



## Washington State Transportation Commission

Regular Meeting Summary  
February 13 & 14, 2018

Chairman Jerry Litt opened the meeting at 9:00 am with introductions by Commissioners and Staff. Commissioners Batra, Young and Serebrin were not in attendance.

### **COMMISSION BUSINESS**

Staff reported on developments with the Washington Transportation Plan update. The WTP Steering Committee will be meeting next week; a briefing with the MPO/RTPO/WSDOT Coordinating Committee is scheduled for later in February.

Staff also reported on legislation that is moving through the process.

### **WSDOT LEGISLATIVE REPORT**

Allison Dane Camden, WSDOT Director of Governmental Relations, reported on WSDOT agency request bills:

- Tow-away trailers compliance with FAST Act changes
- SR 99 tolling process to repay the motor vehicle fund loans

Ms. Camden also reported on the federal budget process. Federal Highway Administration (FHWA) has continued to operate, thanks to FAST Act and Highway Trust Fund, but Federal Transit Administration (FTA) and some other agencies funded primarily from general fund, have been shut down twice.

The Trump infrastructure proposal would shift \$200 million from existing programs to seed transportation improvements. It flips the traditional 90-10 or 80-20 federal contribution and requires a substantial state and local contribution. The legislation proposes a lot of environmental streamlining.

**Action:** None

**Follow-Up:** None at this time

### **ROAD USAGE CHARGE PILOT PROJECT UPDATE**

Nearly 5000 people volunteered to participate in the Pilot. Small batches of invitations are being sent to balance the geographic diversity of participants. As of Monday afternoon, 331 invitations have been sent; about 60% of invitees have signed up.

Later this week, Emovis will join DriveSync as a mileage reporting choice. Based on early sign-up, 50% have chosen the plug-in device to record miles.

There are eight licensing sub agencies trained in odometer reading for the Pilot.

The Idaho and Surrey, B.C. recruitment will not begin until after the second vendor is qualified. Idaho will use all of the options available to Washington, except the subagent support, for its 50 participants. Surrey, B.C. is focused on approximately 200 public officials; it will offer only the plug-in device with GPS.

Participants will be sent three short surveys to assess user experience and attitude toward RUC.

The Commission will hold a news conference once the participants have some experience with the RUC. Tentatively scheduled for March 28, we expect the House and Senate Transportation Chairs to participate.

**Action:** None

**Follow-Up:** *The Commission will continue to receive regular updates on the RUC Pilot.*

### **SECRETARY'S REPORT**

The Memorial Foundation has updated the Workers' Memorial in the WSDOT HQ Lobby.

Joe Hedges has left the Alaskan Way Viaduct (AWV) Replacement Project to head up the California High-Speed Rail program.

WSDOT is assembling an I-5 work group with Puget Sound Regional Council (PSRC); it also is looking at the managed lanes in the Puget Sound region. Challenge Seattle is providing some research assistance.

**Action:** None

**Follow-Up:** None at this time

### **BALLARD LOCKS AND SEATTLE'S MARITIME ECONOMY**

Chad See, Executive Director, Freezer Longline Coalition and Charlie Costanzo, Vice-President, Pacific Region, American Waterways Operators, led a discussion of the Ballard Locks (Locks). The Locks connect Lake Union and Lake Washington with Puget Sound. Ongoing maintenance and repair of the locks is essential to maintain water levels for the maritime industry, vessels berthed in the ship canal and the lakes, and the Lake Washington floating bridges.

Now 100 years old, the Locks need \$30 to \$60 million in new investment to make major systems reliable and safe. The Army Corps budget process prioritizes investment based on the "Value to the Nation" (VTN), driven mainly by cargo tonnage. The VTN formula does not accurately capture the value of the locks, which provide safe harbor for ships that unload cargo before entering the locks. Due to the loss of Congressional earmarks and increased competition for limited Corps funds, users of the Locks must convey the economic value of the marine industrial network around the facility.

The Freezer Longline Coalition includes vessels based out of Dutch Harbor, but serviced in Seattle. Washington has been home to the North Pacific fishing fleet for 100 years. Over 200 North Pacific fishing vessels are homeported in Washington; about 40% of active vessels over 58' are moored and/or serviced annually inside the Locks. Vessels that transited the locks earned over \$500 million in 2016.

Economic Value of the Locks:

- Busiest in nation in vessel transits – 40,000 yr.
- 12<sup>th</sup> busiest in commercial transits – 7,500 yr.
- Supports \$1.2 billion in economic activity
- Tide-free, freshwater environment reduces maintenance costs and prolongs vessel life for 700 commercial and roughly 4,000 recreational vessels
- Indirectly supports an estimated \$785 million in seafood exports

Peter Schrapen, Director, Government Affairs, Northwest Marine Trade Association and Executive Director, Clean Boating Foundation, added that the Locks benefit the region's \$4 billion recreational boating economy.

Labor, environmental and tribal groups also support the initiative to restore the Ballard Locks. The shipyards not only work on the fishing fleet, they work on the Washington State Ferries fleet, helping maintain a competitive maritime environment. Susan O'Neil, Associate Director, Long Live the Kings and a member of the WRIA 8 Lake Washington-Cedar-Sammamish Watershed Council, noted that the locks allow salmon to enter and exit the watershed. The Locks, spillway, and fish ladder safeguard over \$125 million in salmon habitat protection and restoration. Twenty to eighty Muckleshoot fishing boats use the Locks annually. Tribal biologists work in partnership with USACE to monitor and manage fish runs. Coho stocks (21,000/year), Sockeye (115,000/year) and Chinook (11,000/year) transit the Locks.

Secretary Millar offered to provide a letter of support for the Ballard Locks. It is an essential part of the Northwest economy. While a catastrophic failure would cause disruption, he noted that WSDOT has been working with the Corps since 2010 – a 20' drawdown would be the maximum drop in water level. WSDOT could still move traffic across the bridges.

Ms. Griffith asked what funding opportunities exist. American Waterways Operators responded that it had originally hoped to get small annual increases for the Corps to get the work done over a decade. It is now also beginning to look at state and local funding opportunities.

### Ballard Locks

**Action:** None

**Follow-Up:** *Staff will draft a letter in support of funding for consideration at the March meeting.*

## **CALIFORNIA ROAD CHARGE PILOT PROGRAM**

Carrie Pourvahidi briefed the Commission on California's Road Charge Program. Its program began in Fall 2014 with passage of HB1077. The pilot operated from July 2016 – March 2017, and the Final Report was issued in December 2017.

### **California's Road Charge Pilot Program Achieved Many Firsts**

- Maintained more than 5,000 participating vehicles over a nine-month period
- Demonstrated six reporting and recording methods
- Offered manual, low tech, and high tech reporting methods
- For the first time included heavy commercial vehicles

### **Pilot Observations – Participation & Perception**

- Certain demographic targets and sub-targets set by the TAC were unattainable 85% were satisfied with the overall pilot
- 78% were satisfied with the security of their data
- 73% agree that a road charge is fairer than a gas tax
- 90% say they would participate in another road charge demonstration

### **Pilot Observations – Third Party Vendors**

- Successful in studying the viability of using third-party vendors (Account Managers)
- Demonstrated the ability to offer value-added features to enhance the user experience
- Account managers provided flexibility to pilot participants

### **Pilot Observations – Privacy & Data Security**

- Privacy and data security provisions ensured pilot participant information was secure.
- Privacy and data security were not a significant concern for the majority of focus group participants
- 78% participant satisfaction rating in regards to the pilot privacy and data security

### **Pilot Observations – Mileage Reporting Methods**

- Manual and automated mileage reporting options offered
- At enrollment, the clarity of communications and instructions regarding the mileage reporting methods caused a level of concern
- Surveys and focus groups indicated a change in perception over time. Rural participants were more likely to choose the odometer reading than urban participants

### **Pilot Observations – Technology**

- Range of mileage recording and reporting technologies offered
- 62% of the participants with a technology based mileage recording and reporting device, chose a GPS enabled device
- Plug-in device reliable, but could be obsolete as vehicle technology evolves
- Smartphone applications and in-vehicle telematics show promise, but need further development. It was hypothesized that the Smartphone would link to the car, but that did not work. It required a photo of the odometer.

Access to telematics requires an agreement with auto manufacturer. With many vehicles, the owner must subscribe to telematics service.

**Next Steps:**

- How to lower administrative costs? Taking another look at Pay-at-the-Pump with Fast Act grant. Is Vehicle to Infrastructure workable?
- Revenue Collection. How does money flow
- In-Vehicle Telematics
- Technology Collaborative
- Organizational Considerations. How would it work in the state? Interface with other states? How to transition?
- Two other challenges not studied in the Pilot: compliance and enforcement.

**California Road Charge Pilot Program**

**Action:** None

**Follow-Up:** None at this time

**TARGET ZERO**

Pam Pannkuk, Deputy Director, Traffic Safety Commission (WTSC), said that the mission of the Traffic Safety Commission is to lead statewide efforts to build partnerships to save lives and prevent injuries on roadways to benefit the safety and health of community.

Highway fatalities decreased slightly from 2015 to 2016, from 551 to 535. Serious injuries have generally followed the trend for traffic deaths—about four serious injuries per death.

Impaired driving continues to be a factor in about 50% of traffic deaths. Three times as many drivers test positive for multiple substances than are positive for alcohol alone. In the past two years, distracted driving has exceeded speed as a factor in traffic deaths. Sobriety checkpoints work to save lives; people drink less when they know there is a possibility to be stopped.

A new distracted driving law makes it illegal to hold and use your cell phone and other electronics while driving, even when stopped in traffic or at a light. The law was to take effect January 2018, until Governor Inslee vetoed the timeline and the law took effect on July 23, 2017. The WTSC quickly developed and implemented an educational campaign to ensure Washington drivers were aware of the new law and understood it prior to the July effective date. The campaign also provided an opportunity for WTSC to emphasize the dangers of distracted driving. The campaign ran for three weeks from July 10 to July 30, 2017. There was an immediate 13% reduction in distracted driving after the media campaign. However, after two months, the distracted driving rate was back to prior levels.

What's next? Moms! There are 500,000 moms in Washington and over 50% use the phone in the car. Smartphone use is a high concern for them. They are concerned they might cause an accident and 95% want to model correct behavior for kids.

Last year, WTSC began a project to use a behavior change model from the Center for Health and Safety Culture. Our first run at using this process will be exploring the culture around drivers who use alcohol and cannabis. Why do some use both at the same time? Why do some of them drive after use? What about those that chose not to drive after using either, or both?

Research Questions:

- How common is DUI of Cannabis and Alcohol (DUICA)
- Is DUICA willful or intentional
- Which cultural factors influence DUICA
- Which beliefs can be changed to reduce DUICA
- Which values should DUICA strategies align with
- In what contexts is DUICA most common

The plan is to identify strategies to transform traffic safety culture by change underlying beliefs and identify relevant values that can be used to frame introduction of strategies.

Interviews were conducted with people who had driven within two-hours of using alcohol and marijuana in past 12 months.

Of this sample:

- 46 percent had driven after drinking
- 54 percent had driven after using marijuana
- 38 percent had driver after using both alcohol and marijuana

Conclusions:

- Driving after using alcohol and marijuana seems to be predominately intentional
- Cultural attitudes and norms predicts intention to drive after using alcohol and marijuana
- Strategies to change behavioral and injunctive beliefs may be effective
- All users seem to share values safety and Target Zero Goals

Scott Waller, Program Manager, Washington Traffic Safety Commission, reported that fatalities and serious injuries to bicyclists and pedestrians are increasing. Both facility design and safety training are important. A Pedestrian Safety Advisory Council (PSAC) began meeting in fall 2016. Topics considered so far include data, review of multiple fatal crashes, land-use and infrastructure development decisions. This year we will look at disparate involvement of populations in fatality and serious injury crashes, enforcement strategies and technological approaches.

Substitute Senate Bill 5402 established the Cooper Jones Bicyclist Safety Advisory Council (BSAC). This group began meeting October 2017. Topics considered include data, disparately involvement of populations in fatality and serious injury crashes, who addresses and implications of future technologies like automated vehicles on bicyclist safety.

Traffic Safety Conference is April 24 – 26 at the Three Rivers Convention Center in Kennewick.

**Action:** None

**Follow-Up:** None at this time

### **LOCAL TRANSPORTATION PARTNERS 2018 OUTLOOK**

Three state agencies that provide grants for local transportation projects will report on their legislative and policy initiatives for the coming year.

Ashley Probart, Executive Director, Transportation Improvement Board (TIB), John Koster, Executive Director, County Road Administration Board (CRAB), and Brian Ziegler, Director, Freight Mobility Strategic Investment Board (FMSIB), all talked about HB2896/SB6530. This bill would codify the local funds provided through Connecting Washington.

Mr. Probart reported on TIB programs:

- Urban Arterial Program is about ½ preservation and 1/2 new construction. Even when expanding a 2-lane road to a four-lane road, half the job is preservation
- Arterial Preservation Program: for small cities with low Assessed Valuation
- Washington and Massachusetts are the national leaders in complete streets
- Relight Washington is lowering city street lighting costs by helping cities convert to LED streetlights
- On March 24, 2017, TIB created an Emergency Pavement Repair Program. It offered \$10,000 to \$50,000 grants. The Program closed August 31, 2017 after providing \$3 million in 90 cities

Mr. Koster reported on his agency's functions. CRAB is a first-in funder on many projects; the majority of projects funded are multi-year projects. That is why codification of the Connecting Washington funds is so important.

Counties see revenue dwindling as needs are growing. \$2.4 million less was distributed to counties over 17 years, despite a 67% cost increase over that time. In addition, the criminal justice system accounts for over 75% of county general fund dollars. Shift of road funds to other uses now totals \$67 million.

CRAB would like to have an emergency fund to assist counties that experience natural disasters. The good news is that counties will get the job done. They are very resourceful.

Counties in Eastern Washington are having a difficult time funding equipment and operators. Bridges less than 20 feet in length are completely paid for by counties.

Funding aid to county ferries comes off the top of the MVFT before the revenue is distributed. Therefore, the ferry aid impacts all the counties.

Mr. Ziegler reported that the agency mission is to:

- Advocate for strategic freight transportation projects that bring economic development and a return to the state
- Focus on timely construction and operation of projects that support jobs
- Leverage funding from public and private stakeholders

- Create funding partnerships across modal and jurisdictional lines

Connecting Washington more than doubled the funds available for FMSIB projects. Most projects leverage other money. They typically leverage \$6 for each FMSIB dollar.

The Freight Advisory Committee was created in 2013 to advise the state on freight policy issues. It developed and prioritized a list of projects.

The Marine Cargo Forecast projects that cargo is growing; there is some rail capacity available.

FMSIB also is working on Phase 2 of the Road-Rail Conflicts Study to prioritize grade separation projects. That report is due September 2018.

[TIB](#)  
[FMSIB](#)

**Action:** None

**Follow-Up:** None at this time

**UNIVERSITY OF MINNESOTA EXPRESS TOLL LANES REPORT**

In 2017, the Joint Transportation Committee commissioned a study of the effectiveness of the I-405 Express Toll Lanes (ETLs). The study results recommend strategies for near-term and long-term improvement of traffic performance in the corridor. The research team from the University of Minnesota, Dr. Khani, Department of Civil, Environmental, and Geo-Engineering, University of Minnesota and Matt Schmit, State & Local Policy Program, Humphrey School of Public Affairs, University of Minnesota, presented their findings and recommendations.

Dr. Khani noted that the corridor is performing well. Travel time in the corridor did not increase, but volume did. Average daily VMT increased throughout the corridor, accommodating an additional 100,000 vehicles a day.

However, he added that the maximum toll rate is reached too frequently to keep the ETL moving at 45 mph 90% of the time. In a well-functioning corridor, the maximum toll is paid only rarely.

The toll should increase to the point where drivers choose not to enter the toll lane – thus ensuring the free-flow of traffic in the ETL.

**Corridor Performance Findings**

1. ETL speed performance measure not met
2. Speed improved after transforming HOV lane to ETL
3. ETL facility increasing corridor throughput
4. General Purpose Lane (GPL) speeds showed no significant change
5. ETL toll rates max out during 15 percent of peak period
6. Algorithm not optimally responsive and toll rate is too low as traffic volume builds

Many factors are affecting the General Purpose Lanes speeds:

- Opening of the 1.8-mile northbound shoulder lane



- Recent changes in striping, signage and merge lanes
- Population growth in the area
- Change in carpool rules from 2+ HOV to 3+ HOV

Relative impact of multiple variables on corridor performance cannot be measured without the use of more sophisticated traffic modeling.

### **Top Tier Short-Term Recommendations**

1. Improve ETL speed through a more responsive dynamic toll algorithm. The algorithm does not change quickly enough. The current algorithm changes every five minutes. How much should the value change with each update
2. Improve ETL speed through segmented corridor tolling. Prof. Schmit will get back with examples where this has been done previously

### **Second Tier Short-Term Recommendations** (helpful to do, but won't solve the problems)

1. Move toward an "open access" ETL facility to smooth lane transfer
2. Increase maximum toll rate to reduce ETL breakdown
3. Adjust AM peak period times to increase ETL speed (adjust peak period to 10 am)

### **Long-Term Recommendations**

1. Extend second full ETL in each direction to improve ETL speed and capacity
2. Add capacity to ensure lane continuity and ease bottlenecks
3. Increase transit options to improve throughput and speed

### **Recommended Future Studies**

- Analyze corridor travel demand patterns by origin-destination and alternative routes and propose a pricing algorithm with prices varying by entrance ramp location
- Conduct field tests of different price ranges and price change increments to determine Value of Time (VOT) and price elasticities
- Develop a traffic simulation model to experiment with different pricing algorithms and to optimize pricing algorithm parameters

Although the University of Minnesota didn't study the change in carpool toll exemption from 2+ to 3+, the researchers believe the data supports that decision.

### **Conclusion**

The I-405 ETL facility is meeting statutory performance measure related to financial sustainability, but not the performance measure related to average ETL speeds. This is due in part to overall traffic volume growth and a toll rate algorithm and pricing not adequately responsive to rapidly increasing traffic volume during peak periods

As time passes and conditions change, even the most sophisticated ETL facilities require regular adjustments.

- Recommendations should be considered part of the natural evolution of the corridor, not criticisms of work that has been done in the past

- Implementation of recommendations should improve I-405 ETL performance and increase throughput and efficiency

**Action:** None

**Follow-Up:** *The Commission will continue to monitor the I-405 ETLs.*

### **TOLLING FACILITIES FY 2018 UPDATE**

Ed Barry, Director of the Toll Division, announced that the toll division is developing a work plan to respond to the U-Minnesota study. It has changed the algorithm refresh timing from 5 minutes to 3 minutes.

Overall, with the exception of SR 167, toll facility traffic and revenue are above forecast this fiscal year. For all facilities except the Tacoma Narrows Bridge (TNB), processing of some photo-based transactions was delayed during this period due to a series of related vendor issues

- Less than 5 percent of the total transactions were affected
- Customers were notified and transaction processing was managed to minimize customer impacts
- Looking at monthly revenue for SR 520 and I-405 you will see month-to-month variances due to this issue, with lower revenues in one month offset by higher revenues subsequently

TNB reported toll traffic was 0.9 percent above forecast. Total reported adjusted gross toll revenue was 2.8% above forecast.

SR 520 reported toll traffic was 3.2% above forecast and total reported adjusted toll revenue was 2.8% above forecast, up by \$1.1 M.

SR 167 reported toll traffic was 3.3% below forecast and total reported toll revenue was 0.8% below forecast, down by \$13,000.

I-405 ETL reported toll traffic was 1.6% above forecast. Total reported toll revenue was 10.3% above forecast, up by \$1.1 M.

### **Tolling Facilities FY 2018 Update**

**Action:** None

**Follow-Up:** None at this time

### **SR 520 FINANCIAL PLAN**

This agenda item was advanced to the April Commission meeting. However, Commission staff reported that analysis by the Office of State Treasurer indicates that SR 520 is generating adequate revenue to meet obligations.

A change in the revenue forecast and assumptions, along with a change in the traffic and revenue consultant, drove a projected \$121 million decrease in revenue available for debt service between 2017 and 2056. Conservative assumptions in the financing model helped mitigate the decrease in revenues. No changes to SR 520 tolls are necessary at this time.

**Action:** None

**Follow-Up:** None at this time

**PUBLIC COMMENT**

None

**TRANSPORTATION COMMISSION**

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REEMA GRIFFITH, Executive Director

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