#### **Members in Attendance:**

Member*	Organization	Present (Y/N)	Rep Sent in Place (Y/N)
James A. Restucci	Washington State Transportation	Y	
(Chair)	Commission		
Shiv Batra (Vice Chair)	Washington State Transportation Commission	Y	
Senator Curtis King	Washington State Legislature	N	N
Senator Ann Rivers	Washington State Legislature	N	N
Senator Joe Nguyen	Washington State Legislature	N	N
Senator – Vacant Seat	Washington State Legislature	N	N
Rep Shelley Kloba	Washington State Legislature	Y	
Rep Mary Dye	Washington State Legislature	N	N
Representative Claudia	Washington State Legislature	N	N
Kauffman			
Representative – Vacant Seat	Washington State Legislature	N	N
Rep Jake Fey*	Washington State Legislature	Y	
John Batiste	State Patrol	N	Y – Scott McCoy
Shelly Baldwin	State Traffic Safety Commission	N	Y – Pam Pannkuk
Mike Kreidler	State Insurance Commission	N	Y – David Forte
Marcus Glasper	Department of Licensing	Y	
Roger Millar	Department of Transportation	Y	Y – Ted Bailey
Joel Sacks	Department of Labor & Industries	N	Y – Allison Drake
Laura Johnson	Department of Health	Y	
Cami Feek	Employment Security Department	N	Y – Caitlyn Jekel
Bill Kehoe	State Chief Information Office, WaTech	N	Y – Zack Hudgins
Debbie Driver	Governor's Office	Y	
Dr. Yinhai Wang	Smart Transportation Applications & Research Laboratory (STAR Lab), University of Washington	N	N
Justin Leighton	Washington State Transit Association	Y	
Bruce Agnew	ACES Northwest	Y	
Greg Spotts	City of Seattle Transportation Department	Y	
Curt Augustine	Alliance for Automotive Innovation	Y	
Brenda Wiest	Teamsters Local 117	Y	
Todd O'Brien	Adams County	N	N
Fernando Mejia Ledesma	Puget Sound Sage	N	N
Bryan Mistele	INRIX	Y	
Mellani McAleenan	AAA	Y	
Bryce Yadon	Futurewise	Y	
Ariel Wolf	Self-Driving Coalition for Safer Streets	Y	
Steve Gordon	Gordon Truck Centers	Y	
Anna Zivarts	Disability Rights Washington	Y	
Aidan Ali-Sullivan	Waymo	N	Y – Brent Ludeman

\* AV Work Group meetings are open to all Washington State Legislature Committee Chairs.

## A full recording of the virtual meeting and meeting materials are available on the WA AV Work Group website:

Meeting agenda, presentation materials, and recording can be found on the meeting page of the Work Group website: <u>https://avworkgroupwa.org/committee-meeting/executive-committee-meeting-14</u>

Questions and responses during presentations can be found in the Presentation Questions Log table at the end of this document.

### WELCOME AND INTRODUCTIONS

Jim Restucci, Chair of the Autonomous Vehicle (AV) Work Group, opened the meeting with introductions of Executive Committee members and an overview of the meeting agenda.

#### **2023 AV Work Group Plans**

#### WSP USA - Scott Shogan, Vice President

WSP USA Vice President Scott Shogan provided updates to the group on the Roadmap legacy deliverable, the final Work Group Report, and general expectations for 2023 for the Executive Committee and Subcommittees.

## AV ROADMAP TO THE FUTURE – KEY COMPONENT: SAFETY

#### Scott Shogan, Vice President, WSP USA

Scott Shogan, Vice President for WSP USA, presented a high-level overview of the "Roadmap to the Future" and discussed needs and possible recommendations for one of the five key components of the "Roadmap to the Future" culminating report: *Safety*.

Mr. Shogan discussed the safety goals – a multimodal approach to safety through engagement with motorists, cyclists, pedestrians, transit, rail, and other partners; the regulations of AVs and other related technologies, inclusive of the collection and monitoring of testing activities in order to ensure that only safe technologies are being tested and deployed; and the creation of fair and transparent permitting systems for allowing AV's to be tested and deployed among the public.

To support these goals, safety activities to date include the development of the WTSC ADAS Survey; the creation of the AV Work Group Website; and the implementation of HB 2676 Section 2 "AV Notifications and Reporting" (implemented Oct 2022).

Mr. Shogan polled meeting attendees on what other AV Safety related activities the Work Group has conducted that seek to address safety in the context of preparing for AVs in Washington. Responses included, but were not limited to, the following: smart work zones; pavement marking for machine vision; beacons for construction activities; restrictions on systems to limit use only to ODD; standardized engagement procedures, and AV behavior for first responders and flaggers.

Looking ahead, Mr. Shogan discussed aspects and activities related to addressing safety in preparing for AVs for future decision-makers to consider, explore, and develop, including policy and agency preparedness; laws and enforcement; road user compliance and understanding; and licensing education and testing. Mr. Shogan also discussed the importance of gathering a diversity of input, from a range of infrastructure users (e.g., drivers, pedestrians, cyclists, transit riders, etc.), and the need to focus on equity in outreach efforts.

Mr. Shogan polled meeting attendees on what other AV safety-related activities Washington State should explore in the future to prepare for the safe deployment of AVs on Washington roads. Responses included, but were not limited to, the following: compliance with established international safety standards (e.g., ISO 26262); curb space management for loading and deliverables; uniform state standards to prevent a patchwork of local regulations; real-time messaging about road hazards and/or changing conditions; engagement with firefighters; conduct a Washington State lead AV pilot; workforce training and operator safety training; explore pathways of deployment. All polling results are presented at the end of this meeting summary.

# AV ROADMAP TO THE FUTURE – KEY COMPONENT: PATH TO DEPLOYMENT

#### Scott Shogan, Vice President, WSP USA

Scott Shogan, Vice President for WSP USA, presented a high-level overview of the "Roadmap to the Future" and discussed needs and possible recommendations for one of the five key components of the "Roadmap to the Future" culminating report: *Path to Deployment.* 

Mr. Shogan discussed the path to deployment goals- providing clear expectations of regulatory agencies, supporting entities, and companies deploying AVs in Washington; regulations that do not limit opportunities for innovation; and a focus on Washington States' role in regulating AV deployment statewide, not preempting what should be/is done at the Federal level.

To support these goals, the path to deployment activities supported by the Work Group to date include the completion of HB 2676: Umbrella Insurance and AV Notifications and Reporting, completion of SSB 5460, and the attempts of regulation HB1731 for law enforcement/first responder interaction guide, and the enabling of rulemaking authority for WA DOL for AV self-certification programming.

Mr. Shogan polled meeting attendees on what other activities the Work Group has conducted or considered that explore pathways to AV deployment in Washington. Responses included: expanding umbrella coverage to owner roadway operators; standardizing relationships and types of data exchanged between public and private entities.

Looking ahead, Mr. Shogan discussed aspects and activities related to creating a path to AV deployment for future decision-makers to consider, explore, and develop including regulatory changes to transition from AV testing to deployment; the review and revision of RCW to accommodate advancing technologies; the evaluation of risk tolerance and standards; the identification of areas of overlap with or preemption of other regulatory regions or bodies (e.g., NHTSA) and streamline where appropriate.

Meeting attendees were also asked what other activities Washington State should explore in the future to prepare for advancing the path to the deployment of AVs on Washington public roads. All polling results are presented at the end of this meeting summary.

## **AV Program and Mobility Updates**

## Greg Spotts, Director, *Seattle Department of Transportation* and Armand Shahbazian, Electric and Automated Mobility Policy Advisor, *Seattle Department of Transportation*

Seattle Department of Transportation (DOT) Director Greg Spotts began with an overview of the Seattle DOT vision, mission, values, and goals, before turning to a high-level update on mobility, innovation, and AV at the Seattle DOT. Mr. Spotts spoke of a web link that he created to connect with community members in Seattle to discuss ways to make transportation in the city safer.

Mr. Spotts presented information on two SMART grants that the City of Seattle received to improve roadway safety. The two grants received were for digital curb and freight loading analysis using electromagnetic sensors, as well as for a project referred to as Rainier Valley Safe, which uses smart traffic cameras to classify road users and document near misses.

Armand Shahbazian presented progress on Seattle AV Milestones to date, including, a new mobility playbook, a WSTC AV work group, and the publishing of an AV Strategic Vision document. Mr. Shahbazian shared statistics on city and industry partnerships in micro-mobility, such as that 4 million + trips have been taken in the 2022-23 permit year, and that an average of 15% of transit has been deployed in equity areas.

Mr. Shahbazian presented SDOT AV testing permit requirements which are supplementary to state self-certification. The requirements set out by SDOT for AV testing permits include coverage of AV Level 3 vehicles, a driver training program, public outreach, insurance, indemnification, a first responder interaction and disengagement plan, and a first responder demonstration event.

Mr. Shahbazian provided a summary overview of the SDOT goals for AV testing, including safety for all, equity in mobility, and excellence in service. Mr. Shahbazian then presented a basic overview of the permit process that SDOT has outlined for AVs the process is as follows:

- 1. Applicant submits the initial application form
- 2. City of Seattle staff review
- 3. Applicant applies for SDOT Street Use Permit
- 4. City verifies insurance, indemnification, and other documents
- 5. SDOT issues permit
- 6. Delivery of first responder and public outreach events

Mr. Shahbazian provided two examples of successful AV permittees in Seattle (i.e., Zoox, Inc and NVIDIA Corporation) both testing Level 3. Zoox aims to provide mobility as a service ride-hailing users. NVIDIA DRIVE aims to provide an end-to-end platform for the transportation industry to develop autonomous vehicles. In May 2023 SDOT hosted a Zoox first responder event that included a presentation and a hands-on demonstration of one of the Zoox test vehicles.

Page 4 of 8

Looking ahead, Mr. Shahbazian shared that SDOT is working with the Open Mobility Foundation to collaboratively collect and analyze data in partnership between public and private entities.

### **Expectations for Remaining 2023 Work Group Meetings**

#### Scott Shogan, Vice President, WSP USA

Scott Shogan, Vice President for WSP USA, presented the expectations for remaining 2023 Work Group meeting:

- August 22<sup>nd</sup> 9:00am 12:00pm Pacific Time
  - Virtual working session for Roadmap
  - Virtual working session for Final Report
- October 4<sup>th</sup> 9:00am 12:00pm Pacific Time
  - Review Finalized Roadmap
  - Review Work Group Final Report Outline
  - Voting Action: Finalized Roadmap deliverable and Work Group Final Report Outline

# EXECUTIVE COMMITTEE MEMBER ITEMS Open forum

All Executive Committee members in attendance were given the opportunity to offer thoughts, insights, and observations. No members brought forth a topic for discussion.

## **CLOSING REMARKS**

Chair Jim Restucci thanked the presenters, organizers, and Executive Committee members, and asked if there was any other business to come before the committee. Ariel Wolf gave thanks to the group and noted that the backdrop of this work is a safety crisis with reference to data coming out of AV deployment- specifically in SF. Data that AV prevents crashes can be difficult to log and capture but looking forward to working towards that. Representative Shelly Kloba added that there are things humans can do as drivers that AI does not yet have the capabilities to do. Need to look at data on crashes of AV versus a reasonable human. Need to look at a balance of data to reduce crashes. Armand Shahbazian added that there is an opportunity to collaborate with the industry to make sure AV is deployed equitably using triplevel data. Data sharing is important to the achieve outcomes outlined by this group.

Closing Remarks presented included an outline of important dates listed below:

- July 19, 2023- AV Work Group presentation to Transportation Commission
- August 22, 2023- AV Work Group meeting
- October 4, 2023- AV Work Group meeting (voting action)
- December 31, 2023 Final AV Work Group Report due to Governor & Legislature

#### **MEETING ADJOURNED.**

## PRESENTATION QUESTIONS LOG

Presentation	Participant	Question / Comment	Presenter Response
Roadmap: Safety	Beau Perschbacher	Interested in further discussions around pathways to deployment for the State of Washington.	Scott Shogan responded that this will be the next pillar discussed.
Roadmap: Safety	Representative Shelly Kloba	How does a company get to the point that they feel the tech is safe enough for public deployment? Need to set safety criteria prior to public deployment of AVs.	Scott Shogan responded that this will be the next pillar discussed.
Roadmap: Safety	Ted Bailey	The only barrier to deployment is a lack of clarity for the industry to have confidence. At the state level, could do what Seattle is doing with permitting, but would have to invest significantly in expertise.	N/A – no response required
Roadmap: Safety	Bryce Yadon	What is the state's expectation for AVs for safety? What will liability requirements look like? What will outcomes of safety breaches and data collection and accessibility look like?	N/A – no response required
Roadmap: Safety	Armand Shahbazian	Each city's transportation environment is highly localized and unique and needs to be considered as such. Need to consider how technology will interact with other transportation modes within cities and localized jurisdictions.	N/A – no response required
Roadmap: Safety	Ariel Wolf	These issues are important but not that complicated. Other cities and states have found solutions- Houston, San Francisco, and Phoenix. There are deployments happening. We need to lean in hard to get to a path of deployment or the technology providers are going to look to other places.	N/A – no response required
Roadmap: Path to Deployment	Representative Shelly Kloba	Not all AV operators are profitable at the time. Within \$5 million liability allow companies to self-insure, but should be a caveat that they should not self-insure if they are not profitable. This is a detail that should be revisited	N/A – no response required
Roadmap: Path to Deployment	Zack Hudgins	Our workgroup has been connecting with data collecting organizations and would like to see more priority put on developing relationships with data gathering groups.	N/A – no response required

Presentation	Participant	Question / Comment	Presenter Response
Roadmap: Path to Deployment	Beau Perschbacher	Would love to discuss the industry bill, as well as the topic of insurance. There has been discussion on this during session- and will the deployment environment change this?	David Forte: When we were working on language in 2020, we looked to other states and many states set liability at \$5 million and we opted to go with that because this is new technology and we felt this was a good amount. Have not heard any company quote us as this being an inhibitor for them in terms of deployment. Price goes up the more exposure there is, however, if the risk is going down that affects the price as well. Not sure the AV market has enough data for accurate pricing. Insurance companies set rates by experience. If technology is proving to be more and more safe, should expect the rates will go down.
Roadmap: Path to Deployment	Representative Shelly Kloba	Legislature needs to offer authorized commercial deployment, but all kinds of things need to be in place in terms of regulation and planning before that happens	N/A – no response required
Roadmap: Path to Deployment	Ted Bailey	We are a resource for agencies to follow by demonstrated actions. Either needs to invest or provide an unfunded mandate. Would need to grow our expertise to a point where we are	N/A – no response required
Roadmap: Path to Deployment	Beau Perschbacher	There are certain elements of what a deployment will look like (e.g., law enforcement plan, insurance plan) that we all agree should move forward. Some differences in self-regulation approaches. We are trying to zero in on what we still lack consensus on (e.g., local preemption). Good to identify where there is non-agreement.	Ted Bailey: Some states do have law enforcement plans, one thing to have one, another thing to understand if and how they actually work in practice. Need to be willing to enforce and follow through with what gets put out there. Is anyone reviewing these documents and data? If admin agencies are not resourced to do something with the data then builds false sense of security.
Roadmap: Path to Deployment	Armand Shahbazian	AVs are not an abstract object they will arrive in cities and need to set up mechanism for cities to have seat at table in discussions around what will happen when AVs are deployed. Need to uplift these voices. Need to be inclusive of voices from cities where AVs are actually being deployed.	N/A – no response required

Presentation	Participant	Question / Comment	Presenter Response
Roadmap: Path to Deployment	Ariel Wolf	Legislation is version that has been out 5-6 years deployed in states across the country. Some sense that this legislation is unvetted. Worth a reminder that there is federal jurisdiction in this area, in many different ways (e.g., SGO, recalls). Intended to keep from 50 different states having all different mandates. What is the lane for WA State to operate in that touch on road safety? Safety of technology is in the domain of the Federal government- the design, performance, and technology.	Beau: Need to do engagement with stakeholders in the State of Washington to try to get local based issues talked through.
Roadmap: Path to Deployment	Bryce Yadon	Need to look to organizations that work in this area and are locally based. Need to work together. What areas can we agree on and what needs more follow-up.	N/A – no response required
Roadmap: Path to Deployment	Ted Bailey	According to NHTSA AV Safety representatives, WA State has the authority to regulate the human operator, not the machine operator. Need to make sure we have the proper authority for what we are trying to do.	N/A – no response required