

# SR 520 Project Financing

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January 30, 2008

# Agenda

- **Finance plan background**
  - Funding the SR 520 bridge replacement is a high priority
  - Meeting requirements of ESSB 6099
  - Key findings of the finance plan
- **Addressing the funding gap**
  - Summary of project needs and sources
  - Cost-saving options
  - Tolling considerations
- **Next steps**



# SR 520 Bridge Replacement is a Priority



- The SR 520 bridges and structures are vulnerable to earthquakes and windstorms
- Keep drivers safe and people, services, and goods moving
  - Over 150,000 people rely on SR 520 every day
  - Failure of the bridges or roadways could have devastating effects on people's safety and our economy

# Legislative Requirements Met

- The finance plan fulfills the requirements of ESSB 6099
- The plan is tied to cost estimates of recommended solutions
  - \$4.38 billion for 6-lane alternative with Pacific Interchange
  - \$3.98 billion with cost savings of \$400 million
- Various funding sources are evaluated in the plan
  - State, federal, and regional funding
  - Revenue from tolling
- Today's briefing will focus on the proposal to reduce pontoon costs and the tolling scenarios reported in the finance plan

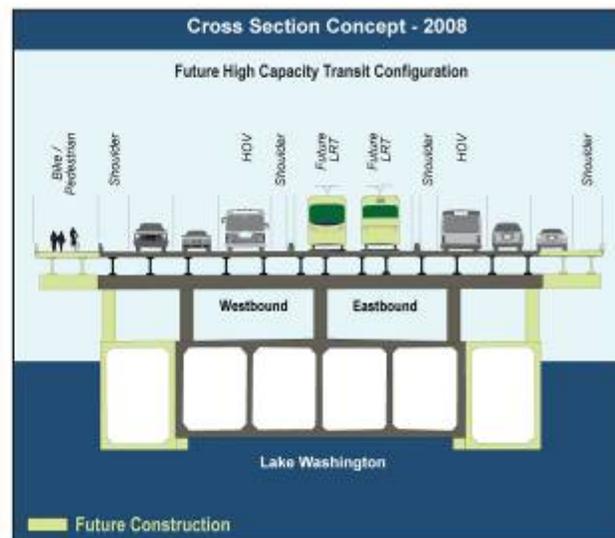
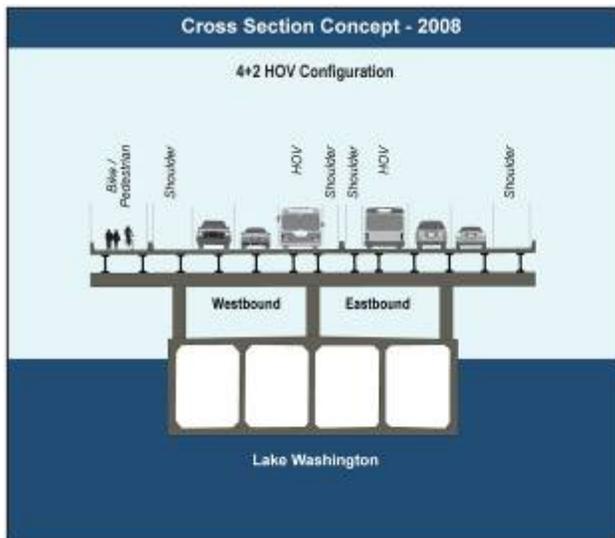


# Key Findings

- A funding gap exists with current identified funding sources.
- Design changes and early pontoon construction could save \$400 million.
- Tolling SR 520 could contribute substantial project funding.
- Pre-completion tolling jump-starts project funding.

# Proposal to Reduce Project Costs

- Fewer pontoons
  - Build the 4+2 configuration with a single line of pontoons, rather than a double line
  - Designed to accommodate expansion in the future for high capacity transit



# Proposal to Reduce Project Costs

- Early pontoon construction
  - Save on future inflation
  - Restore traffic capacity in case of catastrophic failure



# Tolling Considerations

- Toll Configuration: Where should tolls be collected?
  - Single point of toll collection on the floating bridge
    - Only cross-lake trips are tolled
  - Charge drivers for trips anywhere on the corridor between I-5 and I-405
    - Cross-lake trips *and* shorter trips on both sides of the lake are tolled



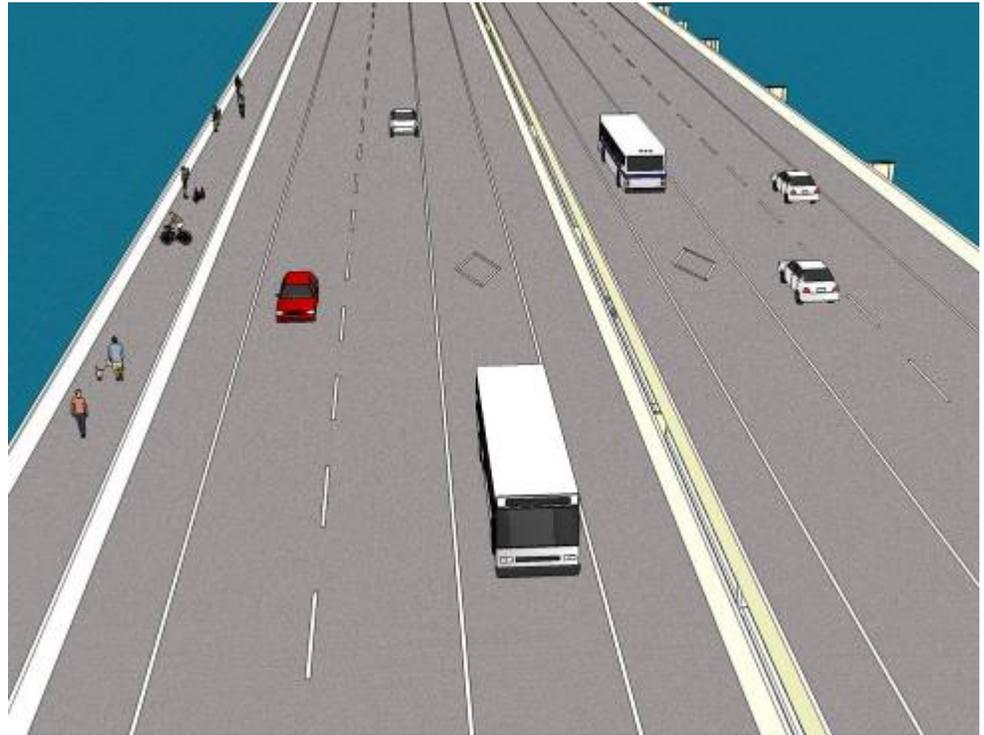
# Tolling Considerations

- Toll Emphasis: What is the objective of tolling?
  - Lower toll rate = more drivers, lower revenues
  - Higher toll rate = higher revenues, fewer drivers
  - Balanced approach attempts to strike a compromise between potential revenue raised and serving a greater number of vehicles using SR 520



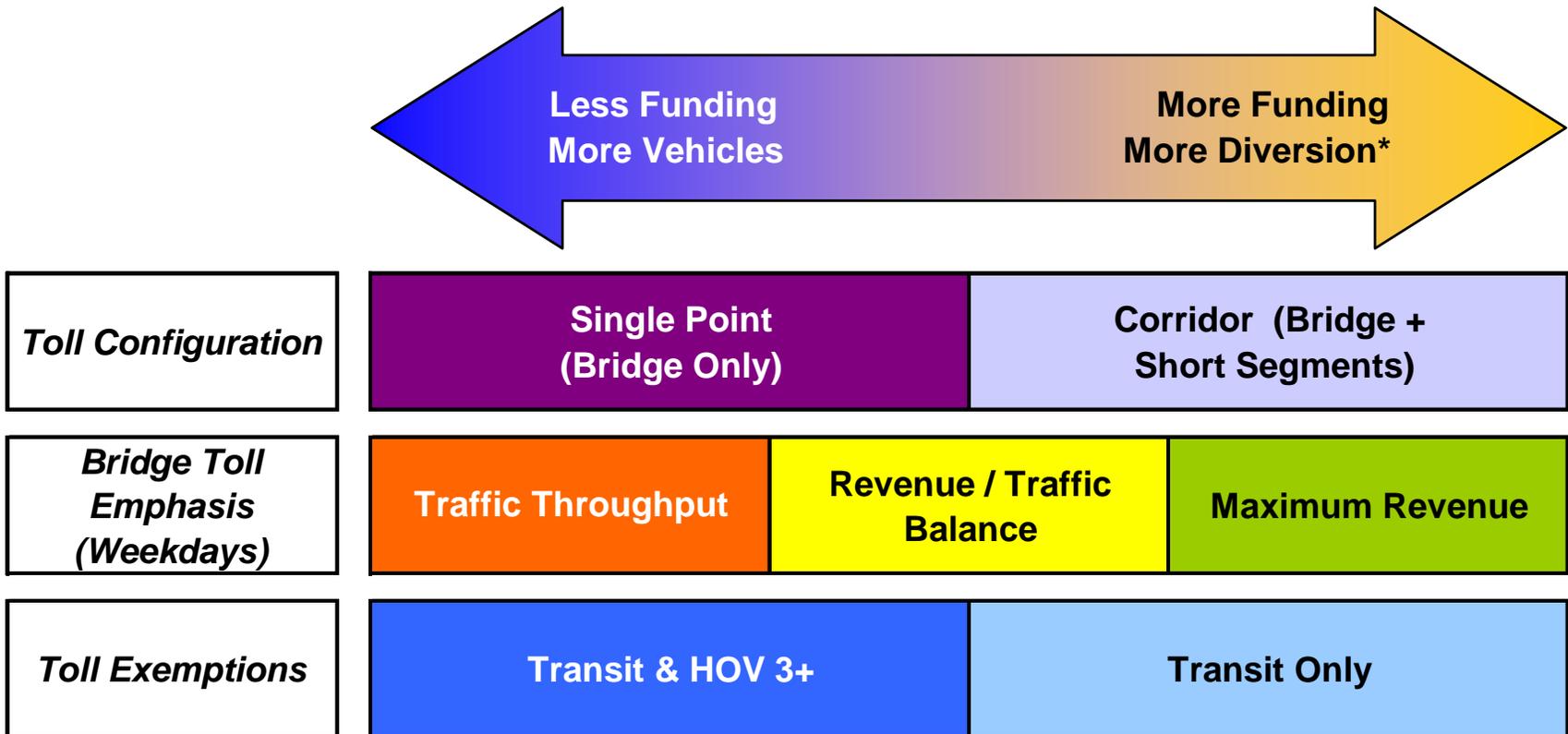
# Tolling Considerations

- Toll Exemption Options:
  - No transit or HOV exemptions
  - Public transit only, or
  - Public transit *and* HOVs with three or more persons (HOV 3+)



# Tolling Considerations

## Components in Toll Scenario Development



\*The changes in travel patterns caused by tolls are often referred to as diversion.

# Common Assumptions for all Toll Scenarios Tested

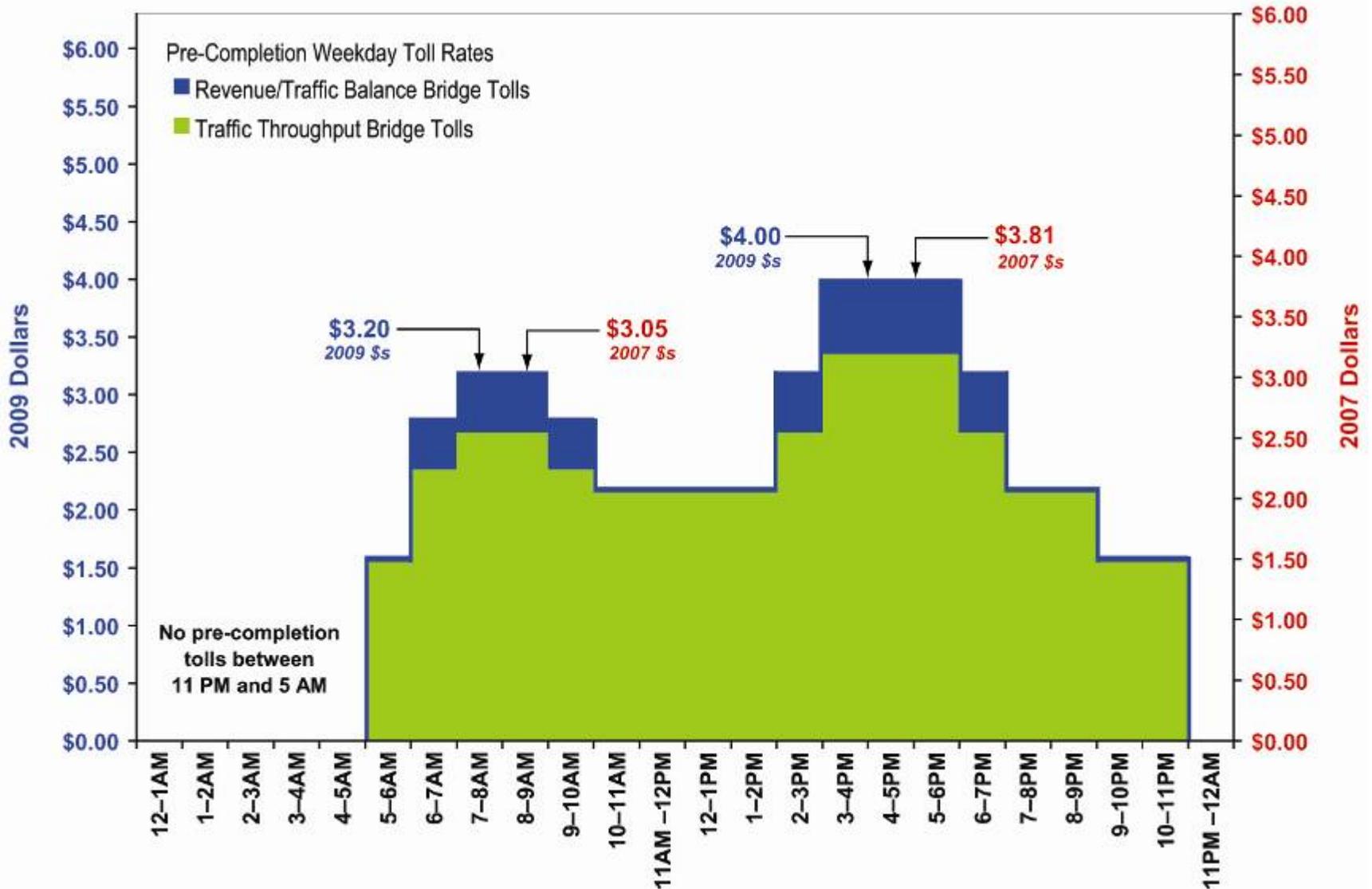
- Tolls will be collected on the floating bridge
- Tolls will be collected electronically
- Tolls will be collected in both directions
- Toll rates will vary by the time of day and the time of week
  - Higher tolls will be paid during peak periods
  - Lower tolls will be paid on weekends
- Public transit will not pay tolls



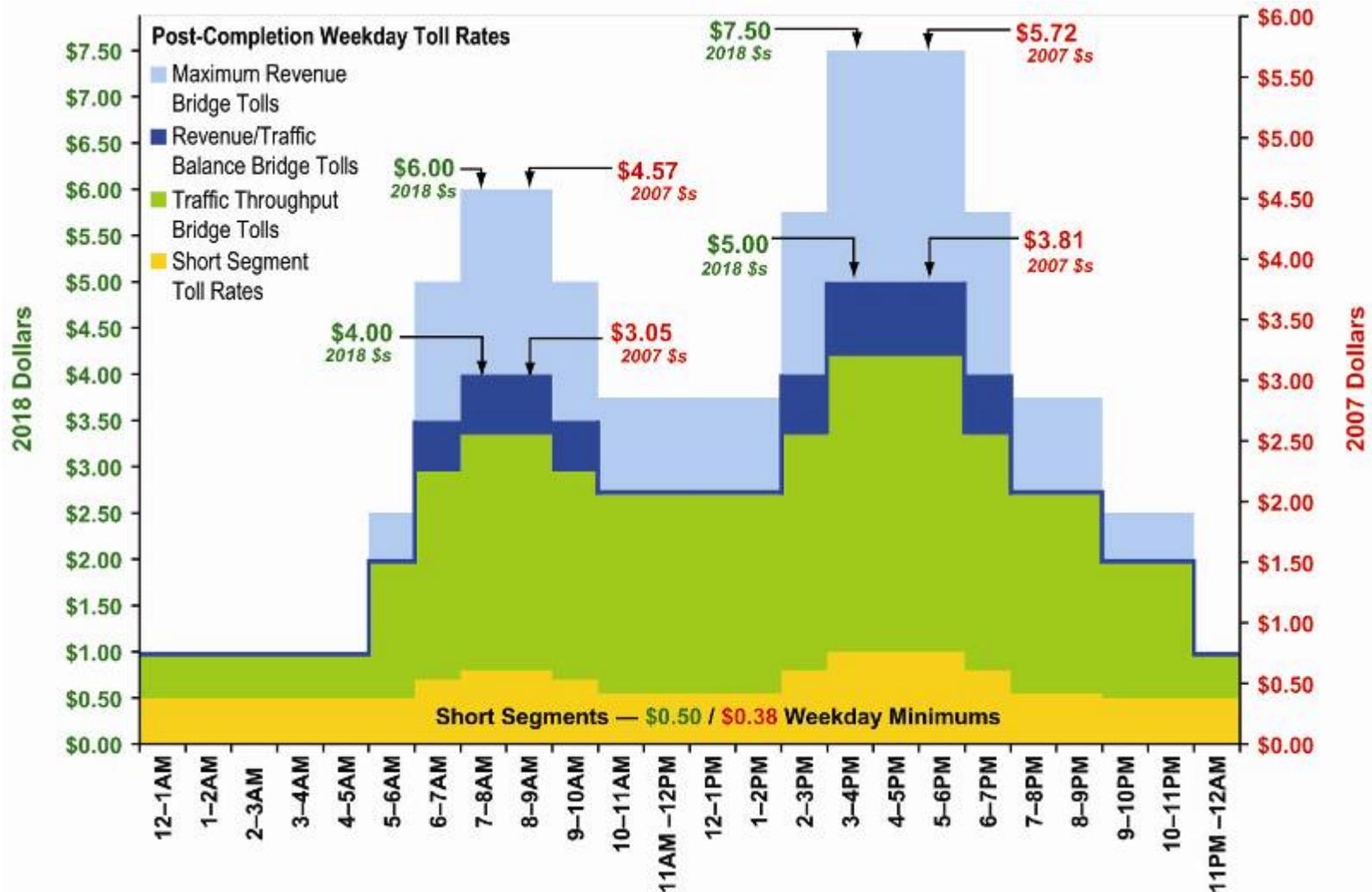
# Finance Plan Toll Scenarios

Scenario	Bridge Toll Emphasis (Weekdays)	Toll Configuration	Toll Exemptions
<i>Toll Scenarios Applying at New Bridge Opening in mid-2018</i>			
SCENARIO 1	= Maximum Revenue	+ Corridor (Bridge + Short Segments)	+ Transit Only
SCENARIO 2	= Revenue / Traffic Balance	+ Corridor (Bridge + Short Segments)	+ Transit Only
SCENARIO 3	= Maximum Revenue	+ Single Point (Bridge Only)	+ Transit & HOV 3+
SCENARIO 4	= Revenue / Traffic Balance	+ Corridor (Bridge + Short Segments)	+ Transit & HOV 3+
SCENARIO 5	= Traffic Throughput	+ Corridor (Bridge + Short Segments)	+ Transit & HOV 3+
<i>Pre-Completion Toll Scenarios from late 2009 until New Bridge Opening</i>			
SCENARIO B	= Revenue / Traffic Balance	+ Single Point (Bridge Only)	+ Transit Only (No HOV Lane)
SCENARIO B5	= Traffic Throughput	+ Single Point (Bridge Only)	+ Transit Only (No HOV Lane)

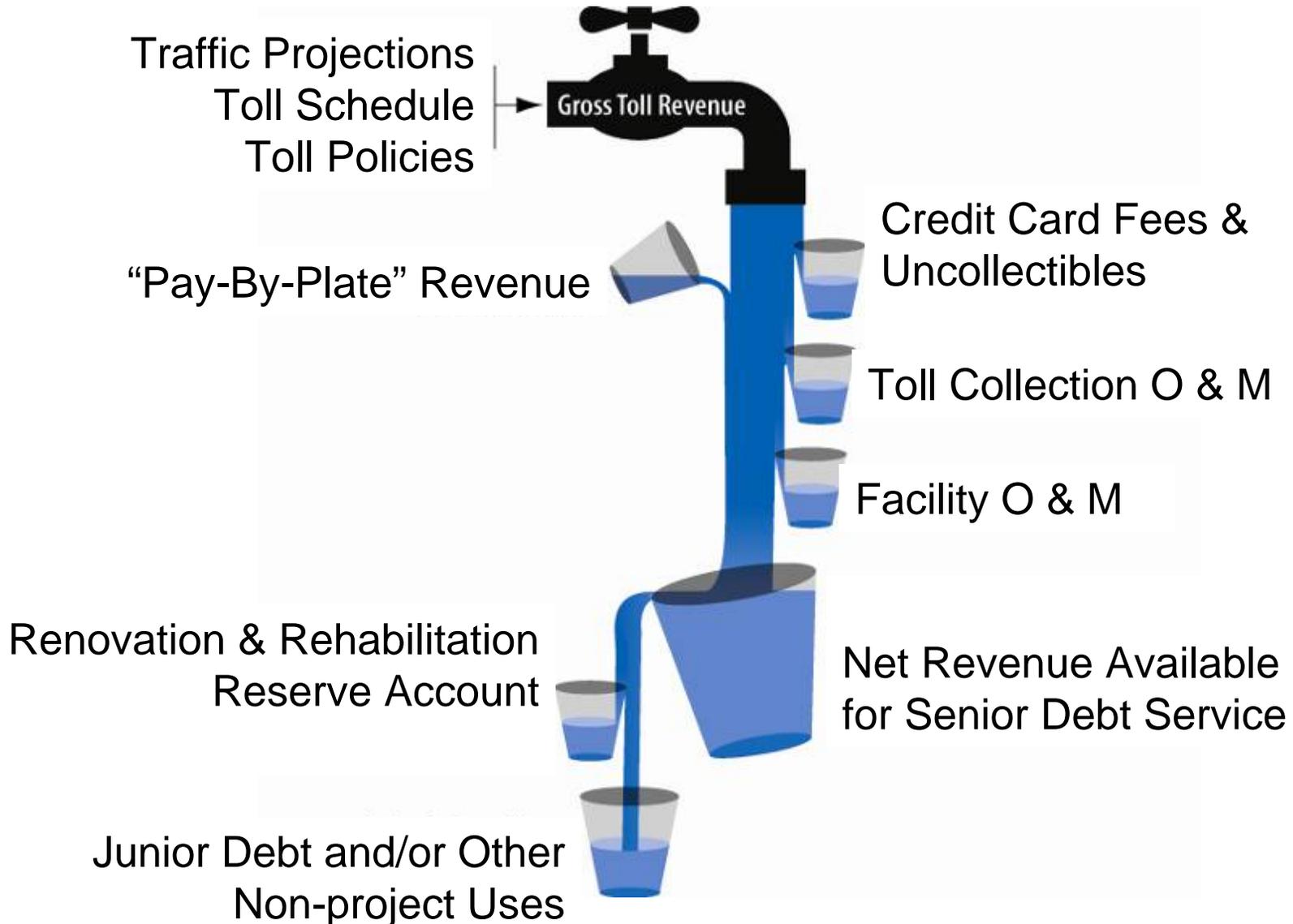
# Pre-Completion Bridge Tolls (Weekdays)



# Post-Completion Bridge Tolls and Segment Tolls (Weekdays)



# "Waterfall" Progression from Gross to Net Toll Revenues



# Bond Financing Assumptions

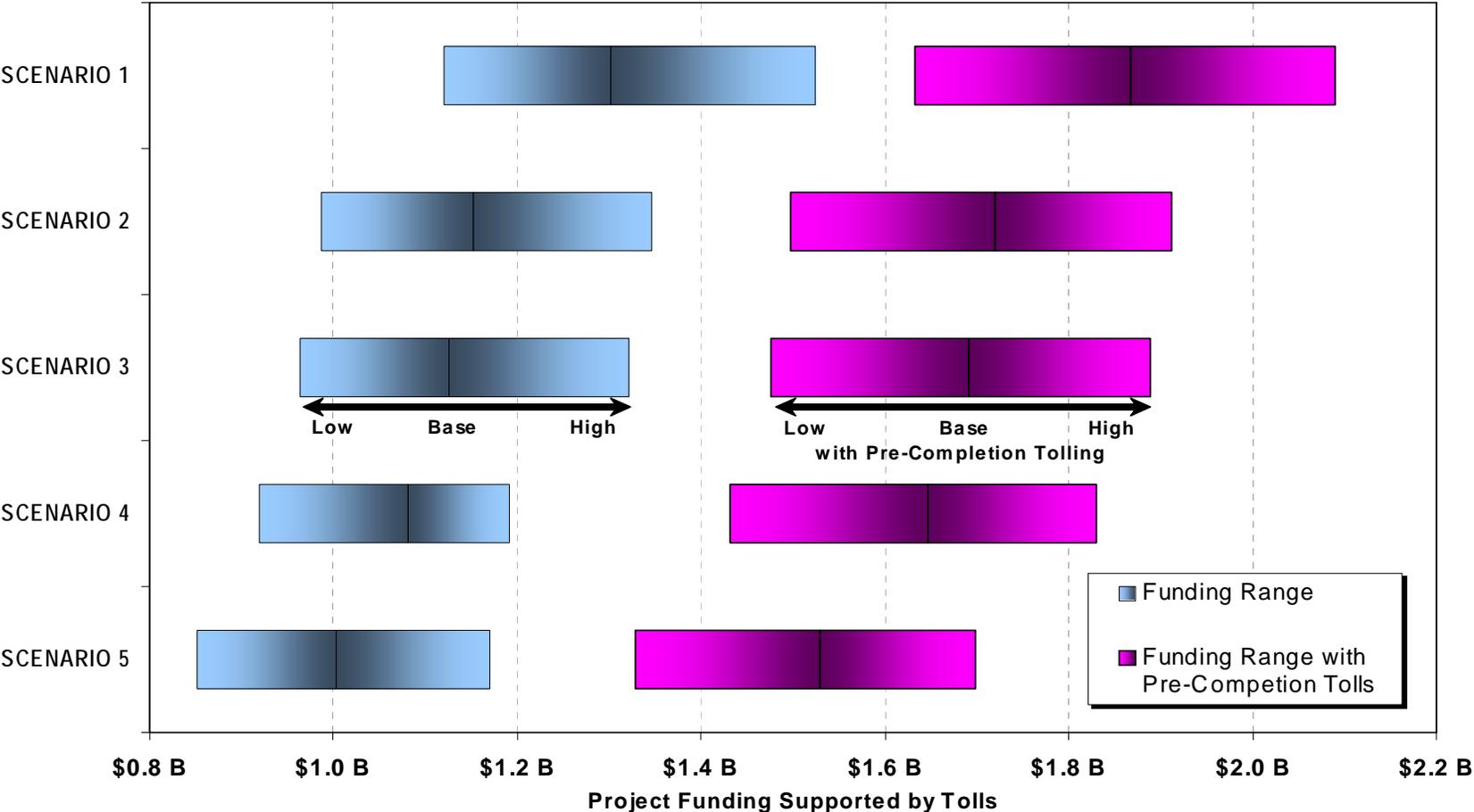
<i>Assumption</i>	<i>GO/MVFT (State-Backed) Bonds</i>	<i>Revenue Bonds</i>
Term	Long-Term (30-year)	Long-Term (40-year)
Minimum Debt Service Coverage Ratio*	1.25x: Annual net revenue is at least 125% the annual debt service payments **	1.5x: Annual net revenue is at least 150% of annual debt service payments
Interest Rates	5.90% Current Interest 6.40% Deferred Interest	6.00% Current Interest 6.50% Deferred Interest
Issuance Costs	0.2% of Par Amount	0.4% of Par Amount ***
Bond Insurance	0.15% of Debt Service	1.00% of Debt Service
Underwriter Discount Current Interest Bonds	0.50% of Par Amount	0.70% of Par Amount
Underwriter Discount - Deferred Interest Bonds	1.00% of Par Amount	1.20% of Par Amount
Minimum Fund Balance	None	None
Reserves	None	Debt Service Reserve Fund (Surety)

\* The Debt Service Coverage Ratio is the factor of net revenue available for repaying debt divided by the debt service principal and interest payments. The excess revenue provided by debt service coverage can be made available for other purposes, such as renovation and rehabilitation expenses, subordinated debt and/or other project or non-project uses.

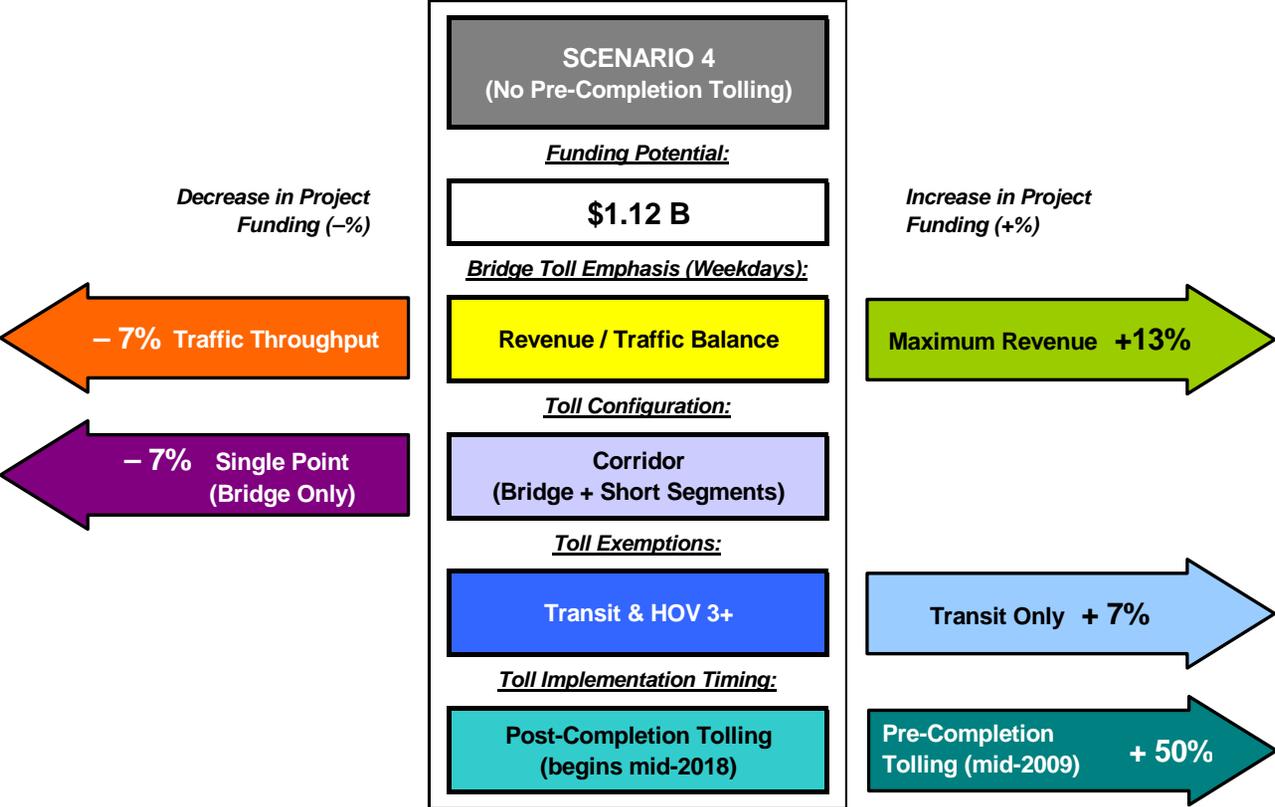
\*\* Assumed, but may not be necessary for debt backed by the State of Washington.

\*\*\* Includes the cost of a debt service reserve account surety policy.

# Toll Funding Ranges by Scenario with and without Pre-Completion Tolls



# Toll Policy Choices Impact Overall Project Funding Provided by Tolls



“Scenario 4” assumes a balance between revenue and traffic flow, tolling the entire SR 520 corridor, and exemptions for transit and HOV 3+

# Types of Toll Diversion

- Route diversion – a change of route to avoid the toll
- Mode diversion – a shift to HOV or transit to lower or avoid the toll
- Change in time of travel – a shift in travel to a lower cost time of day
- Change of trip destination – a shift in travel to a new destination that avoids the toll
- Change in trip frequency – a reduction in the frequency of a recurring trip, including trip elimination

# Toll Diversion: P.M. Peak Period Estimates\*



January 2008

\*Estimates Compare to a 2030 Toll-Free Build Facility

# Toll Diversion: Daily Estimates\*



# Next Steps and Further Questions

- Should there be early tolling of SR 520?
- Should I-90 be tolled?
- What is the appropriate tradeoff between revenues and traffic?
- Should all SR 520 toll revenues go towards the SR 520 bridge construction, or should a portion of the revenues be used for other purposes?

# Questions?

For more information please visit the project website at

<http://www.wsdot.wa.gov/projects/SR520Bridge/>

or

Contact Project Director Ron Paananen at (206) 770-3500

