

WASHINGTON STATE TRANSPORTATION COMMISSION
Regular Meeting Summary
February 18 & 19, 2014

COMMISSION BUSINESS

Chairman O’Neal opened the meeting. *Commissioner Haley moved adoption of the January 21 & 22 meeting summary. Commissioner Tortorelli seconded the motion and it was adopted unanimously.*

Commissioner Litt briefed the Commission on the Washington Transportation Plan Update.

- On schedule to seek public comment on draft plan update by July.
- Public engagement and outreach has begun
 - o Website should launch this week
 - o A PowerPoint overview of the process is available
 - o Staff has begun development of tribal outreach strategy with WSDOT staff
 - o Staff spoke to the Washington Economic Development Association on February 4
 - o Keri Shepherd, tribal representative on WTP Advisory Group, is talking to Associated Tribes of Northwest Indians
 - o Transportation Choices is organizing a public workshop for April
 - o Four stakeholder roundtables planned for April/May
- Sending data request to WSDOT and MPO/RTPOs very soon
- Budget request to complete Phase 2, a federally compliant plan, has been submitted to the Legislature
 - o Requesting an additional \$450,000 through 2013 – 15 biennium
 - o Collaboratively develop performance standards with WSDOT and MPOs
 - o Coordinate transportation plan and economic development planning
 - o Address security of transportation system
 - o Develop future revenue scenarios
 - o Enhanced consultation, outreach and communications

The goal is performance targets that work for entire system and that are achievable and affordable.

Commissioner Haley reported that the tolling team has been digging deeply into the policy issues on I-405 Express Toll Lanes.

Staff briefed the Commission on the status of legislation, the transportation revenue package and the Commission’s budget requests.

Action/Follow-Up:

WASHINGTON STATE FERRIES (WSF) LNG STUDY

David Moseley, Assistant Secretary for WSF, briefed the Commission on the trend toward Liquefied Natural Gas (LNG) a fuel source for marine transport. He reported that ferry vessels currently under construction could be converted to LNG “pretty simply.”

WSF proposes retrofitting 6 Issaquah Class vessels to burn LNG fuel. Benefits are lower operating costs and pollution reduction. Findings of the study include:

- Since 2000 the Norwegian government has allowed the construction and operation of LNG passenger ferry vessels. Norway has 20 car and passenger ferries currently operating that are fueled by LNG.
- Both BC Ferries and Staten Island Ferries are studying options to retrofit their vessels from diesel to LNG fuel.
- The Quebec Ferries Company has contracted for three new LNG ferries.
- There are LNG passenger ferry vessels currently under construction or in design for service in Argentina, Uruguay, Finland, and Sweden.
- There are commercial LNG ships in use. Locally, TOTE is in the process of converting large vessels to LNG.

A WSF consultant has developed a waterways suitability assessment (WSA) with safety, security, and operations components. The WSA has been transmitted to the US Coast Guard and has been published for public review.

The safety and security assessment has found:

- Placement of the LNG tanks on the top deck of the ferries is inherently safe.
- If a person stood at the location with the greatest risk, on the busiest route, their maximum potential individual risk is at the level of 1 in 1,000,000 per year (0.000001 per year)
- Societal risk from LNG fueled passenger ferry deemed as Low as Reasonably Practicable
- Security assessment evaluated eight threat scenarios. These threats are included as separate appendix designated as Sensitive Security Information and is only releasable by the U.S. Coast Guard.

Next steps:

- Awaiting decision on Rolls-Royce Marine's response to financial deficiencies from RFP for design-build propulsion system
- Awaiting approval of the WSA from U.S. Coast Guard
- Final determination of LNG design/build RFP
- Develop final design for Issaquah Class conversion, pending funding from state legislature

[Ferries Division liquefied Natural Gas](#)

Action/Follow-Up: None.

TRANSPORTATION IMPROVEMENT BOARD; STRATEGIC PERFORMANCE INITIATIVE

Steve Gorcester, Director of the Transportation Improvement Board (TIB) briefed the Commission on its Strategic Performance Initiative, a management framework for achieving the goals of TIB.

Performance measures provide data to inform improvement. TIB Business Objectives are:

- strong finances
- healthy inventory
- achieve goals
- extract value
 - (reduce waste, shorten project life, reduce unit costs and maintenance)

- the right treatment on the right street at the right time

Based on approximate \$2.5 million annual loss during 1990s, TIB no longer makes design-only grants. Money lost to wasted design is down by 80%. The business process has four steps: plan, do, check, and act.

2014 TIB Work Program

- LEAN Training (Three TIB staff have a work program for LEAN capacity building.)
- Small City Program Reengineering
- Federal Match Reengineering

The Capital Squeeze. New projects get eliminated first when the budget is squeezed:

1. Debt
2. Operations
3. Maintenance
4. Capital

TIB awards about \$80 million a year. Office processes comprise only 1.3% of the budget.

- TIB staff are coordinating small city pavement preservation with county and state paving.
- Delays are down from 67 projects to 8.
- Economy of scale eliminated highest cost preservation; towns were paying 40% more than county or state.
- Street lights leak value every night.

[TIB Strategic Performance Initiative](#)

Action/Follow-Up: None.

SECRETARY'S REPORT

Cam Gilmour, Deputy Secretary, WSDOT reported that the state has had 60" of snow in the last five days and another 50" are projected this week. He added that there are as many slides as bridges impacting the state transportation system.

JTC Cost Efficiency Study searched hard for ways to save money on transportation projects. One recommendation with high potential is practical design. Practical design identifies, in a community setting, addressing what all stakeholders can agree on, within the financial constraints.

If the legislature fails to enact new transportation revenue:

- until 2017, some facilities will drop into a state of disrepair. WSDOT has shifted some money into maintenance program to fund stop-gap maintenance activities.
- will the 40% of employees eligible to retire in next 4-5 years be replaced? If so, how are they replaced?

Action/Follow-Up: None.

PUGET SOUND REGIONAL COUNCIL: TRANSPORTATION 2040 UPDATE

Robin Mayhew, Program Manager, PSRC briefed the Commission on the Puget Sound Regional Council T-2040 Update. It builds on four integrated strategies:

- land use
- efficient management
- strategic investments
- pricing

Responding to change:

- Great Recession and Recovery
- Population and employment changes
- New Federal emission standards
- Investments in the regional system
- MAP-21 direction
- State of Good Repair Needs
- Transportation 2040 Prioritization

Core elements of the Update:

- state of good repair update
- prioritization
- financial strategies

Statutory/Ongoing Activities:

- active transportation plan
- air quality conformity/GHG update
- TDM/CTR programs
- Growing Transit Communities
- Rural transportation study

What's Changed:

- \$15 billion less revenue is forecast
 - full plan = \$211 billion
 - constrained plan = \$174 billion
- better cost estimates for streets, roads, highways, transit, sidewalks and bike paths
- new prioritization framework

Several commissioners noted that income inequality and the cost of housing complicates the mission.

[Transportation 2040 Update Draft Report](#)

Action/Follow-Up: Continue to monitor T-2040 Update and reference in WTP 2035.

NATIONAL FREIGHT ADVISORY COMMITTEE

Karen Schmidt, Executive Director of the Freight Mobility Strategic Investment Board (FMSIB), briefed the Commission on MAP-21 freight provisions. MAP-21 created a Freight Policy Board and a National Freight Advisory Committee (NFAC). The NFAC has 47 members, from across the country.

Ms. Schmidt co-chairs the NFAC Project Delivery and Operations Subcommittee. It meets every other week and takes a multi-modal approach to freight movement.

Immediate Tasks:

- Identification of major trade gateways and freight corridors;
- Assessment of barriers (statutory, regulatory, etc.)
- Best practices for improving the performance of the national freight network
- Process for addressing multi-state projects and encouraging collaboration
- Strategies to improve freight intermodal connectivity.
- NFAC seeks a dedicated funding source for freight improvements.

MAP-21 guidance for State Freight Plans:

- In General. – The Secretary shall encourage each state to develop a freight plan that provides a comprehensive plan for the immediate and long-range planning activities and investments of the state with respect to freight.
- Relationship to Long-Range Plan. – A freight plan described in subsection (a) of Section 1118 may be developed separate from or incorporated into the statewide strategic long-range transportation plan required by section 135 of title 23, United States Code.

Washington Freight Advisory Committee:

- State & Federal Policies that negatively impact freight movement
- Trends impacting freight movement
- Inventory of Priority At-Grade Crossings
- Inventory of Priority State Highway Projects
- Inventory of Priority Local freight projects

[National Freight Advisory \(NFAC\) Update](#)

Action/Follow-Up: Once FMSIB approves the Washington Freight Report, it will be sent to WSDOT to be included in its Freight Plan and to the Transportation Commission for inclusion in WTP 2035.

PUBLIC COMMENT

Paul W. Locke told the Commission that he is not getting enough revenue from his investments. He urged less spending and less borrowing.

COMMISSION WORK SESSION

1. Commissioners talked about whether to simplify the toll rate structure.
 - Do we want to change how the additional axle toll rates are calculated?
 - Do we want consistent fees and charges for different payment methods regardless of the type of facility?
2. WTP Vision:
Faster, better cheaper.

Or: By 2035, connect people and communities as an environmentally and financially sustainable system.

Graphically illuminate the other sub-concepts.

Action/Follow-Up: (1) Schedule future time to discuss simplification of toll rate structure. (2) Continue work on WTP 2035.

WASHINGTON'S SEISMIC VULNERABILITY: IMPLICATIONS FOR TRANSPORTATION PLANNING AND PROJECTS

Tim Walsh, Chief Hazard Geologist, DNR briefed the Commission on changes in knowledge in Washington's seismic vulnerability and its implications for transportation plans and projects. Washington is ranked second in the nation for earthquake risk. A FEMA Report estimates that the economic impact from a 9.0 Cascadia Subduction Zone quake would be about \$49 billion. A 2012 Report, "Resilient Washington State," includes four recommendations for strengthening regional transportation networks to ensure effective response and recovery from a major earthquake.

The biggest changes in seismic load awareness since Walsh last briefed the Commission are in Eastern Washington. Hundreds of earthquakes were felt (and heard) in Spokane in Spokane in 2001. New seismic research techniques used in 2013 reveal previously unknown faulting in the Spokane area. There also is reexamination of the Olympic Wallowa Lineament, which may be a large fault area extending from the Olympics to the Wallowa Range in Oregon. The seismic events in Walla Walla may be due to this fault zone.

Ports and ferry terminals are highly susceptible to tsunami damage.

The interactive seismic scenario catalog illustrates the expected damage to bridges and structures from potential earthquake events. The driving force behind the catalog was the need of counties to prepare emergency response for worst case scenarios.

[Implications for Transportation Planning and Projects](#)

Action/Follow-Up: Incorporate seismic risk data and recommendations in appropriate parts of WTP 2035.

JOINT TOLL AND FERRY CUSTOMER SERVICE CENTER FEASIBILITY STUDY

ESSB 5024 directed the toll division to study the feasibility of single account-based system for toll and ferry customers. The study evaluated:

- Single customer account for ferries and tolls
- Combined customer services for ferries and tolls
- Ferry fare payment with *Good To Go!* pass
- Integrated ferry reservation system and tolls back office system
- *Good To Go!* as payment for parking at Sea-Tac Airport

Previous Studies

- Joint Transportation Committee Fare Media Study (2012) recommended *Good To Go!* & replacement of ticketing system
- Fare Media Study Update (2013) continued to endorse previous recommendations on *Good To Go!* & ticketing system

Timing

- Current ticketing system for WSF needs replacement (2018)
- Toll Division customer service center contract term ends 2018

Schedule

- 2014*: Toll Division begins back office procurement
- July 2015: Funding for new back office/ticketing contracts
- Mid to late 2018: Go live

Approach

- Replace back office & ticketing systems in approximately same time frame

Alternative Approaches

- Full combination
- Share responsibilities
- Maintain separation

Considerations:

Ferries

Staff work closely with ferry operations center
Traveler Information – Routes & Fares
Special Needs

Toll Division

Account Management and Toll Bill Questions
Inventory Management & Distribution
Payment Processing

Recommended Approach:

- Integrate phone systems
- Maintain separation of customer service staff with basic cross-training

Ferry Fare Payment with *Good To Go!* -- alternatives considered

- Ranged from full gantries to handheld readers used by attendant

Recommendation

- Mount toll equipment to existing ferry terminal infrastructure
 - Minimize capital costs
 - Meet technical performance requirements
 - Optional near-term application

Early Implementation Option Scope/schedule

- *Good To Go!* available at six ferry terminals by end of 2016
- Cost is estimated at \$4,249,000 to \$5,162,000.

Commissioners asked how this work may tie into expansion of the WSF reservation system.

Other transportation applications could include Sea-Tac Airport parking. There are examples from around the country, such as Texas and New York. Benefits are promoting *Good To Go!* and providing added convenience for existing customers. It will require a policy on cost recovery and transferring of revenue.

[Joint Toll and Ferry Customer Service Center Feasibility Study](#)

Action/Follow-Up: Monitor implementation.

TACOMA NARROWS BRIDGE RATE SETTING

The Transportation Commission has adopted rates for FY 2014 and FY 2015.

Citizens Advisory Committee (CAC) Chair Alan Weaver reported that the CAC recommends the Commission stay with its adopted toll rate increase of 25 cents across the board. The CAC is very concerned about next year and the following biennium. The CAC would like to see analysis of removing the tollbooths and going all electronic. While they understand that toll collection provides cash in hand, rather than a promise to pay, there is a desire to have the facts first.

[TNB Rate Setting](#)

Action/Follow-Up: None.

FY 2014 2nd QUARTER FINANCIAL STATEMENTS FOR TOLL FACILITIES

Bob Covington, Director, Accounting & Financial Services, WSDOT briefed the Commission on the fund balances and combined balance sheet for toll facilities, at the end of the second quarter, FY2014.

Commissioners and staff asked several questions about Notice of Civil Penalties revenue accrued but not collected. Mr. Stone indicated that some of it may take over two years to collect from time of accrual, due to timing of penalties, adjudication and license plate holds. It will take 3 – 5 years to understand what portion of uncollected revenue is likely to be collected.

[SR 520 Bridge Financial Statement](#)

[SR 520 Civil Penalty Financial Statement](#)

[HOT Lanes Financial Statement](#)

[TNB Financial Statement](#)

[Tolling Balance Sheet](#)

Action/Follow-Up: Continue to monitor.

I-405 EXPRESS TOLL LANES RATES & POLICIES

Craig Stone, Assistant Secretary, Toll Division, WSDOT and Rob Fellows, Manager, Toll Planning & Policy, WSDOT led discussion of the rate-setting goals for express toll lanes.

WSDOT is developing a new dynamic rate algorithm to replicate SR 167 algorithm behavior. It will add ability for multiple zones, customization to other corridors.

- Why dynamic rates?
 - Customers can choose based on current conditions
 - Better for ensuring reliability day-to-day
- How does the algorithm work?
 - Receives data from loop detectors on roadway (speed, volume)
 - Reacts to changes in speed and volume in a logical way

- Reacts differently depending on volume and rate of change
- Operators can override in exceptional cases (blockages, etc.)

Policy Factors Affecting Revenue

- Traffic management objectives can affect the balance between traffic and revenue optimization
 - Primary tradeoff is the minimum target speed
 - 45 mph results in best throughput, but is close to failure threshold
 - Higher speed goals result in higher revenues
 - In operation, friction between lanes will blur these extremes
- Minimum and maximum toll rates, exemptions and fees for more costly payment methods are most critical and controllable revenue factors
- Other project design and operation elements affecting revenue could include:
 - Hours of operation
 - Speed limits (would require active traffic management)
 - Allowable vehicles by weight/class or commercial vehicle charge
 - Location of express toll lane access points

Commission staff has asked to ensure managing the toll algorithm does not improperly delegate authority.

- Express toll lane rates are set dynamically by definition to achieve both revenue and traffic objectives
- The algorithm is integrated with traffic management systems and requires traffic engineering expertise to achieve the desired traffic management outcomes
- To affect the balance between traffic and revenue objectives, consider a discussion of speed objectives rather than detailed management of the algorithm

Is there a financial target? The \$35 million tolling cost for the Express Toll Lanes is sunk cost. Only the operating cost must be recovered. The specific revenue targets are provided in RCW 47.56.850:

(3) the tolling authority must ensure that toll rates will generate revenue sufficient to: (a) Meet the operating costs of the eligible toll facilities, including necessary maintenance, preservation, renewal, replacement, administration, and toll enforcement by public law enforcement;

Policy Guidelines for Eligible Toll Facilities (RCW 47.56.830):

(4) Setting toll rates. Toll rates, which may include variable pricing, must be set to meet anticipated funding obligations. To the extent possible, the toll rates should be set to optimize system performance, recognizing necessary trade-offs to generate revenue.

Performance Measures (RCW 47.56.880):

(4)The department shall monitor the express toll lanes project and shall annually report to the transportation commission and the legislature...

- (a)Whether the express toll lanes maintain speeds of forty-five miles per hour at least ninety percent of the time during peak periods;
- (b)Whether the average traffic speed changed in the general purpose lanes;
- (c)Whether transit ridership changed;
- (d)Whether the actual use of the express toll lanes is consistent with the projected use;
- (e)Whether the express toll lanes generated sufficient revenue to pay for all Interstate 405 express toll lane-related operating costs;

(f) Whether travel times and volumes have increased or decreased on adjacent local streets and state highways; and

(g) Whether the actual gross revenues are consistent with projected gross revenues

Future financial planning for Express Toll Lanes will follow a different paradigm than bridge tolls

- Operating experience will help indicate revenue potential
- Financial plan will account for express toll lane revenue volatility
- Recognizing that traffic congestion levels will determine toll revenue potential, the toll-funded capital investment will be sized to fit within projected funding capacity as demonstrated by the initial project phase

Is it appropriate only to set minimum / maximum rate limits?

- Minimum Toll \$0.80
- Minimum Toll Rate Too High
 - Model predicts large drop off in traffic (empty lanes problem)
 - Fewer toll trips to cover fixed I-405-specific toll system and enforcement costs significantly increases average cost per trip
 - Risk: higher minimum toll doesn't cover even higher average cost of collection per trip that results from predicted drop in trips
 - Partially offsetting factor: fewer overall transactions reduces I-405 share of allocated system costs
- Minimum Toll Rate Too Low
 - Risk: toll doesn't cover cost of collection
 - Somewhat higher overall toll trips increases I-405 share of allocated system costs
 - Partially offsetting factor: more trips to cover fixed I-405 toll system and enforcement costs reduces average cost per trip
- Current Minimum Toll Rate Assumption
 - Achieves reasonably high lane usage
 - Covers year two cost of collection (\$0.71 / trip Good To Go!)
 - Price is low enough to encourage people to try the system
 - Lower risk / frequency of empty lanes

What Method is Best?

- Several methods have been presented that could be used to arrive at a minimum toll rate
 - Choose a rate that exceeds the average cost of collection (above 71 cents) in FY2017
 - Choose a rate the model shows achieves the current financial plan (80 cents)
 - Choose a rate that is not too high and not too low (75 to 80 cents)
- Another possible approach would be to establish a target that should be covered by those paying the minimum rate
 - Requires running rate scenarios using different minimum toll rate (preferable if a single carpool option has been selected)
- Example targets could include:
 - Minimum tolls should cover X% of O&M costs in 2017 (to meet break-even criterion)
 - Minimum tolls should cover 55% of biennial costs (consistent with financial plan)
 - Minimum tolls cover 100% of costs for 2015-17 (congested tolls are net revenue)

Maximum Toll Rate: Policy Options could include:

- No maximum toll rate
 - Let algorithm set traffic-appropriate rates

- Avoids performance and availability issues
- Occasional high rates may raise public concerns
- \$9.00 maximum toll rate
 - Consistent with SR 167 maximum toll rate
 - Will result in performance/availability issues sooner than higher rate
- \$15.00 maximum toll rate
 - Consistent with SR 167 methodology (\$1.00 per mile maximum)
 - Consistent with national examples
 - Likely to be sufficient for several years
- Planning assumption: No maximum toll rate

The Commission may set a toll differential for Pay By Mail transactions

- Higher cost due to mailing and address look-ups
- Not all post-paid tolls will be collected
- Modeling assumed a \$1.70 Pay By Mail toll differential in FY 2017
- Increment would be added to dynamic toll cost
- Signs would tell customers an additional charge applies

Local Precedent:

- Planned toll schedule has SR 520 Pay By Mail differential at \$1.70 in FY 2017 and financial plan does not rely on additional increases after that time
- Tacoma Narrows Bridge is \$2.00 higher than *Good To Go!*
- Intent to cover incremental costs and losses of payment method

Other options to consider in future rate setting cycle

- Make consistent: standardize the differential for all facilities

How the original \$1.50 was derived:

- \$1.50 was estimated for initial SR 520 and TNB Pay By Mail toll rate increment
- Included additional processing costs and losses from unbillable toll charges – but not from unpaid toll bills
- Without historical data, broad ranges were used for each factor
- These costs are now known and can be used to update the Pay By Mail increment

Components of costs and losses:

- Additional costs compared to Good To Go!
 - Printing and postage associated with toll bills
 - Out-of-state license plate lookup
 - Additional time on phone with Customer Service Center
- Uncollected tolls raise the transaction cost for paying customers
 - Unbillable transactions: Some transactions can't be billed due to unreadable license plates or unavailable addresses
 - Unpaid transactions: Some tolls won't be paid within 80 days and may be captured instead as part of civil penalty revenue
- Additional tolls may be received during the civil penalty process but are not included in net revenues
- Options could include:
 - \$1.00 (covers cost increment only)
 - \$1.25 (covers incremental cost and losses)
 - \$1.70 (consistent with modeling and SR 520 in FY 2017 and beyond)

–\$2.00 (consistent with Tacoma Narrows Bridge)

–Others?

- Considerations:

–Higher options will cover incremental costs for longer period

–Higher options create greater incentive for users to get a pass

- Planning assumption: \$1.70 Pay By Mail differential

Non-carpool Exemptions:

- Vehicles working on the facility are currently exempt on all toll facilities

–In-service maintenance and incident management vehicles

–In-service emergency vehicles

–On SR 520, tow trucks contracted for incident management

–On I-405, would include WSP conducting HOV enforcement

- Transit and Vanpools

–Exempt by statute

- Private Buses

–Exempt on SR 520 by Urban Partnership agreement

–RCW 46.61.165 allows private buses on “transit priority lanes”

–Additional interpretation underway

- Motorcycles

–Motorcycle exemptions may be required under federal statute, additional interpretation underway

Discuss next steps to resolve

- Maximum toll rate

- Minimum toll rate

- Pay By Mail differential

- Exemptions (Note – by statute, transit and vanpools must be exempt on I-405)

- Emergency vehicles / incident response / maintenance vehicles

- Private buses

- Motorcycles

- Carpools (defined as 2+ or 3+ occupancy)

- Key concern to project timeline is carpool definition

–Needed to develop public outreach messages, toll systems

–Will require the longest lead time for customers to adjust

–Commission can decide without further legislative delegation

–Is a March decision possible, and what information is needed?

[I-405 Express Toll Lanes Rates & Policies](#)

Action/Follow-Up: Tolling Team will develop recommended policies for the Commission to consider at a future meeting.

TRANSPORTATION COMMISSION

ABSENT

DAN O'NEAL, Chairman

TOM COWAN, Vice-Chairman

ANNE HALEY, Member

PHILIP PARKER, Member

JERRY LITT, Member

CHARLES ROYER, Member

JOE TORTORELLI, Member

ATTEST:

REEMA GRIFFITH, Executive Director

DATE OF APPROVAL