



## MEETING SUMMARY

**Meeting:** Executive Committee, Meeting #7**Location:** Virtual Meeting only**Date:** September 23, 2020**Members in Attendance:**

| Member*                          | Organization   | Present (Y/N) | Rep Sent in Place (Y/N) |
|----------------------------------|--|---------------|-------------------------|
| James A. Restucci (Acting Chair) | Washington State Transportation Commission   | Y             | --                      |
| Senator Curtis King              | Washington State Legislature   | N             | N                       |
| Senator Ann Rivers               | Washington State Legislature   | Y             | --                      |
| Senator Joe Nguyen               | Washington State Legislature   | Y             | --                      |
| 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   | Y             | --                      |
| Rep Matt Boehnke                 | Washington State Legislature   | Y             | --                      |
| Rep Jake Fey                     | Washington State Legislature   | Y             | --                      |
| John Batiste                     | State Patrol   | N             | Y – Johnny Alexander    |
| Pam Pannkuk                      | State Traffic Safety Commission  | Y             | --                      |
| Mike Kreidler                    | State Insurance Commission   | N             | Y – Jack Lovell         |
| Teresa Bertsen                   | Department of Licensing  | Y             | --                      |
| Roger Millar                     | Department of Transportation   | Y             | --                      |
| Joel Sacks                       | Department of Labor & Industries   | N             | Y – Allison Drake       |
| Laura Johnson                    | Department of Health   | Y             | --                      |
| Suzan LeVine                     | Employment Security Department   | N             | N                       |
| Jim Weaver                       | State Chief Information Office, WaTech   | N             | N                       |
| Charles Knutson                  | 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 – Alex Pazuchanics    |
| 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             | --                      |
| Bryan Mistele                    | INRIX  | Y             | --                      |
| John Milbrath                    | AAA  | Y             | --                      |
| Bryce Yadon                      | Futurewise   | Y             | --                      |
| Caleb Weaver                     | Uber   | Y             | --                      |
| Steve Gordon                     | Gordon Truck Centers   | Y             | --                      |
| Anna Zivarts                     | Disability Rights Washington   | Y             | --                      |
| Annabel Chang                    | Waymo  | Y             | --                      |

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

## MEETING SUMMARY

---

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

Morning session recording: <https://youtu.be/ggXnI4iTKpo>

Afternoon session recording: <https://youtu.be/aWCORNrwQlc>

Meeting agenda and presentation materials: <https://avworkgroupwa.org/committee-meeting/executive-committee-meeting-7>

---

### WELCOME AND INTRODUCTIONS

Jim Restucci, Acting 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.

---

### AV'S IN THE COVID-19 ERA

*Scott Shogan, Vice President, WSP USA*

Scott Shogan of WSP USA presented on the impacts COVID-19 has had on the development and deployment of AVs in 2020. Mr. Shogan discussed immediate AV development impacts, such as the suspension of most passenger-carrying services, repurposing of passenger-carrying AVs for delivery purposes, and accelerated advancement of delivery-based AV form factors. Mr. Shogan also noted AV opportunities the pandemic has brought to communities, such as contactless delivery, healthcare access and transport, and advancements in driverless freight.

Long-term impacts of COVID-19 on AVs and mobility are unknown at this time. Some overarching questions on long-term impacts include decrease in commuter traffic, reduced transit and shared mobility services, trends towards single occupancy travel, and an increase in e-commerce and delivery. COVID-19 has increased acceptance in technology, which may in turn increase acceptance of AV technologies.

Mr. Shogan also presented a use case in Michigan, with Canvue launching a P3 project in August 2020 to accelerate AV deployment through dedicated lanes.

Mr. Shogan noted three key takeaways:

- Delivery use cases are likely here to stay – COVID has accelerated the use case, and there is an opportunity for increased policy focus in this area;
- COVID-19 is likely to delay AV service launches – There is an economic impact on development, as well as concerns on multiple passengers and vehicle cleaning; and
- Impacts on long-term fundamentals are uncertain at this time – This topic will need to be continually monitored and evaluated.

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

## MEETING SUMMARY

---

### JUNE 24 POLLING RESULTS AND NEXT STEPS

*Scott Shogan, Vice President, WSP USA*

Mr. Shogan provided an overview of the Work Group future path discussion and polling exercise that took place at the June 24<sup>th</sup> Executive Committee meeting, and the outcomes and analysis conducted based on the polling results.

The live polling exercise was conducted in two parts, first a ranking of broad focus areas and related actions in order of priority, then free-form questions to gather additional feedback on priorities from the Executive Committee. The results of each priority ranking of focus areas and related actions can be found in the September 23 meeting presentation deck. Key highlights of priorities include:

- The three broad focus areas –*CAT-oriented activities, near-term testing of AVs, and deployment-oriented activities* – All ranked equally, indicating the differing perspectives across the Executive Committee on Work Group priorities.
- Near-term testing actions: Results showed clear interest in having open discussions with companies undergoing testing and better understanding testing motivations to help inform policy decisions.
- Deployment-oriented activities: Results signal particular interest in actions that help lay the groundwork for deployment, including near-term infrastructure investments, legislative reform topics, and developing AV data guiding principles.
- CAT-oriented activities: Results suggest continued interest in conducting scenario planning to explore alternative AV futures, indicating a potential interest for better understanding of impacts and policy implications.

Mr. Shogan presented a recommendations matrix developed for each of the broad focus areas and related actions, providing suggestions for how each subcommittee may fit within the bigger picture of each action and how each action could be approached.

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

---

### AV SUBCOMMITTEE UPDATES AND RECOMMENDATIONS

*Subcommittee Representatives*

**Health and Equity Subcommittee – Dr. Andrew Dannenberg, Chair**

The Health & Equity Subcommittee is looking at issues such as access, cost, distribution, accessibility and mobility, job loss, and exposure as they relate to AVs and AV technologies. This focus led the subcommittee to draft two proposals to further the subcommittee's efforts.

Proposal #1: Conduct structured public outreach related to health and equity issues and automated mobility. This proposal would create a structured public engagement process to better understand the health, equity, and access needs of traditionally marginalized

## MEETING SUMMARY

---

communities in relation to AVs, who may suffer from inequitable impacts when AVs are tested and implemented in Washington. Results would assist policymakers and industry to meet the mobility and access needs of traditionally marginalized communities.

The cost proposed for this recommendation is \$30,000. Dr. Dannenberg noted that this cost estimate was chosen because it is responsible enough to conduct some outreach, and within a range that may actually get funded.

The Executive Committee discussed Proposal #1. Key discussion points included:

- Elements of a public outreach campaign needs to be fully representative of the industry, which is diverse in types of technologies, vehicles, and use cases.
- Communities should be polled on if they have even heard of AV services first, understand the landscape of where the public is at with knowledge and understanding of the AV space now.
- What the public outreach campaign will look like will be further refined upon approval of this recommendation at a later date.
- It is important to bring communities along through the process, start engaging and listening early.

Proposal #2: Amend RCW 46.30 to require testing location assessments be conducted prior to pilot testing on Washington roadways through a public-private partnership with AV companies, focusing on topics such as demographics, traffic safety, and area characteristics to better understand where testing is occurring and may help inform future decision-making about state AV policies. No cost was associated with this proposal.

The Executive Committee discussed Proposal #2. Key discussion points included:

- The assessment approach proposed is not meant to be restrictive or to define where testing may occur, but rather provides the state context as to where testing is occurring to evaluate potential longer-term impacted areas and communities.
- Where AVs are testing may correlate to investment in an area, such as sidewalks and other infrastructure, which may directly relate to demographics.
- Noted that assessing where testing may occur prior to testing may not produce the desired outcomes, discussing hypotheticals instead of witnessing and discussing in real-time. However, if we wait until real-time testing has occurred, it may be too late to fix any problems seen.

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

### Licensing Subcommittee – Beau Perschbacher & Drew Wilder, Co-Chairs

The Licensing Subcommittee spent much of 2020 gathering feedback from members on House Bill 2676 ‘establishing minimum requirements for the testing of autonomous vehicles’. Section 1, minimum insurance requirements, became effective June 11<sup>th</sup>, 2020. Following implementation, six companies continued in the program (including one new company), five companies asked to

## MEETING SUMMARY

---

be removed from the program (no longer testing in Washington), and seven companies did not return insurance certificates and were removed from the program.

The subcommittee discussed Section 2 of the bill and gathered diverse, and sometimes conflicting, feedback from members on law enforcement interaction, the right amount of data for collision reporting, and what the role of the state vs. federal government is in regulating the ability of a vehicle to perform safely. Detailed member feedback can be found in Licensing Subcommittee meeting minutes on the Work Group website.

The Licensing Subcommittee also evaluated the differences between California and Arizona AV regulatory frameworks. California takes an active and 'heavy-touch' approach, with a permitting process, mandatory reporting requirements, and specific requirements for test drivers. Arizona takes a passive, 'light-touch' approach, with a self-certification process and allowance for driverless operations. Both California and Arizona require a law enforcement interaction plan, which the Licensing Subcommittee explored and submitted to the Safety Subcommittee to further review for potential recommendation.

Future Licensing Subcommittee exploration topics include AV licensing/regulatory models in other countries and AV licensing issues for agricultural equipment.

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

---

## NATIONAL DEVELOPMENTS IN COOPERATIVE AUTOMATED TRANSPORTATION

*Roger Millar, Secretary, Washington Department of Transportation*

Roger Millar, Secretary of the Washington State Department of Transportation (WSDOT), provided an overview of Cooperative Automated Transportation (CAT), what is happening with CAT around the country, and how preparing for AVs requires a CAT perspective.

CAT is about the entire transportation environment, encouraging all modes and types. In 2019, the Work Group adopted eight CAT policy goals to serve as a guide for Work Group priorities and activities moving forward.

Nationally, several CAT initiatives are taking place to advance CAT objectives.

- The CAT Coalition was formed to be a focal point for everyone to come together, with focuses on programmatic and strategic, planning and resources, and infrastructure and industry topic areas. The CAT Coalition has developed Infrastructure Owner Operators' Guiding Principles for Connected Infrastructure Supporting Cooperating Automated Transportation, as well as a new Supporting Technical Concepts document that details the guiding principles and how those apply.
- ITS America has developed a FAST Act Reauthorization policy platform, for moving people, data and freight safer, greener, and smarter. ITS America also established the

## MEETING SUMMARY

---

Mobility on Demand (MOD) Alliance, which focuses on treating transportation as a service you consume, with a mode-agnostic and data-driven approach.

- The Open Mobility Foundation has established data standards that encourage data sharing, fare payment integration, and competition.

Secretary Millar also discussed ongoing WSDOT CAT efforts, including MOD policy and data standards development, piloting first and last mile programs, regulating and supporting General Transit Feed Specification flex adoption, expanding electric vehicle charging infrastructure, working with the Washington State Broadband Office for accommodating broadband infrastructure, evaluating and improving roadway striping and pavement markings, and exploring automated work zone safety and data sharing partnerships.

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

---

### AV INDUSTRY PANEL

Industry representatives shared their insights and experience testing in other states, offered input into Washington State's current law on AV's, and provided overviews of their work, products, and future plans.

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

#### *Aurora – Cesar Diaz, Government Relations Senior Manager*

Cesar Diaz, Government Relations Senior Manager for Aurora, presented Aurora's goals, experience and guidance for Washington AV policy. Aurora is a self-driving technology company based in California, looking to deploy AV technology safely, quickly, and broadly. Aurora's goals are to increase safety, expand access, improve lives, and revitalize cities.

Mr. Diaz presented the concept of the Aurora Driver, the 'brains' powering vehicles, a combination of hardware, software, and data services serving as a platform for passenger services, logistics, fleet management, and other vehicle and use case types.

Mr. Diaz discussed Aurora's experience in California, Pennsylvania and Texas, and the differences in regulatory frameworks and approaches each state took that impacted how Aurora was able to engage and deploy within each state. Mr. Diaz highlighted the importance of regulatory certainty for industry to test and deploy within a state.

#### *EasyMile – Sharad Agarwal, Senior Vice President*

Sharad Agarwal, Senior Vice President for EasyMile, presented an overview of EasyMile, deployment examples, and how jurisdictions can prepare for AVs. EasyMile has 16 deployments across the U.S., including a private deployment on Verizon's New Jersey campus,



## MEETING SUMMARY

---

9 sites with different use cases with the Utah Department of Transportation, and a full last mile transit service in Columbus, Ohio.

Mr. Agarwal presented ideas and questions for what is required to prepare for commercial autonomous deployments, such as what type of infrastructure changes will be needed, who is liable in an accident, and are state and local laws and licensing regulations ready to allow autonomous vehicles on roadways.

### *Self-Driving Coalition for Safer Streets – Ariel Wolf, Counsel*

Ariel Wolf, Counsel for the Self-Driving Coalition for Safer Streets, introduced the coalition, its approach to AV policymaking, and an overview of various state approaches. The Self-Driving Coalition for Safer Streets' mission is to work collaboratively with lawmakers, regulators, and the public to develop and promote policies that safely and thoughtfully advance fully self-driving vehicles in order for the technology to realize its full safety and mobility benefits and to work with stakeholders to understand the broader societal and economic opportunities of self-driving vehicles.

The Coalition's approach to AV policymaking is to expand testing and deployment of fully self-driving vehicles, preserve traditional state and federal roles, and maintain the existing liability regime. Mr. Wolf highlighted that if a state chooses to take regulatory action, it should allow for and remove impediments to AV testing and deployment and create a pro-competitive environment.

Mr. Wolf presented the Coalition's model legislation, which would provide for the deployment of SAE level 4 and 5 AV technology in a way that would promote safety while allowing innovation, promote competition, and avoid unnecessary restrictions on AV technology. The model legislation addresses key issues such as definitions, safety, insurance, accident reporting, and registration and titling. Mr. Wolf noted that Florida and Arizona are the closest to this model bill, while Washington D.C. and Pennsylvania is taking a test/pilot approach and New York, Vermont, and Hawaii have the most restrictive requirements which prevent the full deployment of SAE level 4 and 5 vehicles.

---

## THE FUTURE OF MOBILITY AND AV POLICY – AUTOMAKER PERSPECTIVE

### *Dr. Anne Marie Lewis, Senior Director for Technology, Innovation, and Harmonization, Alliance for Automotive Innovation*

Dr. Anne Marie Lewis, Senior Director for Technology, Innovation, and Harmonization for the Alliance for Automotive Innovation, provided an overview of the Alliance and its recommended AV legislative approach. The Alliance was formed in January 2020 as a merger of the Global Automakers Association and Alliance of Automobile Manufacturers, and represents 37 companies, including most major OEMs and tier 1 and 2 suppliers.

## MEETING SUMMARY

---

Dr. Lewis discussed the Alliance's legislative approach to AV policy, and the long journey to get to a model bill. Key points of the model bill include:

- Be technology agnostic;
- Use SAE J3016 definitions to maintain consistency with other states, federal guidance, and international standards;
- AVs should be designed to operate in compliance with existing state traffic and motor vehicle safety laws, as well as within federal motor vehicle safety standards;
- Driverless vehicles must be capable of automatically achieving a Minimal Risk Condition, bringing the vehicle to a reasonably safe state (such as coming to a complete stop and activating hazard lights);
- Humans operating AVs capable of operating with a human-driver must hold the appropriate license;
- Liability, vehicle registration, and insurance requirements should be consistent with the existing Washington state approach; and
- Advanced driver system-equipped vehicles are governed exclusively by an identified state agency.

Dr. Lewis also presented the Alliance's concerns about the Uniform Law Commission (ULC) AV model legislation, including that the creation of the terms "Automated Driving Provider" and "Associated Automated Vehicle" is unnecessary, it creates a new liability regime, and does not provide depth of operational requirements. Dr. Lewis noted that states should defer to existing policies and regulations regarding liability, registration, and insurance, rather than create new, AV-specific ones. Dr. Lewis also noted that no state has adopted the ULC model legislation, and that 21 states have passed laws addressing AV liability with existing regimes.

---

### ARIZONA'S AV REGULATORY FRAMEWORK

*Kevin Biesty, Deputy Director for Policy, Arizona Department of Transportation*

Kevin Biesty, Deputy Director for Policy at the Arizona Department of Transportation, provided an overview of the Arizona AV regulatory framework and the history of bringing autonomous mobility technology to Arizona. Mr. Biesty walked through the history of AV-related bills, going back to 2012, with two bills that did not move forward, then a series of executive orders and bills that enabled pieces of autonomous vehicles and use cases.

One of the executive orders directed the Department of Public Safety to develop the nation's first law enforcement protocols, providing context on how law enforcement should interact with AVs and what they should expect.





WASHINGTON STATE

## AUTONOMOUS VEHICLE WORK GROUP

# MEETING SUMMARY

---

Mr. Biesty discussed several instances of current testing and deployment within Arizona, including operational and delivery services. Mr. Biesty recommended leveraging existing coalitions and groups that cross state boundaries (such as the I-10 Coalition) to encourage partnerships to harmonize cross-state legislation.

---

## 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

Acting 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:**

- **November 12<sup>th</sup>, 2020** – Executive Committee meeting
- **January 8<sup>th</sup>, 2021** – Annual Report to the Legislature due

## MEETING SUMMARY

### PRESENTATION QUESTIONS LOG

| Presentation                        | Participant        | Question / Comment   | Presenter Response   |
|-------------------------------------|--------------------|--|--|
| AV's in the COVID-19 Era            | Anonymous Attendee | Do you think it makes sense to provide dedicated lanes [ <i>Michigan P3 dedicated AV lanes deployment</i> ] to a lane that doesn't exist yet when cyclists and pedestrians are dying in increasing numbers and still do not have a contiguous network of safe, protected infrastructure? | The idea for this project in Michigan is to start by thinking narrowly and incubate AV technology and deployment in an area where the technology is being developed to explore the potential benefits. I cannot comment on priorities for non-motorized users and how they intertwine with this project. |
| Health & Equity Subcommittee Update | Bryan Mistele      | What do you see as the adverse impacts to disadvantaged communities from testing AVs?  | Testing in disadvantaged communities may put those communities at risk, but at the same time, if testing is only done in richer communities, then potentially AVs will only be deployed in those communities.  |
| Health & Equity Subcommittee Update | Teresa Bertsen     | Do you have thoughts on who would do the route testing?  | This assessment is not meant to tell companies where to test, rather asking for a description of where a company plans to test.  |
| Health & Equity Subcommittee Update | Mariya Frost       | Why do you think the location (and income level of its residents) where an AV is tested would necessarily tie the AV deployment to that location? Wouldn't the testing be tied more to the type of road (arterial, highway, etc.) the vehicle is tested on?                              | We currently do not know where testing is occurring, it is up to companies. AV testing may not be directly tied to income, tied more to infrastructure, however infrastructure does tie somewhat to the income levels of the community.  |



## MEETING SUMMARY

| Presentation                        | Participant        | Question / Comment   | Presenter Response  |
|-------------------------------------|--------------------|--|---|
| Health & Equity Subcommittee Update | Anonymous Attendee | How will emissions be a problem when nearly all AV testing is being done with electric vehicles?   | Correct, emissions are less likely to be a problem if AVs are going all-electric.   |
| Health & Equity Subcommittee Update | Rad Cunningham     | Is it possible that we could design the assessment such that all the information could be accessed through the Washington Tracking Network making the process quick and easy?  | First, we need to decide what information we want to collect, in coordination with private industry and public agencies, then if the information is in that tracking network, it could come from there. It depends on what questions are being asked.   |
| Health & Equity Subcommittee Update | John Milbrath      | What is the desired outcome of the impact study [outreach proposal]? Concern that we are talking about scenario-based, hypotheticals, as we are not able to witness this in real-time. What tangible are we looking for? | Hypotheticals are what the industry sees as happening. Not all hypotheticals will exist, but we would expect many of them will come to fruition. We want to get feedback from the public on what their reactions and concerns are.  |
| Health & Equity Subcommittee Update | Ariel Wolf         | What is the objective of the testing location assessment? What is being assessed, in addition to the location itself that is already provided?   | My understanding of the current requirement is to simply note the city and county, not to the level of knowing which communities within that area. The intent of this assessment is not to tell companies upfront what to collect. We don't want to make it complicated; less is more, it could be one page with basic demographics, percentage of sidewalks in the area...something straightforward. |



## MEETING SUMMARY

| Presentation                        | Participant        | Question / Comment  | Presenter Response   |
|-------------------------------------|--------------------|---|--|
| Health & Equity Subcommittee Update | Pam Pannkuk        | Is this recommendation premature? Maybe we need to have a better understanding of what the assessment would include.  | The intent is that we do not want to define the assessment in advance, rather work with the industry to see what questions public and private sector would want to answer. This is intended to be open ended, with industry's input.   |
| Health & Equity Subcommittee Update | Bryan Mistele      | Is testing in a low income area good or bad? May be a higher risk of accidents, but if no testing occurs in low income areas, you won't understand that area, that infrastructure.  | This is explicitly not trying to say where is a good place vs. bad place to test. This is meant to better understand where testing is occurring for future decision making.  |
| Health & Equity Subcommittee Update | Anonymous Attendee | <p><i>[Regarding a comment this recommendation should move forward to understand more of where testing will go, to ensure testing is not disproportionately impacting one or more communities]</i></p> <p>Who determines the nature of the outreach and the metrics for determining if the testing is "acceptable"? There is a risk that outside special interest groups will influence the administrative state and use their privileged positions to oppose personal and private mobility that is not operated or provided by the government.</p> | <p>Proposal 1 - We would expect the nature of the outreach to be overseen by WSDOT or WSTC following procedures and determination of content similar to those used for community outreach for other transportation policies and projects. We would expect the outreach to include an education component and some scenarios, assuming that community members may know relatively little about AVs.</p> <p>Proposal 2 - There is no intent to determine what testing is acceptable in this proposal. The proposal asks that information be collected on where testing is being done. The revised proposal asks solely for the zip codes and/or census tracks/blocks where testing is being done. The WA State Department of Health will subsequently examine the demographics of those locations. The information collected may be used to guide future policies.</p> |

## MEETING SUMMARY

| Presentation                  | Participant  | Question / Comment   | Presenter Response   |
|-------------------------------|--|--|--|
| Licensing Subcommittee Update | <i>Question from presenters to Executive Committee</i> | Are there any concerns with Licensing defining AV levels through agency rulemaking?<br><br>Rulemaking would make it a more agile process to change, rather than putting in legislation.  | There are some concerns because of the everchanging nature of federal and state laws. This may be a 'cart before the horse' issue. Concern linking to the SAE levels.<br><br>There are also concerns that defining specific levels may result in creating restrictions and may deter testing.                          |
| AV Industry Panel – Aurora    | Representative Matt Boehnke                            | Are the goods and services moving from Portland to Seattle to Vancouver through the I-5 corridor is similar the same kind of dynamic you're demonstrating in Dallas? Is that a potential demonstration in the future?  | We are continually looking for partners, and what potential use cases, corridors, etc. they are interested in seeing. We've had designated service routes in Texas that they were interested in demonstrating. The I-5 corridor is definitely a possibility if there are partners interested in talking about testing. |
| AV Industry Panel – Aurora    | Scott Kuznicki   | What barriers do you see with regard to effectively deploying testing in Washington State? How can this group and Washington State's administrative agencies remove barriers and allow you to achieve the benefits of autonomous and semi-autonomous vehicle operation sooner, here, in a State with unique weather and infrastructure challenges? | Weather is a challenge, especially with the amount of rain that certain parts of Washington gets. A lot of companies are testing in states with favorable weather and routes. Establishing this Work Group is helpful to keep industry and regulation accountable to look where we are moving.                         |



## MEETING SUMMARY

| Presentation                 | Participant     | Question / Comment   | Presenter Response   |
|------------------------------|-----------------|--|--|
| AV Industry Panel – EasyMile | Justin Leighton | <p>What is the cost per mile and/or service hour ridership per service mile on the Ohio pilot?</p> <p>On other projects, do you have an estimate on cost per mile and/or service hour?</p> | <p>Not a good representative number, in Ohio the ridership was very low because we only got 2 months into the project. The overall cost for the year for the project was about \$1 million, which included allocation for two vehicles, 7 days a week, 14 hours a day. The cost per hour was around \$60. The cost per passenger would have been very high.</p> <p>We announced last week that we will be launching a project with a paratransit shuttle bus. Some figures to support that scenario are that today an electric shuttle bus costs around \$240,000, depreciated over 8 years. That's the baseline of the electric vehicle. We are targeting the autonomous price to be \$375,000, so a delta of \$120,000 over 8 years. So you're adding less than \$20,000 per year on to the vehicle. The cost savings you can realize is focused on that &lt;\$20,000 per year number, for passenger counts, fuel savings, safety related, wages, overhead. The reduction in operating costs (e.g. overhead, wages) is meant to offset the additional cost to make the vehicle autonomous.</p> |





## MEETING SUMMARY

| Presentation   | Participant                  | Question / Comment   | Presenter Response  |
|--|------------------------------|--|---|
| AV Industry Panel – EasyMile                                 | Representative Matt Boehnke  | What is the “negative”, what is holding you up from the federal position? Is it something similar to our state that we can work on now to reduce that barrier? | <p>Vehicles that are not Federal Motor Vehicle Safety Standards (FMVSS) compliant require special permission from the National Highway Traffic Safety Administration (NHTSA), a review of the route, a review of the technology, and renewal of the permission every 6 months.</p> <p>In the beginning, NHTSA had one dedicated person reviewing, made it easy. With the changing administration, it has become more difficult, more of a revolving door on policy, things started to get blocked for 6 to 8 months at a time. States would be waiting with vehicles on the ground, unable to do anything. In the last year, NHTSA has created a task force and a committee, it has gotten a lot better, more proactive. The last several months, there has been a lot more support at the federal level.</p> |
| AV Industry Panel – Self-Driving Coalition for Safer Streets | Mark Matteson                | Under the coalition model legislation, since the automated driving system is the driver, what entity is responsible if the vehicle causes an accident?         | That is an open question that everyone is trying to figure out.   |
| The Future of Mobility and AV Policy – Automaker Perspective | Representative Shelley Kloba | Do the Alliance’s proposed definitions include Tesla?  | <p>No. Level 2 is a defined term by SAE that a vehicle can provide automated latitudinal and longitudinal control, automatic cruise control, lane keeping assist, etc.</p> <p>Traditionally, the vehicle cannot cross the lane, brake, etc. automatically. Level 1 and 2 are very different from Levels 3, 4, and 5 – Levels 1 and 2 the driver is responsible at all times for vehicle performance and control.</p>  |



WASHINGTON STATE  
**AUTONOMOUS VEHICLE  
WORK GROUP**

## MEETING SUMMARY

| Presentation   | Participant        | Question / Comment  | Presenter Response   |
|--|--------------------|---|--|
| The Future of Mobility and AV Policy – Automaker Perspective | Anonymous Attendee | If ADS-Equipped Vehicles are governed exclusively by an identified state agency, what are your thoughts on this agency building internal expertise versus preparing to contract with 3 <sup>rd</sup> parties to address capability and capacity gaps? | Not necessarily my place to say something on state agencies' capabilities. |