

SR 99 Tunnel Project Advisory Committee on Tolling and Traffic Management Update

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March 19, 2013

Overview

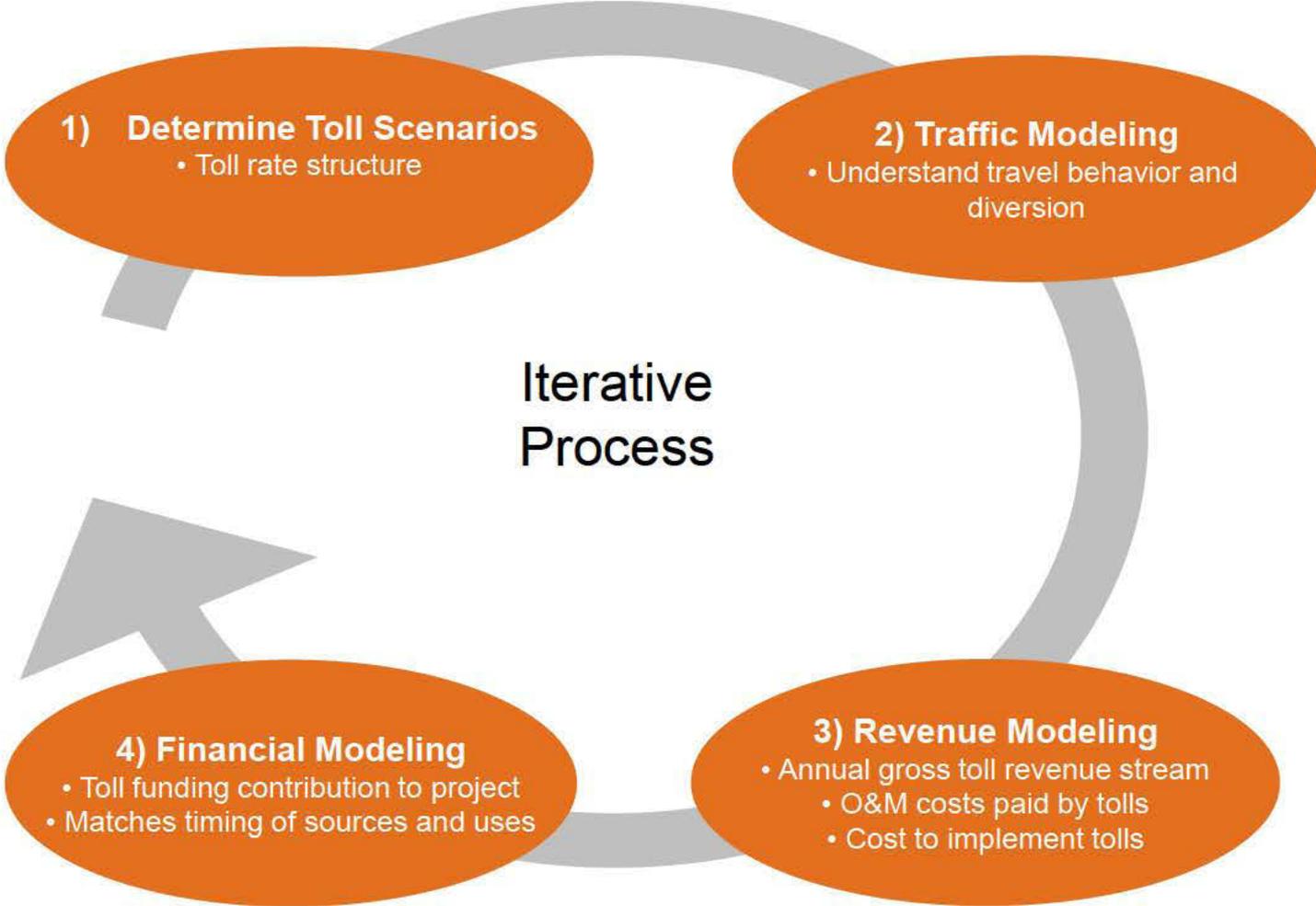
Today's topics:

- Advisory Committee on Tolling and Traffic Management round 2 scenarios.
- Traffic and revenue modeling results.
- Next steps.

Advisory Committee on Tolling and Traffic Management

- The committee's scope was established via:
 - Federal Highway Administration-issued Record of Decision.
 - Seattle Department of Transportation and WSDOT Memorandum of Agreement.
 - City of Seattle's resolution 31323.
- The committee will make advisory recommendations on strategies for:
 - Minimizing traffic diversion from the tunnel due to tolling.
 - Tolling the SR 99 tunnel.
 - Mitigating traffic diversion effects on city streets and I-5.

Four-Step Planning Process



ACTT Round 1 Scenarios Analyzed

- No toll and high toll (\$1 - \$4) were studied as benchmarks.
- Scenario 1 (\$1 - \$3.25): Objective is to achieve funding target.
- Scenario 2 (\$0.75 - \$2.25): Objective is to reduce diversion.
- Scenario 3 (\$0.75 - \$2.50): Objective is to balance funding and diversion.

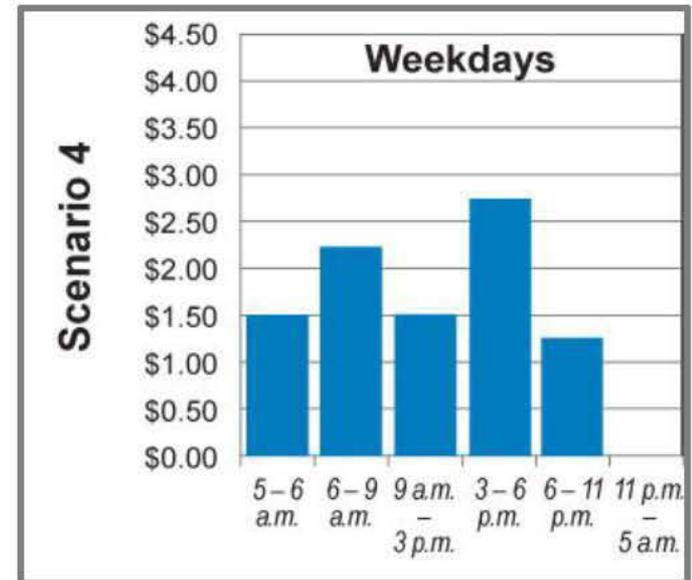
Round 2 Scenarios Being Analyzed

- Scenario 4 (\$1.25 - \$2.75): Objective is to achieve funding target.
- Scenario 5a (\$0.50 - \$0.75): Objective is to reduce diversion. Includes toll rate escalation.
- Scenario 5b (\$1.75 peak only): Objective is to reduce diversion. Includes toll rate escalation.
- Scenario 6 (\$0.45 - \$3): Objective is to balance funding and diversion.

Scenario 4

Assumptions:

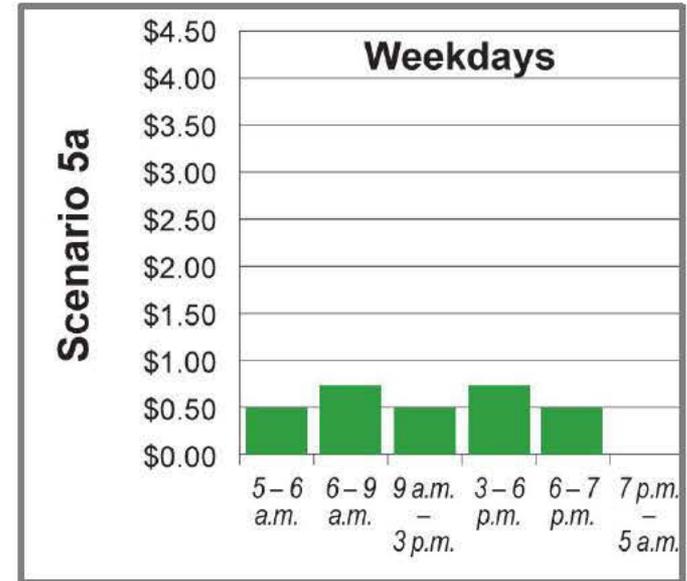
- Refined scenario 1.
- Toll rate same for northbound and southbound travel.
- No tolls overnight.
- Includes weekend tolls.
- Freight toll is 1.5 times the toll rate for all trucks, regardless of size or axle count.



Scenario 5a

Assumptions:

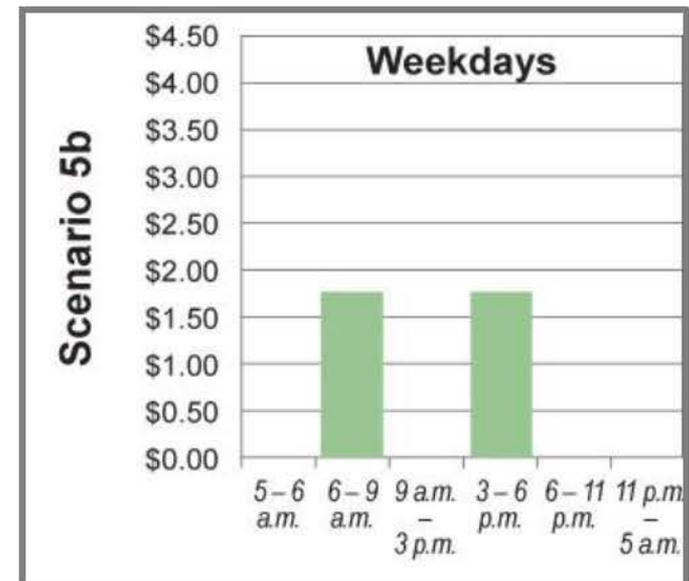
- Refined scenario 2.
- Low tolls throughout the day.
- No toll-backed bonds would be sold.
- Reduced facility insurance.
- Low starting toll that increases with inflation on an annual basis.
- Freight tolls based on number of axles.



Scenario 5b

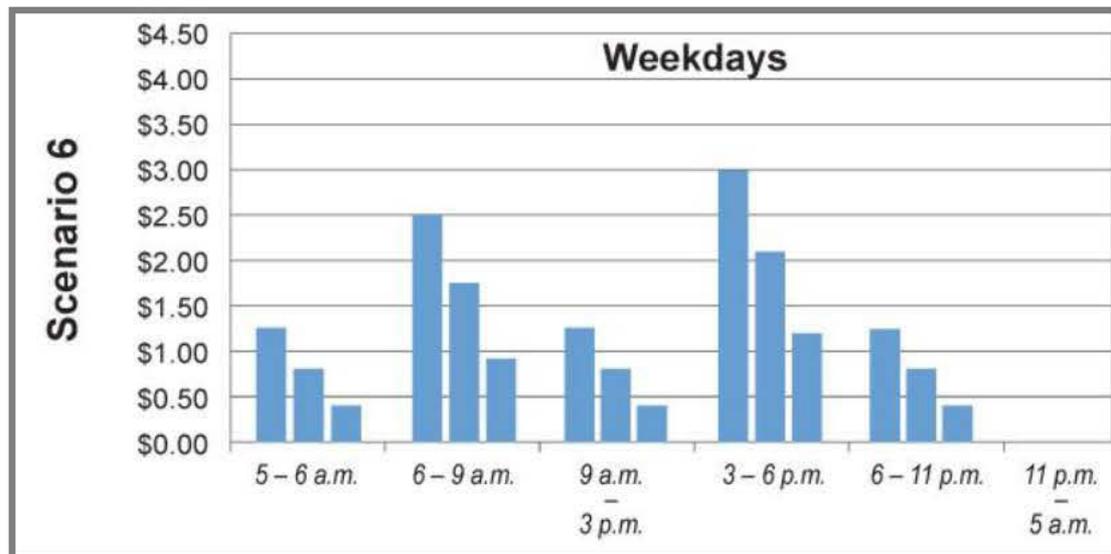
Assumptions:

- Refined scenario 2.
- Higher tolls for peak periods with no mid-day tolls.
- No toll-backed bonds would be sold.
- Reduced facility insurance.
- Low starting toll that increases with inflation on an annual basis.
- Freight tolls based on number of axles.



Scenario 6

- Assumptions:
 - Shorter trips pay a reduced toll compared to longer trips.
 - No tolls overnight.
 - Includes weekend tolls.
 - Freight toll is 1.5 times the toll rate for all trucks, regardless of size or axle count.



SR 99 tunnel



Round 2 Revenue Results

Revenue Analysis

- Revenue models use traffic model projections to calculate how much toll revenue can be raised over a given period of time.
 - Toll rate X Transactions X Period of time = Tolls collected
- Results are estimates for approximately 30 years.
- Toll revenues could cover various costs including:
 - Toll collection costs.
 - Facility ownership: operations and maintenance, repair and replacement, insurance.
 - Financing costs.

Preliminary Revenue Results for Scenarios 1 - 3

	Scenario 1	Scenario 2	Scenario 3
Revenue Collected from Tolls*	\$1,220	\$770	\$980
Toll Collection Costs**	(\$300)	(\$260)	(\$260)
Revenues after collection costs	\$920	\$510	\$720

Numbers represent estimates for approximately 30 years. Costs in millions of dollars.

**After adjustments for fees, credits and uncollectible accounts. Scenario 3 assumed a 20 percent one-time adjustment for all toll rates in July 2030.*

***Includes credit card fees and customer service center, state operations and roadway toll system costs. Could be lower with additional operational toll facilities.*

Preliminary Revenue Results for Scenarios 4 - 6

	Scenario 4	Scenario 6	Scenario 5a	Scenario 5b
Revenue Collected from Tolls*	\$1,270	\$1,260	\$600	\$610
Toll Collection Costs**	(\$320)	(\$360)	(\$280)	(\$160)
Revenues after collection costs	\$950	\$900	\$320	\$450

Numbers represent estimates for approximately 30 years. Costs in millions of dollars.

**After adjustments for fees, credits and uncollectible accounts. Scenarios 5a and 5b assume 1.3 percent toll rate escalation.*

***Includes credit card fees and customer service center, state operations and roadway toll system costs. Could be lower with additional operational toll facilities.*

Potential Costs

Capital Contribution*	\$200
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*Costs in millions of dollars.
Additional costs for financing to be determined.

SR 99 Tunnel Expenses	
Operations and Maintenance	\$160
Facility Insurance Costs**	\$55-85
Repair and Replacement	\$190

*Numbers represent estimates for approximately 30 years. Costs in millions of dollars.
**Variation due to coverage amounts and deductible levels.*

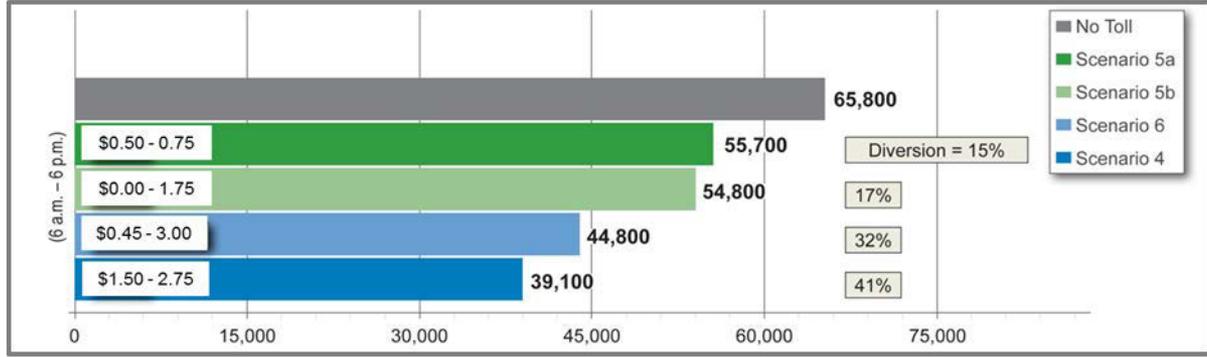
Mitigation	TBD
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Round 2

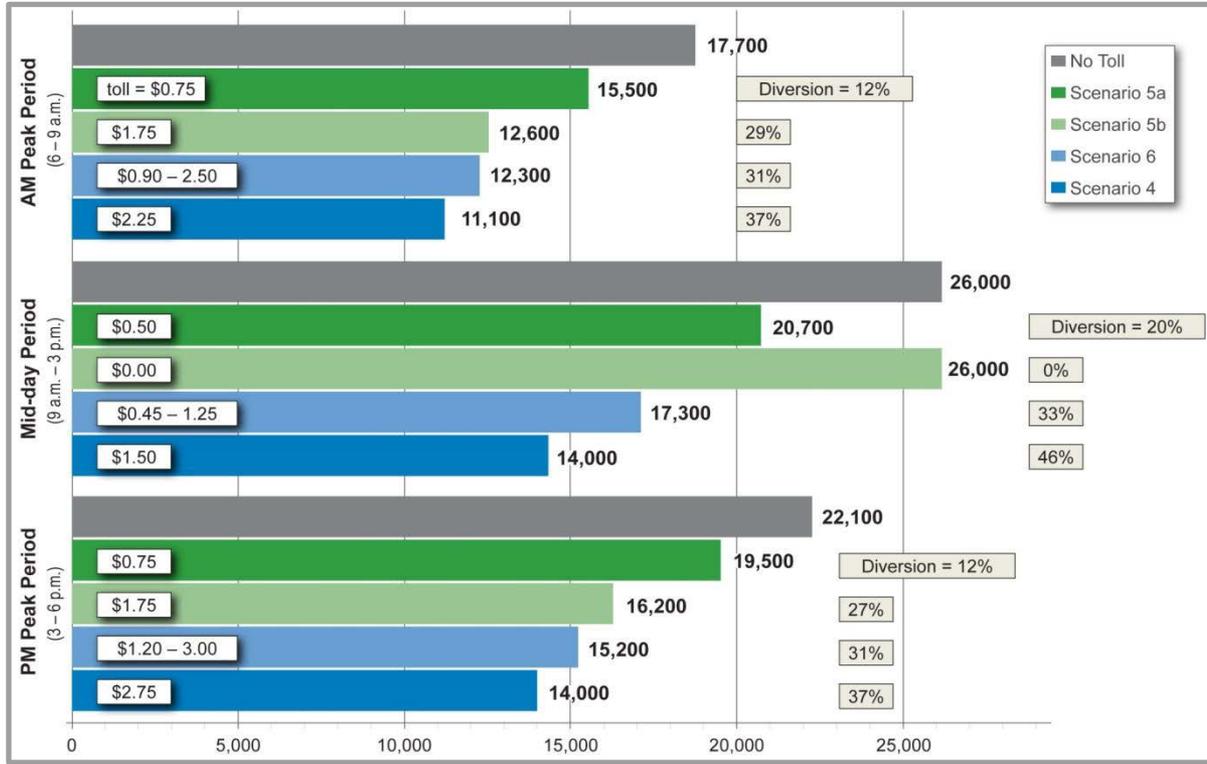
Traffic Results

2017 Tunnel Volumes

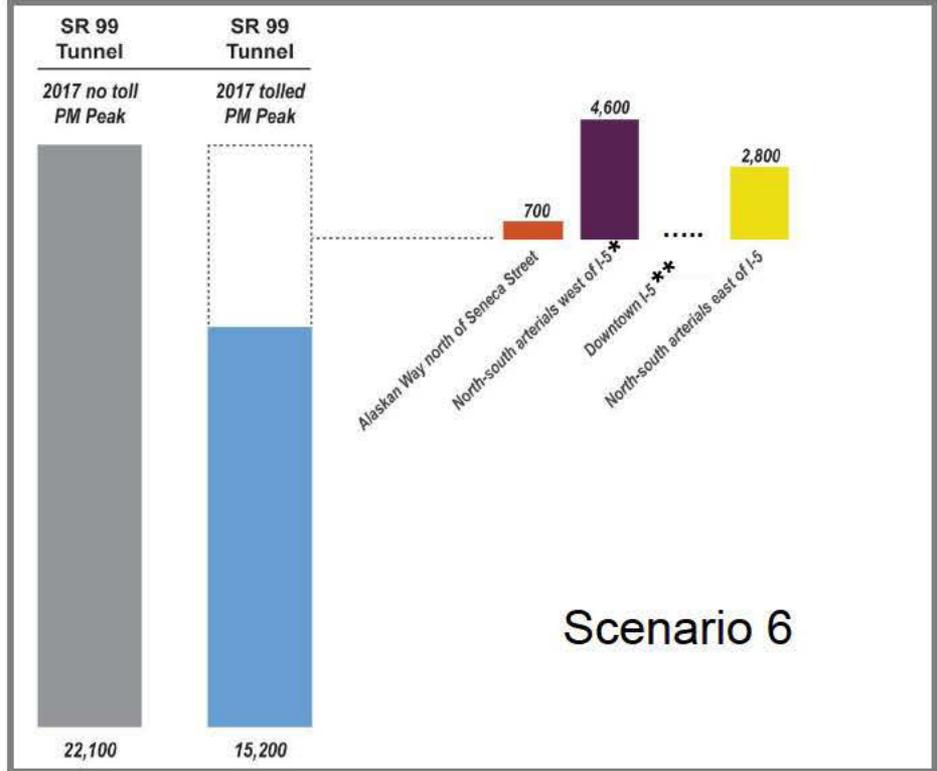
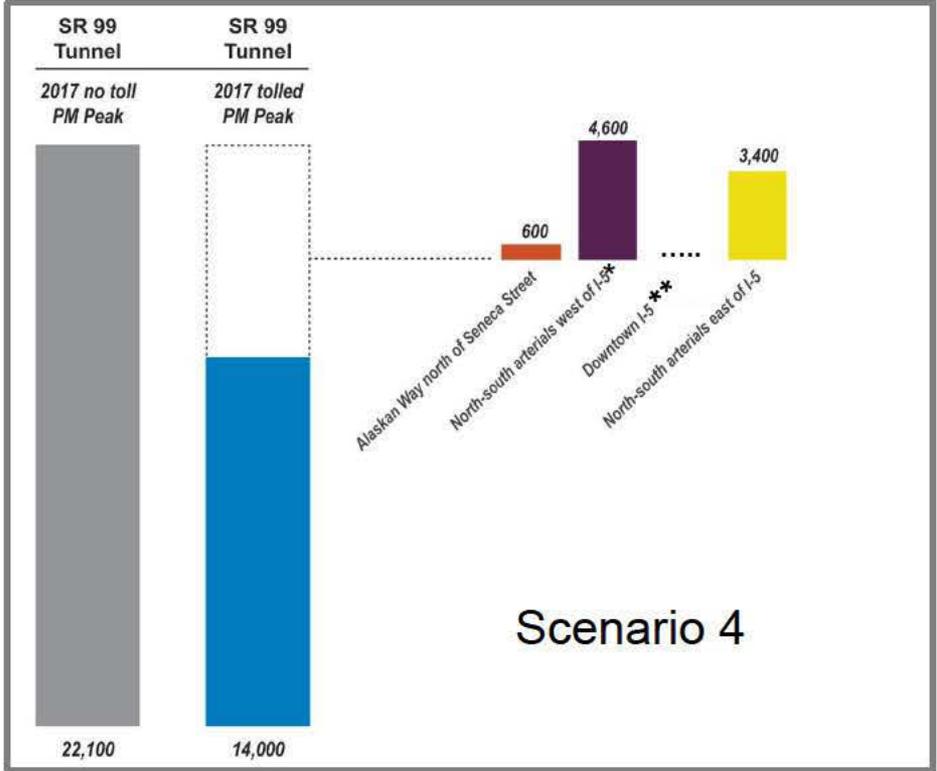
Daytime



By time of day



2017 Traffic Volumes by Location Scenario 4 and 6 P.M. Peak Period 3 – 6 p.m.

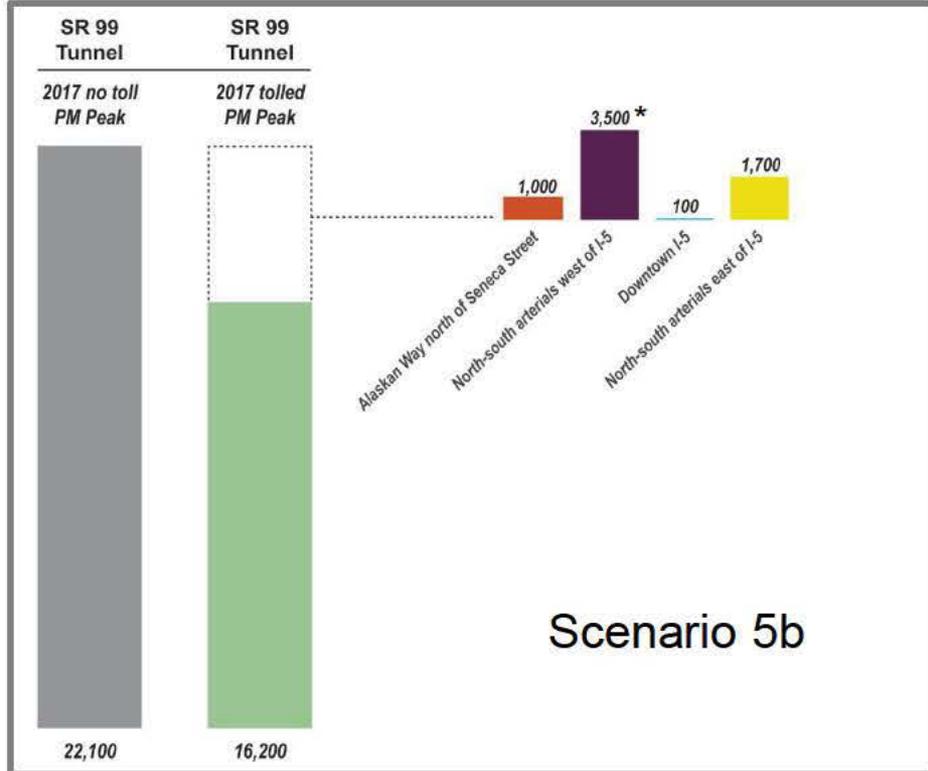
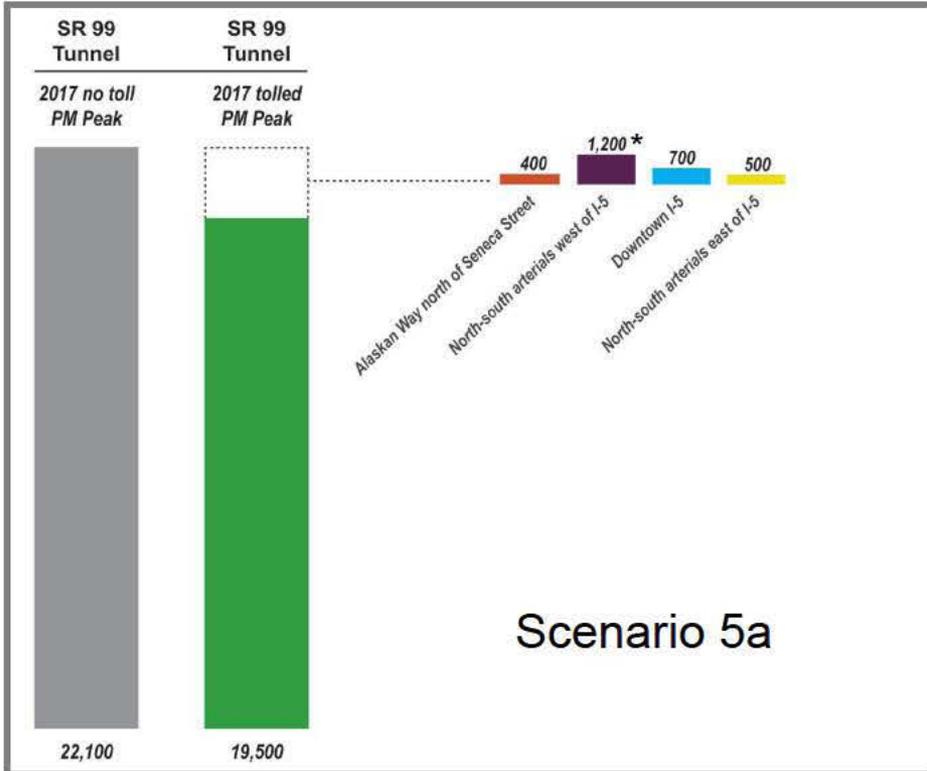


*Alaskan Way volumes not included in arterials west of I-5. All volumes taken at Seneca Street.

**Tolls on the SR 99 tunnel change how drivers access I-5. More drivers access the freeway north and south of Seneca Street.

2017 Traffic Volumes by Location Scenario 5a and 5b

P.M. Peak Period 3 – 6 p.m.

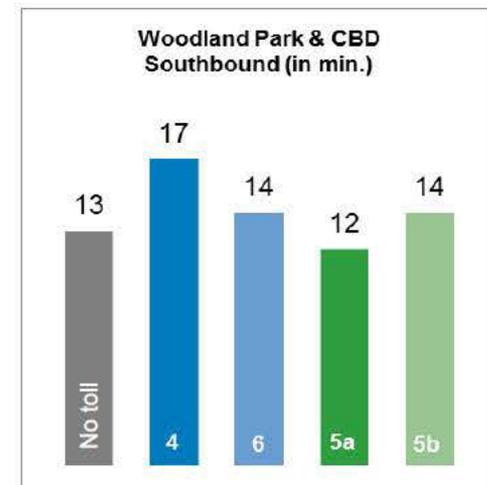
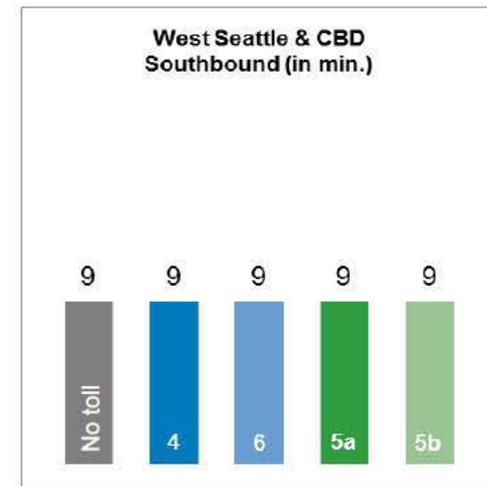
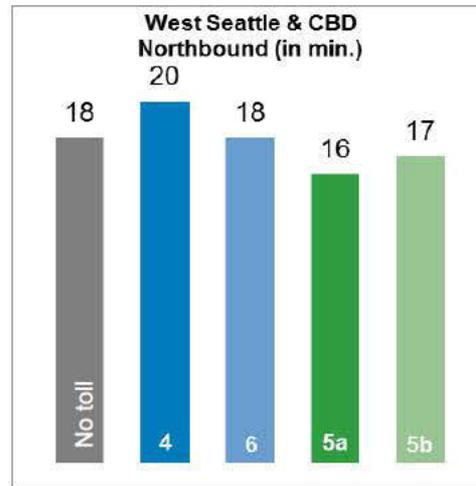


*Alaskan Way volumes not included in arterials west of I-5. All volumes taken at Seneca Street.

2017 Car and Freight Travel Times

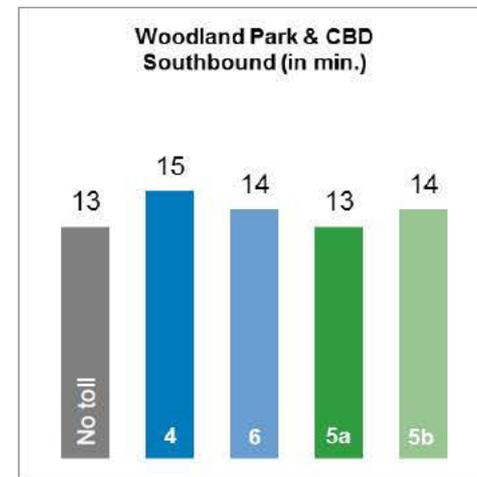
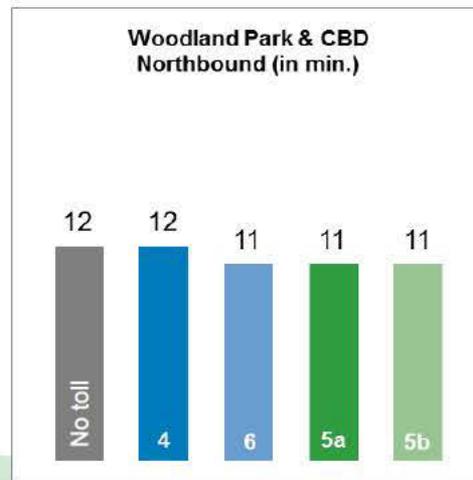
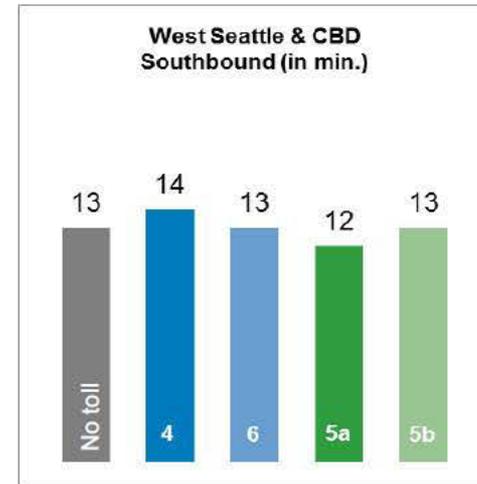
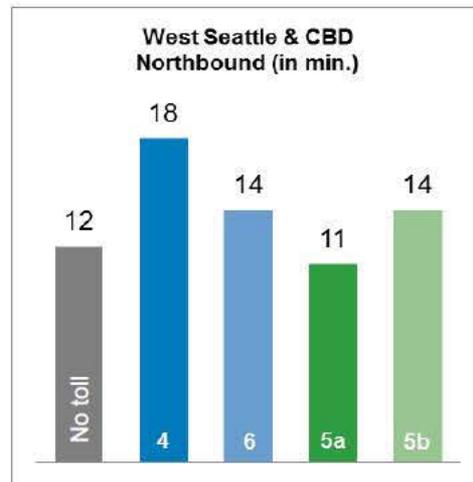
A.M. Peak Hour 7:30 – 8:30 a.m.

- A.M. peak hour travel times for autos and freight vary minimally across the routes reported.



2017 Car and Freight Travel Times P.M. Peak Hour 5 – 6 p.m.

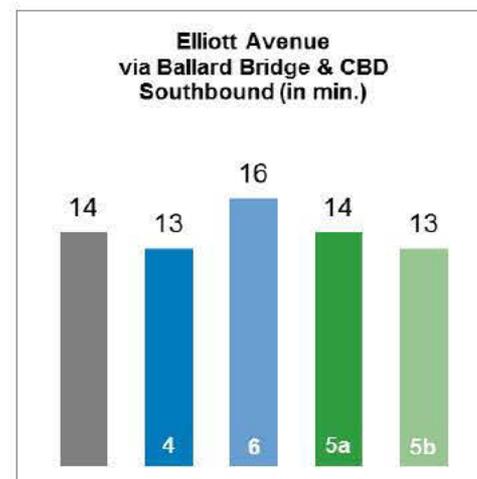
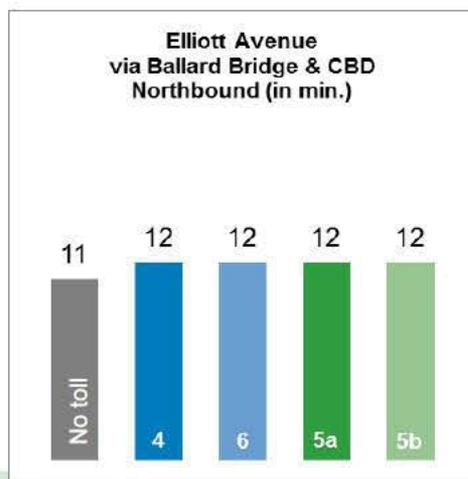
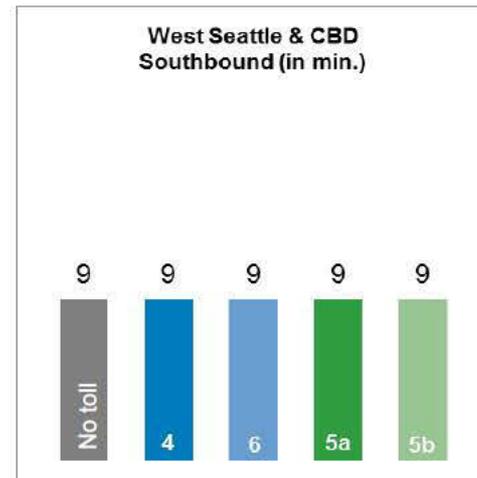
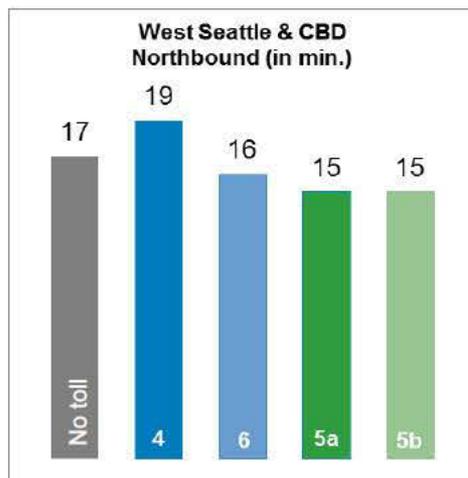
- P.M. peak hour travel times for autos and freight vary minimally across the routes reported.



2017 Transit Travel Times

A.M. Peak Hour 7:30 – 8:30 a.m.

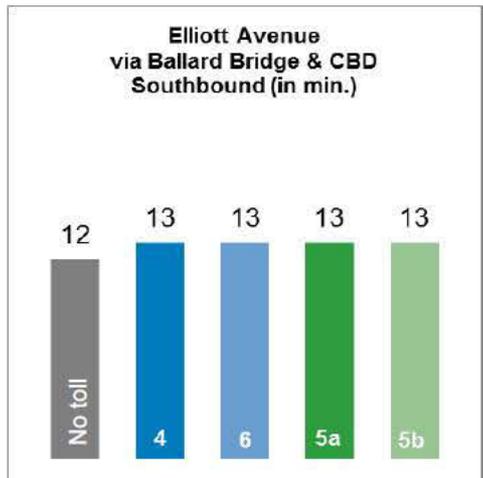
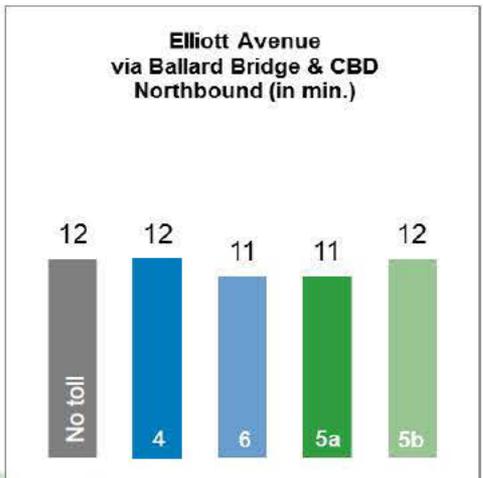
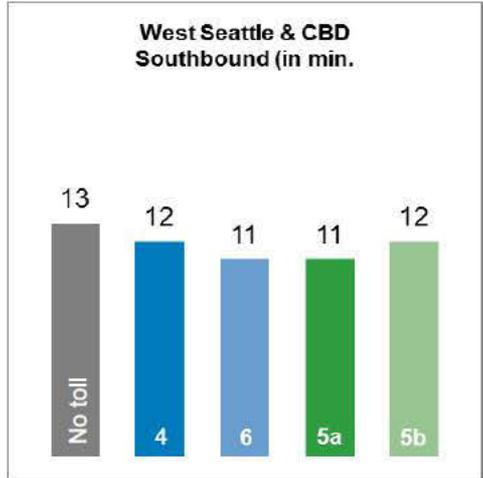
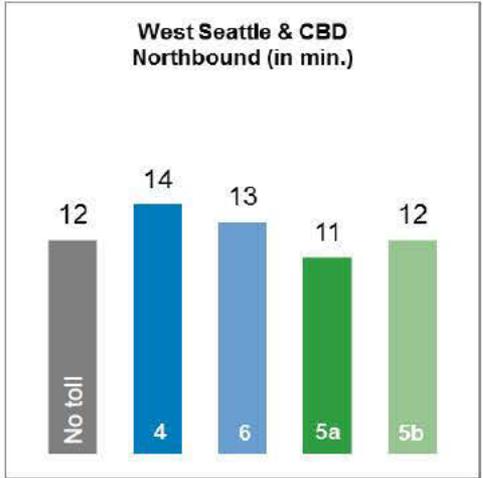
- A.M. peak hour travel times for transit vary minimally due to priority treatments.



2017 Transit Travel Times

P.M. Peak Hour 5 – 6 p.m.

- P.M. peak hour travel times for transit vary minimally due to priority treatments.



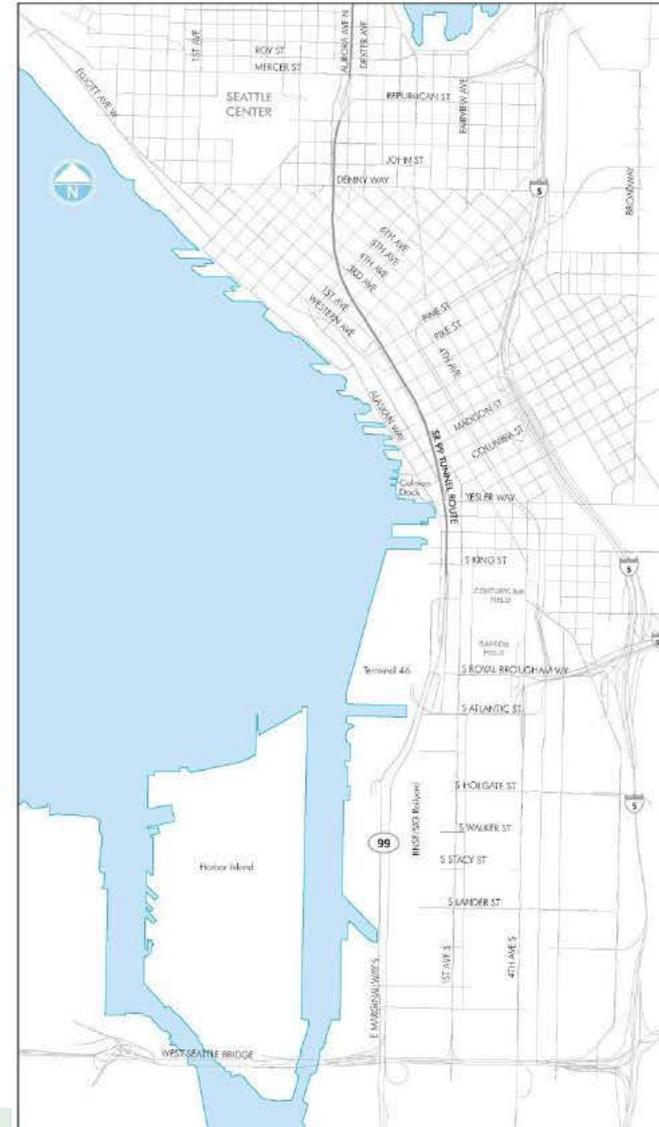
Freight Volumes Based on Different Toll Rates

- Medium trucks follow similar diversion patterns to general purpose traffic.
- Heavy trucks have two alternate routes to SR 99 - Alaskan Way and I-5.
 - High tunnel tolls for general purpose vehicles make these alternate routes more congested.
 - Typically heavy trucks have a higher value of time.
 - Heavy trucks seem to prefer the tunnel when there is increased congestion on their alternate routes.
- Charging a flat truck toll multiplier, regardless of size or axle count, draws more heavy trucks into the tunnel.

Diversion Areas for ACTT Discussion

Metrics:

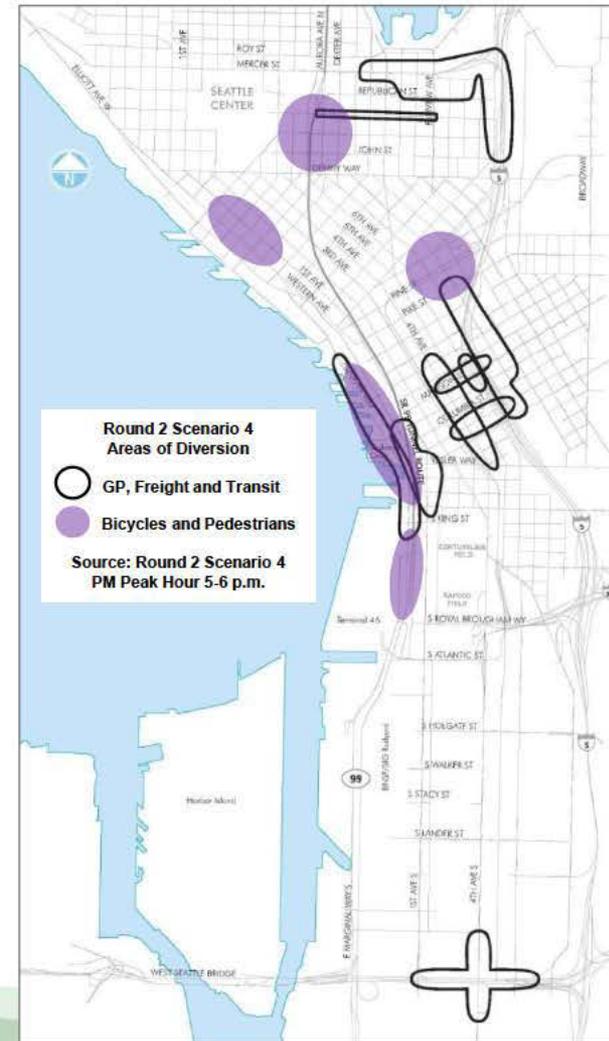
- Travel times.
- Speeds and traffic operations.
- Change in volume on downtown streets and I-5.
- Priority routes for transit, freight, bicycles and pedestrians.



Diversions Areas for ACTT Discussion

Scenario 4 – P.M. Peak Hour

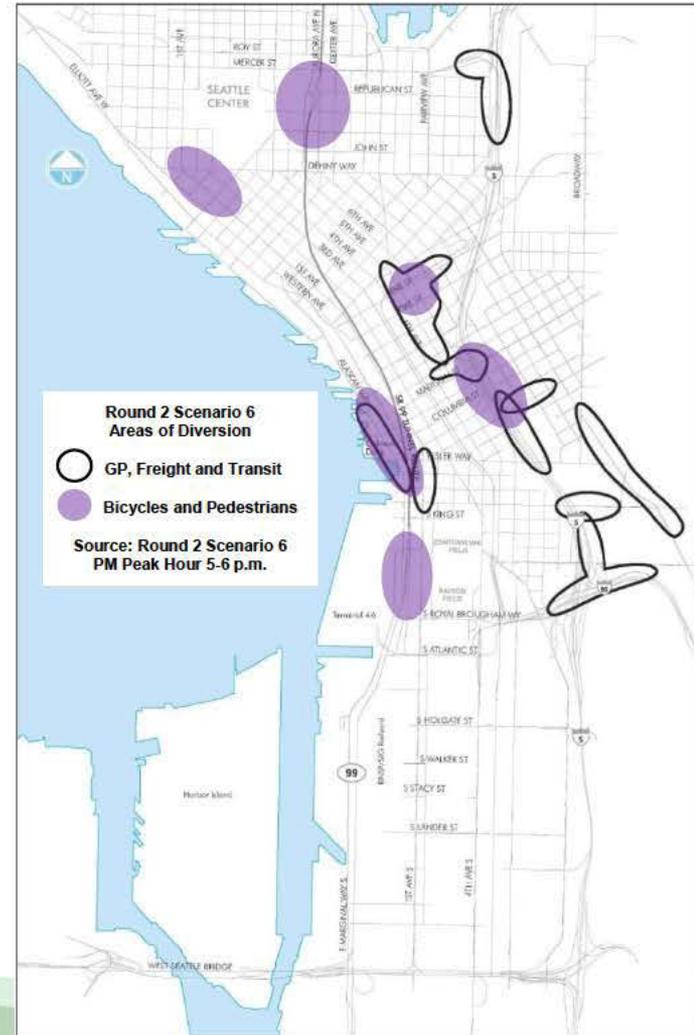
- Parts of South Lake Union and the Mercer Corridor
- Belltown area
- Parts of Alaskan Way and Pioneer Square
- Parts of the downtown core
- South Spokane Street area



Diversions Areas for Committee Discussion

Scenario 6 – P.M. Peak Hour

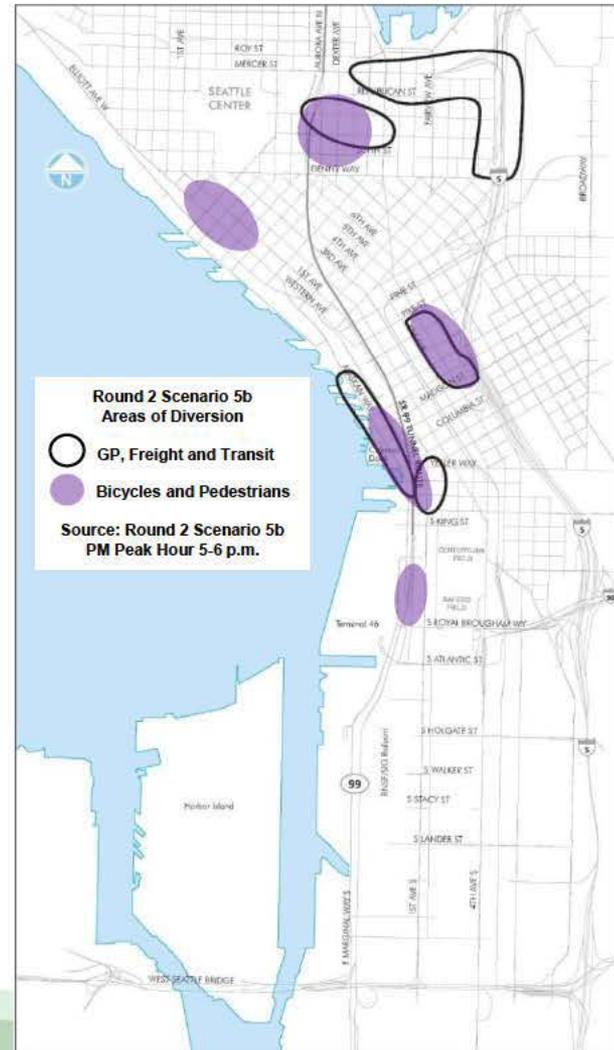
- Parts of South Lake Union and the Mercer Corridor
- Belltown area
- Parts of Alaskan Way and Pioneer Square
- Parts of the downtown core
- Areas east of I-5 and near the I-90 interchange



Diversion Areas for Committee Discussion

Scenario 5b – P.M. Peak Hour

- Parts of South Lake Union and the Mercer Corridor
- Belltown area
- Parts of the downtown core
- Parts of Alaskan Way and Pioneer Square



Coordination with Transportation Commission

- Coordinate with Commission staff prior to each ACTT committee meeting.
- Commission staff attend ACTT committee meetings.
- Commission coordination at the following meetings:
 - Oct. 19, 2011
 - Feb. 21, 2012
 - May 23, 2012
 - July 17, 2012
 - Oct. 17, 2012
 - Dec. 11, 2012
 - March 19, 2013

Looking Ahead

- ACTT committee meetings:
 - April 24
 - May 15
 - June 12
- ACTT meeting materials and December 2012 progress report available on website:
www.wsdot.wa.gov/projects/viaduct/Library/Meetings/ACTTM
- Recommendations in mid-2013.

Questions?

For more information on the
Alaskan Way Viaduct Replacement
Program,
please contact:

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Program Administrator
206-805-2843 or
LAIRD@wsdot.wa.gov

www.AlaskanWayViaduct.org