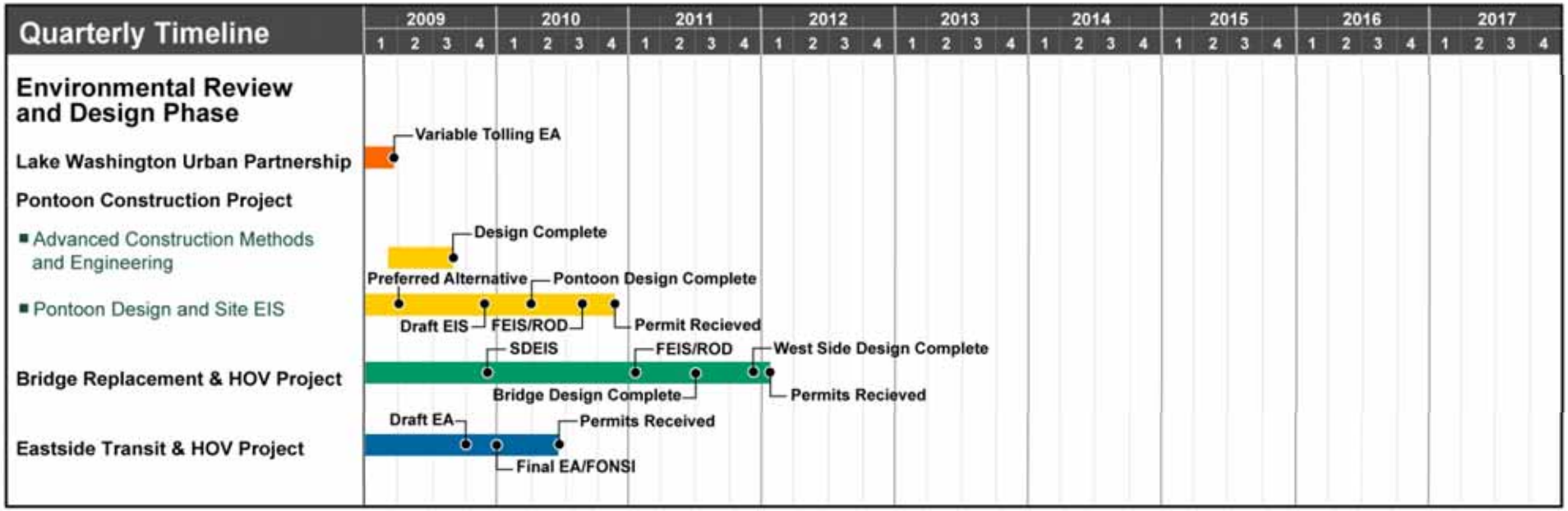
Floating Bridge

Portage Bay Bridge

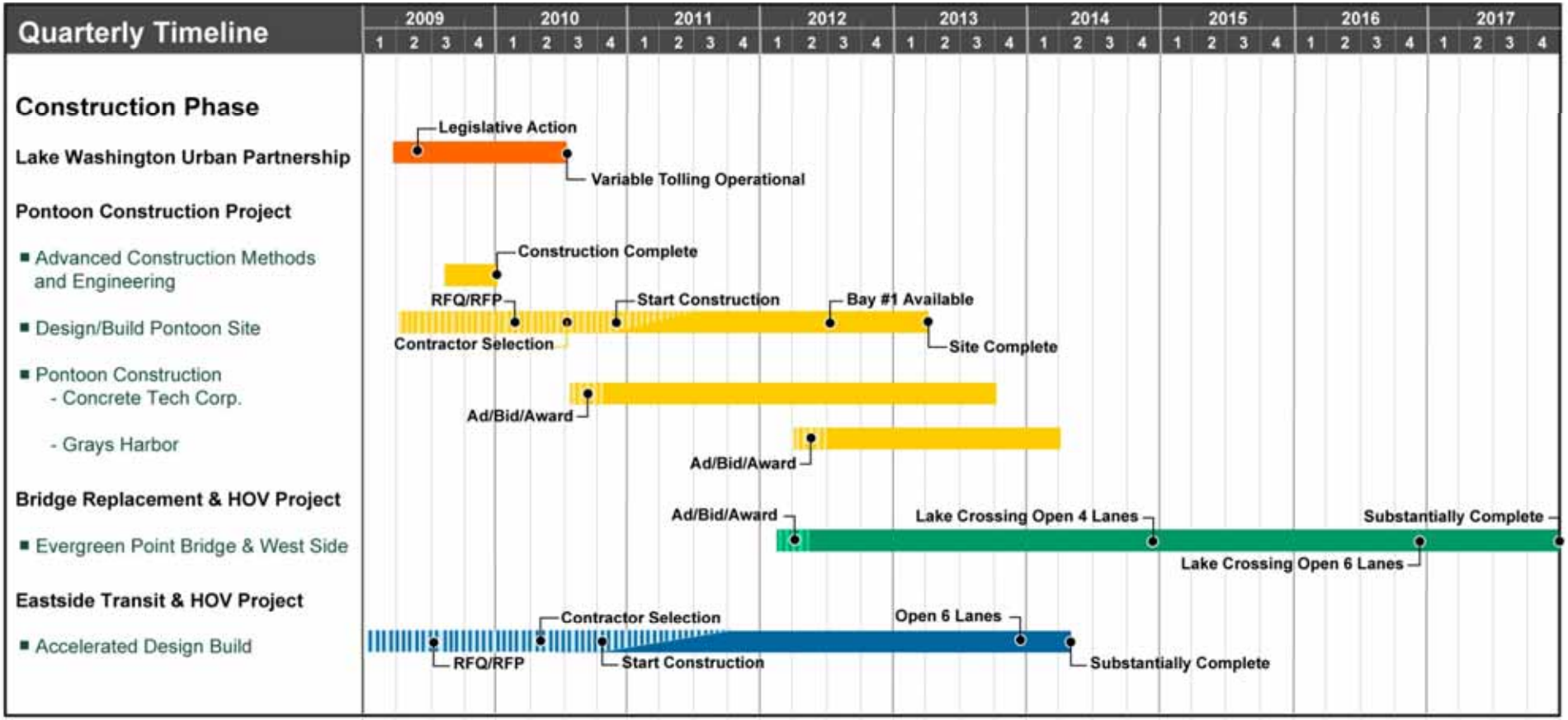
East Corridor

West Approach

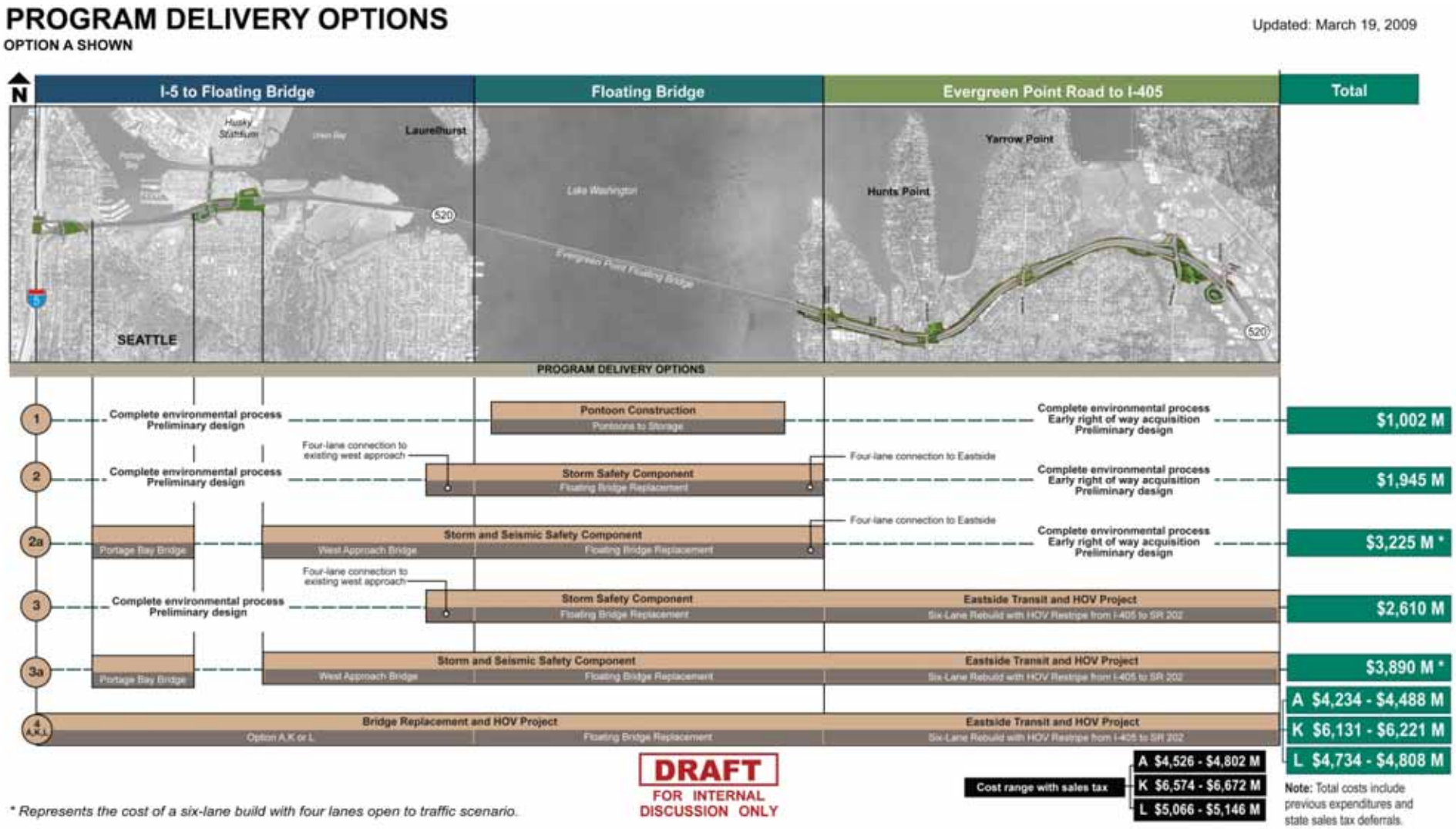
SR 520 Program schedule: Environmental review and design



SR 520 Program schedule: Construction



Phasing scenarios

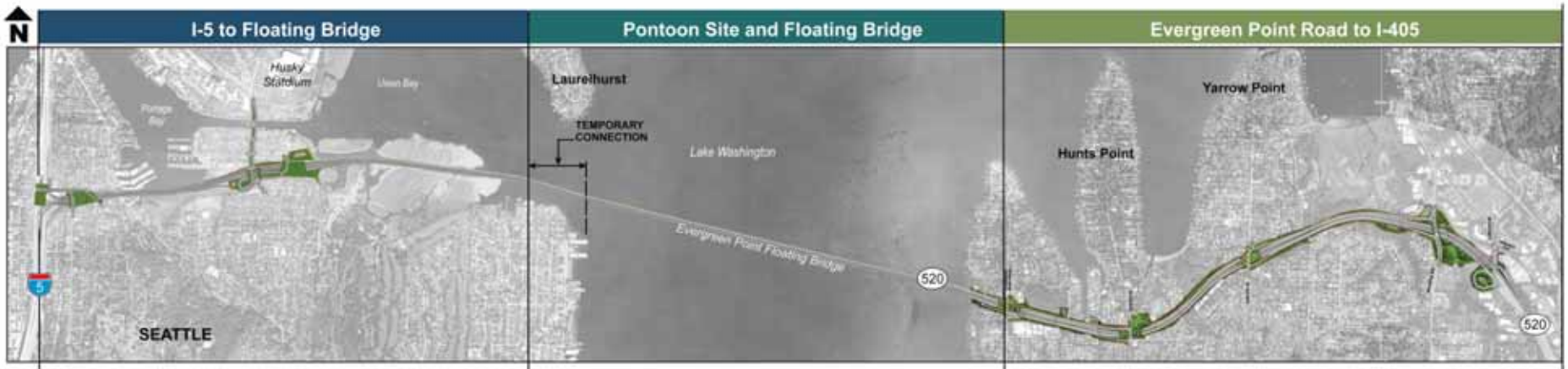


Storm safety option

STORM SAFETY DELIVERY OPTION

OPTION A SHOWN

Updated: March 19, 2009



I-5 to Floating Bridge	Pontoon Site and Floating Bridge	Evergreen Point Road to I-405
Four-lane connection to existing west approach		Four-lane Connection to Eastside
Complete environmental process Preliminary design	Storm Safety Component Floating Bridge Replacement	Complete environmental process Early right of way acquisition Preliminary design
Preliminary Engineering $37M	Preliminary Engineering ..... $57M (assumes design/build pontoon site delivery method)	Preliminary Engineering ..... $22M (assumes design/build delivery method)
Right of way $0M	Right of way $28M	Right of way $10M
Construction $0M	Construction $1,633M	Construction $0M

PROGRAM DEVELOPMENT EXPENDITURE $158M

DELIVERY OPTION TOTAL: $1,945 M

Note: Total includes previous expenditures and state sales tax deferrals.

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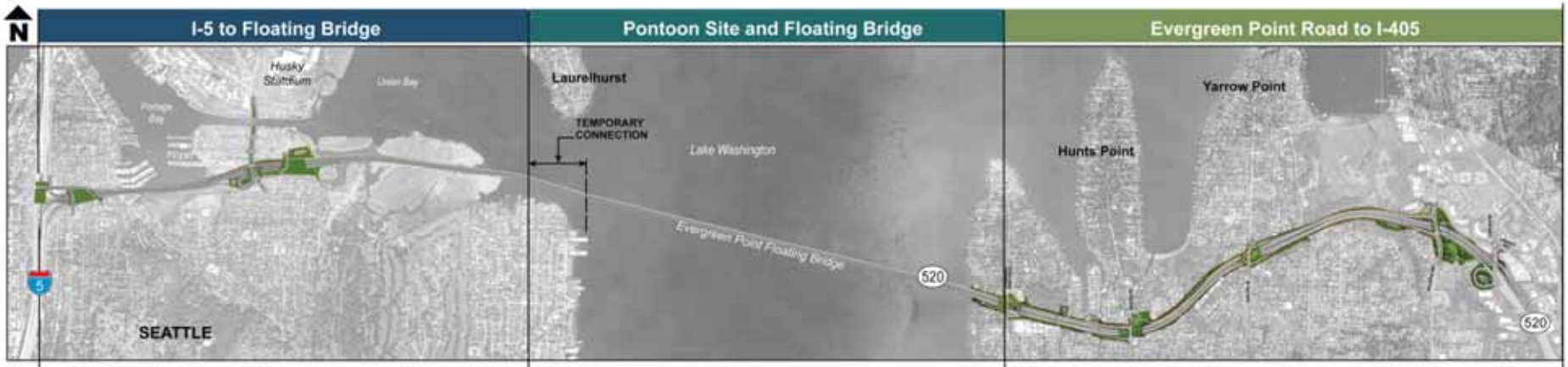
Storm safety and Eastside delivery option

STORM SAFETY AND EASTSIDE DELIVERY OPTION

OPTION A SHOWN

Updated: March 19, 2009



Four-lane connection to existing west approach

Complete environmental process
Preliminary design

I-5 to Floating Bridge	
Preliminary Engineering	$37M
Right of way	$0M
Construction	$0M

Storm Safety Component
Floating Bridge Replacement

Pontoon Site and Floating Bridge	
Preliminary Engineering (assumes design/build pontoon site delivery method)	$57M
Right of way	$28M
Construction	$1,633M

Eastside Transit and HOV Project
Six-Lane Rebuild with HOV Restripe from I-405 to SR 202

Evergreen Point Road to I-405	
Preliminary Engineering (assumes design/build delivery method)	$24M
Right of way	$87M
Construction	$586M

PROGRAM DEVELOPMENT EXPENDITURE $158M

DELIVERY OPTION TOTAL: $2,610 M

Note: Total includes previous expenditures and state sales tax deferrals.

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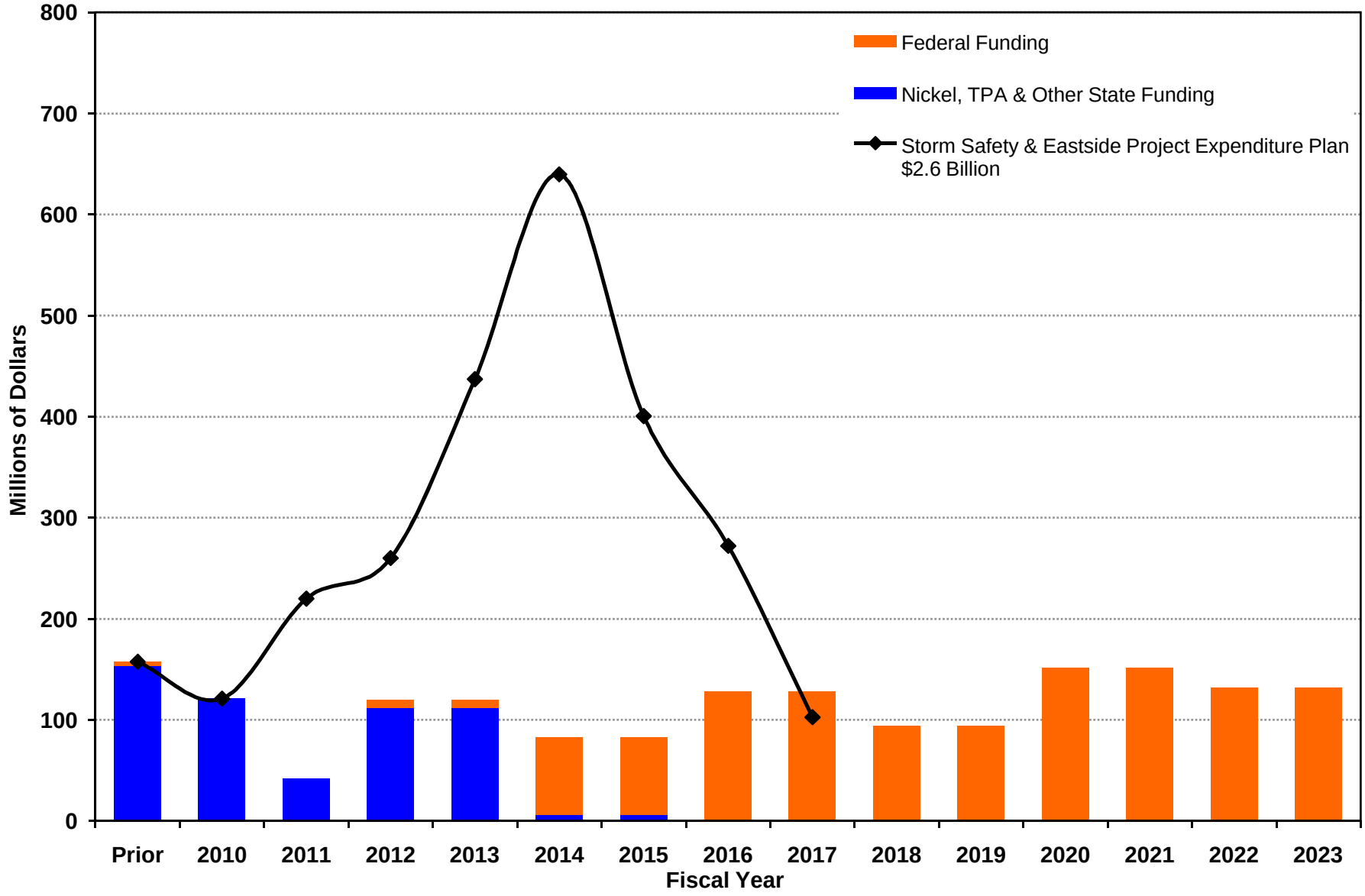
Storm Safety and Eastside Project Funding and Expenditures (Before Financing)

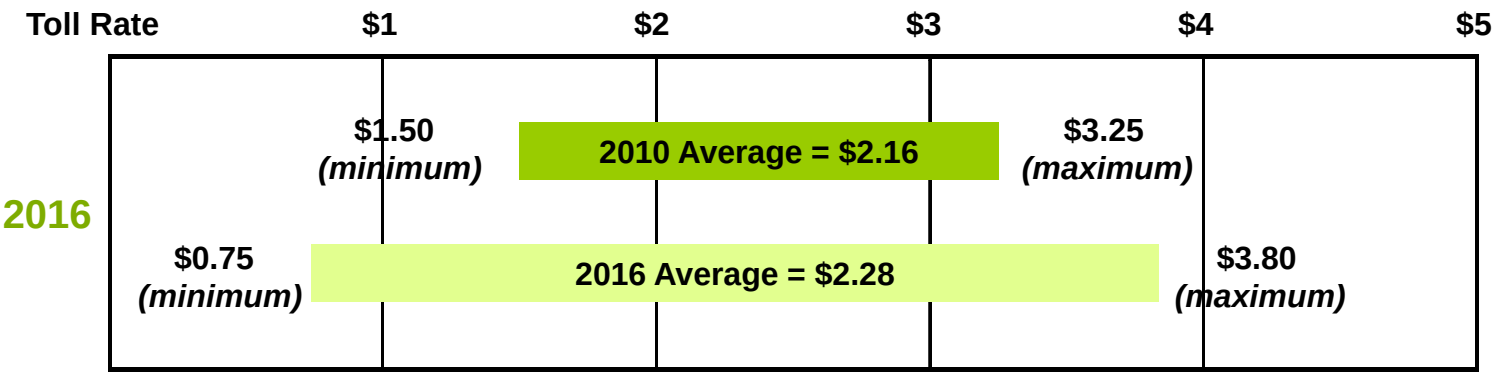


Toll rates for Scenario 7

Minimum toll, maximum toll and average toll paid

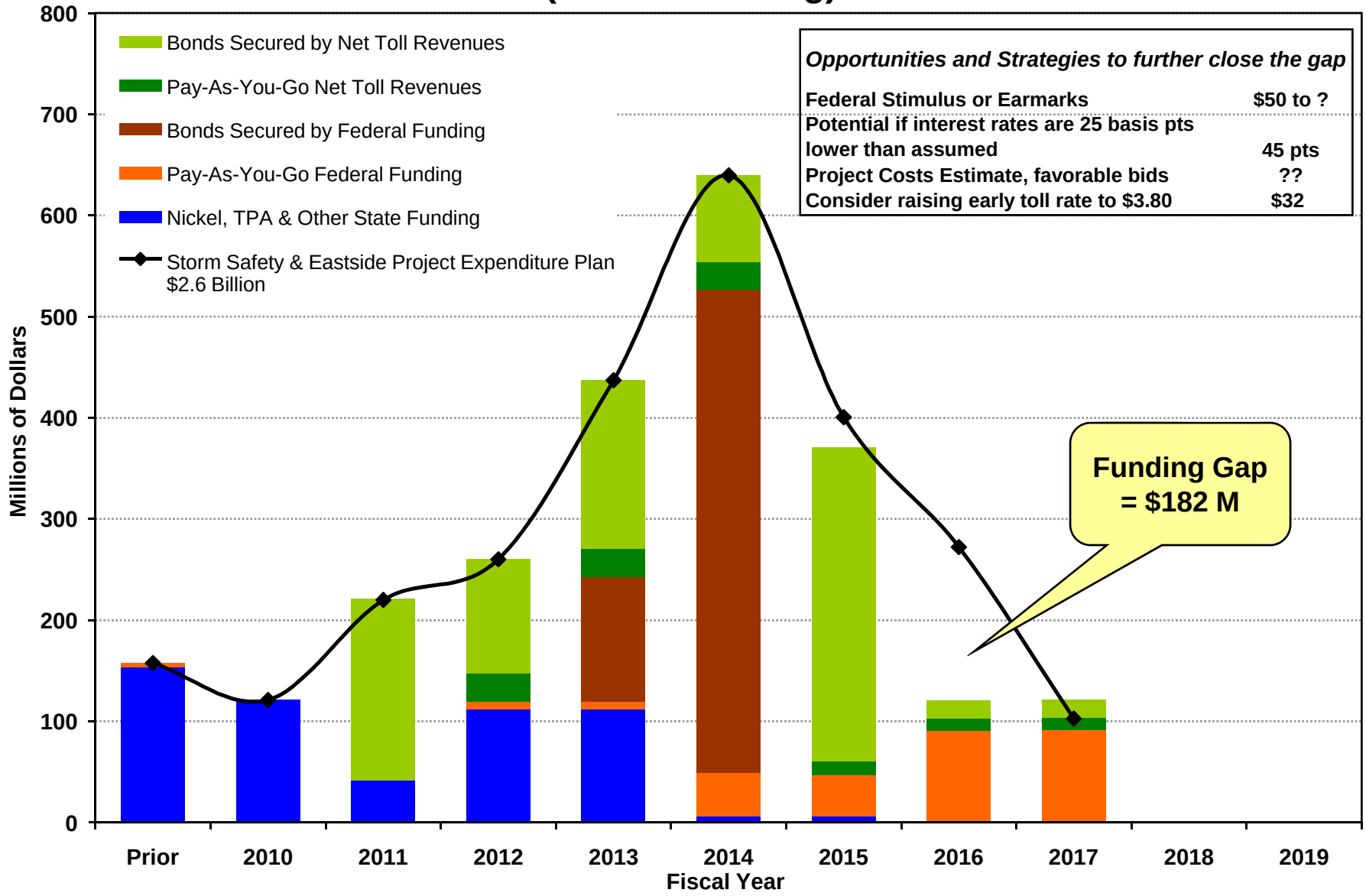
Scenario 7

Toll 520 in 2010;
Increase rate in 2016



Notes:
- *All toll rates are one-way*
- *All tolls are 2007 dollars*
- *2010 scenarios do not charge on overnight toll*

Storm Safety and Eastside Project Funding and Expenditures (After Financing)



Questions?

For more information visit the project website at:

www.wsdot.wa.gov/projects/SR520Bridge

Option A Cost Estimate
November 2008

COST ESTIMATE FOR SR 520 CORRIDOR WITH OPTION A

Updated: November 2008

	I-5 to Floating Bridge*	Floating Bridge		Evergreen Point Road to I-405	
2008 Six Lane Alternative With Option A					Note: Map includes major construction limits. Corridor work continues to SR 202.
	Option A	Pontoon Site	Floating Bridge		
2008	• 4+2 configuration • Six lane Portage Bay bridge • Narrow inside shoulder and lane width • Westbound transit-only ramp to Montlake Boulevard • Second bascule crossing • Lids at I-5, 10th/Delmar and McCurdy Park • Quieter pavement** • Portage Bay Bridge Aesthetic Treatment • Option for Foster Island Land Bridge • Option for Lake Washington Boulevard ramps • Option for Eastbound Direct Access Ramp Flyover	• 8 basin, 2 gate site • Shallow foundation design concept	• 4+2 configuration • Narrow inside shoulder and lane width • Single row of pontoons with added floatation	• 4+2 configuration • Move HOV lanes to inside between SR 202 • Lids at Evergreen Point Road, 84th Avenue E. and 92nd Avenue E. • 108th direct access • Transit stops at Evergreen Point Road and 92nd Avenue E.	
2008 Most Likely Cost	Total Cost Range $2.022B to $2.298B	Total Cost $358M	Total Cost $1.370B	Total Cost $776M	2008 Total Cost Range $4.526B to $4.802B

*Requires additional transit service, etc.
**Does not include life cycle renewal costs for quieter pavement; initial installation only

All costs at year of expenditure.

Option K Cost Estimate
November 2008

COST ESTIMATE FOR SR 520 CORRIDOR WITH OPTION K

Updated: November 2008

	I-5 to Floating Bridge*	Floating Bridge		Evergreen Point Road to I-405	
2008 Six Lane Alternative With Option K					Note: Map includes major construction limits. Corridor work continues to SR 202.
	Option K	Pontoon Site	Floating Bridge		
2008	• 4+2 Configuration • Six lane Portage Bay bridge • Narrow inside shoulder and lane width • Lids at I-5, 10th/Delmar, Montlake and Foster Island • Single point urban interchange under SR 520 at the Montlake shoreline • Tunnel under the Montlake Cut • False arch type Portage Bay bridge • Quieter pavement** • Option for eastbound off-ramp and westbound on-ramp at Montlake Boulevard	• 8 basin, 2 gate site • Shallow foundation design concept	• 4+2 configuration • Narrow inside shoulder and lane width • Single row of pontoons with added floatation	• 4+2 configuration • Move HOV lanes to inside to SR 202 • Lids at Evergreen Point Road, 84th Avenue E. and 92nd Avenue E. • 108th direct access • Transit stops at Evergreen Point Road and 92nd Avenue E.	
2008 Most Likely Cost	Total Cost Range $4.070B to $4.168B	Total Cost $358M	Total Cost $1.370B	Total Cost $776M	2008 Total Cost Range $6.574B to $6.672B

*Requires additional transit service, etc.
**Does not include life cycle renewal costs for quieter pavement; initial installation only

All costs at year of expenditure.

Option L Cost Estimate
November 2008

COST ESTIMATE FOR SR 520 CORRIDOR WITH OPTION L

Updated: November 2008

	I-5 to Floating Bridge*	Floating Bridge		Evergreen Point Road to I-405	
2008 Six Lane Alternative With Option L					Note: Map includes major construction limits. Corridor work continues to SR 202.
	Option L	Pontoon Site	Floating Bridge		
2008	• 4+2 Configuration • Six lane Portage Bay bridge • Single point urban interchange over SR 520 at the Montlake shoreline • Narrow inside shoulder and lane width • Lids at I-5, 10th/Delmar and Montlake • Bascule crossing over the Montlake Cut • Portage Bay Bridge Aesthetic Treatment • Allowance for quieter pavement** • Option for Foster Island Land Bridge	• 8 basin, 2 gate site • Shallow foundation design concept	• 4+2 configuration • Narrow inside shoulder and lane width • Single row of pontoons with added floatation	• 4+2 configuration • Move HOV lanes to inside between SR 202 • Lids at Evergreen Point Road, 84th Avenue E. and 92nd Avenue E. • 108th direct access • Transit stops at Evergreen Point Road and 92nd Avenue E.	
2008 Most Likely Cost	Total Cost Range $2.562B to $2.642B	Total Cost $358M	Total Cost $1.370B	Total Cost $776M	2008 Total Cost Range **$5.066B to $5.146B**

*Requires additional transit service, etc.
**Does not include life cycle renewal costs for quieter pavement; initial installation only

All costs at year of expenditure