

# **SR 509 & SR 167 Ext. Toll Feasibility Study Preliminary Findings**

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**Joint Transportation Committee  
July 15, 2010**



**Washington State  
Department of Transportation**

# The 2009 Budget Proviso

Mandates that the study, at a minimum, must include the following:

- The potential for value pricing to generate revenues for needed transportation facilities within the corridor;
- Maximizing the efficient operation of the corridor;
- Economic considerations for future system investments.

Requires WSDOT to report the study findings to the Joint Transportation Committee by September 30, 2010.

# Preliminary Findings

- Tolling is expected to contribute a substantial amount to fund the project construction, depending on phasing and financing assumptions.
  - SR 509: 40% to 90%
  - SR 167: 20% to 50%
- Tolling is expected to create an opportunity for phasing and reducing the initial construction cost:
  - SR 509: improvements on I-5 can be scaled back significantly without worsening I-5 operation.
  - SR 167: building one side first and making it a two way operation appears to be a sensible option.
- Stakeholders are generally supportive of using tolls to partially finance the projects.

# Background

- Both projects are ready to go (with EIS and ROD).
- Both were in R-49, R-51, and RTID funding packages.
- Both got partial funding from the Nickel and TPA for design and some ROW acquisition:
  - SR 509: \$86m
  - SR 167: \$133m
- Both started off with 6 lane design, 2 GP and 1 HOV/direction, and reduced to 4 lanes in the current design/full build.
- Both have strong freight presence and make strategic port connections.
- Neither is funded for construction.

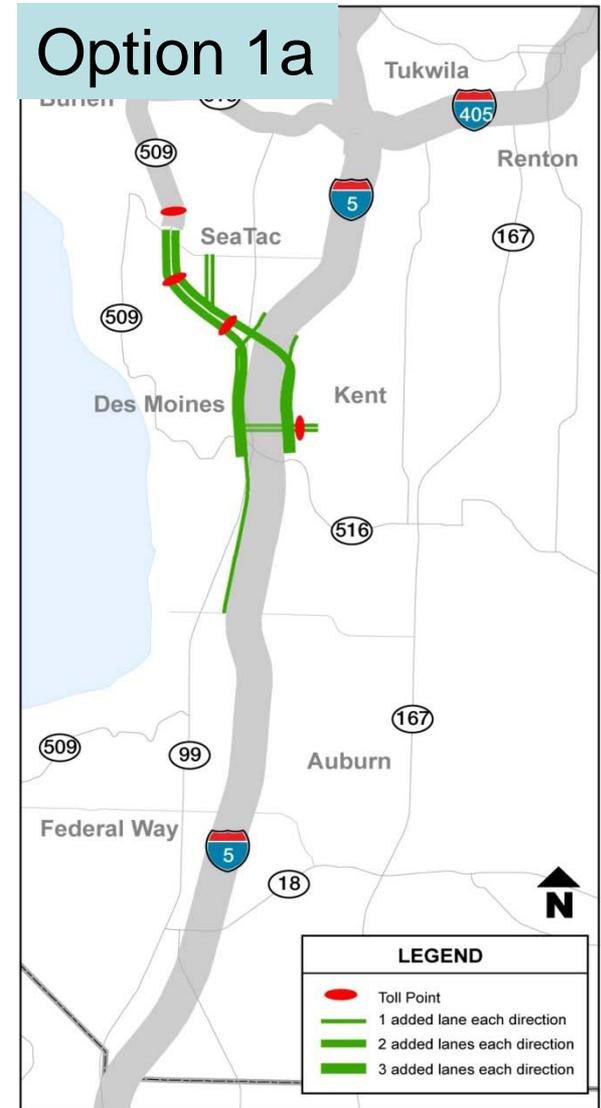
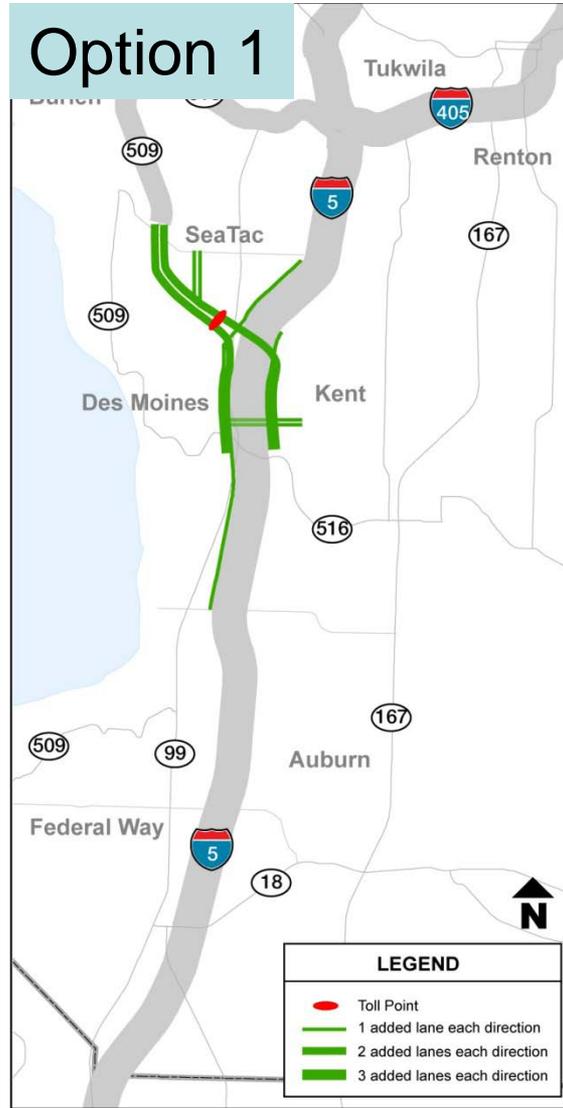
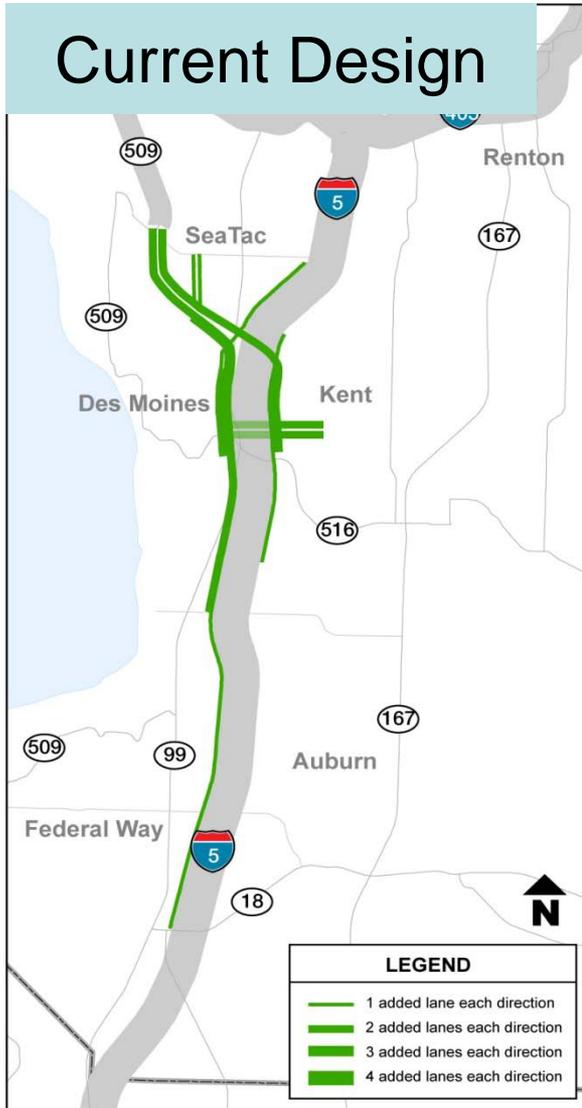
# **SR 509 Options Studied and Key Findings**

# SR 509 Current Design Configuration

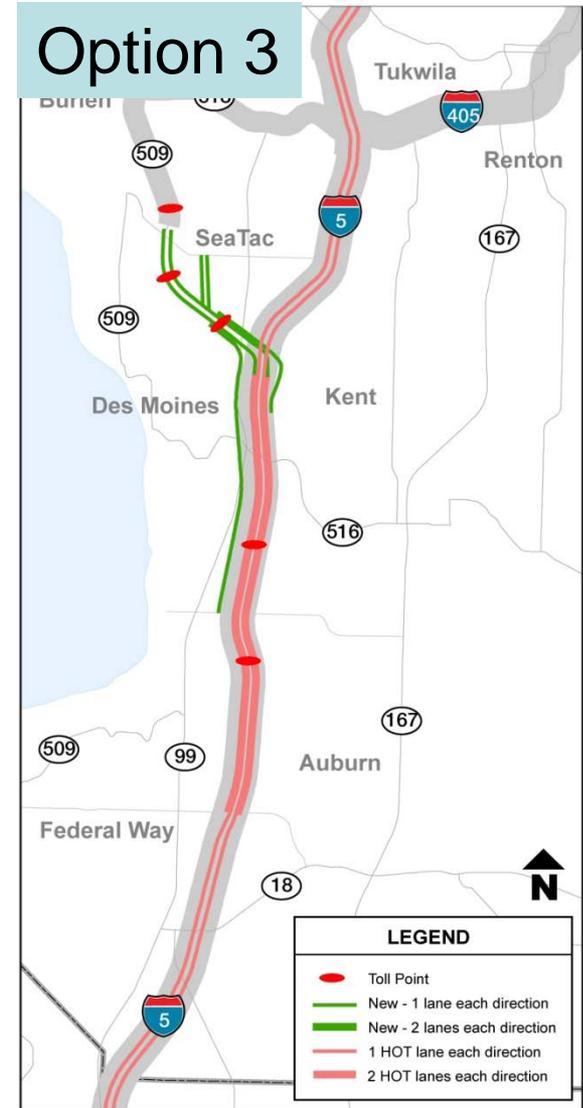
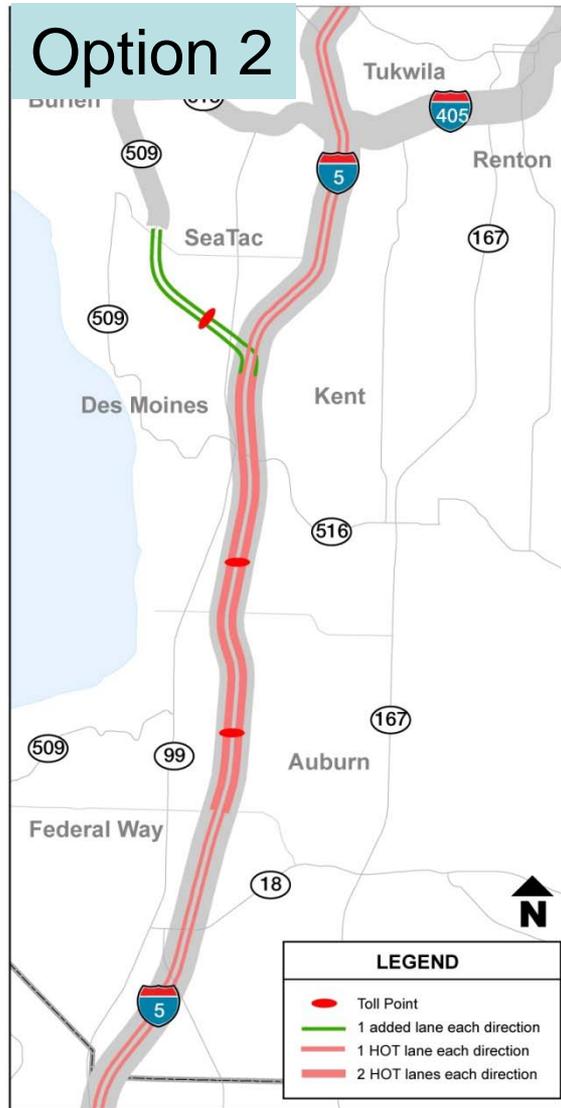
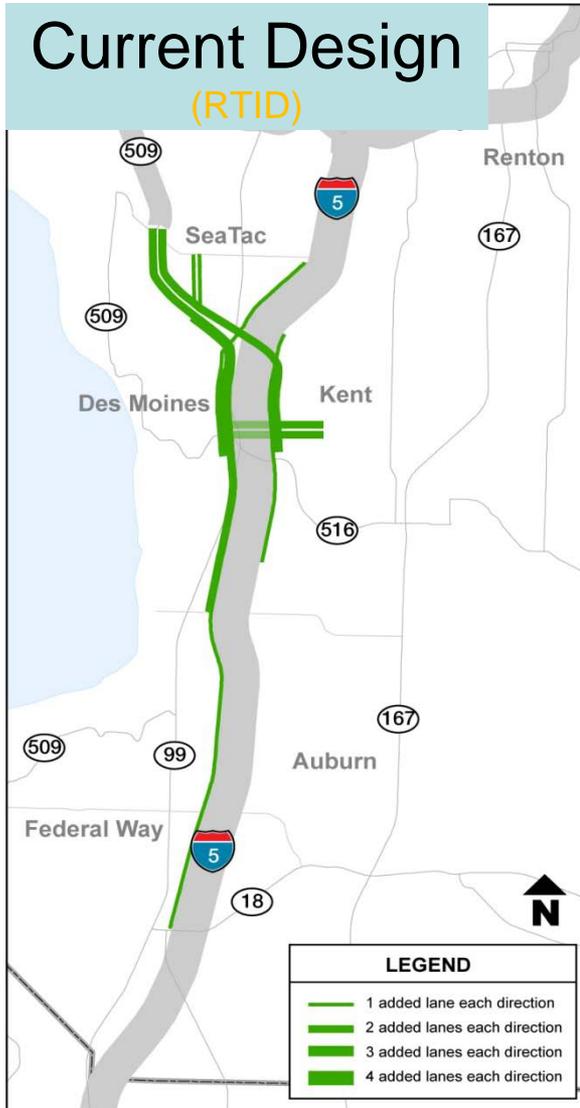
- Two lanes per direction w/SB auxiliary lane from S. Airport Access Rd to I-5.
- New connection to the airport.
- Extensive CD/Auxiliary lanes and interchange improvements on I-5.
- New 228th St connection.
- Updated cost: \$923 million in YOE.



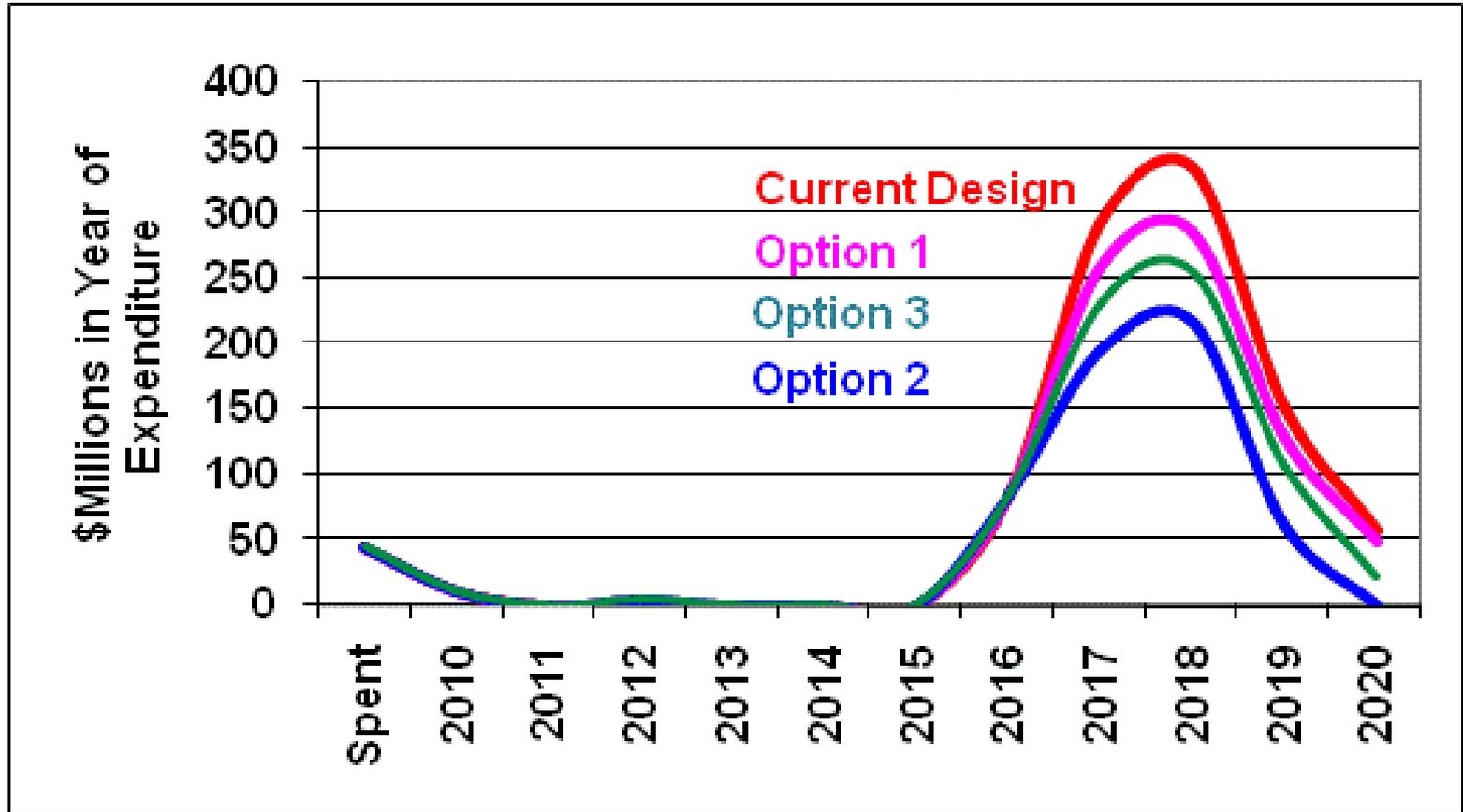
# SR 509 Toll Concepts



# SR 509 Toll Concepts continued



# SR 509 Extension Expenditure Cash Flow Assumption



# SR 509 Extension Financial Analysis Results

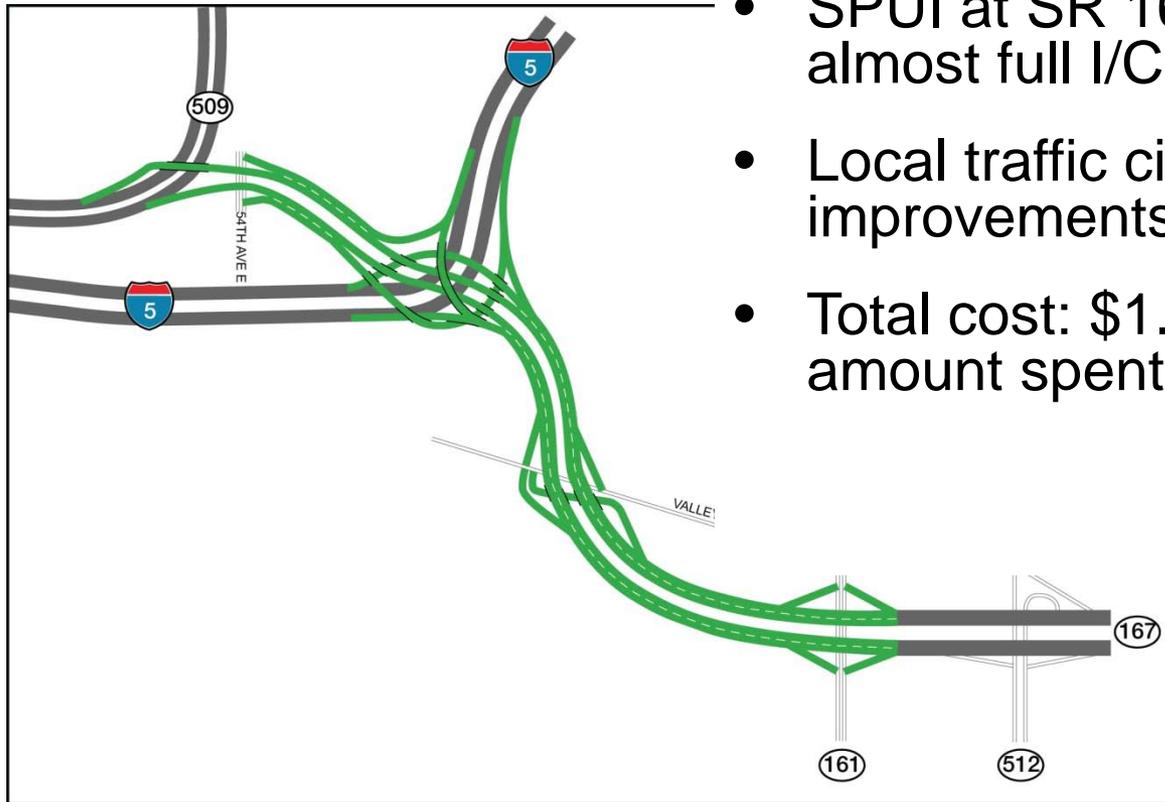
Options	Funding Needs (YOE \$s)			Toll Funding Contribution		Total Remaining Funding Gap
	Total	Upfront ROW	Design /Build	Net Toll Funding Range	% of Design/Build	
<i>Current Design</i>	\$930 M	\$120 M	\$810 M	\$310 M - \$355 M	38% - 44%	\$575 M - \$620 M
<i>Option 1</i>	\$815 M	\$120 M	\$695 M	\$310 M - \$355 M	45% - 51%	\$460 M - \$505 M
<i>Option 1a</i>	\$825 M	\$120 M	\$705 M	\$425 M - \$490 M	60% - 70%	\$335 M - \$400 M
<i>Option 2</i>	\$585 M	\$120 M	\$465 M	\$295 M - \$340 M	63% - 73%	\$245 M - \$290 M
<i>Option 3</i>	\$735 M	\$120 M	\$615 M	\$505 M - \$585 M	82% - 95%	\$150 M - \$230 M

Notes: State Fiscal Year is from July 1 to June 30, e.g., FY 2016 = 7/1/2015 to 6/30/2016

- Analysis assumes that toll bonds are issued when there is a commitment to build, in this case FY 2015.
- All Options have unfunded capital needs beginning in fiscal year 2015 and ending in fiscal year 2020.
- The low end of the funding range represents a 10% reduction in gross toll revenue to account for uncertainty.
- HOT lane (from the extension to S 317th) gross revenue is about 10% of the total gross revenue
- The total project capital costs for all options exclude the amount already spent on P/E and R/W.
- The total Remaining Funding Gap includes the remaining upfront ROW cost

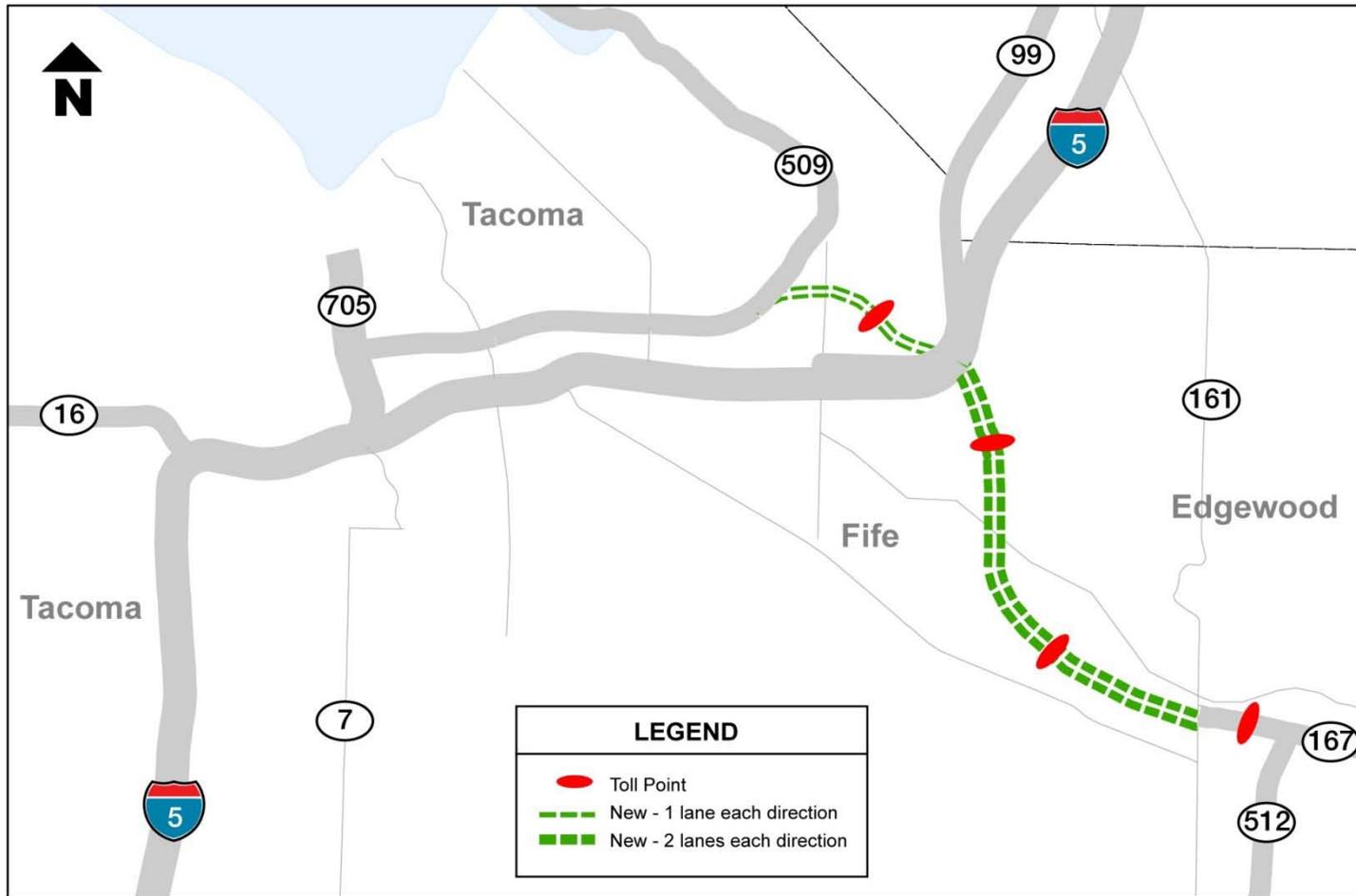
# **SR 167 Options Studied and Key Findings**

# SR 167 “Full Build” Configuration

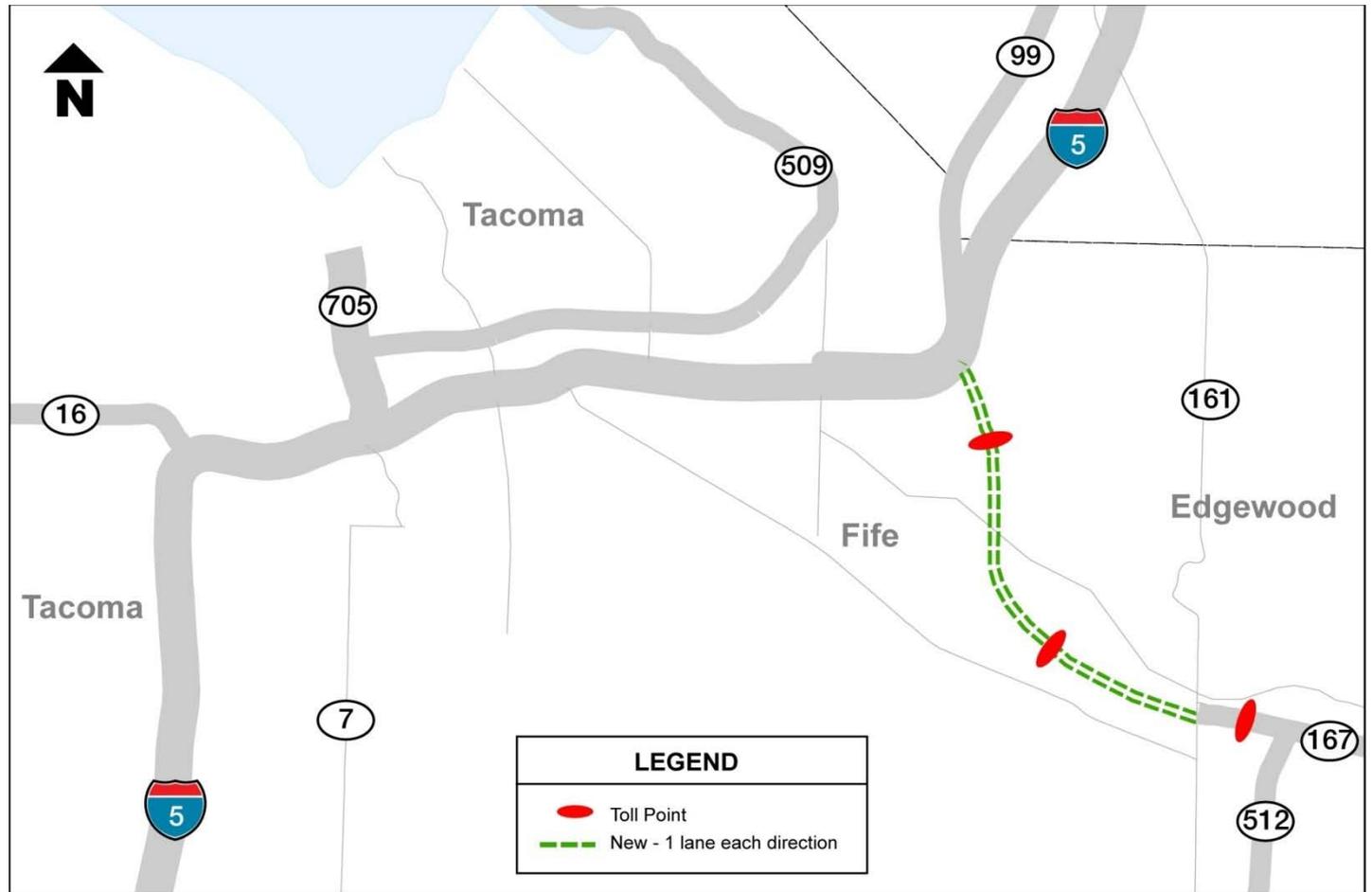


- Two lanes/direction most of the way.
- SPUI at SR 161, Diamond I/C at Valley, almost full I/C at I-5, half SPUI at 54<sup>th</sup>.
- Local traffic circulation and mitigation improvements.
- Total cost: \$1.9B (in YOE excluding amount spent).

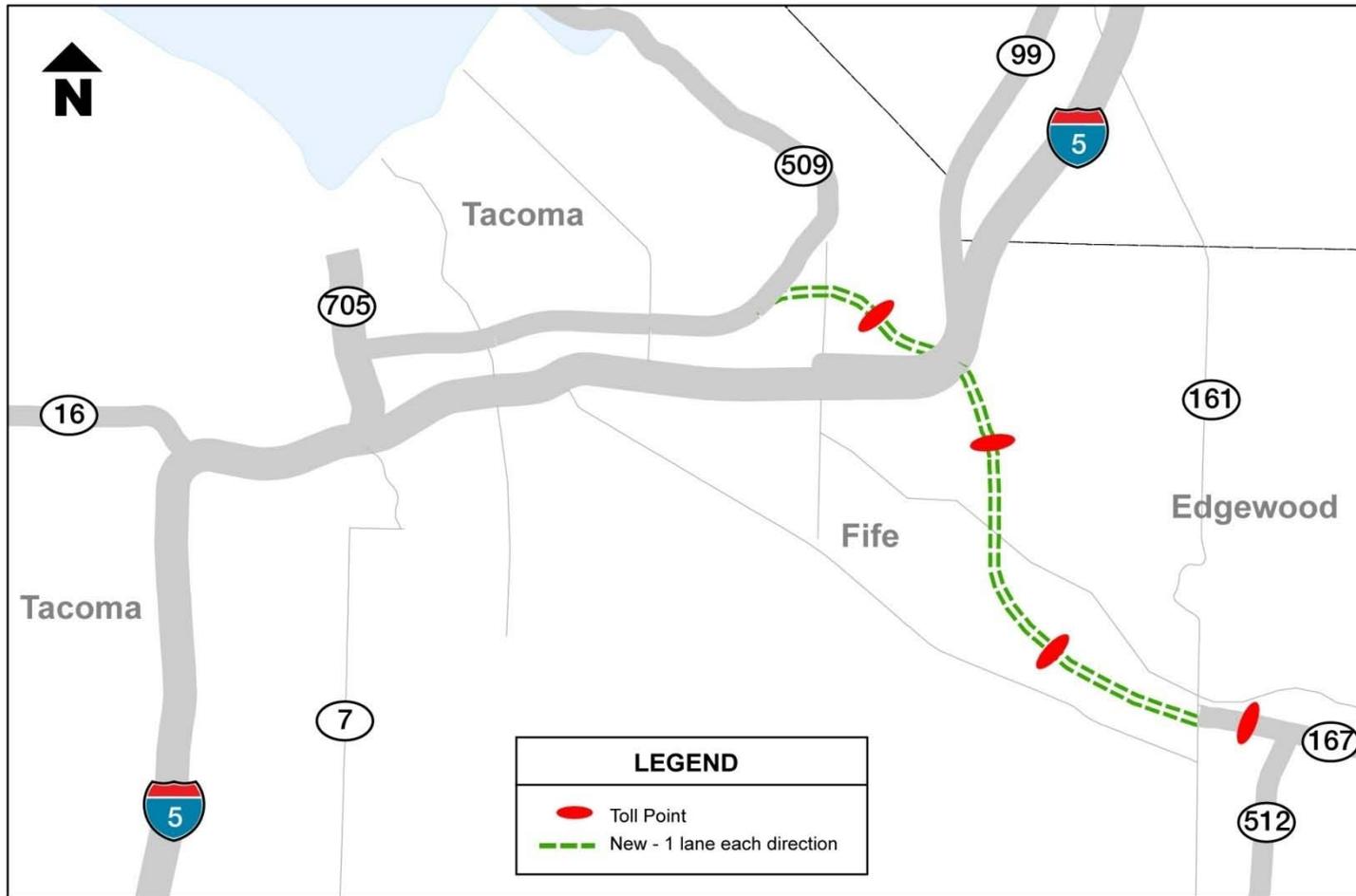
# SR 167 Full Build Tolling Concepts



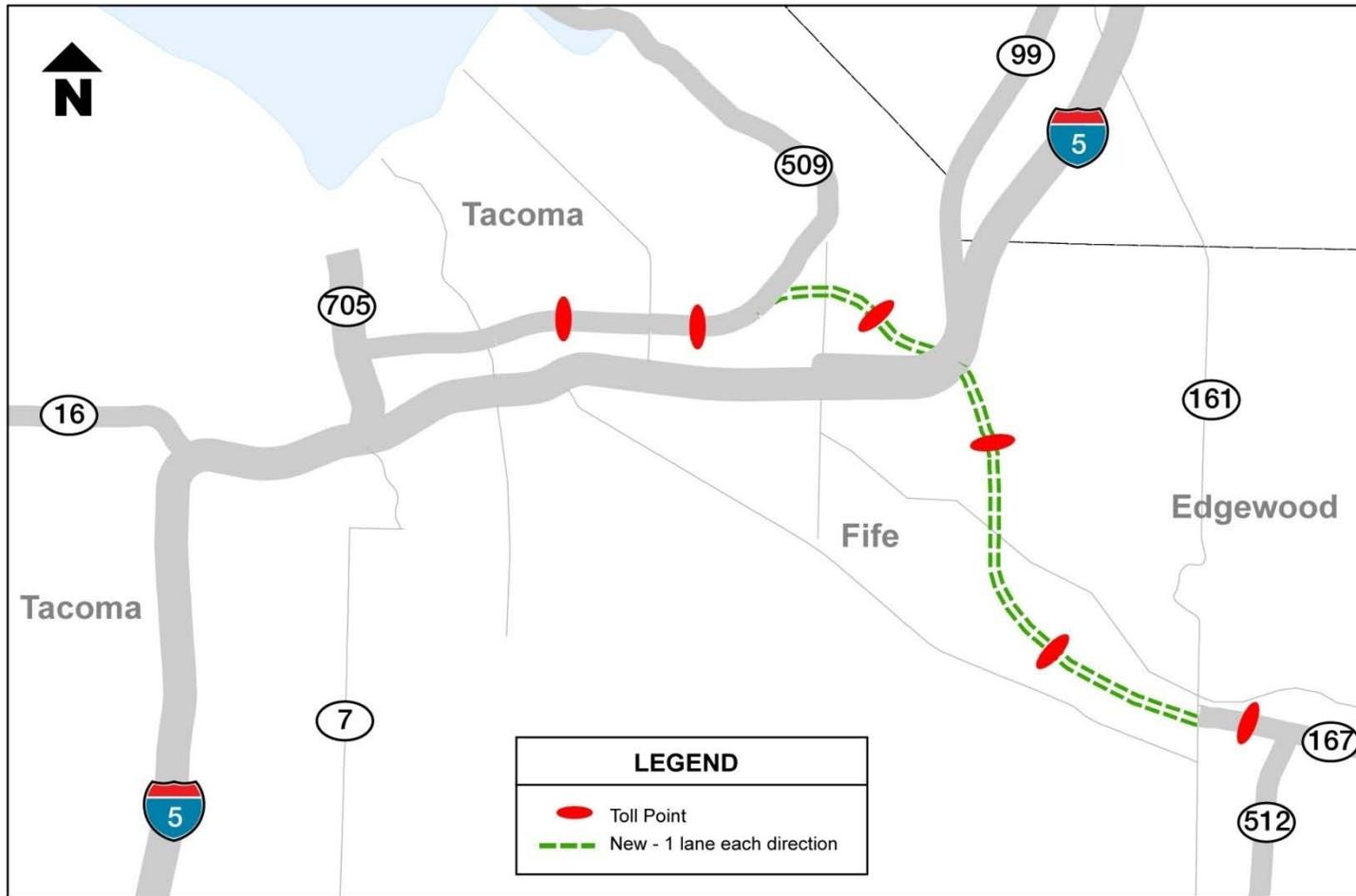
# SR 167 Option 1 Toll Concept



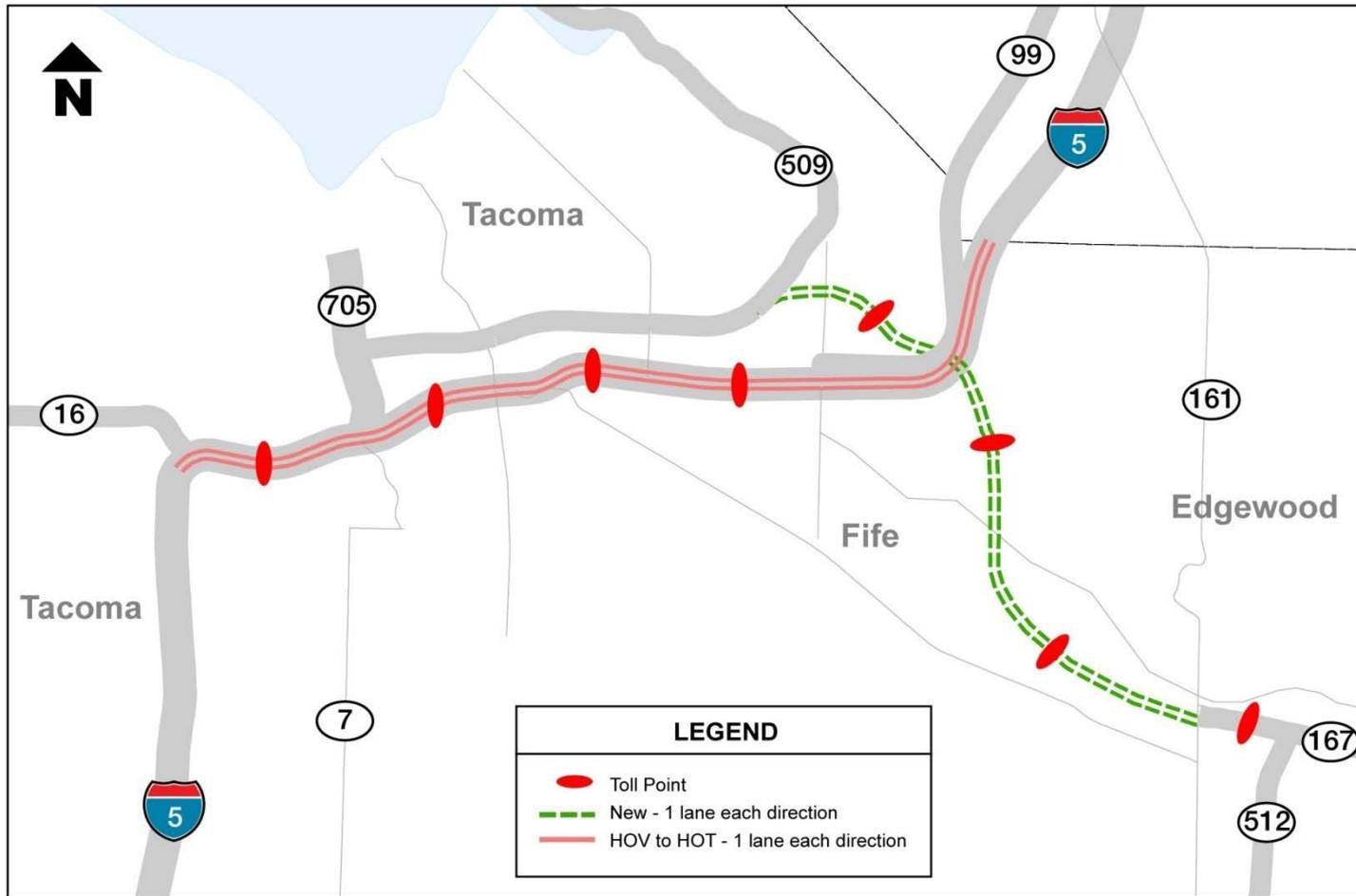
# SR 167 Option 2 Toll Concept



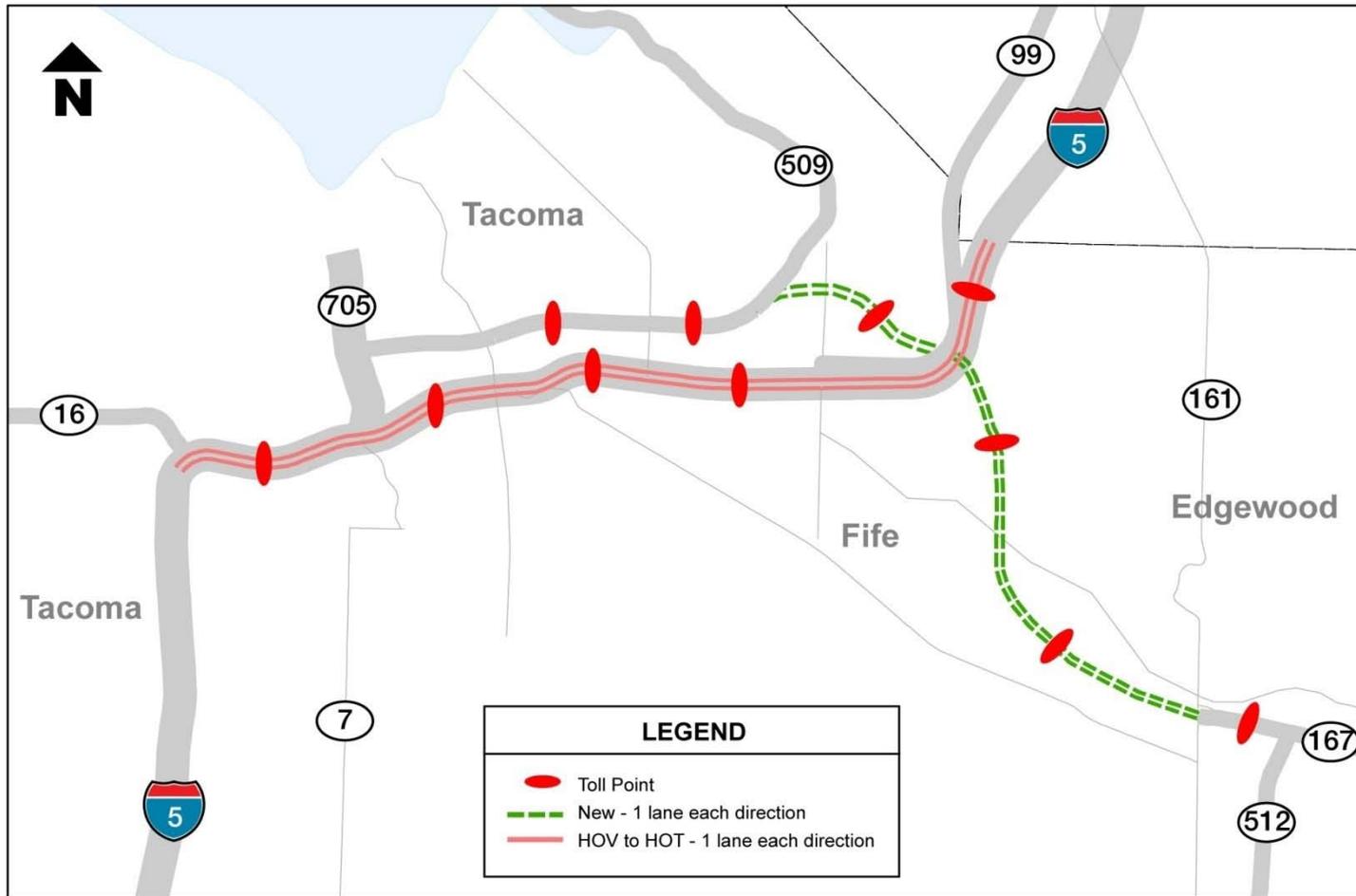
# SR 167 Option 2a Toll Concept



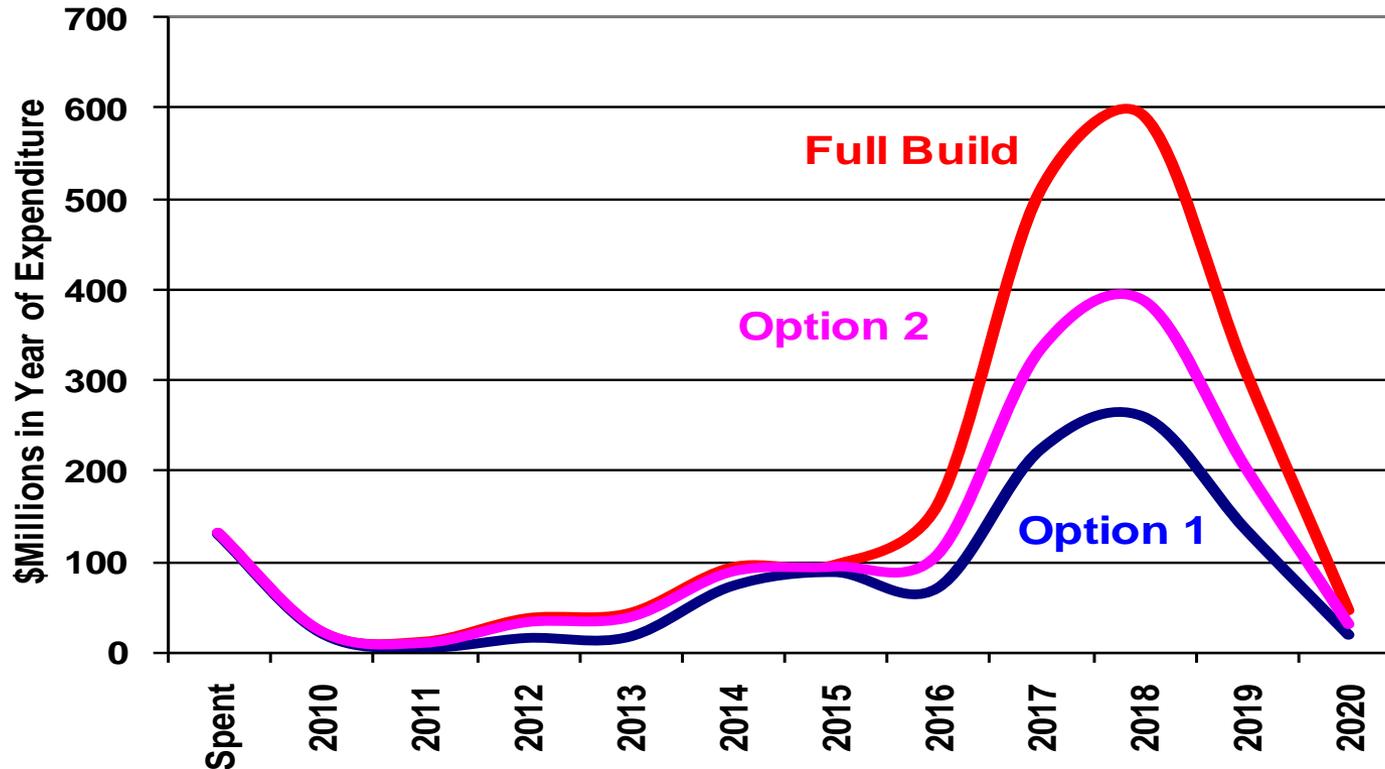
# SR 167 Option 2b Toll Concept



# SR 167 Option 2c Toll Concept



# SR 167 Project Expenditure Cash Flow Assumption



Assumptions:

PE and ROW acquisition complete by 2015

Construction assumed to start in 2016 and complete in 2020

# SR 167 Extension Financial Analysis

Options	Funding Needs (YOE \$s)			Toll Funding Contribution		Total Remaining Funding Gap
	Total	Upfront PE/ROW	Const.	Net Toll Funding Range	% of Const. Cost	
<i>Full Build</i>	\$1,910 M	\$280 M	\$1,630 M	\$325 M - \$370 M	20% - 23%	\$1,540 M - \$1,585 M
<i>Option 1</i>	\$923 M	\$204 M	\$719 M	\$310 M - \$360 M	43% - 50%	\$563 M - \$613 M
<i>Option 2</i>	\$1,332 M	\$261 M	\$1,071 M	\$350 M - \$405 M	33% - 38%	\$927 M - \$982 M
<i>Option 2a</i>	\$1,336 M	\$261 M	\$1,075 M	\$390 M - \$455 M	36% - 42%	\$881 M - \$946 M
<i>Option 2b</i>	\$1,358 M	\$261 M	\$1,097 M	\$415 M - \$480 M	38% - 44%	\$878 M - \$943 M
<i>Option 2c</i>	\$1,362 M	\$261 M	\$1,101 M	\$465 M - \$545 M	42% - 49%	\$817 M - \$897 M

Notes: State Fiscal Year is from July 1 to June 30, e.g., FY 2016 = 7/1/2015 to 6/30/2016

- Analysis assumes that toll bonds are issued when there is a commitment to build, in this case FY 2015.
- All Options have unfunded capital needs beginning in fiscal year 2015 and ending in fiscal year 2020.
- The low end of the funding range represents a 10% reduction in gross toll revenue to account for uncertainty.
- The total project capital costs for all options exclude the amount already spent on P/E and R/W.
- The total Remaining Funding Gap includes the remaining upfront PE/ROW cost

# Preliminary Conclusions & Next Steps

- Tolling could contribute a substantial amount to fund the project construction while helping reduce initial phasing scope and construction cost.
- Stakeholders are generally supportive of using toll to partially finance the projects.
- Right of way need to be secured before bond issuance to reduce financing cost.
- More comprehensive toll study needs to be conducted as well as environmental clearance needs to be addressed as a next step.

# Questions?

For additional information on the SR 509 & SR 167 Extension Toll Feasibility Study Preliminary Findings, please contact

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