Transportation Commission

December 21, 2012

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DEC 28 2012

Reema Griffith
Washington Transportation Commission
PO Box 47308
Olympia, WA 98504-7308

Dear Ms. Griffith,

In 2009, the Washington State Legislature identified tolling as a funding source for the SR 99 Tunnel Project. It is anticipated that tolling revenue will contribute $200 million toward tunnel construction. In 2011, the City of Seattle and WSDOT formed the Advisory Committee on Tolling and Traffic Management to explore ways to toll the SR 99 tunnel and raise revenue while minimizing diversion onto city streets and I-5.

The 15-member committee has met regularly to discuss how various toll scenarios might affect traffic patterns and revenue. Three toll scenarios have been analyzed to date, but more work is needed to find a scenario that strikes the right balance between generating revenue and minimizing diversion. The initial analysis has found scenarios that reach the $200 million capital funding target result in high levels of diversion to city streets and I-5. Scenarios that result in lower diversion still raise revenue, but not enough to cover both capital and ownership costs such as operations and maintenance, insurance and repair and rehabilitation.

In the first half of 2013, we plan to analyze three additional scenarios, providing a more comprehensive picture of possible tolling options. We'll begin to set priorities and discuss the potential need for mitigation measures that are not currently funded.

By the middle of 2013, we will come to you with our recommendations. In the interim, we are pleased to provide you with this progress report of our work. We have also identified several policy issues where your guidance may help inform our work. The policy issues are more fully addressed in the attached progress report.

- Priority of state's use of toll revenue: what types of costs should be covered by toll revenue and in what relative order.
- Financing and toll rate adjustments: how capital costs could be financed and whether toll rates could be adjusted in future years to keep up with inflation.
- Allocation of toll collection costs: how statewide tolling system costs are allocated among facilities.
- Systems approach to tolling: as the region moves forward with studying and tolling additional highways, the committee sees value in analyzing a systems approach to tolling – I-5, I-405, I-90, SR 99 - to reduce diversion across the regional roadway network.
- Freight rates: what freight rate structure makes sense for the tunnel.
- Mitigation funding: finding a funding source for potential mitigation measures.
- Transit funding: finding a sustainable funding source for King County Metro service.

We understand that these issues – including the toll rate structure – are within the purview of various appointed and elected officials and our role is advisory in nature.

We would be happy to provide a briefing on our work or answer any questions.

Sincerely,

Maud Daudon and Claudia Balducci
ACTT Co-chairs

SR 99 Advisory Committee on Tolling and Traffic Management
2012 Progress report

Overview

Formation and role of tolling committee

WSDOT and the City of Seattle established the Advisory Committee on Tolling and Traffic Management in fall 2011. The committee is exploring ways to refine tolling the SR 99 tunnel to minimize traffic diversion, meet project funding goals including $200 million for project construction, and investigate strategies to reduce or mitigate diversion.

WSDOT, the Seattle Mayor and Seattle City Council jointly appointed the 15 committee members. Five members were nominated by each, and membership was confirmed by the City Council in resolution 31323. Members were selected to represent various interests, such as freight, local businesses, drivers, transit, and bicycle and pedestrian interests.

Authority for tolling is granted by the State Legislature, while toll rate setting is within the purview of the Washington State Transportation Commission.

Advisory recommendations in 2013

In the first half of 2013, the committee will provide initial recommendations on strategies for tolling the SR 99 tunnel, minimizing traffic diversion from the tunnel due to tolling, and mitigating traffic diversion effects on city streets and I-5. Recommendations will be provided to the Governor, Legislature, State Transportation Commission, Federal Highway Administration, Seattle Mayor and the Seattle City Council.

Recommendations may be implemented by the State, City of Seattle, Port of Seattle, and/or King County as appropriate.

The committee will continue working to refine its analysis and recommendations through December 2015 and for up to one year after tolling begins.

ACTT work completed to date

Process for studying potential toll scenarios

Prior to making recommendations, the committee is reviewing traffic and revenue data for six potential toll scenarios. All of the toll scenarios assumed variable pricing. Committee members are working to find a balance between raising toll revenue necessary to construct the SR 99 Tunnel Project and keeping vehicles from diverting away from the tunnel.

To date, the committee has reviewed traffic and revenue analysis for three of six total toll scenarios. The committee also investigated types of costs that could be covered by toll revenue and assumed that toll revenue would pay for toll collection costs and facility ownership costs over 30 years with the remainder going toward the $200 million capital target.

The committee selected each toll scenario to evaluate the effects of different policy choices.

- **Scenario 1 - maximize revenue.** Raise enough revenue to cover project capital costs and ongoing tunnel ownership costs (operations and maintenance, insurance, and repair and replacement costs). The minimum toll was $1 and maximum toll was $3.25.

- **Scenario 2 - minimize diversion.** Reduce diversion by using lower toll rates. The minimum toll was $0.75 and maximum toll was $2.25.
- **Scenario 3 - balance revenue and diversion.** Strike a balance between revenue generation and diversion from the tunnel. The minimum toll rate was $0.75 and maximum toll rate was $2.50. This scenario included a one-time escalation of toll rates in 2030.

Observations from first round of traffic and revenue analysis

Overall, no toll scenario stood out to committee members as the right balance between generating revenue and reducing diversion. However, key findings were made that helped shape what the next three scenarios look like, including:

- All three initial scenarios would raise significant amounts of funding. However, none of the initial three scenarios would generate sufficient levels of revenue to fund **all** of the following: WSDOT's ownership costs, $200 million project capital target, and any mitigation that may be recommended by the committee.
- Scenario 1 appears to generate enough revenue to meet the project's funding target and ownership costs. However, this scenario caused diversion throughout the day resulting in increased trip times and congestion on city streets and I-5, and it does not raise enough revenue to fund any mitigation measures.
- Diversion was significant in each of the scenarios and created congestion that would interfere with city and regional traffic, as well as international trade and logistics operations at the Port terminals.
- Revenue generated from the scenarios is directly connected to the amount of trips that stayed in the tunnel. In the table on page 6, you can see Scenario 1 raises enough revenue from tolls to pay for both capital project funding and ownership costs while Scenario 2 would not raise enough money to provide capital funding. Scenario 3 could support ownership costs and some project funding, but not enough to meet the $200 million target.
- Having many toll-free route alternatives through downtown Seattle contributes to the amount of diversion projected. As an example, tolls as low as $0.75 during the midday resulted in diversion because of the many toll-free route choices and the relatively free-flowing traffic conditions during midday travel. The table on page 6 shows daily tunnel volumes for each scenario in addition to the midday and p.m. peak period.
- Southbound tolls resulted in more diversion than anticipated. Future analysis should consider toll rates that are similar for northbound and southbound travel (southbound tolls were higher than northbound tolls in all three initial scenarios).
- Longer trips (e.g., North Seattle to the airport) tended to stay in the tunnel while shorter trips (e.g., Queen Anne neighborhood to the stadiums) were more likely to divert to other routes such as city streets and I-5. Future analysis should consider ways to attract some of the shorter trips back into the tunnel.

Policy issues discussed by ACTT

The committee has identified a number of policy issues based on its review of the traffic and revenue analysis completed to date.

- **State to prioritize use of toll revenue**

  Tolling is a viable funding source as part of the Alaskan Way Viaduct Replacement Program, but the committee believes the use of revenue will need to be prioritized and views this as a state decision. Funding is needed for the following:

- $200 million of project capital funding
- Ongoing facility ownership costs
- Potential funds to mitigate the effects of traffic diverting from the tunnel.

Current assumptions are that funding would pay for toll collection costs and facility ownership costs over 30 years, with the remainder going toward the $200 million needed for project funding. To date, scenarios that raise enough revenue to cover both capital costs and ownership costs result in high levels of diversion largely because there are so many adjacent route options. The ACTT recognizes agencies and elected officials determine how toll revenue would be used. The committee believes their charge is to suggest a tolling approach which maximizes revenue while reducing diversion and the state will determine how best to use the revenue stream. The committee would welcome a discussion about how to prioritize the use of state funding.

- **Financing and toll rate adjustments**

  For financial planning purposes, most scenarios the committee has analyzed assume no toll rate increases based on guidance from the Office of the State Treasurer and State Finance Committee. This approach helps secure favorable financing when bonding against toll revenue, but it also reduces the funding available for the project and ongoing costs. The committee believes it's reasonable to expect that nominal toll rates will not remain the same for 30 years. Toll rate adjustments in future years would help keep up with inflation over time. The committee would welcome a discussion on financing assumptions and toll rate adjustments over time.

- **Toll collection cost allocation policy**

  WSDOT's Toll Division and the Office of Financial Management have created a cost allocation policy where system-wide toll collection costs such as customer service center operations and state operations are shared based on facility-specific toll transactions. This policy should be discussed as planning to toll new facilities or roadways continue. Because of diversion levels, SR 99 toll rates may need to be lower than other existing toll facilities. The current policy allocates costs on a per-transaction basis, and the cost to collect tolls on SR 99 is a larger percentage of the toll charged compared to other tolled facilities. This results in less revenue being available for the facility. The committee suggests analyzing revenue-based allocation of costs.

- **Systems approach to tolling**

  As the region and the state move forward with studying and tolling additional highways, the committee sees value in analyzing a systems approach to tolling to manage congestion and minimize diversion. This would include tolling state facilities such as I-5, I-90, I-405 and SR 99 and could include other planned toll facilities and future facilities which could reduce diversion across the regional system. This type of study is beyond the committee's timeframe for making recommendations in 2013.

- **Freight rates**

  Toll facilities in Washington currently have freight toll rates based on truck axle count. The ACTT has analyzed different cost structures based on axles and flat rates to determine if a change would encourage more freight to use the SR 99 tunnel rather than diverting. Because the Transportation Commission leads the rate-setting process, the committee will discuss with the Commission the results of traffic analysis for both cost structures.

- **Mitigation funding**

  Currently, no source of funding has been identified for mitigation measures. The committee would welcome a discussion about what funding sources might be available, including the use of toll revenue.

- **Transit funding**

  In 2009, as part of multi-agency plan to replace the Alaskan Way Viaduct (AWV), a significant investment in transit service was outlined, including $140 million in transit capital investments and a $15 million annual investment in transit service. It was envisioned that funding for these transit improvements would come from a 1 percent motor vehicle excise tax (MVET) authority for King County, which has not been secured. Investing in transit service, along with the tunnel and other roadway improvements, was expected to keep people moving to and through Seattle and provide additional capacity to and from downtown Seattle.

  WSDOT funded $32 million in transit service to reduce congestion in the SR 99 corridor and mitigate the impacts of construction-related delays on transit service. This funding paid for added trips and travel time impacts due to construction. This investment has led to a 22 percent increase in ridership on AWV related transit service. This funding expires in 2014 prior to the end of construction. To continue this service through the end of tunnel construction, King County Metro needs an additional $10 million in both 2014 and 2015.

  The committee asks that a sustainable funding source be identified to support King County Metro.

  Additional transit funding may be necessary to reduce impacts from toll diversion. The committee will discuss impacts of diversion and possible mitigation measures in 2013.

ACTT work plan and schedule

At its Nov. 1 meeting, the committee approved three additional scenarios for traffic and revenue analysis. WSDOT and City of Seattle staff will share traffic and revenue results in February and March 2013.

- **Scenario 4 - maximize revenue.** Designed to raise enough revenue to cover project capital costs and ongoing tunnel ownership costs. This scenario is a variation on scenario 1, but for example, toll rates are optimized to reduce diversion. The toll rates range from $1 to $2.75.
- **Scenario 5 - ownership costs.** Designed to raise enough revenue to cover ongoing ownership costs such as operations and maintenance, repair and replacement and facility insurance. This scenario does not attempt to cover capital costs and toll-backed bonds would therefore not be pursued. This scenario includes escalating toll rates. Two different variations are being analyzed: tolls of about $1.75 only during peak periods (6 – 9 a.m. and 3 – 6 p.m.) and low tolls (up to $0.75) throughout most of the day. The committee expects this scenario will have the least diversion of those studied.
- **Scenario 6 – balance revenue and diversion.** Designed to maximize revenue and to reduce diversion from the tunnel by charging a tiered toll rate. Only those who use the tunnel would pay a toll. As an example, during the p.m. peak period, the tunnel toll might be $3 for "Driver A" who uses the tunnel going from north Seattle to the airport. "Driver B" is also headed from north Seattle on SR 99 but wants to go to the stadium area. "Driver B" may not be willing to pay a $3 toll for a trip through the tunnel and would exit just before the north end of the tunnel (avoiding the toll) to use city streets through downtown. This tolling scenario would set a tunnel toll to a low enough level that "Driver B" would choose to pay the toll and use the tunnel rather than diverting from the tunnel and taking another route. In this example, "Driver B" is willing to pay $2 (but not $3) for a faster trip to the stadium area using the tunnel. The toll rates range from $0.45 to $3.

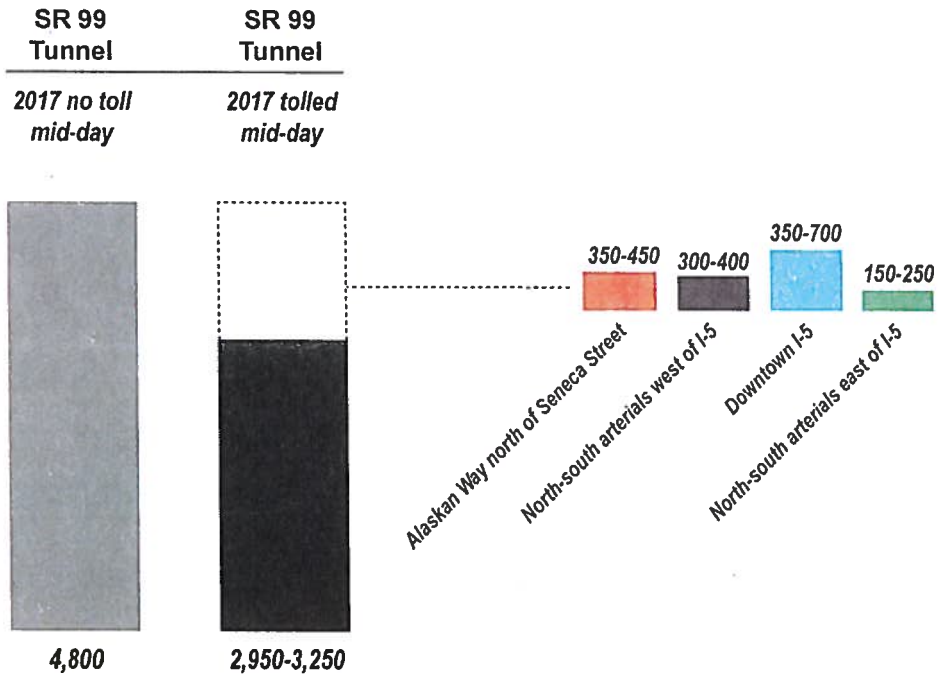
Mitigation discussions and 2013 recommendations

Committee members expect to meet regularly in early 2013 to review traffic and revenue modeling for the second round of scenarios and examine issues such as equity as the broader impacts of tolling are discussed. After additional traffic and revenue modeling results are analyzed in early 2013, committee members expect to make a recommendation on strategies for tolling the tunnel, minimizing and mitigating diversion. The committee's recommendation may mix and match aspects analyzed in different toll scenarios. The committee expects to evaluate whether mitigation measures are needed to reduce the effects of drivers diverting from the tunnel to avoid tolls and keep people and goods moving through downtown, while balancing the needs of freight, transit, bicyclists, pedestrians and vehicle users. In late 2012 (and continuing into 2013), the committee will be discussing potential mitigation, estimated costs, and strategies for funding any package(s) of mitigation that may be recommended. In mid-2013, the committee will share its recommendations with agencies, policymakers and elected officials.

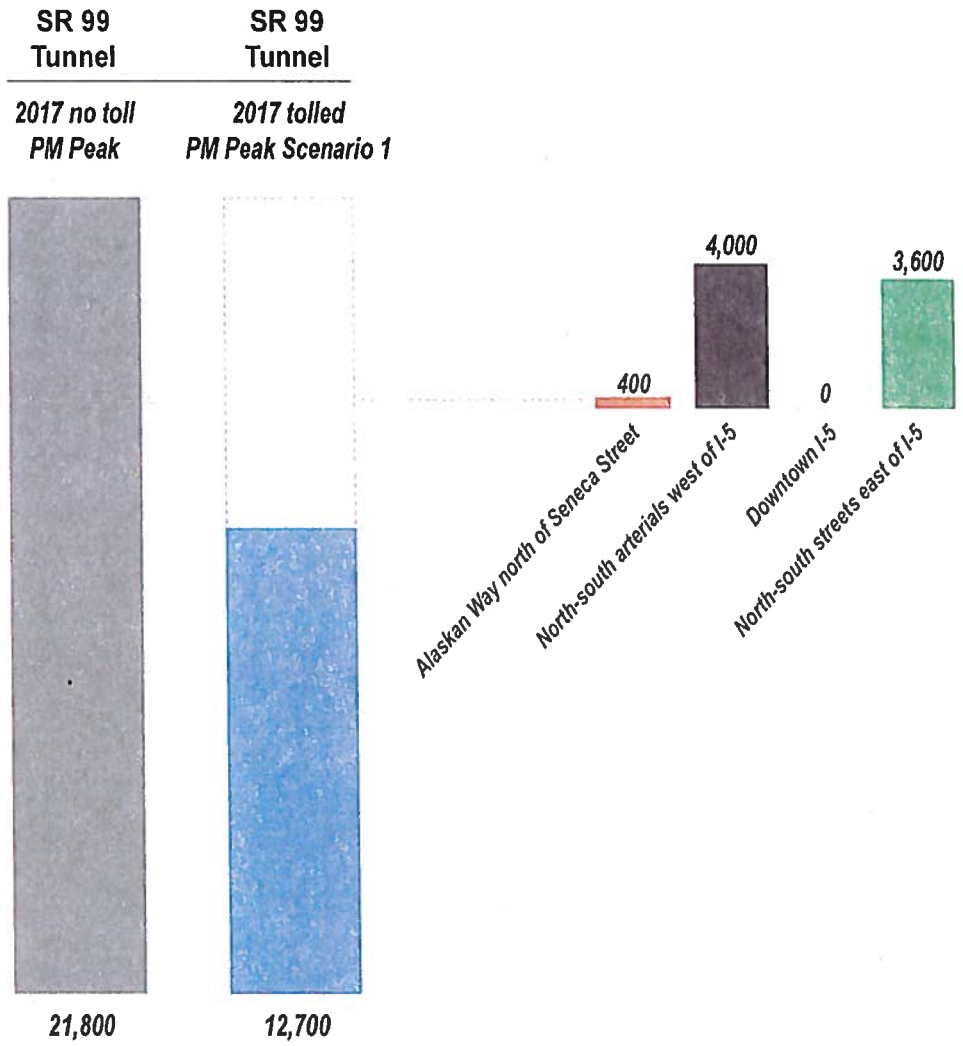
Traffic in the SR 99 tunnel and potential capital funding for project construction (target is $200 million)

Toll scenario	6 – 9 a.m peak period	1:30 – 2:30 p.m. mid-day	3 – 6 p.m. peak period	Total daily traffic in SR 99 tunnel	Potential capital funding after paying various toll collection and ownership costs
No toll	Not yet evaluated	4,800	21,800	85,800	N/A
Scenario 1	Not yet evaluated	2,450	12,700	50,000	Provides revenue for toll collection costs, ownership costs and $170 to $210 million for capital funding.
Scenario 2	Not yet evaluated	3,250	15,300	63,300	Provides revenue for toll collection costs and ownership costs, but the revenue likely couldn't be bonded to provide capital funding.
Scenario 3	Not yet evaluated	3,100	14,500	59,200	Provides revenue for toll collection costs, ownership costs, and $110 to $150 million for capital funding.

2017 Traffic volumes by location – Scenarios 1 – 3
Midday 1:30 – 2:30 p.m.



2017 Traffic volumes by location – Scenario 1
Peak period 3 – 6 p.m.



Due to congestion on downtown streets, it may be more difficult for drivers to reach Alaskan Way or I-5.