



Washington State Transportation Commission

Tri-State Commission Meeting Summary Portland, Oregon June 17, 2016

COMMISSION BUSINESS

Oregon Transportation Commission Chair Tammy Baney welcomed the Commissioners from California and Washington. All of the Commissioners and staff directors introduced themselves.

Before moving on to the meeting agenda, Commissioner Baney had staff distribute a report from the Oregon Department of Transportation (ODOT) on the June 3, 2016 Union Pacific Rail Road crude oil train derailment. Sixteen tank cars from the 94 car train derailed and four caught fire. No injuries were reported and about 100 people were evacuated. The last rail car was removed by June 8 and site clean-up and environmental monitoring continues.

ROAD USAGE CHARGING

Maureen Bock, OReGO Program Manager, discussed the history of user-pay transportation in Oregon, beginning with its adoption of the nation's first gas tax in 1919. Ms. Bock reported that the Road Usage Charge program is fully operational for up to 5,000 light duty vehicles and described how it works. Volunteers sign up on-line and participate in exit surveys.

The ongoing work, after start-up last summer, includes:

- Resolving volunteer issues and inquiries
- Conduct volunteer exit surveys
- Certified Azuga Basic as an account manager
- Refining the process and requirements

Additional work underway includes:

- Enhancing ODOT's RUC account system
- ODOT has begun rewriting administrative rules is working to certify Sanef as an account manager.

The most enrolled vehicle type is the Toyota Prius, followed by the Ford F-150 and Subaru Outback.

Goals for the future:

- Ensure OReGO is poised as a viable revenue program
- Monitor market opportunities
- Reduce barriers
- Further partnerships with other states
- Plan for potential expansion

Ms. Bock added that Oregon applied for a FAST Act Grant to expand the market, increase public awareness, evaluate compliance, and explore interoperability. The interoperability vision is one account for RUC, parking, and other services; accurate fund collection by jurisdictions; and allocating revenue to the correct jurisdiction.

Commissioner Serebrin asked whether Oregon has evaluated how to make the RUC more equitable across income strata. Ms. Bock replied that a study indicated that in most of rural Oregon, people will pay less. Commissioner Lohman added that trucker happiness with the weight-distance system helped persuade others of its fairness.

Reema Griffith reported that the Washington Legislature tasked the Transportation Commission with taking the lead in exploring and developing the RUC option for future funding. Ms. Griffith provided overview of the RUC Steering Committee and its recommendations. Key findings to date:

- Taxing gallons of gas has real fairness and equity challenges
- Even with annual gas tax increases, revenue will not keep up with needs
- What you drive will determine RUC cost impacts
- It is important to continue to charge out-of-state drivers for use of the roads

Norma Ortega, Finance Deputy with CalTrans, reported that CalTrans has seen a significant decline in buying power of the gas tax. California's Road Charge pilot will launch July 1, 2016 and run for nine months to evaluate several policy issues. Mileage reporting options for up to 5,000 participants include:

- Time permit
- Mileage permit
- Odometer charge
- Plug-in device
- Smartphone app
- Built-in vehicle technology

In California the smartphone device has a non-GPS option and the plug-in has both GPS and non-GPS options.

Recruiting took place through a program website, an insert in DMV mailings, public service announcements in English and Spanish, and a Facebook digital marketing campaign. Newsletters help keep volunteer participants connected with the program.

Ms. Ortega also reported that the Western RUC Consortium has submitted a two-phase Fast Act Grant application. The proposal builds on existing relationships and agreements and uses lessons learned from existing RUC projects.

Commissioner Earp suggested that all three states need to raise more revenue, not merely develop a revenue-neutral program. Ms. Griffith responded that the key is in the transition strategy, which involves not only gas tax and RUC, but tolling and pricing.

Commissioner Serebrin asked whether California will gain enough experience with so many different reporting methods?

Ms. Ortega said that so far the tech device is the one most chosen. She added that California's Advisory Group had a lot of discussion of equity issues and looked into lower rates for low-income users.

Commissioner Lohman said that RUC can accommodate congestion pricing without the infrastructure of tolling. That approach will help reduce the inequity that occurs when high-impact users do not pay for expansion driven by peak use.

Commissioner Dunn noted that the entire rainbow of funding approaches complicates the discussion and added that it is great that west coast states are taking the lead.

Commissioner Inman warned that the states not underestimate how hard people will work to evade the RUC. She noted that the gas tax is very easy to collect and protect.

Commissioner Alvarado wants all three state systems to talk with each other. He also suggests that we correct the mistakes we made with the gas tax, i.e., include indexing. And, he recommends that all three states should take the same approach.

Commissioner Batra said that all three states coming together is even more powerful than thinking outside the box. The system we have is not sustainable. He likes idea of rate escalation and urged the states to think about future income, not just replacement income. On the topic of equity, he suggested considering as a whole all of the vehicle charges assessed, including registration and weight fees.

Jim Whitty, who developed Oregon's pilot programs, added that a pay-at-the-pump option could help people who don't have a lot of money and would prefer to pay a road charge with each fill-up.

[Oregon's Road Usage Charge Program](#)
[Washington RUC Assessment/Demonstration](#)
[California Road Charge Pilot Program Update](#)

ADVANCEMENTS IN VEHICLE TECHNOLOGY AND ALTERNATIVE FUELS

Bernard Soriano, Deputy Director, California Department of Motor Vehicle, provided an overview on what autonomous vehicles are and how California plans to regulate them. California Senate Bill 1298 directed the DMV to adopt requirements for:

- Manufacturer testing of autonomous vehicles on public roadways; and
- Operation of autonomous vehicles on public roadways.

The National Highway Traffic Safety Administration (NHTSA) has defined four levels of autonomy. California considers NHTSA Level 3 and 4 – limited or full self-driving automation – as autonomous.

California's DMV developed a broad-based steering committee to help it develop the testing regulations, summarized below:

- \$5 million in insurance, bond, or self-insurance;
- A test driver, in the driver seat during testing, who meets the following requirements:
 - No DUI, not an at-fault driver, and no more than one point;
 - Successful completion of test driver program;
 - Employee, contractor, or designee of manufacturer
- Report any accident within 10 days
- Report unanticipated disengagements of autonomous technology annually
- Testing permit valid for one year
- Commercial vehicles, vehicles over 10,000 lbs. GVW, and motorcycles not allowed

Fourteen companies were approved for testing in California. There have been 15 crashes since testing permits were issued.

Draft deployment regulations are focused on safe operation on public roads:

- Independent third party certification of a vehicle's performance relative to a specified set of behavioral competencies.
- Exclude vehicles capable of operating without the presence of a driver.
- Operators must be a licensed driver, responsible for monitoring the safe operation of the vehicle.
- Manufacturers initially issued a three-year deployment permit. Autonomous vehicles may only be made available to the public on a lease basis.
- During the deployment period, collect and report on performance, safety, and usage of autonomous vehicles.

Manufacturers also have been told they must program vehicles to obey all traffic laws, including three-foot rules for bicycles.

Commissioner Serebrin expressed concerned that we will develop a regulatory framework for autonomous vehicles that promotes sprawl and more driving vs. shared mobility and reduced infrastructure.

Commissioner Earp also expressed concern that autonomous vehicles will lead to greater congestion, less use of transit, and land use sprawl.

Commissioner Haley sees great benefit to older women, who are no longer able to drive.

Curt Augustine, Director of Policy and Government Affairs, Alliance of Automobile Manufacturers, talked about the auto technologies that add up to an autonomous vehicle: radar, lane keeping cameras, LIDAR, infrared camera to detect objects ahead in the day or night, visible light camera, GPS navigation, and wheel-mounted sensors.

Mr. Augustine emphasized that connected car technology is here and evolving. People expect to be connected everywhere and the connected car offers social value and provides a safer, more efficient journey. The key hurdles to clear are technology, liability, consumer acceptance, infrastructure, policy, and federal/state legislation.

Mr. Augustine also reported on advanced power trains. In the last four years, nationally the percentage of gas vehicles has increased. Nationally, sales of hybrid vehicles closely track the price of gas. Also, there are seven times the number of vehicles achieving 30+ mpg today than in 2006. This accounts in part for the decline in the popularity of alternative fuel vehicles.

Sahas Katta, CEO, SmartCar, shared his vision of the future of vehicles:

- Autonomous
- Connected
- Electric
- Shared

All four trends are driven by software. SmartCar is the open standard for vehicles to access cloud communication.

[Autonomous Vehicles in California](#)
[Advancements in Vehicle Technology & Alternative Fuels](#)

INTERSTATE TRADE AND FAST ACT FREIGHT INVESTMENTS PROGRAM

Ashley Probart, Executive Director, Freight Mobility Strategic Investment Board (FMSIB) and Amy Scarton, Assistant Secretary, Community and Economic Development, WSDOT, provided an overview of FAST Act requirements and opportunities for freight movement. The state freight plan builds on the substantial amount of work that Washington has already done, and is a collaborative effort of WSDOT and FMSIB.

Washington's state freight plan will be updated as follows:

- Submit Critical Urban and Rural Freight Corridors to Federal Highway Administration (FHWA) in August
- Submit prioritized freight project list to Office Financial Management and the legislature by November 1
- Incorporate project list into 2017 freight plan update
- Update other key elements of state freight plan, pending FHWA guidance, late in 2016
- WSDOT will consult with State Freight Advisory Committee throughout the process

Kome Ajise, Chief Deputy Director, Caltrans, reported that California's Freight Mobility Plan looks at interstate freight corridors, including I-5, I-10, I-15, and I-80. Freight involves 32% of the California economy and 33% of its jobs.

California is incorporating the goals of its Sustainable Freight Action Plan. Freight planning will look at efficiency, economics, and the environment. Factors driving a continuous pressure to evolve:

- Competition and cost pressures
- Demands of e-commerce
- System capacity, safety, and security
- Toxic substances and air quality standards more protective of public health
- Vulnerability of freight facilities to climate change

System targets for 2030 include improving system efficiency by 25%, deployment of over 100,000 zero emission vehicles and equipment, and foster future economic growth within the freight and goods movement industry.

Research and pilot projects include partially automated truck platooning, partnerships with Bay Area Rapid Transit (BART) for high value freight delivery, and an I-5 Smart Truck Parking Project.

Jerri Bohard, Administrator, Transportation Development Division, ODOT, recognized that all three states are taking a common approach to FAST Act freight planning. Oregon is completing an inventory of bottlenecks and needs, defining the freight system, and developing an investment plan and freight performance measures.

Commissioner Batra suggested it may be time to build infrastructure on waterways, to shift some of the freight burden from highways to waterways. California reported that the Marine 580 route from Stockton to Oakland ran for about 18 months, but because it didn't seem sustainable, shippers didn't sign up.

Commissioner Serebrin asked about the health mitigation impacts that California is undertaking. Mr. Ajise responded that LA-Long Beach has been under pressure to clean up emissions and is now 86% cleaner.

Commissioner Jennings asked whether the I-5 bridge is included as a pinch point in the Washington Freight Plan.

[FAST Act and the Oregon Freight Plan](#)

[FAST Act Freight Provisions Handout](#)

[Freight Planning in California](#)

[Washington State Freight Plan Update and 2016 Call for Projects](#)

PREPARING PACIFIC COAST TRANSPORTATION INFRASTRUCTURE FOR SEISMIC ACTIVITY

Herby Lissade, Chief, Office of Emergency Management and Infrastructure Protection, Caltrans, provided a chronological overview of the California highway system seismic planning and response, beginning with the 1971 Sylmar/San Fernando earthquake.

- Post-Sylmar, Caltrans began retrofitting and increased its standards and retrofitting investment after the 1989 Loma Prieta and 1994 Northridge quakes.
- Northridge, a 6.8 magnitude quake, revealed good performance from past retrofits. The most seriously damaged structures were scheduled for retrofit in the near future.
- Current planning, response and recovery work includes a Regional Resiliency Assessment Program, which is focused on goods movement through high hazard areas from the Port of Long Beach through the Cajon Pass to the State of Nevada.

Mr. Lissade also reported on ShakeCast, an App that provides a real-time alert to first responders with notifications and information to help direct and prioritize emergency bridge, roadway and facility inspections.

Developed in collaboration with US Geological Survey (USGS), ShakeCast builds on the ShakeMap tool that predetermines what will fail. The ShakeMap tool recognizes that magnitude and epicenter alone aren't enough to determine the area and impact of strong shaking.

CalTrans is now participating in a study with USGS on early earthquake warning. Sensors can detect the early P-waves from a fault rupture and transmits data on location and intensity to an alert center prior to the arrival of the slower moving, more damaging S-waves.

Paul Mather, ODOT, said that Oregon is playing catch-up with California and Washington to address a Cascadia Subduction Zone (CSZ) quake. The Oregon Resilience Plan, directed by the legislature, will require \$5.1 billion investment in retrofit. SR 97 is the backbone priority for retrofit.

In a 9.0 CSZ quake, the I-5 bridge, the Astoria-Megler Bridge, and the US 30 Longview-Rainier Bridge are all projected to collapse and clog commercial and rescue traffic. The I-205 Glenn Jackson Bridge has a slight to moderate chance of collapse.

Most Oregon bridges are beyond their design life. Retrofitting has two approaches:

- For life safety to prevent collapse; and/or
- For serviceability to keep the bridge functional.

Robert Ezell, Director, Department of Emergency Management, provided additional background the CSZ. He predicted the quake will be the biggest event in the nation's history. West of the Cascades, water, power, wastewater, and transportation infrastructure will be destroyed or hobbled. Projections indicate the need to feed 1 million Washingtonians in a matter of days.

Following Oregon's lead, Washington has adopted a Cascadia Playbook. The planning assumptions are:

- Capacity to deliver capabilities is impacted – the need exceeds available resources
- Immediate assistance is needed

- Communication is impaired and capacity increase is essential
- Response is significantly larger, more complex, and more difficult
- Follows the concepts in FEMA prescribed Cascadia plan

Planning Framework:

- Coast is most critical and will require air support to distribute supplies and provide help. It will require maximum route clearance effort.
- The largest response is needed in the urban core. It will require the majority of security force capability and large scale evacuation capability.
- The response concept anticipates central logistic support bases at Sea-Tac, Paine Field, Moses Lake, and Spokane.
- State staging areas to be established at airports and ports.
- Re-establish road networks rapidly.

Initial Gaps to Fill:

- Helicopter support
- Staging area personnel and equipment
- Fuel
- Medical care, injury treatment, and transportation supplies and personnel
- Food, water, and shelter
- Road, airport, and seaport repair
- Debris clearing
- Fatality management
- Search and rescue
- Communications equipment and support

Initial Personal Observations from Cascadia Rising, June 7 – 10, 2016:

- Policies and procedures for most events won't work
- Time is of the essence
- Detailed planning is imperative
 - develop thorough and detailed plans
 - plans must automatically trigger and be able to be executed in the absence of state and local leadership
 - shift from pull capacity (locals ask for help) to push capacity (help is provided)
- Transportation infrastructure is the linchpin of response
 - critical east-west and north-south routes
 - airport assessment and opening
 - rail, ports
- Effective, survivable communications is essential
- Public preparedness
- CSZ is a national issue

Mr. Ezell warned us not to be like the people of Louisiana and New Orleans: we know the hazards and we are not getting prepared.

Commissioner Haley said the whole Northwest will be affected all the way to Boise.

Commissioner Batra, a structural engineer with emphasis on geologic design, commented that a ferry system across the Columbia River could improve resiliency when the I-5 bridge collapses.

Commissioner Lohman asked that the states work together to:

- Support additional federal funds for seismic resiliency
- Confirm interstate mutual-aid agreements
- Think through standards to prepare for as three states jointly. National standard is life safety, but some places need to prepare to serviceability standard

Mr. Ezell said that there are interstate mutual aid agreements.

[California State Highway System Earthquake Planning and Response](#)
[Seismic Readiness of Oregon's Highways](#)
[Washington Cascadia Planning](#)