



MEETING SUMMARY

Meeting: Executive Committee, Meeting #9

Location: Virtual Meeting only

Date: May 25, 2021

Members in Attendance:

Member*	Organization	Present (Y/N)	Rep Sent in Place (Y/N)
James A. Restucci (Chair)	Washington State Transportation Commission	Y	--
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 Mona Das	Washington State Legislature	N	N
Rep Zack Hudgins	Washington State Legislature	N	N
Rep Shelley Kloba	Washington State Legislature	Y	--
Rep Mary Dye	Washington State Legislature	N	N
Rep Matt Boehnke	Washington State Legislature	Y	--
Rep Jake Fey*	Washington State Legislature	Y	--
John Batiste	State Patrol	N	Y – Scott McCoy
Shelly Baldwin	State Traffic Safety Commission	Y	--
Mike Kreidler	State Insurance Commission	N	N
Teresa Bertsen	Department of Licensing	N	Y – Beau Perschbacher
Roger Millar	Department of Transportation	Y	Y – (first half) Ted Bailey
Joel Sacks	Department of Labor & Industries	N	N
Laura Johnson	Department of Health	Y	--
Suzan LeVine	Employment Security Department	N	N
Jim Weaver	State Chief Information Office, WaTech	N	N
Debbie Driver	Governor's Office	Y	--
Dr. Yin Hai Wang	Smart Transportation Applications & Research Laboratory (STAR Lab), University of Washington	Y	--
Justin Leighton	Washington State Transit Association	Y	--
Tom Alberg	ACES Northwest	Y	--
Sam Zimbabwe	City of Seattle Transportation Department	N	Y – Kelly Rula
Curt Augustine	Alliance for Automotive Innovation	Y	--
Brenda Wiest	Teamsters Local 117	Y	--
Todd O'Brien	Adams County	Y	--
Jessica Ramirez	Puget Sound Sage	N	N
Bryan Mistele	INRIX	Y	--
John Milbrath	AAA	Y	--
Bryce Yadon	Futurewise	Y	--
Ariel Wolf	Self-Driving Coalition for Safer Streets	Y	--
Steve Gordon	Gordon Truck Centers	N	N
Anna Zivarts	Disability Rights Washington	Y	--
Annabel Chang	Waymo	Y	--

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



WASHINGTON STATE

AUTONOMOUS VEHICLE
WORK GROUP

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

Meeting session recording: <https://youtu.be/RZssns7sqh0>

Meeting agenda and presentation materials: <https://avworkgroupwa.org/committee-meeting/executive-committee-meeting-9>

WELCOME AND INTRODUCTIONS

Jim Restucci, Chair of the AV Work Group, opened the meeting with introductions of Executive Committee members, an overview of the meeting agenda, and a walk through of virtual meeting operations and functionality.

Legislative Update

Reema Griffith, Executive Director, Washington State Transportation Commission

Reema Griffith, Executive Director, for the Washington State Transportation Commission, provided an update on AV-related legislation introduced in the Washington State 2021-22 legislative session.

Ms. Griffith discussed Substitute Senate Bill (SSB) 5460 “Implementing recommendations of the autonomous vehicle work group”, sponsored by Senator Joe Nguyen, which passed in both the Senate and the House, and was signed by Governor Inslee on May 3, 2021. SSB 5460:

- Creates a definition of “autonomous vehicle” to only include SAE levels 4 and 5
- Repeals RCW 46.37.480 section 1 relating to prohibition of television viewers in vehicles – distracted driving component of this language is addressed in other, newer distracted driving laws
- Moves the effective date of House Bill 2676 section 2 on Reporting back one year, to October 1, 2022
- *Provisions to provide rulemaking authority for the Department of Licensing for the AV testing program was in original bill language, removed in the Senate*

Ms. Griffith also noted the Washington Privacy Act was introduced for the third year in a row. This version of the Act sought to address the processing of personal data by the private sector and for public health emergencies in response to the COVID-19 pandemic. The Act has direct impacts to the operation of autonomous vehicles and this Work Group’s efforts. The Act did not pass out of committee and will likely be continued to be debated in the 2022 legislative session.

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University of Washington AV National Research Update

University of Washington Technology Law and Public Policy Clinic Students – Kristen Moran, Daniel Ballesteros, Dylan Harlow, Savannah McKinnon, Lorena Lung, and Mason Hudon

The Connected and Autonomous Vehicles Research Team with the University of Washington Technology Law and Public Policy Clinic presented on research conducted to provide the Washington Legislature with unbiased findings and analysis on the current state of AV legislation throughout the country. The Team discussed various areas explored in a nationwide survey, including: Platooning, rideshare and delivery, definitions, fee structure, insurance, investments/infrastructure, and partnerships. These topics will be addressed in detail in the Team's Research Paper, to be provided to the Commission in June 2021.

The Team presented its ongoing efforts to develop a public database containing connected and autonomous (CAV) vehicle legislation, key contacts, relevant policy and commercial information gathered from research across the country. The public database is anticipated to launch Summer 2021.

The Team also provided suggestions for Washington, including public/private partnerships, creating a coalition with neighboring states, and establishing new CAV-related laws as well as amending existing laws that impact CAV testing and deployment.

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

PANEL: AV FREIGHT MOBILITY

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

American Trucking Association – Ross Froat, Director of Technology and Engineering Policy

Ross Froat, Director of Technology and Engineering Policy for the American Trucking Association (ATA), presented on the ATA membership, events, committees, and automated truck activities. The ATA manages an automated truck subcommittee with members across the trucking and automated vehicle technology industries. The ATA coordinates with federal and state efforts, including coordination on automated trucking policies and considerations with the federal motor carrier safety administration (FMCSA) and the US Department of Transportation (USDOT). The ATA takes a policy and advocacy role and released an AV Policy guidance document in 2017 that highlights key policy considerations such as safety, interstate commerce, uniform state laws, and maintainability, among others.

Mr. Froat also discussed the ATA involvement in advancing zero emissions vehicle (ZEV) and near-ZEV trucks, exploring challenges such as charging infrastructure, maintenance and operations, fleet management, and economic feasibility analyses.



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PACCAR – Kyle Quinn, Chief Technology Officer; Alison Cochran, PACCAR Technical Lead, AVP; Darryl Oster, Chief Engineer, Zero Emissions

Kyle Quinn, Chief Technology Officer for PACCAR, along with colleagues Alison Cochran, PACCAR Technical Lead, AVP, and Darryl Oster, Chief Engineer, Zero Emissions, provided an overview of PACCAR, its autonomy development, and advancing its zero emissions strategy.

Mr. Oster presented on various paths to zero emissions in the trucking industry and how they may impact operations and PACCAR’s electrification strategy and schedule. PACCAR is involved in various research and grant projects to further explore zero emissions technologies and how to deploy PACCAR “ePowertrain” and hydrogen fuel cell trucks across the country.

Ms. Cochran discussed PACCAR’s autonomous driving research and testing, current and future technologies, and its focus on advancing Level 4 autonomous technologies in its products and trucks. PACCAR’s current and future automated technologies include driver assistance systems such as adaptive cruise control and lane keeping, Level 4 autonomous driving, fully autonomous auto docking, and real-time connectivity. PACCAR sees opportunities for Washington State to provide leadership in automated trucking to remove barriers to testing and promote freight efficiency and safety benefits of automated trucking.

Ms. Cochran also discussed its partnership with Aurora to bring level 4 autonomous on-highway trucks to market for operation on dedicated routes in the US. PACCAR will deliver autonomous-enabled trucks, and Aurora will deliver the self-driving software and sensors needed for the truck to operate autonomously.

Aurora – Mufaddal Ezzy, Director, Public Affairs and State & Local Government Relations; Kenny Quinn, Technical Program Manager, Partner Products & Programs

Mufaddal Ezzy, Director of Public Affairs and State & Local Government Relations for Aurora, along with colleague Kenny Quinn, Technical Program Manager for Partner Products & Programs at Aurora, presented on Aurora’s company and mission, how it approaches work in the autonomous technology space, its efforts in autonomous trucking, and its partnership with PACCAR.

Mr. Ezzy discussed Aurora’s mission, to deliver the benefits of self-driving technology safely, quickly, and broadly, and how its mission shapes how it operates and works to advance self-driving technologies. Aurora has offices across the country, including some offices strategically in areas to support autonomous trucking research and development.

Mr. Quinn provided an overview of the “Aurora Driver”, which is a self-driving stack, providing self-driving software, hardware, and data services that allows Aurora to operate vehicles autonomously without the need for a driver of human intervention. Mr. Quinn discussed the various technologies Aurora uses to advance the self-driving stack and enhance the Aurora Driver. The Aurora Driver is designed to operate in diverse vehicles and can be applied to the same to a passenger vehicle or a heavy-duty truck, such as in its partnership with PACCAR to deploy Level 4 autonomous trucks.



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The State of AV Testing & Utah Use Case

Scott Shogan, Vice President, WSP USA & Blaine Leonard, Transportation Technology Engineer, Utah Department of Transportation

Scott Shogan, Vice President for WSP USA, presented on connected autonomous vehicle (CAV) readiness and what that may mean for this Work Group and its focus looking forward. CAV readiness is complex, with no national standards and a lack of a national vision. One key area of CAV readiness is testing, which is occurring across the country. Mr. Shogan discussed the types of testing occurring around the country, and 5 key states where testing is happening – California, Michigan, Arizona, Ohio, and Florida. Each of these states have different driving factors for testing, ranging from established industry footprint, to testing regulations, government investment in testing, and favorable weather and/or geography forms.

Mr. Shogan then introduced Blaine Leonard, Transportation Technology Engineer with the Utah Department of Transportation (UDOT), who presented on Utah's autonomous shuttle pilot project. Mr. Leonard discussed the pilot's established goals, project scope and schedule, and key findings.

The Utah autonomous shuttle pilot project looked to expose the public to AV technology, evaluate operational characteristics, understand factors that influence passenger and pedestrian trust, and test the capability to communicate with traffic signal infrastructure. The pilot ran for approximately two years, with a year of planning, 6 months to procure the AV shuttle, and operations for 17 months. The pilot operated at a variety of sites across Utah, providing broad interaction with the public and stakeholders.

Mr. Leonard noted key findings from the pilot were that AV shuttles are a suitable supplement to existing transit operations and that there are some operational and regulatory constraints identified during the pilot that could be addressed for future deployments. The pilot included surveys conducted by cognitive psychologists to evaluate rider trust, the operator's role (or operating without an operator), and the public's understanding of and comfort level with accessibility, comfort, operations, etc.

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Future Path Update and Discussion

Scott Shogan, Vice President, WSP USA

Building off the presentation on the state of AV testing and the Utah autonomous shuttle pilot project, Mr. Shogan acknowledged that this is an opportunity for the Work Group to shift its focus and set clearer direction for the Work Group moving forward. Mr. Shogan conducted a polling exercise with Executive Committee members to look at the longer-term view of AV objectives for the State of Washington and where the Work Group should focus its remaining time, through the end of 2023.

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The polling exercise first asked committee members to rank the principal objective of the Work Group: Encourage and attract testing, prepare for near term technology deployment, prepare for long term technology deployment, advance public awareness, direct organizational changes to prepare, or an open-ended “other”. Preparing for long term technology deployment was ranked first among members, with public awareness a close second, indicating the desire to focus on communicating to and educating the public in the near-term while looking ahead towards longer-term big picture focus on long-term technology deployment preparation. Although encouraging and attracting testing was only ranked fifth out of the six options, responses to those who selected “other” presented several testing-related objectives, indicating there is a strong desire for the Work Group to explore AV testing during its purview.

This theme continued into the next polling question, which asked members if Washington State should invest in bringing/attracting AV testing to the state, with 17 of the 22 respondents voting “Yes”. Homing in on testing, members were asked to rank primary objectives of testing in WA: Enhancing organizational knowledge, informing policymaking, supporting economic development, improving public awareness, other, or the members could state testing is not important. Informing policymaking and improving public awareness ranked as the priority objectives, with enhancing organizational knowledge close behind.

Members were asked specific to preparing for AVs, whether the work group should focus on early technology (i.e. level 1 to 3, driver assistance systems), or focus on the long term (i.e. levels 4 and 5, towards nationwide deployment), with members voting to focus more on preparing for long term.

Members were also asked in the context of advancing public awareness and communication of AV technologies, what the primary objective should be, among understanding public concerns, improving understanding of potential traffic and safety implications, improving awareness of potential applications of AV technology, addressing misconceptions and increasing public acceptance, or sharing information on state efforts. Members identified understanding public concerns related to AVs as the primary objective, with improving understanding of potential traffic and safety implications close behind.

Next steps from this work session will be to synthesize input from the polling for dissemination to the Work Group, and to support evolution of the Work Group.

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.



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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. No other business identified.

MEETING ADJOURNED.

Important Dates:

- **July 27th, 2021** – Executive Committee meeting
- **October 5th, 2021** – Executive Committee meeting



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PRESENTATION QUESTIONS LOG

Presentation	Participant	Question / Comment	Presenter Response
University of Washington AV National Research Update	Representative Matt Boehnke	Which would be the most important idea we could take to legislature to focus on to build out Washington becoming a leader in the AV space?	<p>It is hard to prioritize which demands the most attention. Some recommendations:</p> <ul style="list-style-type: none">• Safety and public perception go hand in hand• Understand what other states are doing in regulation to make ourselves competitive• Create partnerships can help sort some of these things out• Understanding infrastructure needs and collecting data to determine what is safe may be a strong starting point
University of Washington AV National Research Update	Kelly Rula	Have you seen any regulations specific to urban delivery services such as Nuro autonomous vans for grocery delivery, etc.? Where/how would you expect to see them regulated?	<p>A problem for urban delivery services are crowds. Making sure delivery robots on sidewalks are not impeding pedestrian traffic, not slowing cars down if in car lanes.</p> <p>Likely to see autonomous delivery robots and vehicles in the Vehicle Code. This can be highlighted in the upcoming white paper.</p> <p>Note that different ways that states view delivery robots. Some afford these robots the same rights as pedestrians, have the right of way. Other states laws that limit how they can be used, cannot come into contact with traffic at all.</p> <p>A key challenge is to figure out what the full scope of AV delivery robots are in Washington.</p>



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University of Washington AV National Research Update	Ariel Wolf	Suggestions for new laws, did you look at the interplay between federal law and state law, and the jurisdictional considerations specific for safety, design, and performance vs. operational?	<p>General consensus is that states will refer to the NHTSA or may go beyond that to create additional state safety measures they'd like to see in their state.</p> <p>The creation of a minimum risk standard is something not all states do, but a good way to illustrate what the state wants/needs the vehicle to do for safety.</p> <p>Can continue to look at this in more depth and address in the white paper, get a holistic picture what is being done federally vs. what states will be required to explicitly express.</p>
University of Washington AV National Research Update	Ted Bailey	Did you explore the differences between Washington and other states in respect to protection of data, data sharing, and intellectual property (IP), and efforts to allow public/private partnerships to flourish?	<p>IP was specifically not something we looked into for this project but is a good point to raise in the white paper on how different states are approaching and forming partnerships and IP.</p> <p><i>Participant response: The connection between IP and the ability to attract investment and pursue grant funding is a paramount issue for Washington.</i></p>



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Presentation	Participant	Question / Comment	Presenter Response
University of Washington AV National Research Update	Anna Zivarts	Regarding the intersection between delivery robots and pedestrian infrastructure – We are seeing slower moving robots deploying sooner because the safety risk is lower. States are talking about making sidewalks ready. Are there conversations around infrastructure mapping for conditions and accessibility, and how companies can partner with local jurisdictions to improve the local infrastructure?	<p>Generally, states that put the framework on the books have local preemption laws, unless it is for safety. If Washington is interested in that regard, should make sure local municipalities have a say over certain areas for mobility issues.</p> <p>Have not seen any instances where companies are helping the city help build a better infrastructure. Not to say it couldn't be done though. There are ridesharing companies working with government to map out infrastructure for ridesharing purposes, so this could be done in the AV space if the partnership were sought out.</p>
University of Washington AV National Research Update	Rose Feliciano	Can a state have different safety standards than the feds? Do they currently have that authority? Are there any examples of that currently?	Federal entities have set a bar for safety standards. States are not allowed to go below the federal bar, but are able to create additional safety standards.
University of Washington AV National Research Update	Reema Griffith	When will the AV research database be online and available?	Expecting to launch the database Summer 2021. It will be publicly available on the UW.edu domain. When it is ready, the Team will disseminate the link.



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Presentation	Participant	Question / Comment	Presenter Response
University of Washington AV National Research Update	Roger Millar	Drivers today know the speed limits and other laws on the books, however when the speed limit says 60, some drivers go 65 miles per hour (MPH) while others go 80 MPH. Assuming AVs would know the law as well, will the AV be able to break the law, or will the operator/passenger/owner have an ethics knob to do something different than the what is in the law today?	<p>It depends on the level of autonomy. Tesla's autopilot allows the driver to set the speed to 80 MPH in a 60 MPH speed limit zone. When you move to Level 4 and Level 5 AV, we do not see the manufacturer coding in for the AV to break the speed limit, to break the law.</p> <p>Lower levels of autonomy where user has significant level of control and can manually set the speed limit, they can set it go faster than the posted limits.</p> <p>Participant response: Manufacturers bringing us Level 4 and Level 5 AVs are also bringing us Level 2 and are allowing us to break the law today, giving us that capacity. The issues that are going to be tough for us as a state and as a country are not the technology, but are the policy questions. We have the technology today to avoid distracted driving, to prevent drivers from driving while intoxicated, to make the car drive 20 MPH in a school zone, however we are not doing that. Request that the Team look into how these policy questions are going to be asked and answered moving forward.</p>



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Presentation	Participant	Question / Comment	Presenter Response
Panel: AV Freight Mobility	Representative Matt Boehnke	On the data and software companies are working on, are you focusing on cybersecurity and how data can be secured as it is transmitted and shared?	<p>PACCAR: From the truck perspective, redundancy in the architecture to protect the actuators is our top concern and will be built into the safety actuation of the vehicles.</p> <p>Most of the trucking industry manufacturers are involved in the Automotive Information Sharing & Analysis Center (Auto-ISAC), in-depth efforts to secure the vehicle. There is also major regulation coming from the United Nations Economic Commission for Europe (UNECE) regarding how to secure vehicles, like how data centers are secured today. The autonomous vehicle platform's architecture will comply with that at the component, system, and vehicle level.</p> <p>Aurora: Cybersecurity is a systems-level approach. We are making sure there is strong security between vehicle actuation and external actors. Having industry-leading practices in the cybersecurity layers of data collection and transmission is a key area we are focusing on.</p> <p>The ATA developed a program with truck manufacturers and motor carriers. Motor carriers and manufacturers can report cybercrime and we can stop cybercrime early on. A lot of the trucking industry is handling cybercrime themselves, not reporting it. The more we can share knowledge, the more the entire industry can learn and evolve in cybersecurity best practices.</p>



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Panel: AV Freight Mobility	Jeremy Une	In following Representative Boehnke's question – If there was a power failure or hack at a headquarters or control center, would all the AV trucks be left unsupervised?	It is important that these vehicles will be capable of operating safely by themselves. With no external intervention required to be safe.
Panel: AV Freight Mobility	Chair Jim Restucci	Are there obstacles you see in the deployment and commercialization of AV Freight in Washington State that this Work Group could/should be addressing?	Consistency in highways, regulations, and signage is key and something we should all continue to work on. As regulations begin to develop with proposed rulemaking, consistency is key, and we should continue to coordinate across states and the federal level.



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<p>Panel: AV Freight Mobility</p>	<p>Roger Millar</p>	<p>In the short term, what barriers remain to road testing in Washington State that we could help address while addressing safety?</p> <p>Long term, one barrier to partnership is protection of IP, a lot of representatives and senators and other leaders here today. What can we do to enable public/private partnerships while protecting IP and protecting the public's right to know?</p> <p>We are doing a virtual communications center in Washington where emergency responders and traffic management folks can work together. Working with the trucking community would add benefit to both the public and private side. We keep running into the IP barrier. Any suggestions on how we can address those legitimate concerns about government data being open data, and protecting your investment?</p>	<p>PACCAR: Coordination with testing in the State of Washington so far, we haven't run into significant testing barriers. In the past, we've tested Level 1 and Level 2 platooning, coordinating with Washington State Patrol and WSDOT. We did not hit any barriers that precluded us, and everyone was cooperative.</p> <p>As we move through the program with Aurora, we will get to the point to take on some Level 4 highway testing a few years from now. We will want to see the kind of cooperation and collaboration we have had with the state before.</p> <p>The level of investment and level of proprietary and IP information involved in these programs is a significant concern. It would be worthwhile for a deeper engagement to explore the opportunity to find out where our concerns are and see if we can alleviate those so we can provide data that represents value to the state. Whatever we can do to improve safety, reduce congestion, and overall efficiency of the transportation system is important for all of us.</p>
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Panel: AV Freight Mobility	Shelly Baldwin	Regarding the mention of an EV goal of zero emissions, when we talk about Level 4 and Level 5 AVs, hearing from those not in the industry there a concern about safety. What is your safety approach and safety principles?	<p>PACCAR: Aurora and PACCAR have explored this in detail together. Our program is deep in functional safety analysis to make sure combined solutions are better than any driver you would find on the road. That is where simulation, deep testing, deep validation of systems and technologies in vehicle before it ever hits a public road.</p> <p>We are making sure we think of everything before we begin road testing. Then road testing, in the beginning, will have a safety driver at all times. Only when a route has been completely validated, proven, confirmed and evaluated will it be released for full automation.</p> <p>We have not come out publicly with any communications but something we are discussing. We want to build communities' understanding of how this technology operations and what that means for citizens.</p> <p>ATA: There are 30 voluntary safety self-assessments on NHTSA's website, including aurora. These assessments explain safety scenarios and backup data. There is checking, double checking, redundancies on these trucks even without the AV components that are done.</p> <p>Aurora: With the idea of the operational design domain (ODD), Level 4 automated vehicles are in the context of a particular ODD and what the claims are specific to that ODD's set of circumstances – weather, roadway, time of day, payload, etc. This is essentially the difference between Level 4 and Level 5.</p>



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Panel: AV Freight Mobility	Chair Jim Restucci	The public needs to be educated on these technologies, and we need to have outreach programs in order for them to understand these different technologies. What are you doing to educate the public on these technologies?	<p>ATA: For advanced driver assistance systems (ADAS), it is ATA's policy for automated emergency braking (AES) to be on all commercial vehicles. Not only mandating it, but also supporting education and incentive programs to encourage fast adoption and deployment. The ATA is running a two-year program to talk to the industry about ADAS. There are 12 different ADAS technology sharing webinars, public events, materials online, and 4 videos.</p> <p>Aurora: Where we have significant facilities, we bring community stakeholders to see and experience the technology. Also, there are organizations like PAVE that we and many others in the industry are a part of, collaborating in strategies to educate public through media and events.</p> <p>PACCAR: We are not a business-to-consumer business, our customers are primarily fleet operators. We spend a lot of time educating and collaborating and helping to build understanding around Level 2 and Level 4 autonomy in the industry. We opened a lab in Silicon Valley, CA that gives us the ability to bring customers in, to get up close with the technology and deepen their understanding. In the future, when approaching industrialization of this solution set, there will be an effort to more broadly address the public.</p>



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Panel: AV Freight Mobility	Anna Zivarts	Question about the plan to transition from Autonomous freight to last mile and what infrastructure you envision for that, how that will impact existing communities.	<p>The ODD of heavy-duty autonomous trucks is the major mid mile drive, the long haul on the highway. We will need transfer hubs next to or near the highway for the beginning and end of a drive. These transfer hubs will have local traditional drivers bring the trailer to the transfer hub, drop the trailer, which will be connected to the AV, then the AV will be launched to drive on the highway. On the other end of the trip, the opposite happens.</p> <p>One of the issues now with attracting long haul drivers is having to be away from home too long. These transfer hubs bring a desirable model, to have local transfer drivers with short regional hauls, home every night.</p>
The State of AV Testing & Utah Use Case	Representative Shelley Kloba	In the feedback, were there any concerns about transit drivers losing their jobs?	<p>Didn't hear much of that from the public. We did hear from Utah Transit Authority (UTA) bus drivers who came to ride the shuttle, perceived this was a threat to their job.</p> <p>UTA's response was that this is not intended to replace existing transit, rather it augments transit for first mile / last mile and will generate more ridership for existing fixed routes. This is a new service that would not displace existing services, and may add some different kinds of roles.</p>
The State of AV Testing & Utah Use Case	Representative Shelley Kloba	What can be done to assure public trust?	<p>The public needs to touch and feel it. We don't trust what we don't understand or haven't experienced. Part of our goal was just to get the public to ride it and leverage word of mouth.</p>



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Presentation	Participant	Question / Comment	Presenter Response
The State of AV Testing & Utah Use Case	Anna Zivarts	Are you planning on hiring or have you hired disabled staff to ensure better accessibility?	<p>This was a one-time pilot. We interacted with disabled community to get feedback. We don't currently have a finite plan to put any of these into service.</p> <p>UDOT does have some employees with various levels of disability, and we did engage them in the Pilot to get their feedback. UTA has a task group (I believe they are non-employees) who advise them on accessibility issues, and we hosted them during the pilot, as well.</p>
The State of AV Testing & Utah Use Case	Reema Griffith	Question about the funding aspect. The project rounded out to about \$1 million in cost – was it state funded, federal funded, and did UTA provide an investment as a partner?	<p>This project was almost entirely state funded, mostly UDOT funded. The lessons learned report was funded through an Advanced Transportation and Congestion Mitigation Technologies Deployment (ATCMTD) grant, for about \$25,000.</p> <p>The public trust research had an element of federal funding in it as well.</p> <p>UTA provided about \$90,000 for the second operator and resources for shuttle branding, striping and coloring. UTA paid for the branding and had their existing contractors do the work.</p>