

Alaskan Way Viaduct **REPLACEMENT** PROGRAM



Advisory Committee on Tolling and Traffic Meeting
March 13, 2013

Overview

Previous discussions:

- 2017 transportation system.
- Progress report.

Today's topics:

- Round 2 toll scenario traffic modeling and revenue analysis results.
- Small group discussion.

ACTT Purpose

- The committee will make advisory recommendations on strategies for:
 - Tolling the SR 99 tunnel.
 - Minimizing traffic diversion from the tunnel due to tolling.
 - Mitigating traffic diversion effects on city streets and I-5.

Meeting Objectives

- Understand round 2 traffic and revenue model results.
- Provide feedback on the second round of scenarios.
- Discuss the path to making recommendations.

Future ACTT Meetings

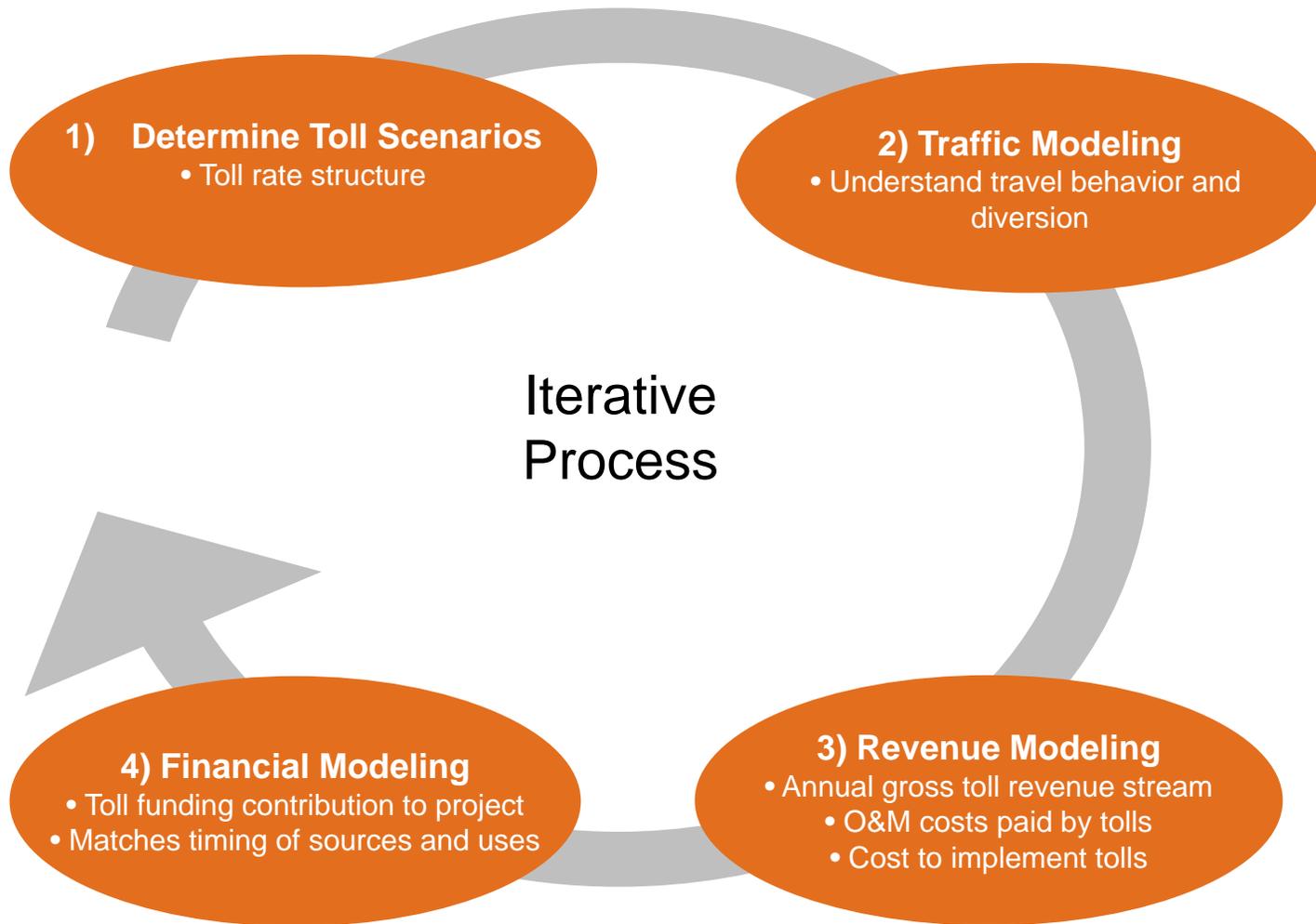
Proposed 2013 meeting dates (Wednesdays)	Meeting topic(s)
April 24	Diversion and mitigation
May 15	Recommendations discussion
June 12	Recommendations discussion
Future meetings	TBD

Seattle City Council Resolution 31323: The ACTT is expected to continue working to refine its analysis and recommendations through December 2015 (when the tunnel is anticipated to open to traffic and when toll implementation begins). The ACTT will continue its work for up to one year after tolling begins to review the effects of the implemented tolling and diversion minimization strategies and to make further recommendations.

Round 2

Toll Scenarios Overview

Four-Step Planning Process



Roles and Responsibilities for Toll Projects

<p>State Legislature</p>	<ul style="list-style-type: none"> • Authorize tolling • Authorize sale of bonds • Appropriate toll revenue • Maintain Toll Authority's powers 	
<p>WSDOT (Project Owner)</p>	<ul style="list-style-type: none"> • Prepare project financial plan • Project development & delivery • Oversee prep of traffic & revenue projections 	<ul style="list-style-type: none"> • Develop & test proposed toll rate schedule • Toll collection & customer service • Operate, maintain & insure the facility
<p>Toll Authority (WA Trans. Commission)</p>	<ul style="list-style-type: none"> • Set and maintain toll, fees, policies and exemptions • Review and report on toll collection and operations policies / expenditures 	<ul style="list-style-type: none"> • Ensure adopted tolls are sufficient to meet all obligations
<p>Office of the State Treasurer</p>	<ul style="list-style-type: none"> • Financial planning in developing & testing proposed toll rate schedule • Certify toll sufficiency to meet bond covenants 	<ul style="list-style-type: none"> • Ensure tolls are sufficient to meet obligations • Sell bonds • Administer accounts for debt repayment
<p>State Finance Committee</p>	<ul style="list-style-type: none"> • Adopt Master Bond Resolution • Support sale of bonds • Investor relations/ maintain tax exempt status 	<p>Note: The State Finance Committee is composed of the Governor, the Lieutenant Governor, and the Treasurer.</p>

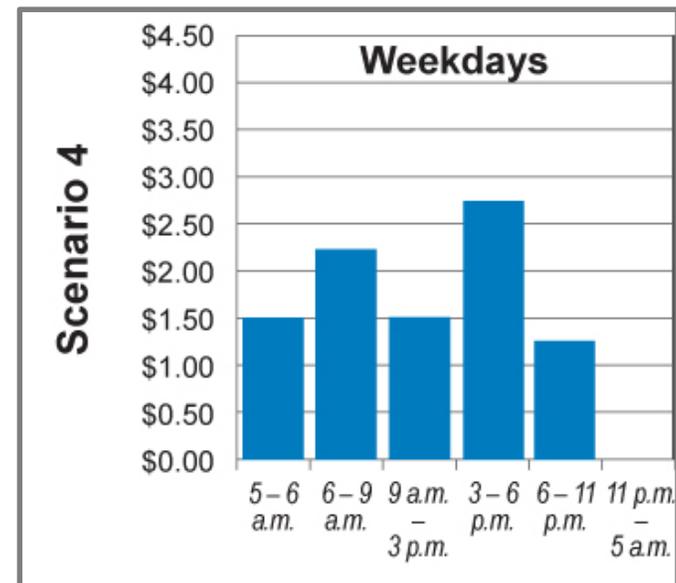
Round Two Scenarios Being Analyzed

- No toll and high toll (\$1 - \$4) were previously studied as benchmarks.
- 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:

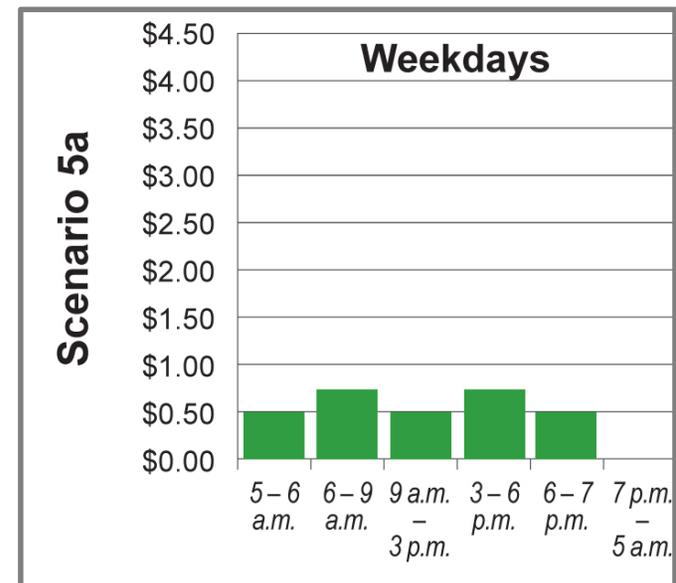
- Refined scenario 1.
- Toll rate same for northbound and southbound travel.
- No tolls overnight.
- Includes weekend tolls.
- Freight toll is 1.5 times the toll rate for all trucks, regardless of size or axle count.



Scenario 5a

Assumptions:

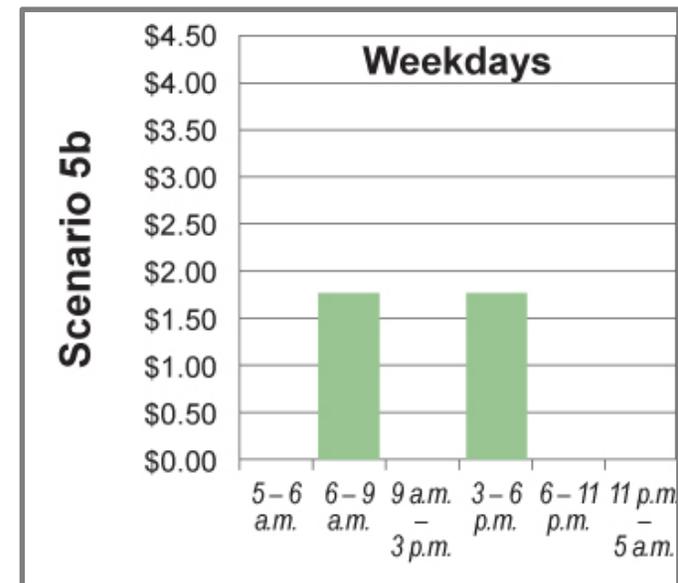
- Refined scenario 2.
- Low tolls throughout the day.
- No toll-backed bonds would be sold.
- Reduced facility insurance.
- Low starting toll that increases with inflation on an annual basis.
- Freight tolls based on number of axles.



Scenario 5b

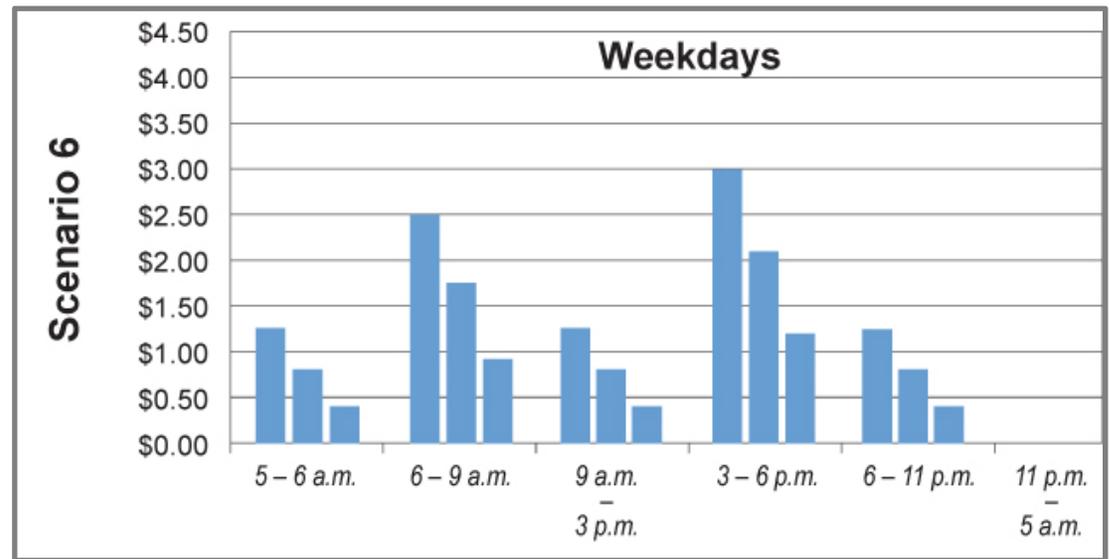
Assumptions:

- 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.

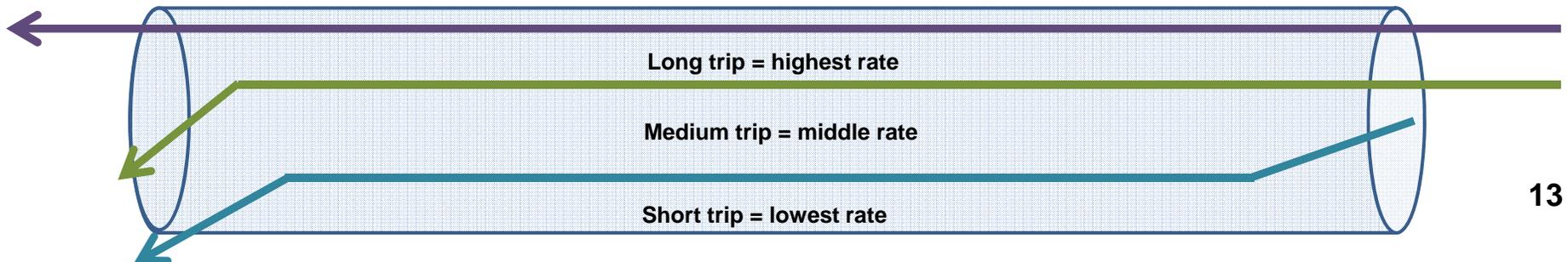


Scenario 6

- 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.

Additional Financial / Toll Scenario Analysis

- What other technical analysis could be done?
 - Office of the State Treasurer's financial capacity analysis.
 - Independent traffic and revenue analysis.
 - Transportation Commission toll rate setting process.

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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Traffic Modeling Results

Traffic Model Overview

- Traffic assignment models are best at highlighting differences between scenarios.
- Traffic modeling includes many important variables like toll rates, route options, the economics of how people value time, and the number of tolled facilities in a given area.
- Dynamic Traffic Assignment model is being used to assess route diversion effects on I-5 and city streets.

Traffic Model Outputs

Today's data discussion points:

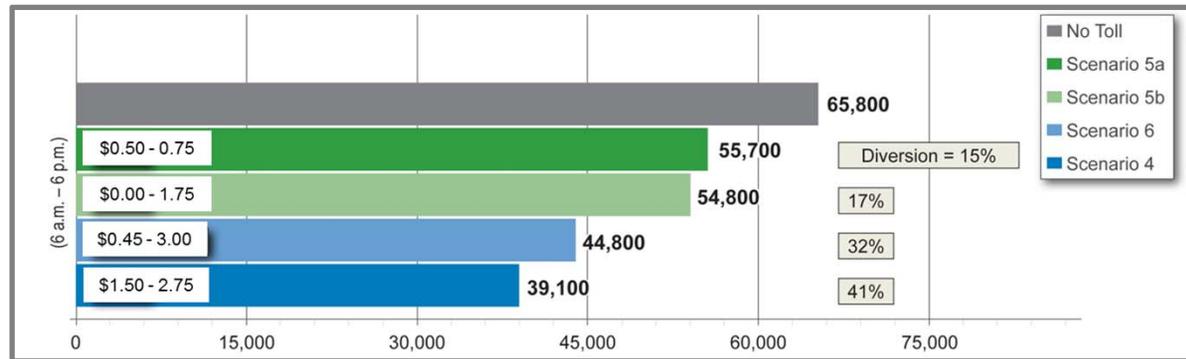
- Traffic volumes and diversion
- Travel times
- Data will be provided for:
 - A.M. peak period: 6 – 9 a.m.
 - Mid-day hour: 1:30 – 2:30 p.m.
 - P.M. peak period: 3 – 6 p.m.

Round 2

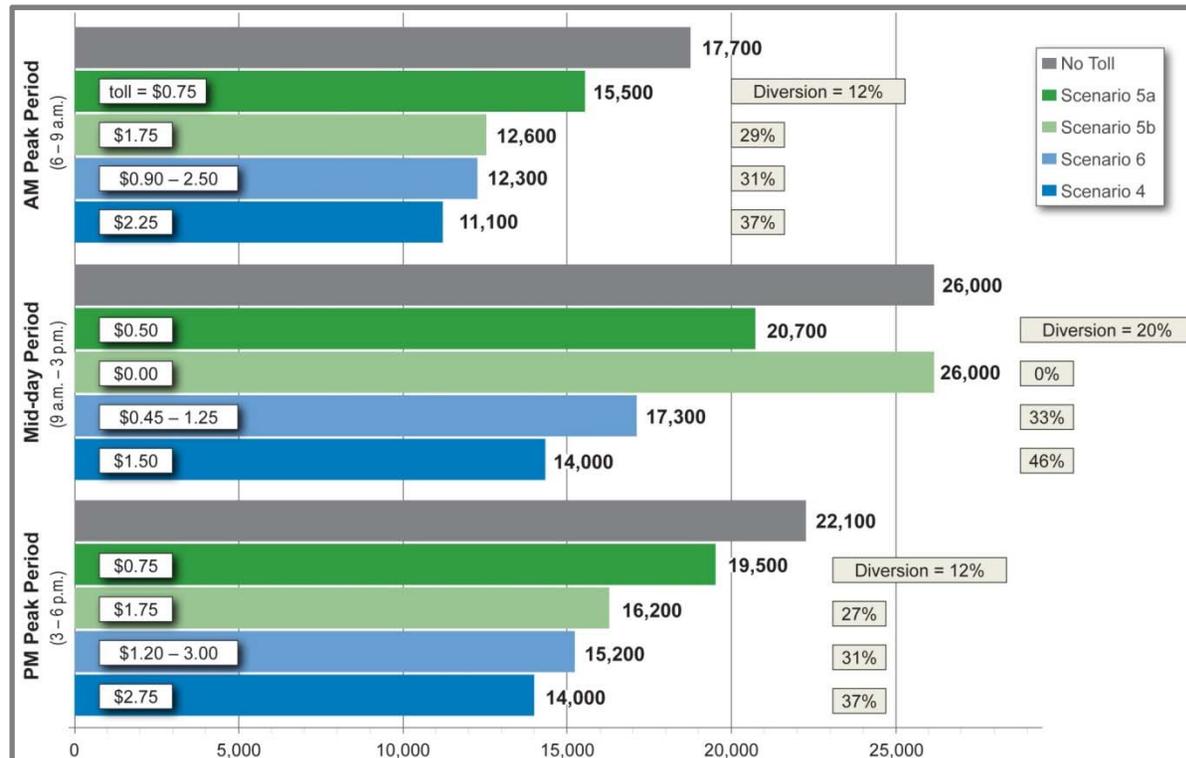
Traffic Volumes and Diversion

2017 Tunnel Volumes

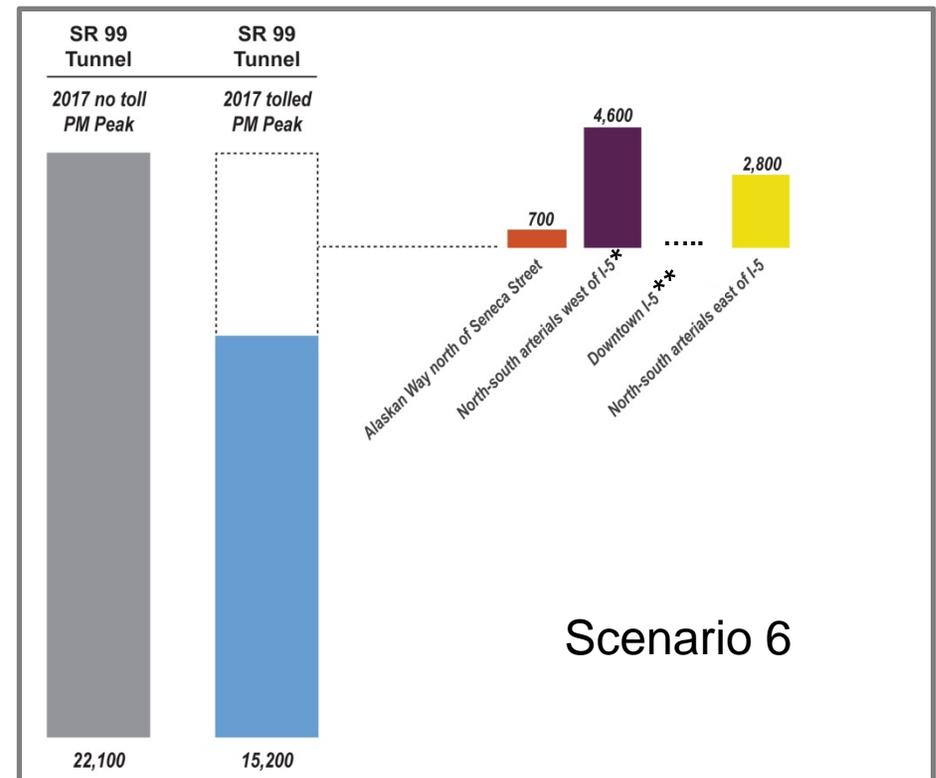
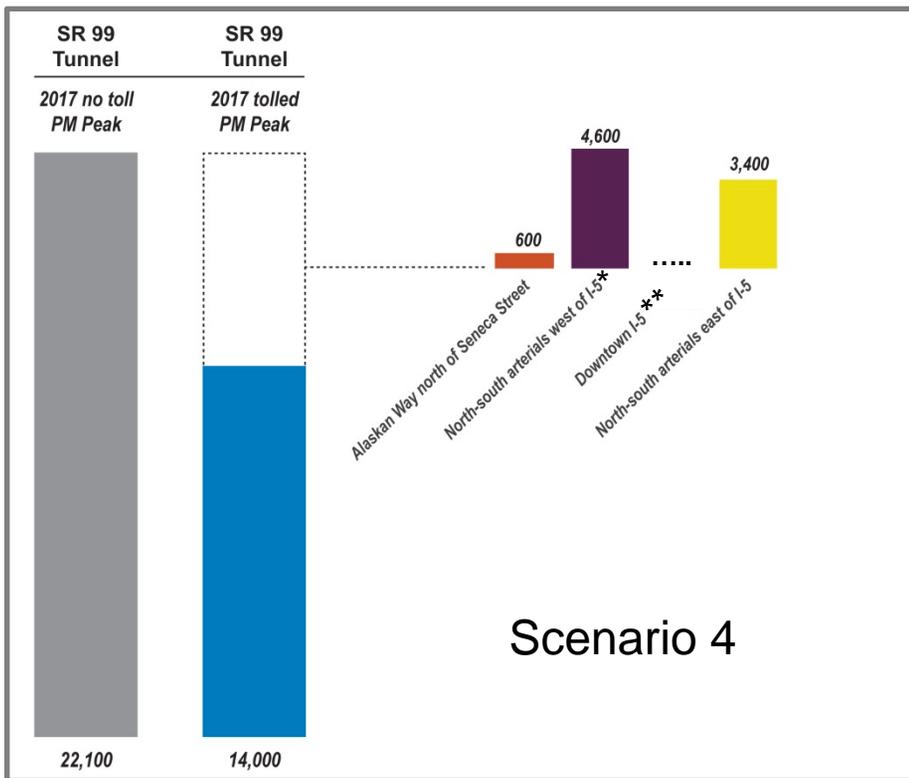
Daytime



By time of day



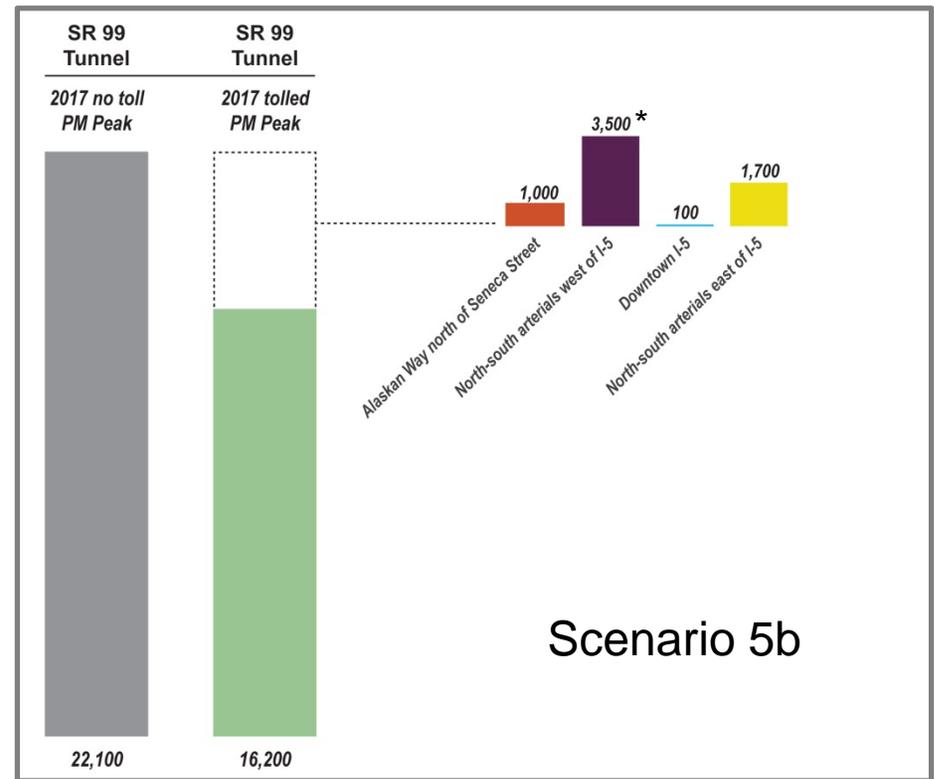
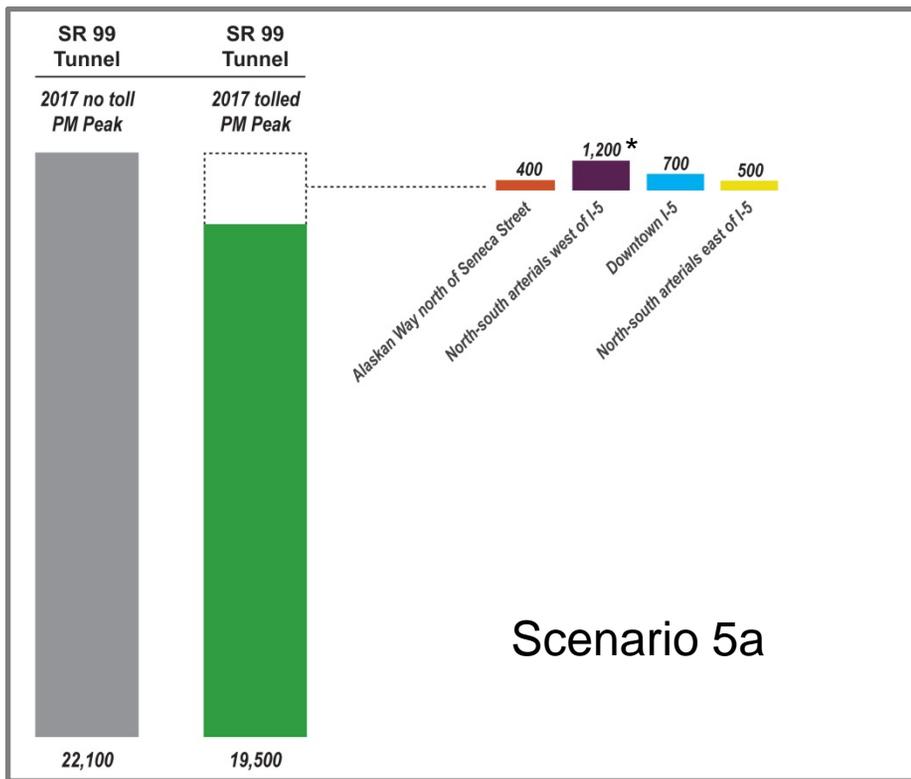
2017 Traffic Volumes by Location Scenario 4 and 6 PM Peak Period 3 – 6 p.m.



*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.

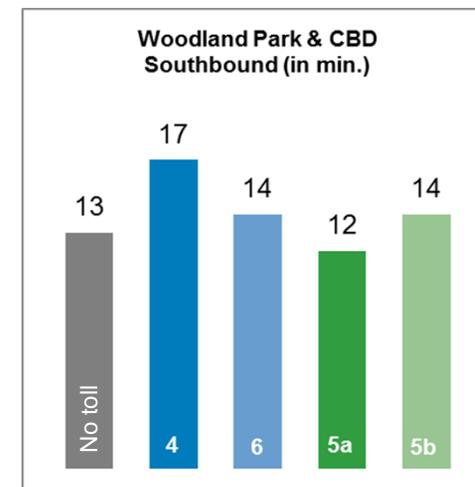
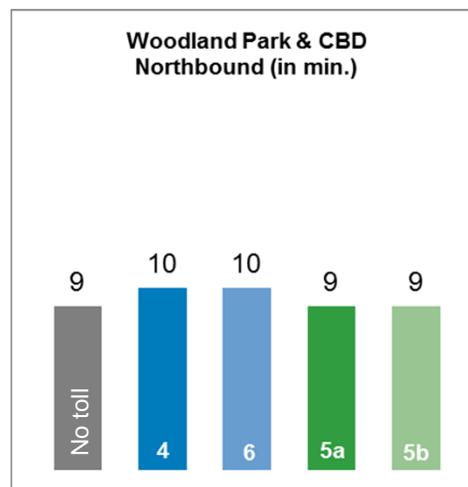
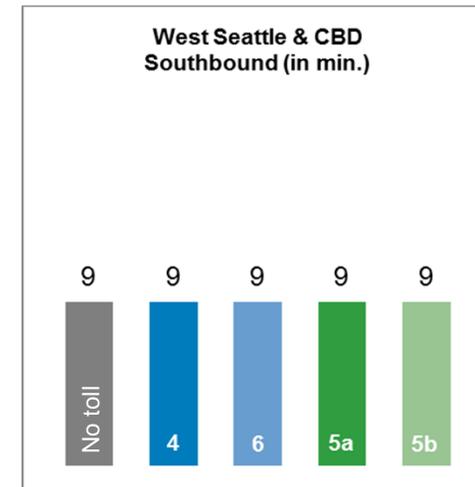
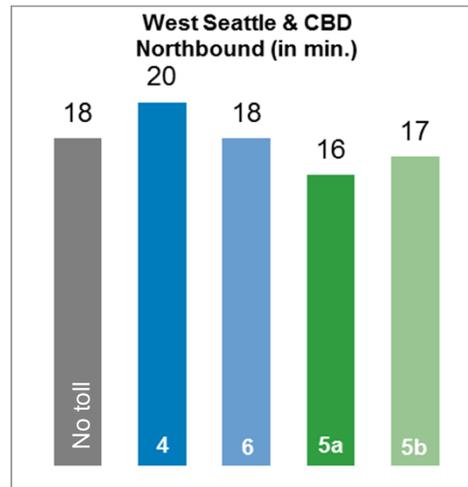
2017 Traffic Volumes by Location Scenario 5a and 5b PM Peak Period 3 – 6 p.m.



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

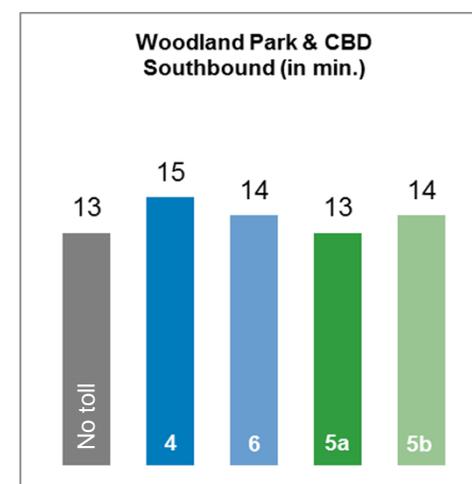
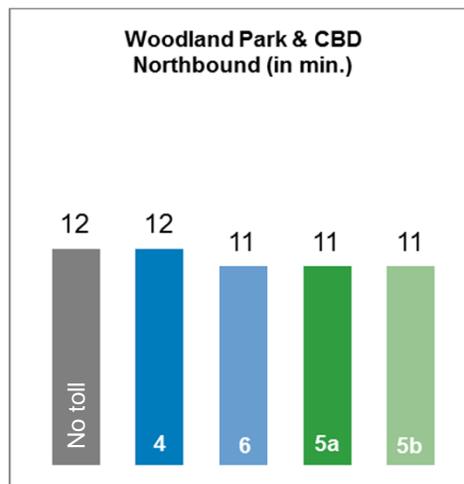
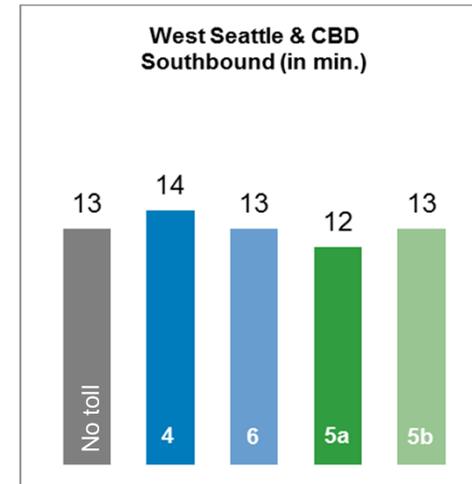
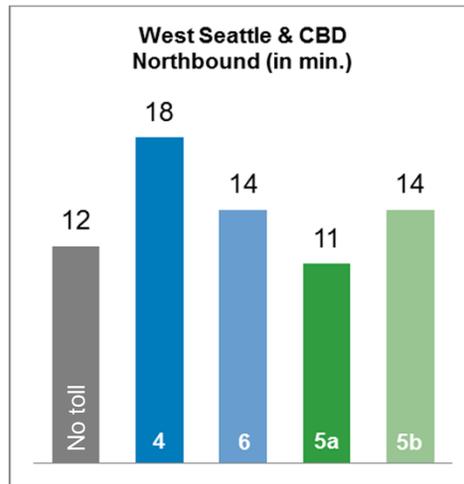
2017 Car and Freight Travel Times A.M. Peak Hour 7:30 – 8:30 a.m.

- 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.

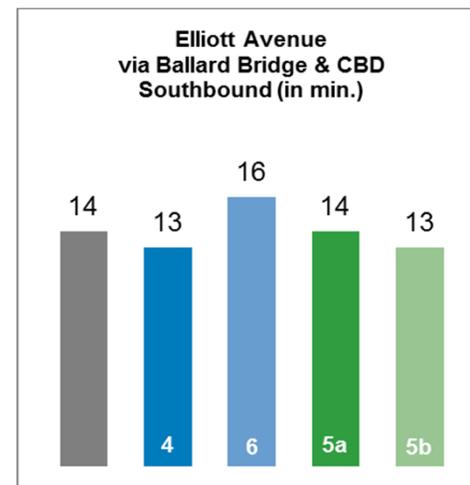
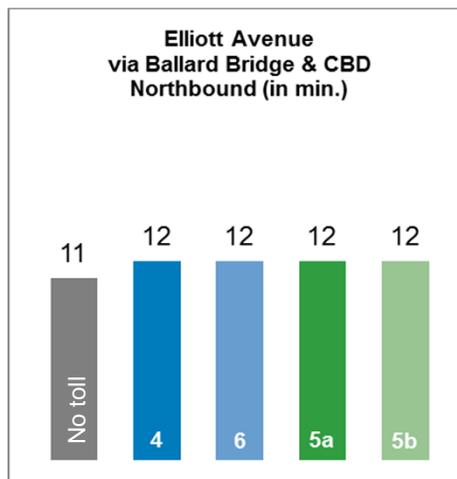
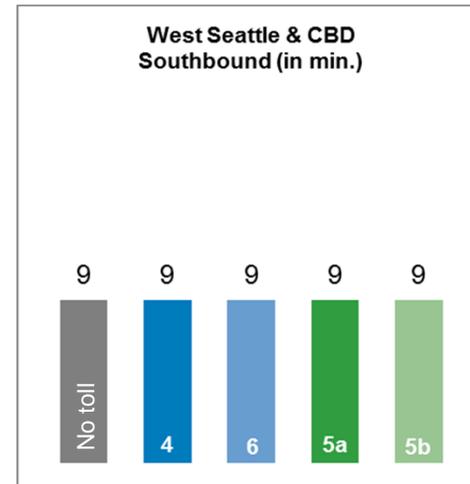
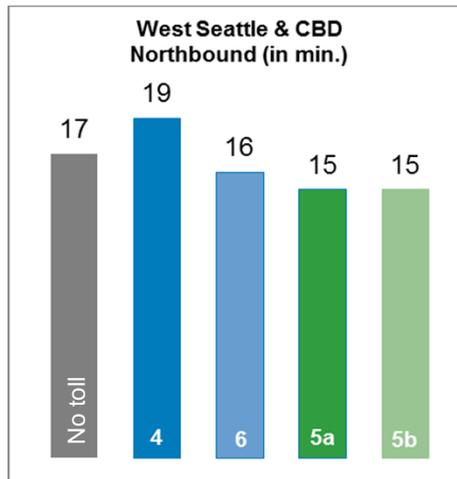
- P.M. peak hour travel times for autos and freight vary minimally across the routes reported.



2017 Transit Travel Times

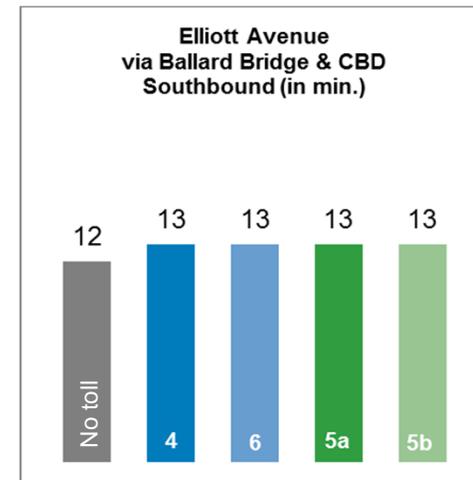
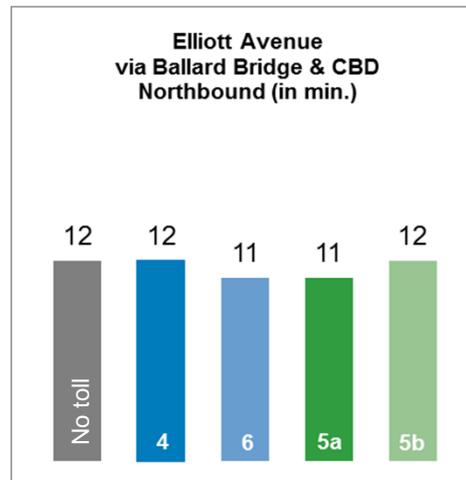
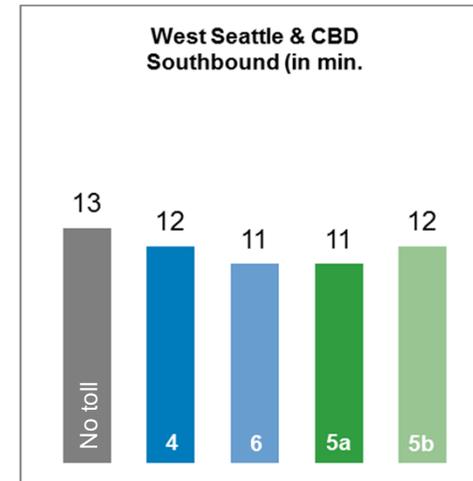
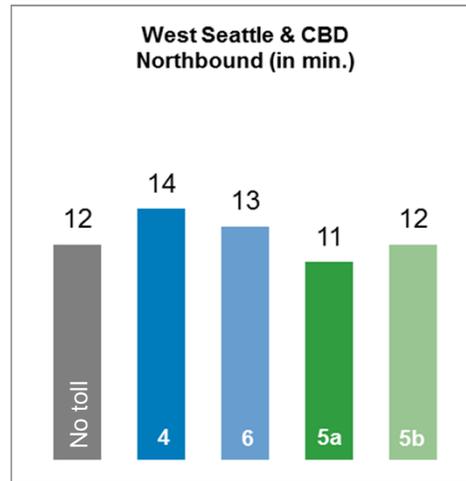
A.M. Peak Hour 7:30 – 8:30 a.m.

- 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.



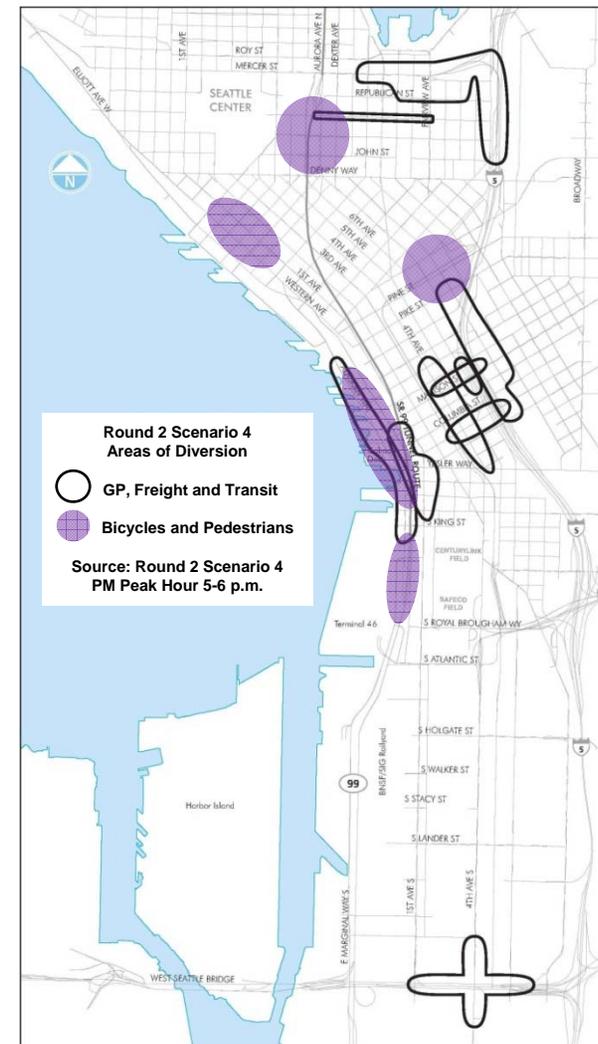
Freight Volumes Based on Different Toll Rates

- 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.

Diversions Areas for Committee Discussion

Scenario 4 – PM Peak Hour

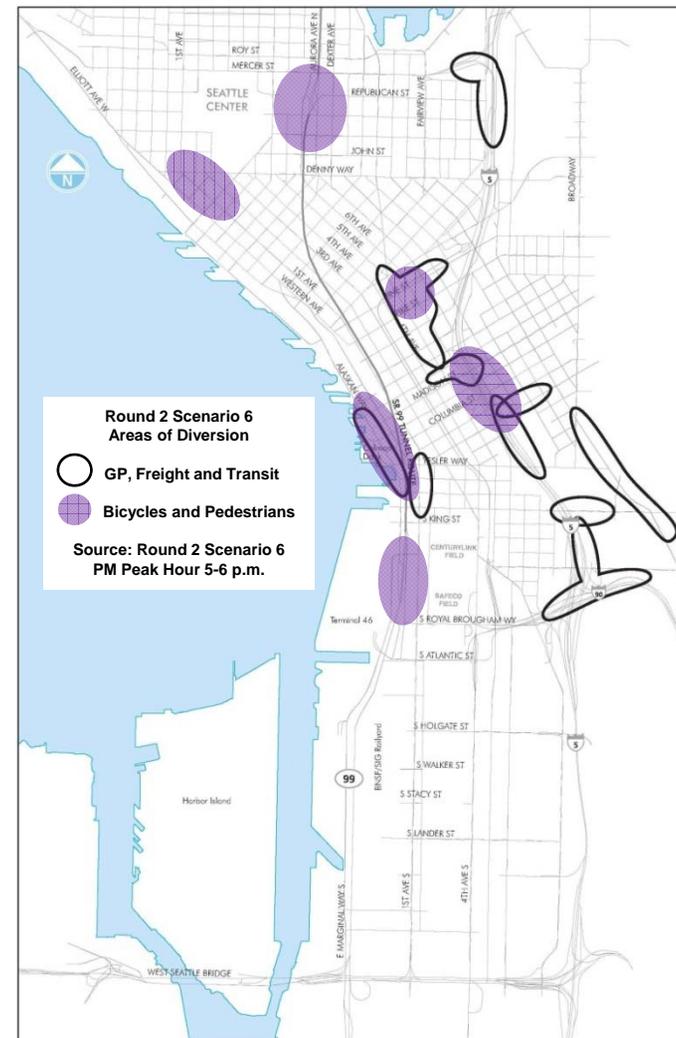
- Parts of South Lake Union and the Mercer Corridor
- Belltown area
- Parts of Alaskan Way and Pioneer Square
- Parts of the downtown core
- South Spokane Street area



Diversions Areas for Committee Discussion

Scenario 6 – PM Peak Hour

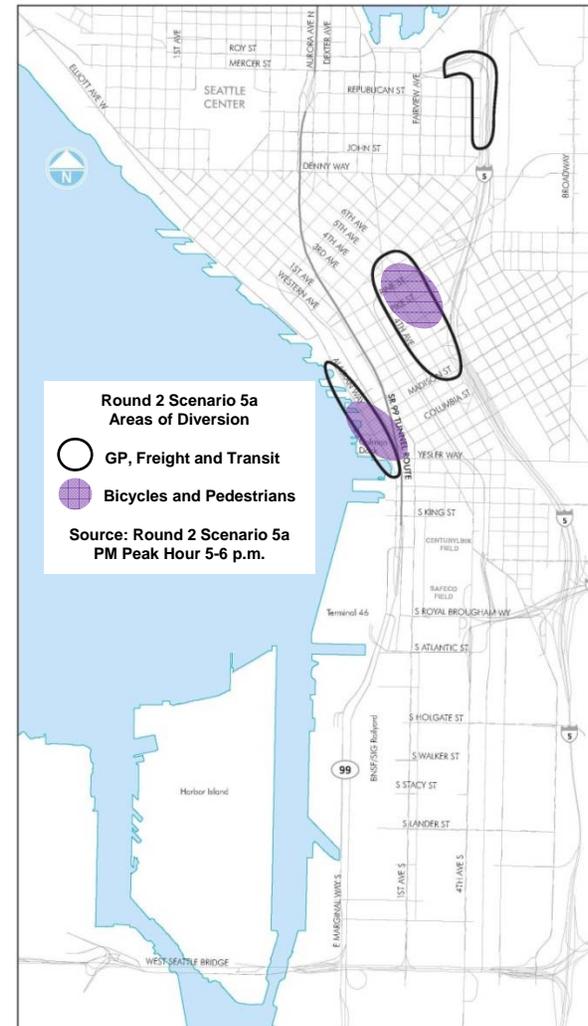
- Parts of South Lake Union and the Mercer Corridor
- Belltown area
- Parts of Alaskan Way and Pioneer Square
- Parts of the downtown core
- Areas east of I-5 and near the I-90 interchange



Diversions Areas for Committee Discussion

Scenario 5a – PM Peak Hour

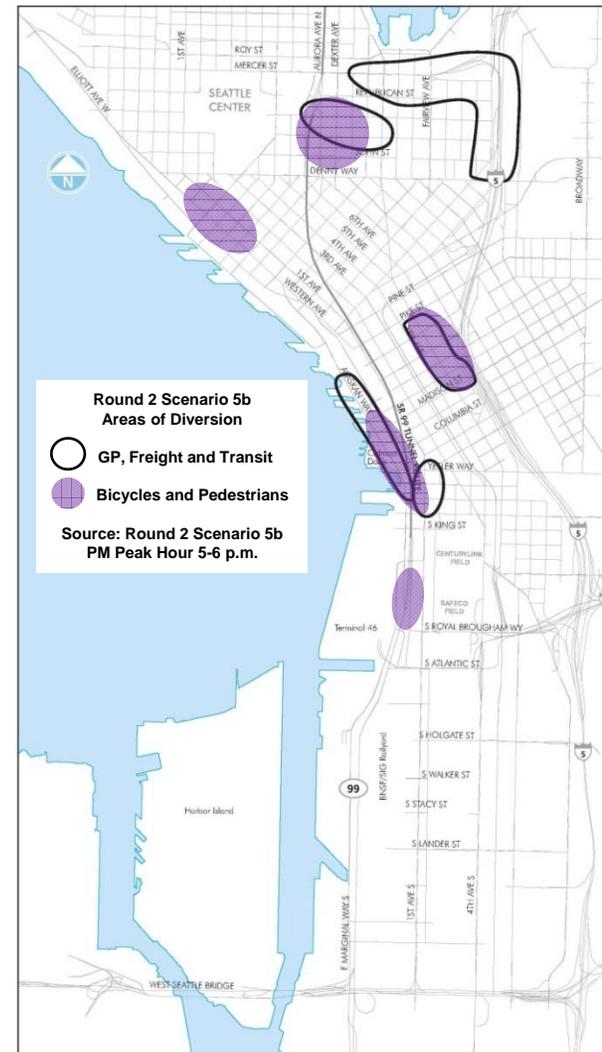
- Parts of South Lake Union and the Mercer Corridor
- Parts of Alaskan Way
- Parts of the downtown core



Diversions Areas for Committee Discussion

Scenario 5b – PM 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



Small Group Discussion

Small Group Discussion Overview

- Break into two groups to discuss the traffic and revenue modeling results further and how they relate to the committee's guiding principles.
- Each group will have 60 minutes for discussion.
- Each group should elect a committee member to report out.
- 20 minutes for group report-outs and questions.
- Each group will have program staff to guide discussion and answer questions.
- Each group will have someone to take notes.

Small Group Report Out

Closing: Next Steps

Website:

www.AlaskanWayViaduct.org

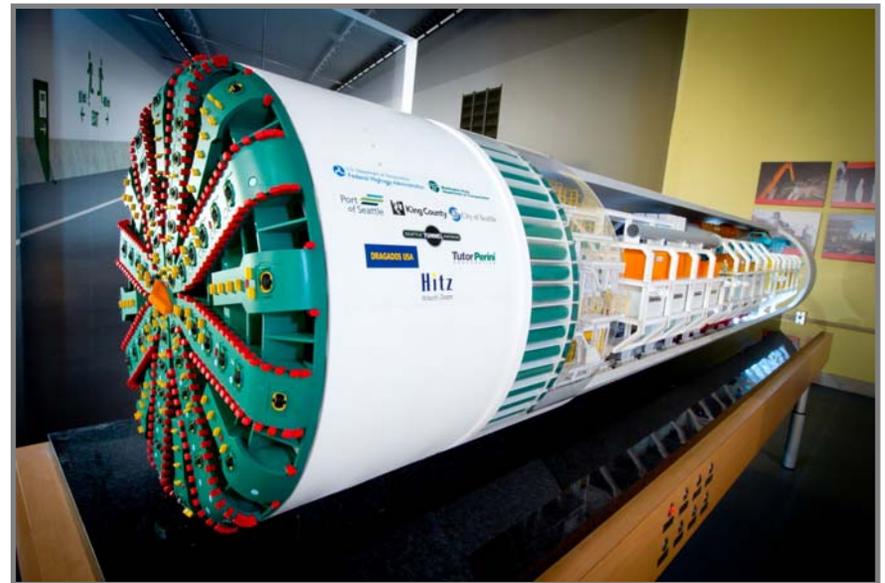
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Milepost 31 is located at 211 First Ave. S.