SR 99 Tunnel Project
Advisory Committee on Tolling and Traffic Management

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Washington State Transportation Commission
July 17, 2012

Advisory Committee on Tolling and Traffic Management (ACTT)

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.

ACTT's Charge

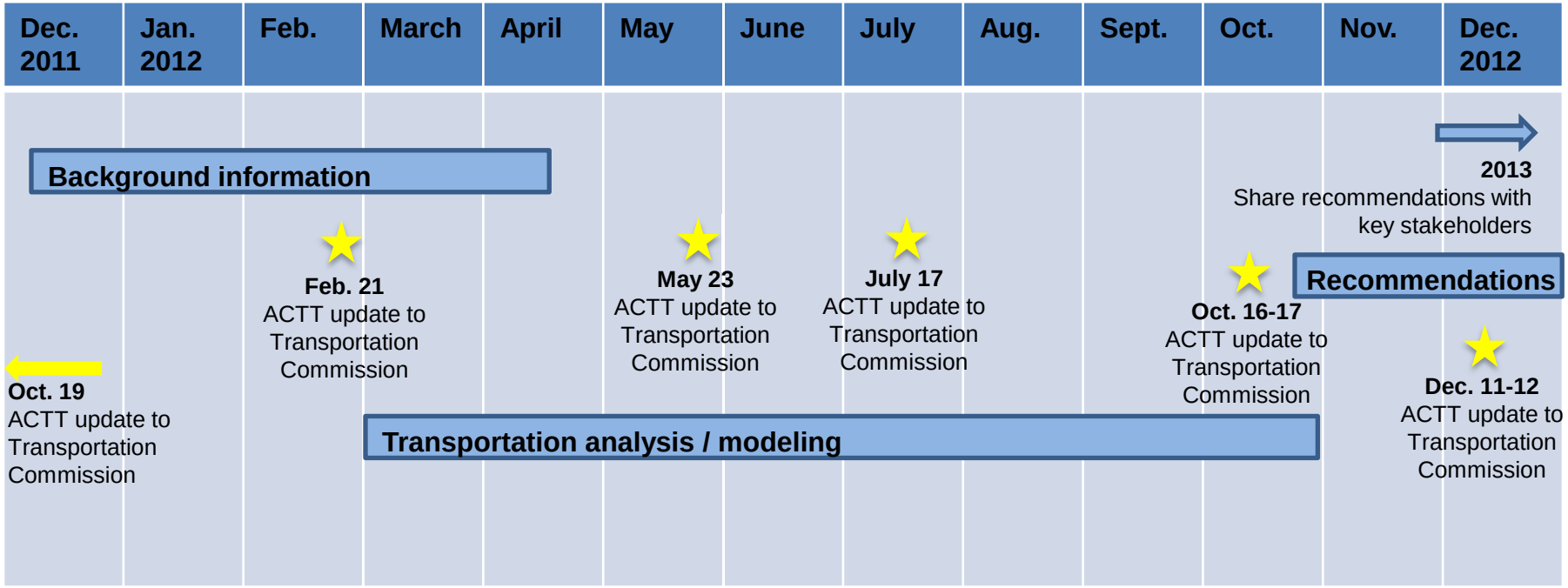
The committee will make advisory recommendations on strategies for:

- Minimizing traffic diversion from the tunnel due to tolling.
- Tolling the SR 99 tunnel.
- Mitigating traffic diversion effects on city streets and I-5.

Draft ACTT 2012 Work Plan

ACTT meetings to date:

- 2011: Dec. 8
- 2012: Jan. 25, Feb. 29, April 17 and June 27



Coordination with Transportation Commission

- Coordinate with Commission staff prior to each ACTT committee meeting.
- Commission staff attend ACTT committee meetings.
- Commission coordination:
  - October 19, 2011 meeting
  - February 21, 2012 meeting
  - May 23, 2012 meeting
  - July 17, 2012 meeting
  - October 16-17, 2012 meeting
  - December 11-12, 2012 meeting

SR 99 Tunnel Tolling Analysis

Past traffic modeling

- Included the 2010 Supplemental Draft EIS, 2011 Final EIS, and 2010 cost and tolling summary report to the Legislature.
- Used the Puget Sound Regional Council model with a regional transportation network focus.

Current modeling

- Uses a Dynamic Traffic Assignment model.
- Is more localized and considers city street operations.

Tolling the SR 99 Tunnel

- Toll rates will vary by time of day.
- Tolling the tunnel only.
- Many parallel routes exist which creates diversion issues.
- Studied directional tolls.

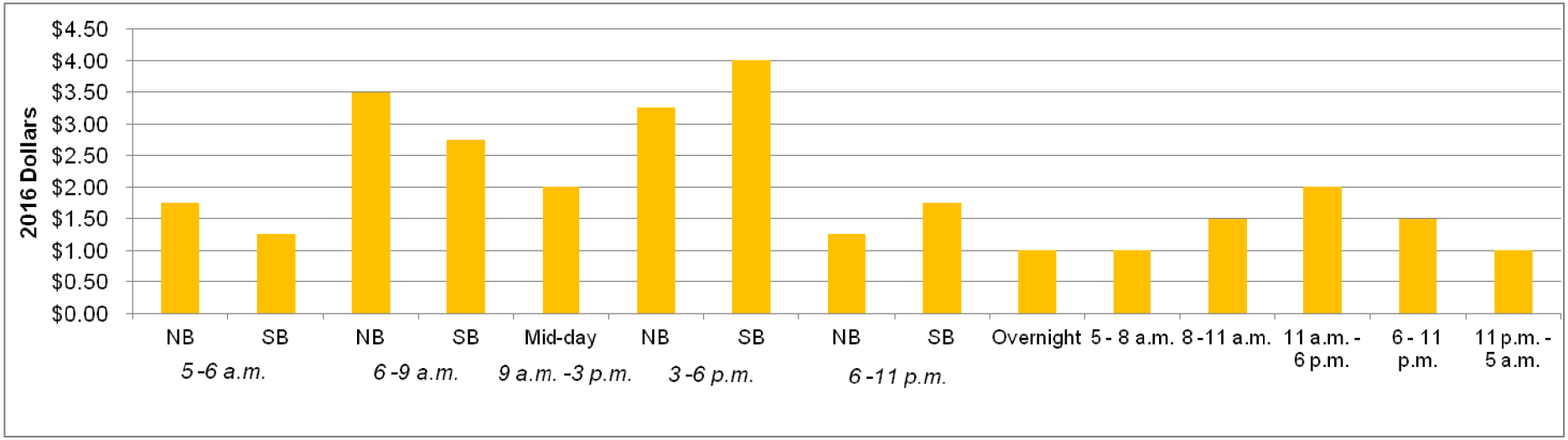
Modeling Assumptions

- Approach consistent with SR 520 toll financing.
- Value of time consistent with SR 520 studies.
- No toll rate escalation.

Scenarios Being Analyzed for ACTT

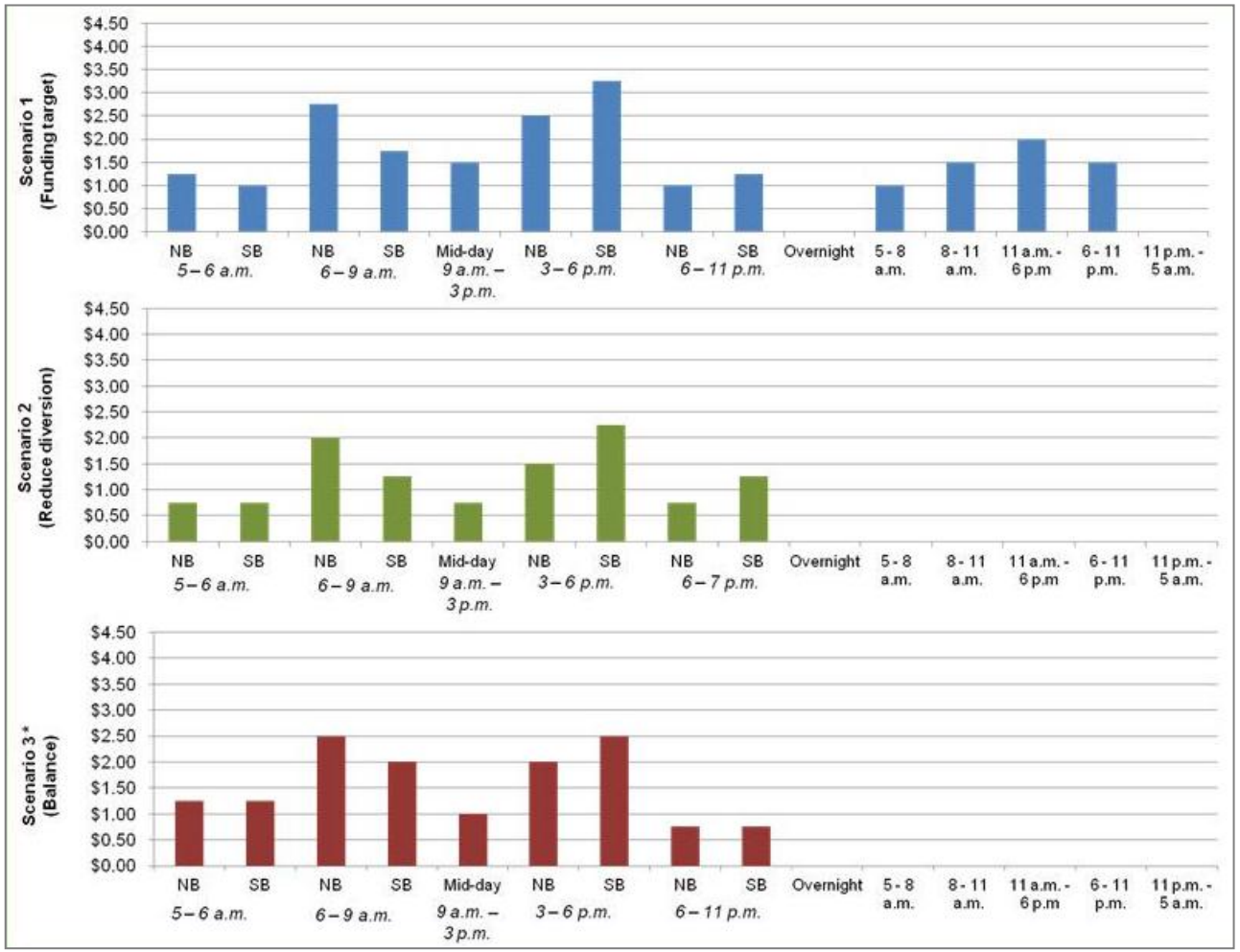
- No toll benchmark.
- High toll ($1 - $4) benchmark.
- Scenario 1 ($0 - $3.25): Objective is to reach $200 million capital funding target.
- Scenario 2 ($0 - $2.25): Objective is to reduce diversion.
- Scenario 3 ($0 - $2.50): Objective is to balance funding and diversion.

Toll Rates by Time of Day – High Toll Benchmark



** Chart represents *Good To Go!* rates. Pay by mail rates are approximately $1.50 more.

Toll Rates by Time of Day - by Scenario

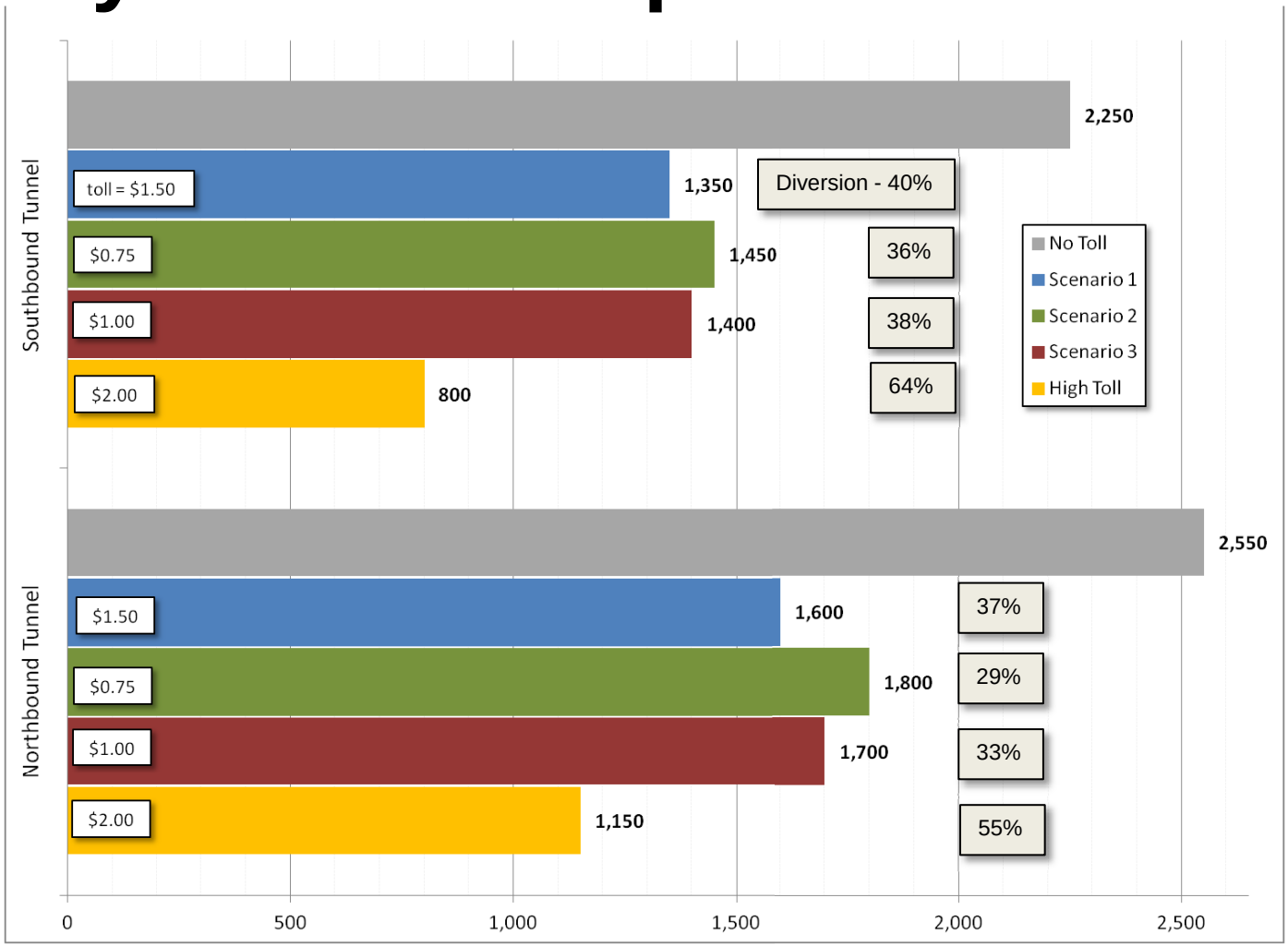


* Scenario 3 includes a 20 percent one-time adjustment for all toll rates in July 2030.
** Scenarios 2 and 3 reduce the freight toll to a 1.25 multiplier for all trucks, regardless of size or axle count.
*** Chart represents *Good To Go!* rates. Current pay by mail rates are approximately $1.50 more.

Initial Observations

- Southbound tolls resulted in higher diversion than we anticipated.
- Even modest mid-day tolls led to diversion.
  - Diversion does not necessarily lead to congestion.
  - 30 – 40% of traffic leaves the tunnel which may have an effect on revenues.

2017 Tunnel Volumes
Mid-Day 1:30 – 2:30 p.m.



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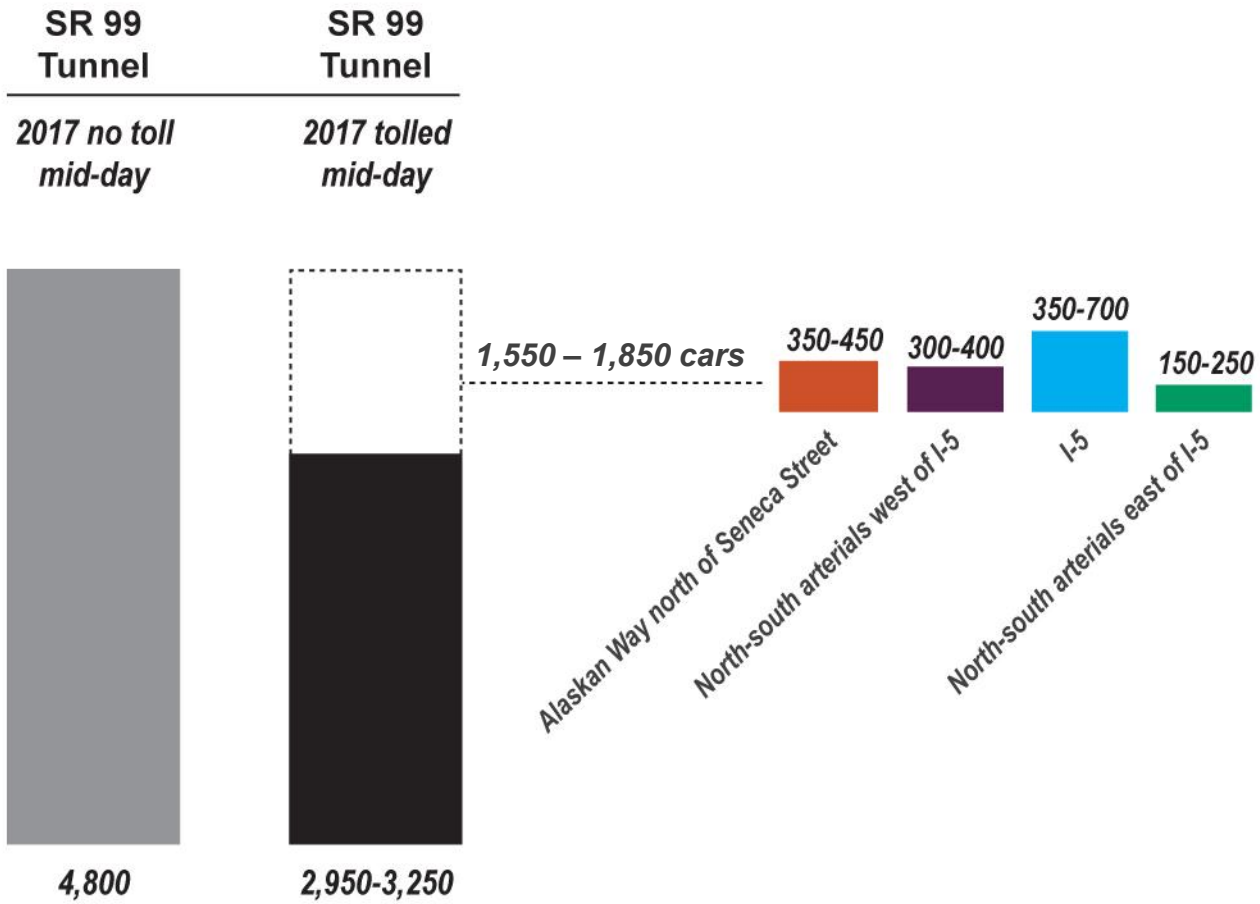
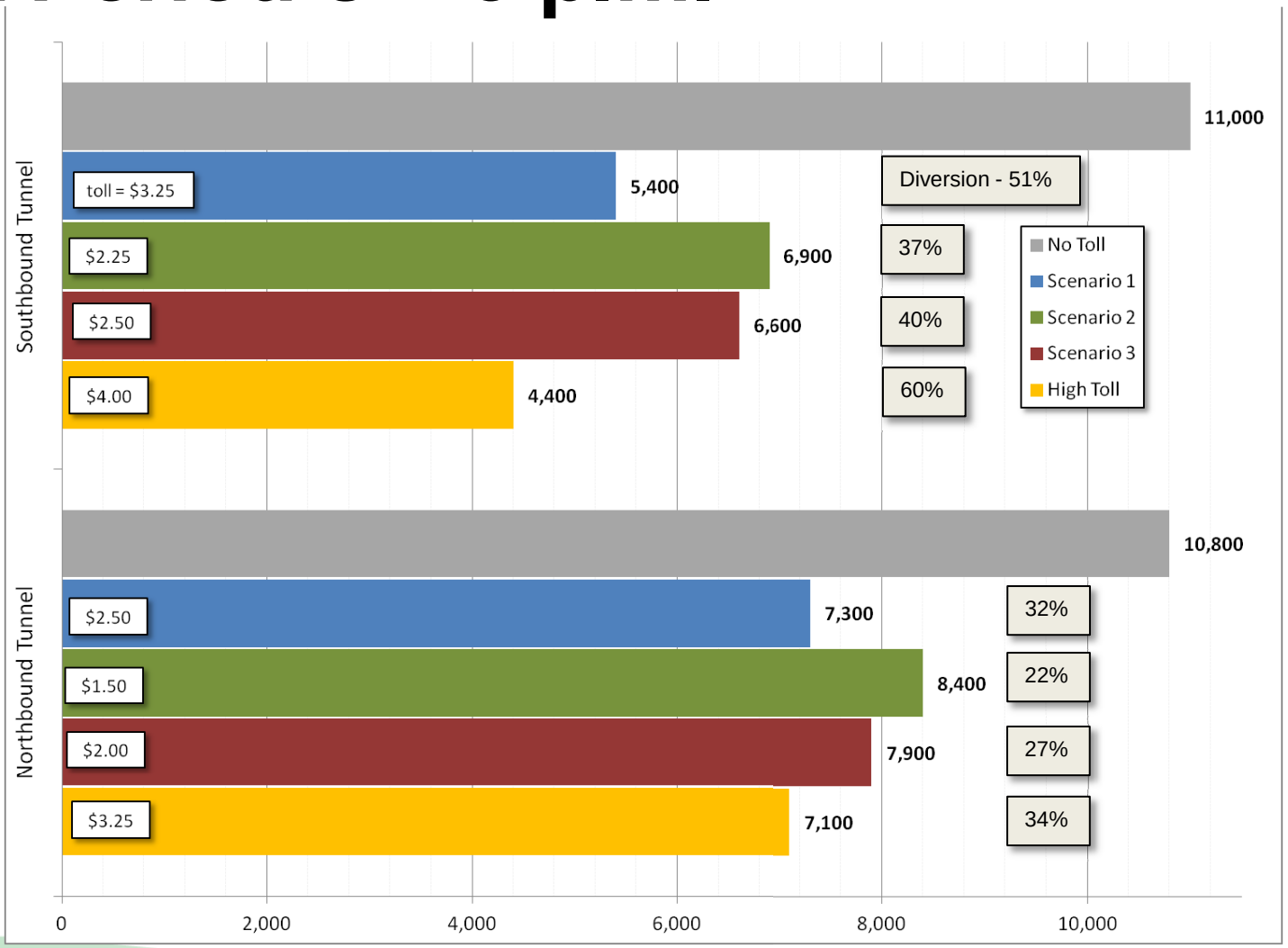
2017 Traffic Volumes Scenarios 1 – 3
Mid-Day 1:30 – 2:30 p.m.



*Alaskan Way volumes not included in arterials west of I-5.

2017 Tunnel Volumes
Peak Period 3 – 6 p.m.



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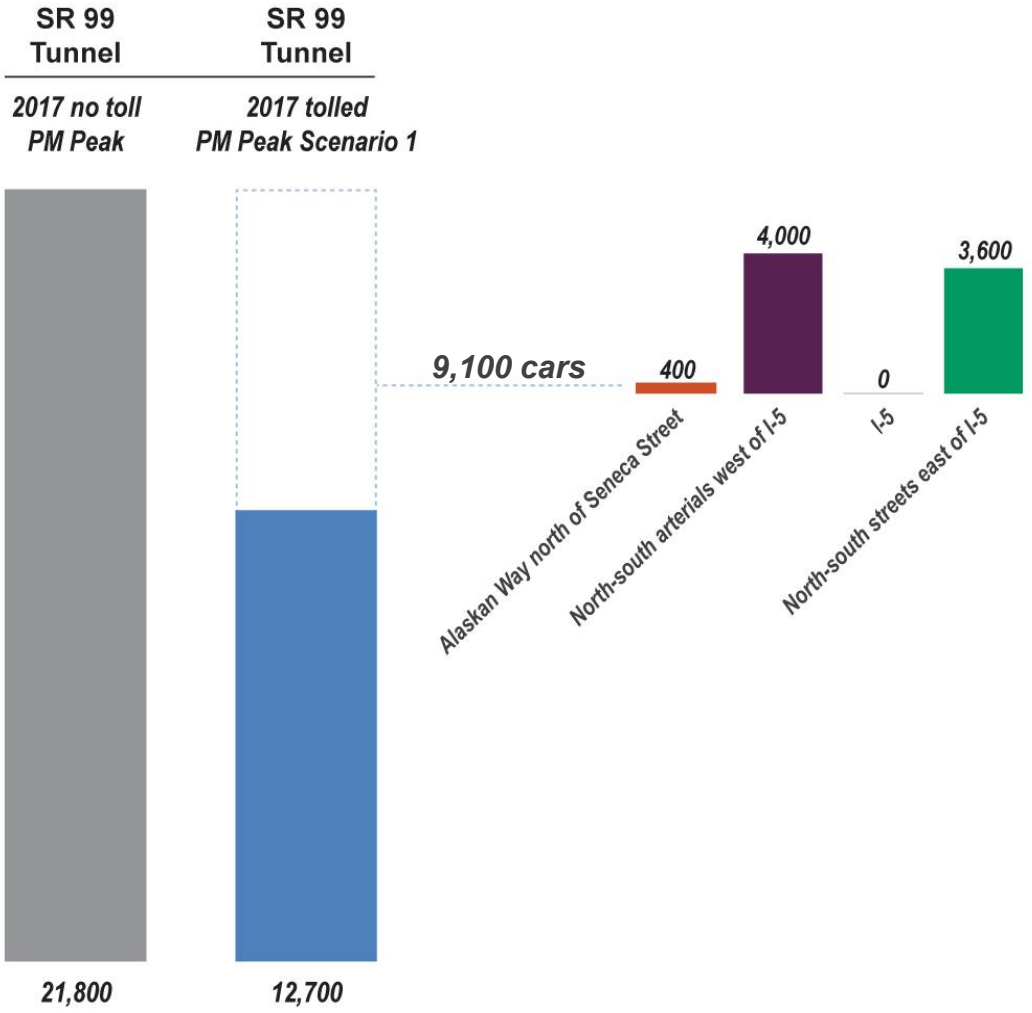
2017 Traffic Volumes by Location Scenario 1 Peak Period 3 – 6 p.m.



*Alaskan Way volumes not included in arterials west of I-5.

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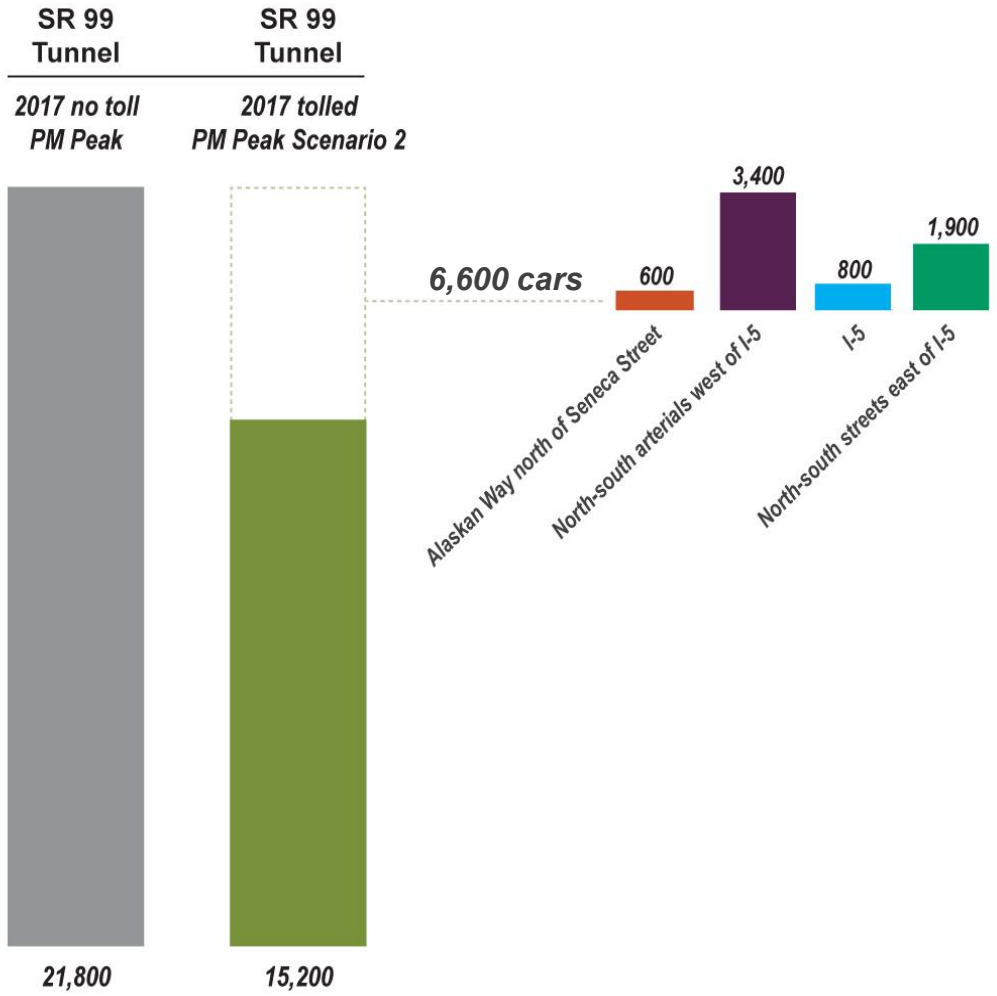
2017 Traffic Volumes by Location Scenario 2 Peak Period 3 – 6 p.m.



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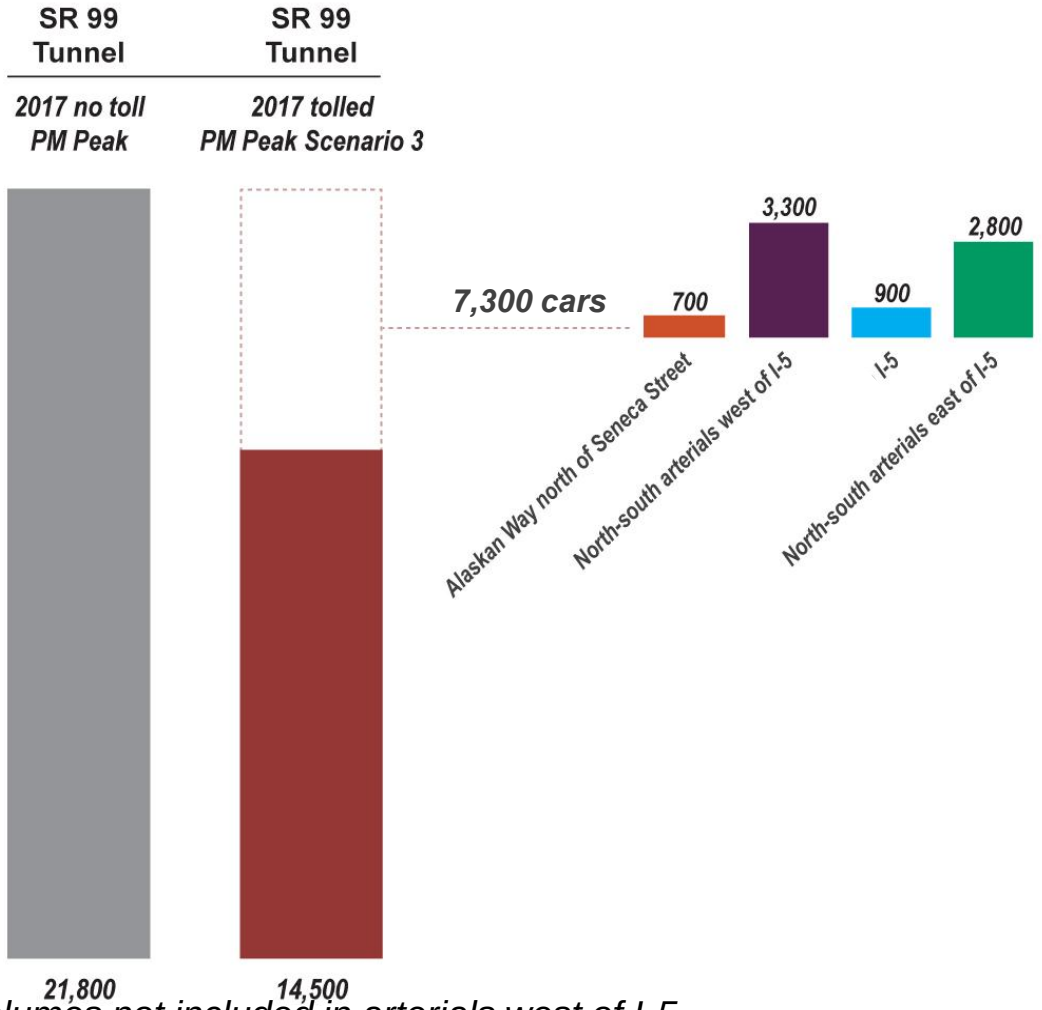
2017 Traffic Volumes by Location Scenario 3 Peak Period 3 – 6 p.m.



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2017 Travel Times
Mid-Day 1:30 – 2:30 p.m.

- Mid-day travel times for autos, transit and freight vary minimally across the routes reported.

Northbound (in min.) **Southbound (in min.)**

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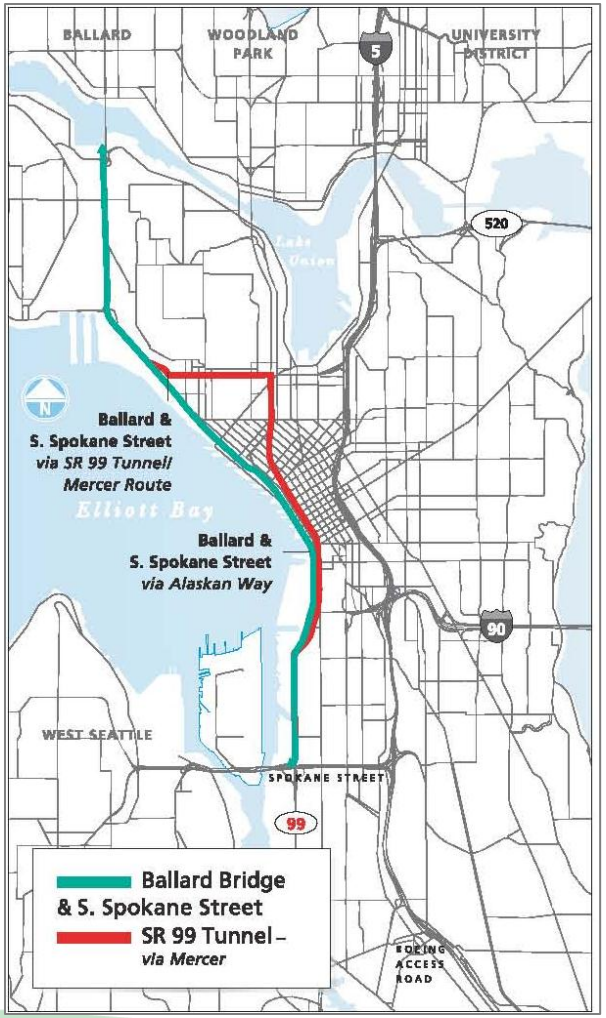
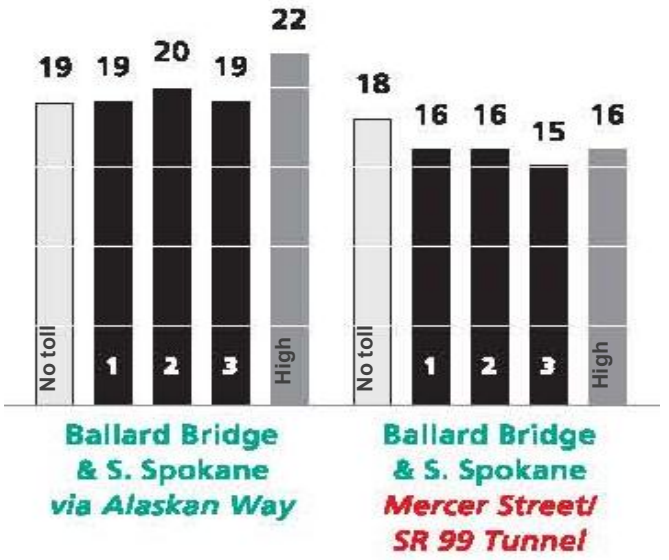
2017 Car and Freight Travel Times P.M. Peak Hour Spokane Street to Ballard



Northbound (in min.)



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Summary

General observations:

- Congestion exists even in a no toll scenario.
- Where capacity is added, for example, Alaskan Way, or reconnecting streets, such as Harrison Street drivers will use it.
- Those who use the tunnel will save time compared to city streets.

Observations about rate structure:

- Southbound tolls resulted in higher diversion than we anticipated. We should test similar northbound and southbound tolls in future scenarios to encourage tunnel use.
- As expected, higher toll rates result in more diversion. We see that especially on Alaskan Way and Western Avenue during the evening peak period.

Summary

Time of day observations:

- Even modest mid-day tolls led to some diversion and may affect revenues.
- P.M. peak tolls caused some areas to experience more congestion and other areas to operate a little better.

Geographic observations:

- East of I-5
  - When I-5 is congested, cars leave it for city streets east of the highway.
- Downtown/Belltown
  - Lower tolls don't result in much change in congestion intensity in the downtown core compared to the No Toll Benchmark.
  - Higher tolls affect the southbound streets (1st, 2nd and 3rd) between Stewart Street and Belltown as drivers avoid the tunnel and work their way to Alaskan Way and SR 99.

Summary

More geographic observations*:*

- North Portal area/Mercer Corridor
  - SR 99 near Republican Street and north of the Aurora Bridge operates a little better.
  - Higher tolls add to congestion on eastbound Mercer Street. SR 99 drivers divert to Mercer and South Lake Union trips might go to I-5 instead of the tunnel.
- South Portal/Pioneer Square
  - Higher toll rates result in more diversion on Alaskan Way and Western Avenue during the evening peak periods.
- Waterfront
  - P.M. peak congestion intensity increases on the waterfront in any toll scenario.

Next Steps

- Calculate revenues and discuss with the ACTT.
- ACTT will recommend two more scenarios to be modeled. Results from modeling will be shared with the ACTT in the fall.
- Coordinate with the Office of the State Treasurer on financial modeling. Results from modeling will be shared with the ACTT in the fall.
- Provide progress update to Commission in October.

Questions?

For more information on the
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www.alaskanwayviaduct.org