Alaskan Way Viaduct REPLACEMENT



Seattle City Council Sept. 16, 2013







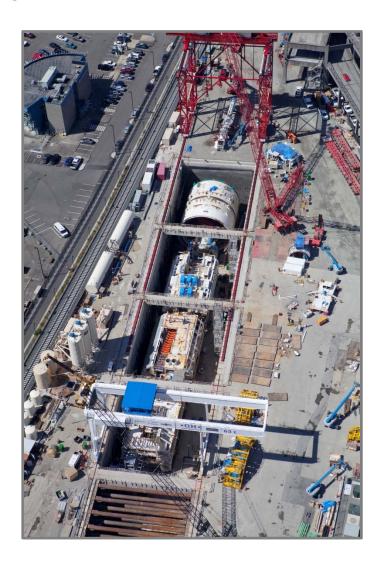






Overview

- Construction update
- SR 99 tolling update:
 - Current committee work:
 Scenario 7 traffic and revenue results
 - ACTT committee's next steps
- Looking ahead





Building the New Overpass





Launched the SR 99 Tunneling Machine





Headwall Muck





Tunnel Spoils Conveyor Belt



The SR 99 tunnel conveyor belt stretches from the launch pit to Terminal 46.



North Portal Receiving Pit





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.



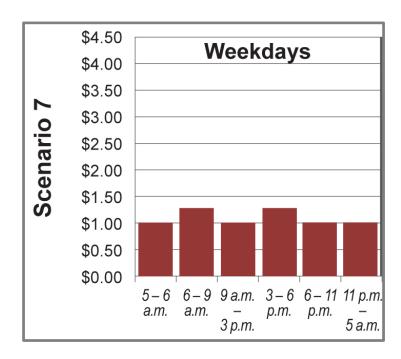
Round 2 Scenarios Analyzed

- 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.



Additional Modeling – Scenario 7

- Scenario 7 assumptions:
 - Balance between minimizing traffic diversion and raising revenue.
 - Includes \$1 overnight and weekend tolls.
 - Freight toll is 1.5 times the toll rate for medium trucks and 2.5 times the toll rate for large trucks.
 - Toll rate escalates 1.3% per year.





Preliminary Revenue Results for Scenarios 4 - 7

| | Scenario 4 (High toll) | Scenario 5a (Low toll) | Scenario 5b (Low toll peak only) | Scenario 6 (Differenti al tolls) | Scenario 7 |
|---------------------------------|------------------------------|------------------------------|---|---|---------------|
| Revenue collected from tolls* | \$1,270 | \$600 | \$610 | \$1,260 | \$1,085 |
| Toll collection costs** | (\$320) | (\$280) | (\$160) | (\$360) | (\$350) |
| Revenues after collection costs | \$950 | \$320 | \$450 | \$900 | \$735 |

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

^{*}After adjustments for fees, credits and uncollectible accounts. Scenarios 5a, 5b, and 7 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 Uses for Revenue

| Capital Contribution* | \$200 | | |
|-----------------------|-------|--|--|
| | | | |

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 | | | |

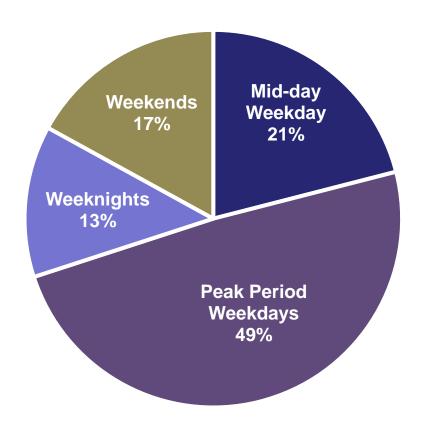
Numbers represent estimates for approximately 30 years. Costs in millions of dollars.

^{**}Variation due to coverage amounts and deductible levels.

| Mitigation | TBD |
|------------|-----|
| | |



Scenario 7 Gross Toll Revenue By Time Period (2017)



Weekend values represent a 48 hour period from 12:01 a.m. on Saturday through 11:59 p.m. on Sunday.

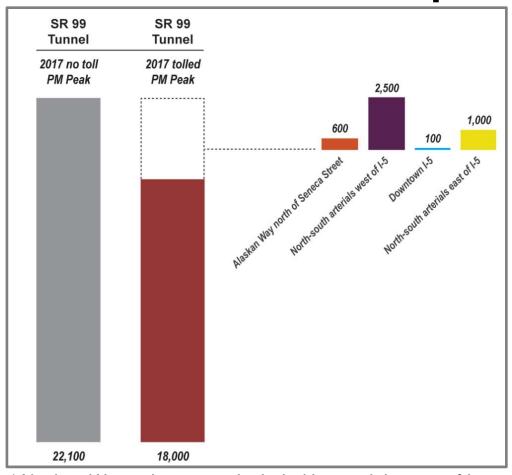


Scenario 7 Daytime Volumes





2017 Traffic Volumes by Location – Scenario 7 PM Peak Period 3 – 6 p.m.



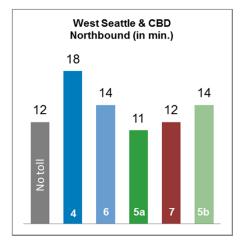
^{*}Alaskan Way volumes not included in arterials west of I-5. All volumes taken at Seneca Street.

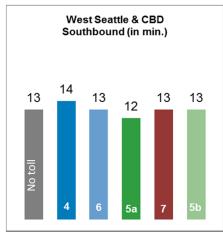


2017 Car and Freight Travel Times PM Peak Hour 5 – 6 p.m.

West Seattle to Downtown





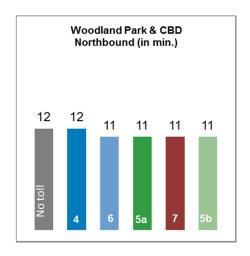


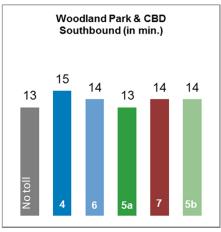


2017 Car and Freight Travel Times PM Peak Hour 5 – 6 p.m.

Woodland Park to Downtown









Another Look at Diversion

- Committee members asked for a metric assigning a dollar amount to the diverted traffic within the transportation system.
- Traffic models produce vehicle hours of delay which shows the number of hours travelers spend on roadways at less than optimum speeds.
- Vehicle hours of delay is inherent in any transportation system and increases over time due to growth.
- In general, vehicle hours of delay increases as toll rates increase.



Another Look at Diversion

- Traffic models produce vehicle hours of delay which shows the number of hours travelers spend on roadways at less than optimum speeds.
- Model output: Hours represent a.m. and p.m. peak periods (6 to 9 a.m. and 3 to 6 p.m.).
- Basic formula: Peak period vehicle hours of delay X 250 work days
 X \$18 per hour = estimated annual value.

| | No toll | Scenario 4 | Scenario 5a | Scenario 5b | Scenario 6 | Scenario 7 |
|--|------------------|------------------|---------------|---------------|---------------|---------------|
| 2017 estimated peak period hours | 36,600 | 44,600 | 38,000 | 39,800 | 42,900 | 40,000 |
| 2017 estimated annual peak period hours | 9,150,000 | 11,150,000 | 9,500,000 | 9,950,000 | 10,725,000 | 10,000,000 |
| Estimated annual value (hourly value of \$18) | \$165 million | \$201 million | \$171 million | \$179 million | \$193 million | \$180 million |



System Improvement Strategies To Consider With Tolled SR 99 Tunnel

- Freight movement priority to/from Port facilities and between manufacturing and industrial centers (including I-5).
- Signal and intelligent transportation system improvements including adaptive signal control.
- Bicycle improvements in downtown.
- Pedestrian improvements near the tunnel portal areas.
- Transit service and pathways into downtown.



ACTT Next Steps

- Further discuss:
 - The transportation system approach to minimizing and mitigating diversion.
 - Committee recommendations.
- Scheduled ACTT committee meetings:
 - September 25
 - October 30



Looking Ahead

- Expert Review Panel will reconvene this fall.
- North Access Project contract will be advertised this fall.
- Tunneling in a controlled environment: through fall 2013.
- Tunnel under the viaduct: this winter.
- South Atlantic Overpass: open to traffic end of 2013.



Inside the SR 99 tunneling machine control room.



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