

# Safety & Mobility Policy Advisory Committee

## MEETING SUMMARY

August 23, 2023

10:00 a.m. to 11:30 a.m.

Via Microsoft Teams

### MEMBERS:

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|---|---|
| <input type="checkbox"/> Steve Bates, OTA                         | <input checked="" type="checkbox"/> MARK GIBSON, OTA  |
| <input type="checkbox"/> Kevin Campbell, AAA                      | <input checked="" type="checkbox"/> Erik Havig, ODOT  |
| <input checked="" type="checkbox"/> Ed Chamberland, ACEC          | <input checked="" type="checkbox"/> John Hickey, APAO |
| <input checked="" type="checkbox"/> Marie Dodds, AAA              | <input checked="" type="checkbox"/> Jana Jarvis, OTA  |
| <input checked="" type="checkbox"/> Jason Fender, TFT Const.      | <input checked="" type="checkbox"/> David Kim, Chair  |
| <input checked="" type="checkbox"/> Stratos Flanders, Knife River | <input checked="" type="checkbox"/> Evan Sether, OSP  |
| <input checked="" type="checkbox"/> John Gambatese, OSU           | <input checked="" type="checkbox"/> Erik Zander, OTA  |
| <input checked="" type="checkbox"/> Walt Gamble, AGC              |   |

### RESOURCES:

- Tamira Clark, ODOT
- Donnell Fowler, ODOT
- Christy Jordan, ODOT
- Angela Kargel, ODOT
- Mike Kimlinger, ODOT
- Justin Moderie, ODOT
- Audrey Lawson, ODOT
- Mac Lynde, ODOT
- Amy Ramsdell, ODOT
- Katie Scott, ODOT

### GUESTS:

- David Hurwitz, OSU
- Hisham Jashami, OSU
- Logan Scott-Deeter, OSU

### FACILITATOR:

- Bill Gross, Mobility Program

AGENDA TOPIC	HIGHLIGHTS AND OUTCOME
<b>Introductions, Roll Call, Meeting Notes &amp; Agenda Review</b> Bill Gross and David Kim	Bill Gross took roll call. During roll call, Bill introduced a new committee member, Captain Evan Sether, who replaced Captain Cord Wood as Oregon State Police's representative on the committee. Draft minutes from the April 26, 2023 meeting were also approved. David Kim welcomed everyone to the meeting and reviewed the agenda topics.
<b>ODOT Updates</b> David Kim	David Kim provided the following agency updates for the committee: <ul style="list-style-type: none"> <li>• ODOT is going through some budgetary challenges. He said the cost of doing business is forecast to continue to climb, and significant impacts will be to ODOT Maintenance and Operations. He said ODOT implemented a hiring pause until the agency has a better sense of its budgetary impacts.</li> <li>• Former Region 1 Project Delivery Manager Tova Peltz has been appointed as the Deputy Division Administrator for Delivery and Operations. Matt Freitag is interim Project Delivery Manager.</li> <li>• ODOT's Public Transportation Division Administrator Karyn Criswell is no longer with ODOT and the agency is actively recruiting for a new administrator.</li> </ul>

	<ul style="list-style-type: none"> <li>The Oregon Transportation Commission (OTC) approved the 2024/2027 Statewide Transportation Improvement Program (STIP). The STIP must now go before the Federal Highway Administration and Federal Transit Administration for approval. Once approved, ODOT expects a wave of projects to kick off in October (which is the beginning of the 2024 federal fiscal year).</li> </ul> <p>Walt Gamble asked about the scale of the 2024/2027 STIP. David suggested he could put together a presentation for the next SMPAC meeting to compare the previous STIP with the current one and will include an updated mountain chart.</p> <p>John Hickey commented that the state needs to provide more funding for traditional infrastructure. David said he expects there will be a lot of conversations going forward between the OTC, Legislature, Governor's Office and others about the funding needs to maintain and preserve basic infrastructure assets. He suggested another future agenda topic for the SMPAC could be to invite someone from ODOT executive leadership (such as Travis Brouwer or Mac Lynde) to provide the committee an overview of what the 2027/2030 STIP could look like, as well as future funding and legislative concepts.</p> <p>Marie Dodds asked if David is aware of any proposals to open up the Highway Fund to other expenditures besides maintenance and preservation. David suggested this could be another question to ask executive leadership when they come to the committee.</p>
<p><b>OSU/OTA/ODOT Roundabout Truck Access Study Update</b>  Dr. David Hurwitz, OSU  Dr. Hisham Jashami, OSU  Logan Scott-Deeter, OSU</p>	<p>Dr. David Hurwitz shared a presentation on the study he has led in partnership with ODOT, OTA and OSU. He described three methods of evaluation used in the study:</p> <ul style="list-style-type: none"> <li>Field study: the goal from the field work was to define how trucks are interacting with roundabouts in the field today, with an emphasis on congested conditions.</li> <li>VISSIM Simulation study: this was aimed at trying to understand the existing processes that ODOT is using for modeling roundabouts and how to incorporate trucks into those predictive models.</li> <li>Driving Simulator study: this effort aims to determine if there are alternative infrastructure solutions that might improve truck access to roundabouts (either geometric or operational).</li> </ul> <p>In terms of the field study, Dr. Hurwitz said they looked at sites in both Oregon and Washington to observe locations where there is significant amounts of traffic and large volumes of commercial vehicles:</p>

<b>Sisters, OR</b> <ul style="list-style-type: none"> <li>Hwy 20 &amp; Barclay Dr.</li> </ul>	<b>Site</b>	<b>Description</b>	<b>Dates Collected</b>
<b>Forest Grove, OR</b> <ul style="list-style-type: none"> <li>Hwy 47 &amp; Verboort Rd</li> <li>Hwy 47 &amp; David Hill Rd</li> </ul>	Sisters, OR	Control site - High volumes and HV classification variety	6/27/2022 – 6/29/2022
<b>Fife, WA</b> <ul style="list-style-type: none"> <li>Hwy 99 &amp; Wapato Way</li> </ul>	Forest Grove, OR	Medium volumes, more double-trailers observed	7/11/2022 – 7/13/2022
<b>Lakewood, WA</b> <ul style="list-style-type: none"> <li>Murray Rd &amp; 150th St</li> <li>Murray Rd &amp; Thorne Ln</li> </ul>	Fife, WA	Supplemental site – Frequently operated under congested conditions	8/30/2022 – 9/01/2022
	Lakewood, WA	High volumes, low congestion	8/16/2022 – 8/18/2022

Dr. Hurwitz said they captured video observations on all approaches to every intersection. He said they transcribed 164 hours of footage, which included more than 2,600 heavy vehicles (the most common of which was the WB-67). In looking at the data in terms of “gap acceptance,” he said about half of all the trucks at the roundabouts rejected at least one gap, 24% rejected two gaps, and 10% rejected three gaps. He also said the data shows an upward trajectory of larger vehicles requiring longer gaps to enter a roundabout. Dr. Hurwitz said they also looked at critical gap results on a per heavy vehicle configuration. He said the data shows the gaps increase as the size of the vehicles increase – which he said is data that doesn’t exist anywhere in current literature. To put into context, he said the values are 2 ½ times larger than the gaps observed for passenger cars.

For the microsimulation study, he says they picked the roundabout located Sisters, Oregon at US20 and Barclay Drive. He said four models were developed for comparison, which featured existing traffic conditions. He said they got the geometric design files from ODOT so that they could model them accurately to field conditions. The team used “priority rules” to closely align the simulation with observed data from the field, to provide an accurate representation of the experiences of large commercial vehicles entering a roundabout during congested conditions.

Dr. Hurwitz said the third part of the study (driving simulator) is still in progress. He said they’re looking at geometric configuration alternatives as well as some operational alternatives in the simulator. He said they have a “control” roundabout (an exact replica of the Sisters, OR roundabout) and two alternate designs (tapered and elliptical). He said they are also evaluating potential metering devices that would introduce longer gaps for trucks as they approach a roundabout under certain conditions. He said they’ve run 38 CDL drivers through the simulator so far, but still need three more to complete the study.

Jana Jarvis said she is excited to see the study and offered to help get more CDL drivers to complete the simulator portion. Jana also said there are states that introduced legislation that gives priority to trucks when vehicles approach a roundabout, requiring passenger vehicles to stop and allow trucks to enter the roundabout first.

	<p>Walt Gamble asked if the current modeling tool uses the equivalent of passenger cars to represent heavy trucks. Dr. Hurwitz said the default logic commonly used for gap acceptance does not reflect as accurately as the priority rule configuration from this study. He said the conversion to passenger car equivalence comes from the application of the Highway Capacity Manual.</p> <p>Mark Gibson said he is thrilled to see some of the data come out of the study. He asked if the data can be built into a model to look when an intersection might fail due to increased traffic flow. Dr. Hurwitz said that just like any other microsimulation tool, they can project into the future any increases in demand at a location. Mark also commented that the observed vehicles yielding to trucks out of courtesy could be helpful if Oregon were to potentially enact a law requiring passenger vehicles yield to trucks.</p> <p>Marie Dodds asked if there are plans in the works to look at how automated vehicles deal with roundabouts. Dr. Hurwitz said they've done a fair amount of work over the last couple of years for the National Highway Traffic Safety Administration focused on human factors that relate to automated vehicles. He said he likes having a roundabout as a use case as it has some of the same challenges as a dense urban environment where there's lots of turns and users. He said right now, the focus is on level 2 and level 3 driver assistive technologies, as we will likely be stuck at those levels for quite a bit longer than originally thought.</p> <p>David Kim said there's a lot of interest by our consultant partners and other state DOTs. He suggested scheduling another update in 6-9 months when the team feels it has reached a significant milestone.</p>
<p><b>Travel Lane Width Working Group Update</b> Mike Kimlinger</p>	<p>Mike Kimlinger said during the last work group meeting, they finalized a proposed set of language for statutory changes to allow vehicles to use a buffer space between a travel lane and a bicycle lane in places where the travel lane is 11 feet wide. He said the challenge right now is that current law requires a driver to maintain their lane, which is used heavily by law enforcement to detect distracted or impaired driving. Mike said the proposed language was shared with Serena Hewitt at the Department of Justice. He said he is hoping to hear back in the next week or two. Mike said they also talked about the continued desire to have additional guidance related to when designers should/should not use reduced travel lane width. He said they shared some areas in ODOT's guidance where they made some changes and acknowledged that there are perhaps other places to provide more explicit instructions.</p>
<p><b>Work Zone Safety Technical Work Group Updates</b> Mike Kimlinger</p>	<p><b>Work Zone Safety Billboard Contest</b></p> <p>Mike Kimlinger said the work group is advancing the idea of a billboard contest for high school students on how to be safe in work zones. He said the idea is to have a billboard in the western part of the state, followed by billboards in the rest of the state. He said they're considering two contests: one in the fall and another in the spring.</p> <p>John Hickey said he's excited about the project. He said the contest will have students considering a real-life issue of work zone safety and designing a billboard to educate the public. He said the feedback they received from educators has been excellent. He said there's some logistical work that needs to take place over the next few months to kick it off in the fall and potentially again in the spring. John said they were initially thinking the SMPAC would be the judging group, but they are now planning a separate judging group to include a graphic design teacher and other educators.</p>

	<p>Walt Gamble said he thinks we're underestimating the number of students and teachers that will be involved. Although there will only be one or two winners, he said all the other participants will be educated as well. John Hickey added the contest is a potential steppingstone into working with DMV on how they can better train drivers about work zones.</p> <p><b>DMV Drivers Manual</b></p> <p>Mike Kimlinger said he had discussions with the DMV Administrator Amy Joyce, and it looks like some of the suggestions that were made for adding work zone content into the driver manual are going to be published in the next edition. Mark Gibson commented he would like to see something in the manual in terms of safely driving around trucks as well.</p> <p><b>Automated Speed Control/Automated Speed Enforcement</b></p> <p>Mike said there was a lot of discussion about some other states that have very successful campaigns about automated speed enforcement in work zones. He said John Hickey and some others are intending to try and influence how automated speed enforcement is done in Oregon in the next legislative session. John added the effort will need to involve OSP as well. John said current Oregon law prevents automated work zone speed enforcement, but other states that do allow automated enforcement have seen good results. He said they are trying to get a speaker from Pennsylvania to talk about the success of their program and the next Safety Symposium.</p> <p><b>Work Zone Safety Symposium</b></p> <p>John Hickey said the next symposium is tentatively scheduled for February 15, 2024. He said he is trying to look at alternative dates due to the legislative session, but they will likely land on the February date. John also suggested that the SMPAC should review the feedback from the previous event at the committee's next meeting in October.</p> <p><b>Projects with Positive Protection</b></p> <p>Mike Kimlinger said his team is putting together a list of projects from the past 1-2 years that have had positive protection in their work zones under different scenarios. He said the list would be helpful so we can point back to and say those are decisions that were influenced by the Work Zone Decision Tree and the Work Zone Guiding Principle.</p>
<p><b>Mobility Program Updates</b> Christy Jordan</p>	<p><b>Mobility Program 1<sup>st</sup> Annual Customer Satisfaction Survey</b></p> <p>Christy Jordan said the survey was distributed on June 1<sup>st</sup> and closed on June 30<sup>th</sup>. They collected 80 responses with a 65% completion rate (50 responses from ODOT staff; 22 from external consultants; and 8 from Mobility Advisory Committee members). Christy said the data from this first annual survey will be used to establish a baseline for two performance measures for the Mobility Program:</p> <ul style="list-style-type: none"> <li>• Percentage of external customers rating their satisfaction as good or excellent.</li> <li>• Percentage of internal customers rating their satisfaction as good or excellent.</li> </ul> <p>She said they are currently reviewing the feedback from the survey and seeing if there are any changes they can make to improve the program as appropriate.</p> <p><b>Mobility Advisory Committee Charter Updates</b></p> <p>Christy said that per the MAC charter, ODOT will review the document annually to make changes as appropriate. She said the Mobility Program collected comments over the past year and made some changes (mostly housekeeping</p>

	<p>changes). She said the draft, updated charter was sent out for review after the July MAC meeting and the Mobility Team is currently reviewing feedback and making additional changes as appropriate. She said she plans to follow up with a final version to the SMPAC either at the next meeting or via email.</p>
<p><b>Member Updates (Roundtable)</b> All</p>	<p><b>Oregon Trucking Association Annual Convention (Jana Jarvis and Mark Gibson)</b></p> <p>Jana said the OTA held its annual convention in Bend last week. She said there was a lot of discussion with heavy focus on the new carb rules and NOx regulations. She said they had a number of original equipment manufacturers (OEMs) tell them at the convention that they will have very limited product offerings for sale starting January 1, 2024, due to the new NOx rules. Jana said ODOT also came to the event and talked about tolling, which she said is a big issue facing their members. Mark Gibson added it was helpful to have ODOT at the event to answer questions and show solidarity with the industry.</p> <p><b>ODOT Roundabout Messaging (Erik Zander)</b></p> <p>Erik shared images of a recent social media campaign by ODOT about roundabouts. He said he was disappointed to see the campaign advised to watch out for bikes and pedestrians, but did not mention cautioning drivers about interactions with trucks. He said he raised the issue so that it could be passed on to the ODOT Communications team. <i>(Update: Christy Jordan reached out to ODOT Communications who are working to update the content to include truck interactions)</i></p> <p><b>APAO Updates (John Hickey)</b></p> <p>John said they have a Safety Symposium planning meeting. Anyone interested in participating on the planning efforts should reach out to him to get on his email list. John also said ODOT's constructability industry staging meeting is coming up in November. He asked ODOT staff to make sure the Regions bring their projects to the meeting so they can give them safety feedback before the project gets to the MAC meeting.</p> <p><b>OSU Research Updates (Dr. John Gambatese)</b></p> <p>John said he's involved in starting up an ODOT research project that looks at intrusion detection devices. He said they'll be doing the study over the next two years which will involve looking at different devices and doing some demonstrations in a closed setting and possibly some actual projects. He said they might invite SMPAC members to view the demonstrations as well. John also said he's leading another two-year study for the National Cooperative Highway Research Program that looks at trying to predict the potential for an intrusion into a work zone based on conditions of the roadway, the nature of the work zone, the type of work being done and other factors.</p> <p><b>AAA Updates (Marie Dodds)</b></p> <p>Marie said the AAA Foundation for Traffic Safety had a recent study that came out last week. The study looked at advanced driver assistance systems (ADAS) and found that the technologies could prevent about 37 million crashes, 14 million injuries and nearly 250,000 deaths over the next 30 years. She said ADAS includes features that are widely available on newer cars including forward collision warning, automatic emergency braking, adaptive cruise control, lane departure warning, lane keeping assistance, and blind spot monitoring.</p>

	<p><b>Additional ODOT Updates (David Kim)</b></p> <p>David said ODOT is partnering with Washington (WSDOT) and California (CALTRANS) to pursue a federal grant related to truck parking. He said the system they're looking to develop would identify where there are locations along the state highway system where truck parking may be available. He said we potentially can get an update from Erik Havig on this effort at the next SMPAC meeting. Jana Jarvis commented that as the trucking industry is pressured to move into zero emission vehicles, charging capacity has become a part of the discussion in truck parking. She said the ability to put charging stations in rest areas is limited, as there cannot be financial transactions in rest areas.</p>
<p><b>Final Comments</b> David Kim</p>	<p>David Kim thanked everyone for their time to the SMPAC meetings. He said he thinks the committee is starting to see some of the fruits of its labor and is starting to move the needle on the policy, design, and legal fronts. David said he would like to highlight and share some of the major accomplishments and work underway with the SMPAC.</p>