

TransPort / draft summary

TransPort, Subcommittee of Transportation Policy Alternatives Committee (TPAC)
Thursday January 15, 2025, online

Attendees:

AJ O'Connor	TriMet
Bikram Raghubansh (Vice Chair)	PBOT
Briana Calhoun	Fehr & Peers
Caleb Winter	Metro
Carl Olson	Clackamas County
Dr. David S. Hurwitz, PhD	Oregon State University
Dongmei Lin	City of Beaverton
Eliot Rose	Metro
Elsa Merno Rangel	Oregon State University
Grayson Isbell	ODOT
Hanna Howsmon	Metro
Jean Senechal Biggs	Metro
John Fasana	Washington County
Jonathan Rand	City of Gresham
Josh Roll	ODOT
Kadin Mangalik	Metro
Kate Freitag (Chair)	ODOT
Matt Egeler	City of Hillsboro
Mike Burkhardt	ODOT
Nick Fortey	FHWA Oregon Division
Scott Turnoy	ODOT
Summer Blackhorse	Metro
Tammy Lee	PSU/TREC
Ted Leybold	Metro

Introductions and Announcements

Chair Freitag with the Oregon Department of Transportation (ODOT) called the meeting to order at 1:02 p.m. She asked for announcements and updates. Caleb Winter with Metro introduced and welcomed Jean Senechal Biggs, Metro's new Resource Development Manager to the meeting.

'Round the Table Updates

- Caleb provided a safety update and highlighted an award of \$1 million to Safe Routes To School (SRTS). He also covered the recent SRTS Alameda Bike Bus event.
- Caleb reminded the committee about the Traffic Incident Management's (TIM) Crash Responder and the TIM training curriculum and the Incident Response Ride-along. He asked that they reach out to Dustin Ross, ODOT's Incident Management Coordinator for more information on meetings and TIM training.
- Tammy Lee with PSU PORTAL covered the completion of the Pedestrian Estimated Volume User Interface, the upcoming Application Programming Interface (API) workshop, and a workshop on manual short-term duration counts.
- Bikram Raghubansh with the Portland Bureau of Transportation (PBOT) provided updates on the Regional Intelligent Transportation Systems (ITS) Architecture and mentioned the conversion/update to version 9.12. He also discussed the delay in the Central Signal System software acceptance.
- Grayson Isbell with ODOT noted that the next meeting of the Cooperative Telecommunications Infrastructure Committee (CTIC) will be held on March 15, 2025.
- Caleb shared updates on the Intelligent Transportation System (ITS) network and noted that the management team had discussed switch replacement funding on the Oregon side, and that he is working with partners on local match contributions.
- A.J. O'Connor with TriMet shared updates on the Federal Highway Administration (FHWA) grant, the engineering handbook, and recent changes in their communication protocol.
- John Fasana with Washington County reported the completion of the final controllers for the ATC Transportation Systems Management and Operations (TSMO) Controller Conversion project.
- Carl Olson with Clackamas County discussed several ongoing projects including signal controller upgrades, fiber infill projects, and the ARTS program grant projects.
- Nick Fortey with FHWA discussed the process involved with grant agreements for recent grant awards.
- Caleb gave updates on TriMet Line 33 Transit Signal Priority Upgrade project.
- Jean provided information on her previous work and her new position at Metro, Resource Development Manager. This Section includes Metro's TSMO program, Regional Travel Options (RTO) program and Regional Flexible Funds Allocation (RFFA). She gave an update on the RFFA Bond process.
- Matt Egeler with the City of Hillsboro discussed their move towards a more current implementation plan for projects.
- Dongmei Lin with the City of Beaverton gave updates on the shut down the Beaverton TransCore server on January 10, which will remain shut for next few weeks to review any affects to Washington County's services. Barring any disruptions, the server will be given to Gresham. Additionally, the city is starting construction on the OR210: SW Scholls Ferry Rd to SW Hall ITS (formerly Washington Square Area Adaptive) project.
- Caleb and Tammy shared information on their participation in the annual Transportation Research Board (TRB) Annual Meeting. Caleb discussed carbon reduction and Artificial Intelligence (AI) applications in transportation. He highlighted the potential for quantum

computing and generative AI in the transportation sector. Tammy shared her experience at the TRB, focusing on the work done for the Stations page and the bike and ped portal. John also shared his experience at TRB and the panel presentation on asset management and the integration of traffic-related assets into their asset management system.

Validation of Speed Sensors at Signalized Intersections

Elsa A. Moreno Rangel and Dr. David S. Hurwitz, PhD with the Oregon State University gave a presentation on Validation of Speed Sensors and Signalized Intersections. Dr. Hurwitz led a discussion about the validation of radar detector speeds, a project led by Elsa, a PhD student, and assistant professor Dr. Hisham Jashami. He stated that the team had focused on one particular measure from the ATSPM suite and that they are aiming to eliminate crashes that result in fatal or serious injuries.

Elsa noted that the data collection process involved identifying a study site, collecting data from radar detectors, the use of pneumatic tubes and handheld Lidar, and data transcription. This research used fourth-generation handheld Lidar that recorded trajectory data, observing vehicle speed for 1,000 feet. In the study, the team found no statistical difference between radar detector speeds and pneumatic tube speeds at two intersections at NE Martin Luther King Jr. Blvd. and Tillamook and NE Martin Luther King Jr. Blvd. and Fremont in Portland. Elsa stated that radar detector speeds can be used to evaluate compliance against a threshold speed limit, but not in absolute terms.

Elsa and Dr. Hurwitz concluded that this validated technique can be used for evaluating the safety outcomes of alternative signal timing strategies to help reduce speeding and red light running at signalized intersections

Bikram noted that Dr. Hurwitz team had done projects like this for the City of Portland and expressed more interest in implementing speed signal timing and using radar sensors to measure changes in traffic flow. Dr. Hurwitz and Caleb discussed Elsa's poster presentation of this research at the Transportation Research Board (TRB) Annual Meeting. Elsa spoke with 75 people about the research. She was invited to the Dwight D. Eisenhower Transportation Fellowship Program. Dr. Hurwitz and Caleb commented on this research's application to evaluate shifts in phasing and timing practices for safety. They also mentioned the possibility of automating data analysis to accelerate the process.

Chair Freitag asked about the availability of the presentation and additional work for sharing with their signal timer and speed zoning staff. Dr. Hurwitz replied that a technical report is close to finalization and will be shared once approved.

Relating Research to TSMO and Carbon Reduction

Caleb gave a presentation and asked the committee to focus on two questions. Specifically, what are the research sources at their fingertips that relate to TSMO, and what considerations do they need to make, including travel behavior and reliability of the transportation system, to help implement our TSMO Strategy?

Caleb discussed how TSMO strategies support carbon reduction goals. He covered research sources and considerations such as travel behavior, system reliability, and implementation of strategies like traffic signal coordination, incident management, and eco-driving.

Caleb noted that, while existing research often lists carbon reduction as a benefit, more focused study is needed to quantify emissions reductions from specific TSMO strategies. He shared that an upcoming tool would estimate carbon emissions due to delay and covered strategies for federal guidance. Caleb mentioned that TSMO actions were also part of the regionally adopted Climate Smart Strategy toolbox.

A brief discussion examined how investments in TSMO can contribute to reducing greenhouse gas emissions. Scott Turnoy with ODOT noted that the Oregon Travel Survey (formerly Oregon Household Activity Survey) might have responses to help answer the two questions posted. Caleb agreed to ask Metro staff who work with the survey data. Caleb closed the discussion and asked that the committee to email him their responses.

Adjourn

There being no further business, Chair Freitag adjourned the meeting at 2:30 p.m. The next online meeting will be held online, February 12, at 1 p.m.