Overview

Previous discussions:
• Scenario 7 traffic and revenue results.
• Transportation system approach to minimizing and mitigating diversion.

Today’s topics:
• SR 520 tolling update.
• Transportation system approach to minimizing and mitigating diversion.
• Committee recommendations.

Excavation for the south tunnel operations building.
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

- Further discuss the transportation system approach to minimizing and mitigating diversion.
- Begin discussions about committee recommendations process and content.
SR 520 Tolling Update
SR 520 Tolling Planning Timeline

• 2007 – 2012: Lake Washington Congestion Management Program / Urban Partnership Agreement was a collaborative partnership between WSDOT, King County Metro and Puget Sound Regional Council.


• May 2009: Legislature authorized tolling the SR 520 bridge.


• Aug. 2011: Investment grade traffic and revenue study published to support project financing.

• Dec. 2011: Tolling began on SR 520.

- Revenue and traffic volume changes met or exceeded projections.
- Traffic volume fluctuations were greater during the first few months of tolling as people adjusted.
- Traffic forecasted to be 48% lower than pre-tolling during the first few months.
- More drivers returned to the corridor and bridge traffic is nearing 70% of pre-toll levels.
- Regional traffic volumes increased 1 to 2% between 2011 and 2012.

• As projected, most of the diversion to SR 522 and I-90 occurs during mid-day and other off-peak times when there is capacity.

• Diversion to SR 522 and I-90 slightly different than forecasted depending on direction and route.

• Peak-period vehicle trips decreased by 6%, but 98% of travelers who used the SR 520 bridge before tolling have continued to travel during the peak period. Many have switched travel modes.

• Travel times on eastbound I-90 and SR 522 have remained mostly steady.

• Travel times on westbound I-90 and SR 522 have increased since tolling began.
### SR 520 Tolling: Forecasted vs. Actual Diversion

<table>
<thead>
<tr>
<th>Route</th>
<th>Westbound morning peak hour</th>
<th>Eastbound afternoon peak hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Forecasted</td>
<td>Actual</td>
</tr>
<tr>
<td>SR 522</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent change</td>
<td>11.7%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Peak hour volume change</td>
<td>200</td>
<td>150</td>
</tr>
<tr>
<td>I-90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent change</td>
<td>8.3%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Peak hour volume change</td>
<td>550</td>
<td>260</td>
</tr>
</tbody>
</table>

Source: SR 520 Toll Operations and Traffic Performance Summary Report
SR 520 Transit and Vanpools

- In 2009, state legislature provided property tax authority for added service on SR 520.

- As part of the Urban Partnership Agreement, King County Metro and Sound Transit added 140 daily bus trips across the bridge prior to tolling (fall 2010 and spring 2011), increasing weekday service to nearly 750 trips on 19 routes serving the corridor.

- Significant growth in transit and vanpool ridership.
  - Transit ridership grew by 25% between 2010 and 2012. Region wide ridership increased 5% during the same period.
  - Vanpools increased by 40% (up to 180 vanpools) between 2011 and 2012.

- Increase in ridership on Microsoft’s private transit system, the Microsoft Connector.
Transit Ridership on SR 520

- Transit ridership increased by nearly 40% since 2010.
Transportation System Approach to Minimizing and Mitigating Diversion
Guiding Principles

1. Minimize diversion from the tunnel onto city streets.
2. Minimize diversion from the tunnel onto I-5.
3. Mitigate the anticipated adverse effects of traffic diversion.
4. Meet the State’s funding obligation for the AWV Replacement Program.
5. Identify funding for mitigation of diversion impacts.
6. Support Seattle’s “Complete Streets” policy goals to make city streets function for bicycles, pedestrians, freight, transit and automobiles in strategies that are proposed to mitigate and minimize diversion impacts.
Guiding Principles

7. Support Seattle’s waterfront and Center City policy goals to make the waterfront and downtown an enjoyable place for people to live, work, shop and play.

8. Support and maintain efficient use of city streets and I-5 for transit access into, within, out of and through downtown.

9. Support a vibrant maritime and industrial sector by maintaining efficient use of city streets and I-5 for freight access into, within, out of and through downtown.

10. Ensure that ACTT recommendations provide an effective, integrated transportation solution across modes.
Definitions

• Diversion: Extra vehicles on city streets or I-5 driven by people who are avoiding paying the tunnel toll.

• Minimize diversion: Actions to reduce the number of vehicles diverting to city streets or I-5.

• Mitigate diversion: Take additional actions to address effects from remaining diversion.
Toll Scenario Analysis Summary

• No toll, high toll benchmark and scenarios 1-7 studied.

• Some level of diversion will exist with tolls; level varies based on the toll rate. Diversion could be drivers making changes to their route, mode, departure time, destination or eliminating a trip.

• From July committee meeting: Of scenarios studied, scenario 7 found the best balance between revenue generation and minimizing diversion.

• Optimizing toll rates resulted in minimizing diversion or keeping more cars in the SR 99 tunnel.

• Tolling more time periods resulted in additional revenue.
## Preliminary Revenue Results for Scenario 7

<table>
<thead>
<tr>
<th>Scenario 7</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Collected from Tolls*</td>
<td>$1,085</td>
</tr>
<tr>
<td>Toll Collection Costs**</td>
<td>($350)</td>
</tr>
<tr>
<td>Revenues after collection costs</td>
<td>$735</td>
</tr>
</tbody>
</table>

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

*After adjustments for fees, credits and uncollectible accounts. Scenario 7 assumes 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

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Contribution*</td>
<td>$200</td>
</tr>
</tbody>
</table>

*Costs in millions of dollars.

*Additional costs for financing to be determined.

## SR 99 Tunnel Expenses

<table>
<thead>
<tr>
<th>Expense</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations and Maintenance</td>
<td>$160</td>
</tr>
<tr>
<td>Facility Insurance Costs**</td>
<td>$55-85</td>
</tr>
<tr>
<td>Repair and Replacement</td>
<td>$190</td>
</tr>
</tbody>
</table>

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

**Variation due to coverage amounts and deductible levels.

## Mitigation

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitigation</td>
<td>TBD</td>
</tr>
</tbody>
</table>
Scenario 7 Daytime Volumes

[Graph showing traffic volumes and tolls for AM Peak Period (6-9 a.m.), Mid-day Period (9 a.m. - 3 p.m.), and PM Peak Period (3-6 p.m.).]
Diversion Areas for Committee Discussion
Scenario 7 – PM Peak Hour 5 – 6 p.m.

• Based on:
  • Travel times
  • Speeds and traffic operations.
  • Changes in volume on downtown streets and I-5.
  • Priority routes for transit, freight, bicycles and pedestrians.
  • Parts of South Lake Union and the Mercer Corridor
  • Parts of Alaskan Way
  • Parts of the downtown core
Agencies Considered Various Planning Efforts

• 2009 agreement of system improvements to replace the Alaskan Way Viaduct (e.g. Alaskan Way and Elliott Way).

• City of Seattle and Port of Seattle plans:
  • Container and cruise access
  • Industrial Areas Freight Access Project (future)
  • Freight master plan (future)

• City of Seattle plans:
  • Pedestrian master plan (approved in 2009)
  • Bicycle master plan (2013 draft plan)
  • Transit master plan (approved in 2012)

• WSDOT
  • I-5 planning
Considerations

• Consider:
  • Existing transportation systems operations.
  • Growth expectations.
  • Network changes already underway (SR 99 tunnel, improved Alaskan Way, light rail extension)
  • Policy goals.
  • Operations of various modes: freight, cars, bicycles, pedestrians, transit, etc.
  • Toll levels and traffic forecasts including travel times, volumes, vehicle hours of delay.
  • Adaptability of strategies.
What Are We Trying to Achieve?

• What improvements could help the system operate most efficiently?

• Recognize the different ways objectives are achieved in mid-day vs. peak periods and that the objectives may be different.
  • Mid-day (9 a.m. to 3 p.m.): Volume reduction
  • Peak periods (6 to 9 a.m. and 3 to 6 p.m.): Adaptability, reliability

• Reduce impacts during peak hours of peak periods.

• Quality and character of downtown streets.
Scenario 7: PM Peak Period Diversion Levels

- Transit can help meet additional demand for trips.
- 43% of commuters use transit to get to and from downtown Seattle.

*Alaskan Way volumes not included in arterials west of I-5. All volumes taken at Seneca Street.
Transportation System is Already Vulnerable

- Traffic model does not capture variability of the system.
- System is sensitive to:
  - Special events
  - Traffic incidents
  - Operational changes
- For example on Second Avenue, transit travel times can vary by 50%.
Types of Strategies for Committee Discussion
Transit

Target: Reliability and efficiency of transit operations in the SR 99 corridor. Encourage transit ridership to meet increased demand for trips.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Overview / benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burien / Delridge RapidRide service</td>
<td>Increases service frequency for 8,500 daily riders; expected to grow to 13,000 in five years. Helps meet increased demand for trips.</td>
</tr>
<tr>
<td>Separate RapidRide C (West Seattle) and D (Ballard-Crown Hill) lines</td>
<td>Allow lines to operate as separate routes. Improves reliability for 6,200 daily riders of the C line and 8,300 daily riders of the D line. Helps meet added demand for trips.</td>
</tr>
<tr>
<td>Implement new service to South Lake Union (extend all day service on RapidRide C line or peak-only service from southwest Seattle). Includes transit hub in South Lake Union</td>
<td>Supports increased transit service to growing South Lake Union market and improves access and connectivity in South Lake Union.</td>
</tr>
<tr>
<td>Transit priority treatments in the downtown core</td>
<td>Improves travel time and reliability for riders. Helps reduces impact from increased traffic volumes.</td>
</tr>
<tr>
<td>Continue viaduct construction mitigation service levels on high productivity routes serving the SR 99 corridor.</td>
<td>Sustains added service on routes serving West Seattle and peak commute trips on routes serving Ballard and Aurora corridors.</td>
</tr>
</tbody>
</table>
## Types of Strategies for Committee Discussion

### Freight

**Target:** Reliability and efficiency of freight operations.

<table>
<thead>
<tr>
<th>Strategy</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Adaptive signal systems in SODO and south portal area</td>
<td>Signal system can respond with more precision to fluctuating traffic volumes. Benefits general purpose and transit.</td>
</tr>
<tr>
<td>Port terminal and SODO dynamic routing and access information on I-5, I-90 and key arterials (e.g. Travel time and electronic signs)</td>
<td>Facilitates freight movement to/from Port terminals due to variability in traffic levels and congestion in this area.</td>
</tr>
<tr>
<td>East Marginal Way truck emphasis strategies from Spokane Street to Atlantic Street (e.g. signage / enforcement)</td>
<td>Allows for efficient freight operations by prioritizing freight movements and excluding potential diverting traffic.</td>
</tr>
<tr>
<td>Southbound I-5 lane and ramp management improvements from Mercer Street to Corson Avenue (e.g. electronic signs, freight priority treatments)</td>
<td>Improves throughput and reliability on southbound I-5 for multiple modes. Reduces congestion southbound from SR 520 interchange to Corson Avenue.</td>
</tr>
</tbody>
</table>
### Types of Strategies for Committee Discussion

**Bicycle**

Target: Improve safety and encourage mode shift to reduce vehicles in the system.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Overview / benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-south cycle track through downtown</td>
<td>Increases vehicle / bicycle separation for safety, mobility and to encourage mode shift.</td>
</tr>
<tr>
<td>North-south facility through north portal area</td>
<td>Increases vehicle / bicycle separation for safety, mobility and to encourage mode shift.</td>
</tr>
<tr>
<td>East Marginal Way bicycle facility from South Spokane Street to South Atlantic Street</td>
<td>Reduces conflicts between freight and bicycle traffic.</td>
</tr>
</tbody>
</table>
## Types Strategies for Committee Discussion Pedestrian

Target: Improve safety and quality and experience for pedestrians.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Overview / benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian safety projects at key locations in Pioneer Square and Belltown (for example: curb extensions, sidewalk improvements, etc.)</td>
<td>Improves safety and the pedestrian experience on key corridors. Addresses some potential hot spots.</td>
</tr>
</tbody>
</table>
Committee Discussion
### Roles and Responsibilities for Toll Projects

<table>
<thead>
<tr>
<th>State Legislature</th>
<th>WSDOT (Project Owner)</th>
<th>Toll Authority (WA Trans. Commission)</th>
<th>Office of the State Treasurer</th>
<th>State Finance Committee</th>
</tr>
</thead>
</table>
| • Authorize tolling  
• Authorize sale of bonds  
• Appropriate toll revenue  
• Maintain toll authority’s powers | • Prepare project financial plan  
• Project development and delivery  
• Oversee prep of traffic and revenue projections | • Set and maintain toll, fees, policies and exemptions  
• Review and report on toll collection and operations policies / expenditures | • Financial planning in developing and testing proposed toll rate schedule  
• Certify toll sufficiency to meet bond covenants | • Adopt master bond resolution  
• Support sale of bonds  
• Investor relations/ maintain tax exempt status |
| | • Develop and test proposed toll rate schedule  
• Toll collection and customer service  
• Operate, maintain and insure the facility | • Ensure adopted tolls are sufficient to meet all obligations | | **Note:** The State Finance Committee is composed of the Governor, the Lieutenant Governor, and the Treasurer. |
ACTT Consensus Process

1. Present issue/proposal
2. Discussion - concerns raised
3. Refine issue/proposal, as necessary
4. Issue resolved or majority approves proposal
   - No consensus
5. Discussion - No concerns raised
6. Issue resolved or majority approves proposal
Recommendations Report Distribution

Recipients:

- Governor
- Washington Legislature (Joint Transportation Committee)
- Washington State Transportation Commission
- Office of the State Treasurer
- State Finance Committee

- Seattle City Council
- Seattle Mayor
- FHWA
- WSDOT
- City of Seattle
- King County
- King County Metro
- Port of Seattle
- Puget Sound Regional Council
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