

Future Path Work Session

Executive Committee Meeting – June 24, 2020

The WA AV Work Group Executive Committee participated in a work session at the June 24, 2020 meeting to explore the future path of the work group, considering its sunset at the end of 2023. The following overarching question was posed:

Given the legal purview of this Autonomous Vehicle Work Group and the sunset date of 2023, what does the Executive Committee (EC) wish to focus on for the duration of the group, and what role do the Cooperative Automated Transportation (CAT) policy goals adopted by the EC play in guiding that direction?

BACKGROUND

The WA AV Work Group was legislatively created in 2018 with a charge to follow developments in AV technology and related policies, explore approaches to modify policy to further public safety and prepare for the emergence of AV technology, and share information on AV technology and policies with interested stakeholders.

In 2019, the Work Group's Infrastructure & Systems Subcommittee explored Cooperative Automated Transportation (CAT) and its intersection with AV and the Work Group's charge. CAT broadly represents the confluence of automated, connected, electrified, and shared mobility in a way which contributes toward a safe and efficient transportation that emphasizes public transit and active transportation, and promotes livable (walkable/bikeable), economically vibrant communities with affordable housing and convenient access to jobs and other activity centers. CAT is about more than just vehicles; it includes:

- Modes: Automobile, truck, plane, van, bus, rail, ferry, bicycle, scooter, pedestrian, etc.
- Systems: Vehicles, infrastructure, information, communications, etc.
- Applications: Traffic management, fare collection, mobility services, trip planning, etc.

The Work Group's Executive Committee, and subsequently the Washington State Transportation Commission, voted to endorse the recommendation to adopt eight Cooperative Automated Transportation (CAT) policy goals recommended by the Infrastructure & Systems Subcommittee at the end of 2019. The adopted policy goals are as follows:

- **Organize for Innovation:** Enable organizational change that empowers officials to be flexible, accelerate decision-making, and adapt to changing technology.
- **Shared Mobility:** Encourage and incentivize shared mobility, including an emphasis on high occupancy and shared modes for moving people and goods.
- **Economic Vitality and Livability:** Create resilient and efficient regional networks and empower local agencies to create resilient, multimodal local networks.



WASHINGTON STATE

AUTONOMOUS VEHICLE WORK GROUP

- **Infrastructure and Context Sensitive Street Design:** Promote durable, physical and digital networks that accommodate the movement of people and goods in ways that are appropriate for the context.
- **Land Use:** Encourage land use development patterns that support multimodal connectivity to efficient local and regional networks.
- **Equity:** Work with marginalized communities to increase access to desirable mobility options.
- **Safety:** Increase the safety of transportation systems and infrastructure to support the safe movement of people and goods.
- **Environment:** Reduce the local and cumulative environmental impacts of mobility to improve air and water quality, energy conservation and mitigate climate change.

At the June 24th Executive Committee meeting, it was proposed that the adopted CAT policy goals be used as a framework for action. Due to the broad nature of the policy goals, it would require the Executive Committee identify priorities within them so that near-term needs and actionable items can be identified and subsequently addressed by the subcommittees.

With this as the backdrop, the Executive Committee members participated in a live polling exercise to identify priorities and direction for the Work Group's path moving forward. The polling exercise first asked members to rank broad focus areas, then rank actions within each focus area for the Work Group to prioritize. Finally, members were asked to provide insights and thoughts on additional actions to pursue and what the ultimate outcome is most critical to the success of the Work Group. The following report synthesizes the results of the polling exercise.

SYNTHESIZED POLLING EXERCISE RESULTS

RANKING QUESTION #1: Broad Work Group Focus Areas (*rank in order of priority*)

- Focus on needs for near-term testing of highly automated vehicles
- Focus on near- and long-term deployment needs of highly automated vehicles
- Focus on achievement of CAT objectives and mitigating potential negative impacts of AV technologies

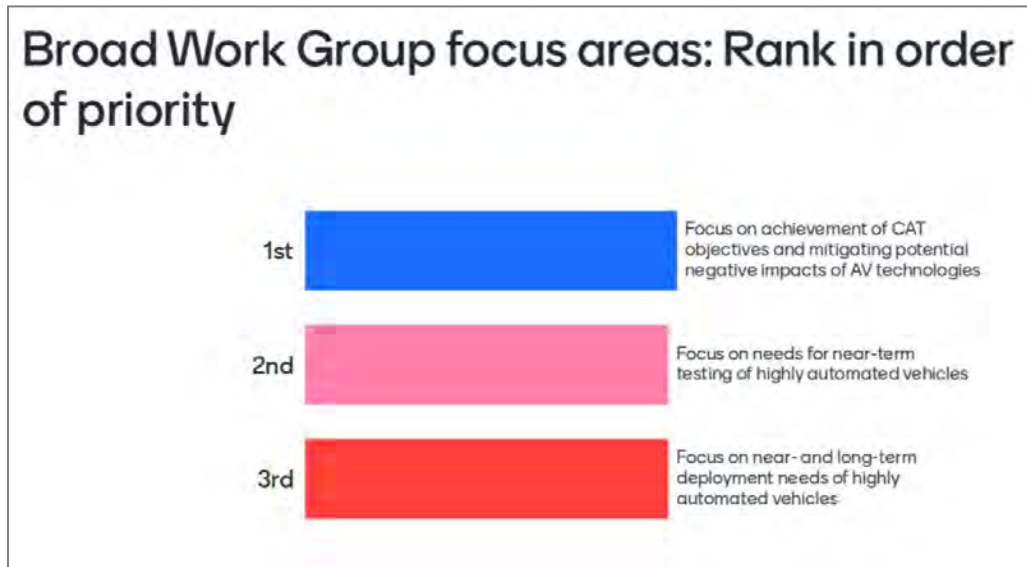
RESULTS

Collectively, participants did not indicate a strong preference on how to prioritize broad work group focus areas.

26 Executive Committee member responses

The results of this poll showed almost equal preference across all three focus areas, noting that "Focus on achievement of CAT objectives and mitigating potential negative impacts of AV technologies" ranked at a slightly higher priority over the other two. Though there is little information to provide further context and explanation as to why participants voted in this way, these outcomes may represent the

balance of differing perspectives across the participants, and signal that participants as a collective, feel that all three focus areas are important for the Work Group to address in the near term.



RANKING QUESTION #2: Near-Term Testing Activities *(rank in order of priority)*

- **Implementation of and/or revisions to ESHB 2676 section 2: Autonomous Vehicle Testing & Reporting**
- **Conduct open discussions with companies with DOL self-certification to understand what motivates testing decisions**
- **Identify and pursue funding to support pilot and testing activities**

RESULTS

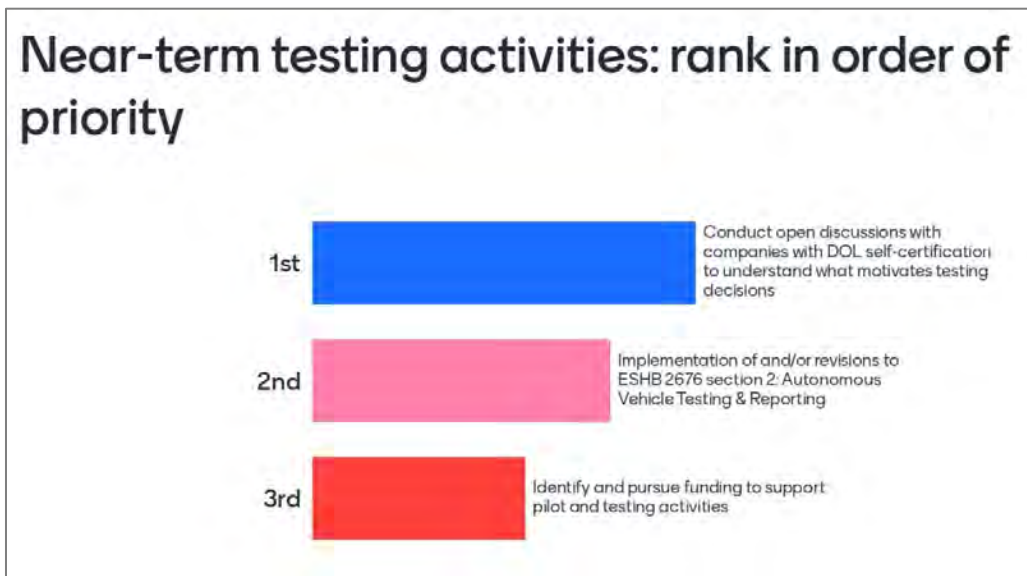
Participants showed clear interest in open discussions with companies undergoing testing to understand motivations for testing decisions, which may help to inform further policy revisions and implementation.

26 Executive Committee member responses

When asked to rank in order of priority, the above three different near-term testing priorities, participants showed clear preference for conducting “open discussions with companies with Department of Licensing (DOL) self-certification to understand what motivates testing decisions”. Second in priority was the “Implementation of and/or revisions to ESHB 2676 Section 2: Autonomous Vehicle Testing & Reporting”. This ordering indicates a desire for clear understanding of what motivates testing decisions, which could help inform implementation and revisions to ESHB 2676.

Ranked third was to “Identify and pursue funding to support pilot and testing activities”. While this activity ranked as a lower priority, responses from the free-form portion of the poll (covered later in this

report) did include several responses related to additional testing needed to strategically position Washington at the leading edge of AV development. Its lower ranking among the other two near-term testing activities may signal that participants perceive the other actions to be more pressing in the immediate term, or that funding to support pilot and testing activities is less of a need at this time.



RANKING QUESTION #3: Deployment-Oriented Activities *(rank in order of priority)*

- Review and recommend revisions to the draft Uniform Law Commission AV Model Bill language & HB 2470
- Identify and adopt AV data guiding principles
- Develop a prioritized list of topics needing legislative reform (e.g. video screens, public records act, etc.)
- Prioritize a list of near-term infrastructure investments to pursue (signing/stripping, broadband, etc.)
- Develop an Education Plan to communicate the benefits and limitations of ADAS and AV

RESULTS

Prioritization of near-term infrastructure investments, topics requiring legislative reform, and the need for AV data guiding principles signals interest in laying the groundwork for deployment.

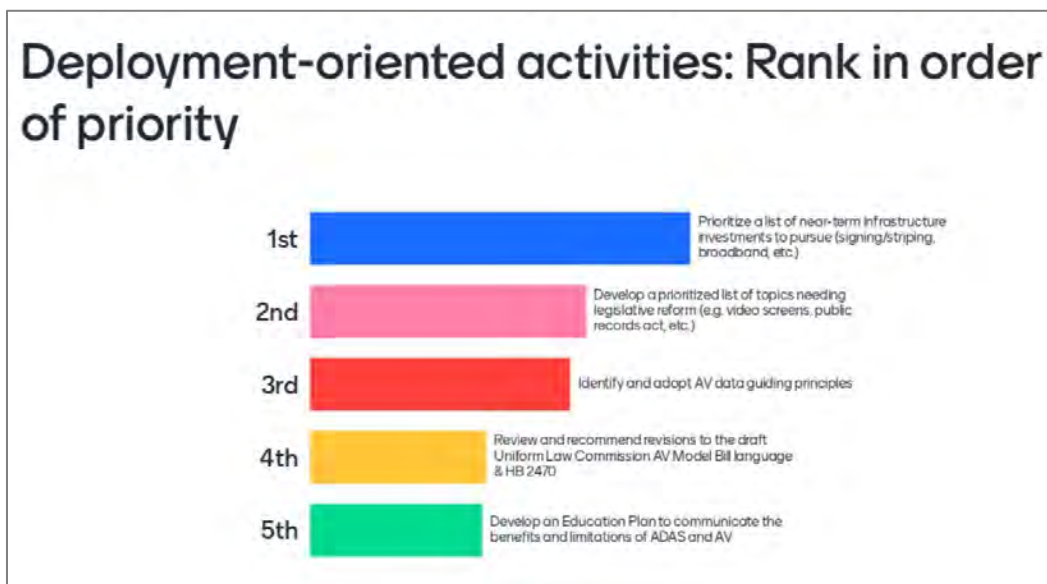
27 Executive Committee member responses

Regarding deployment-oriented activities, participants ranked “Prioritize a list of near-term infrastructure investments to pursue (signing/stripping, broadband, etc.)” as highest priority. This was followed by “Develop a prioritized list of topics needing legislative reform (e.g. video screens, public

records act, etc.)”, and then “Identify and adopt AV data guiding principles” ranked closely behind. Though the prioritization of infrastructure investments was ranked higher by a relatively large margin, all three of these activities relate to laying the groundwork for AV deployment.

Ranked lower were the activities “Review and recommend revisions to the draft Uniform Law Commission AV Model Bill language and HB 2470” and “Develop an Education Plan to communicate the benefits and limitations of ADAS and AV” tied at fourth and fifth. Regarding the Uniform Law Commission AV Model Bill language and HB 2470, the low ranking may be in part due to the fact many subcommittees have already been engaged in ongoing work to review the language, and have been asked to report back on their reviews by the end of 2020.

While the activity for developing an Education Plan for communicating the benefits and limitations of ADAS and AV was ranked the lowest, subsequent free-form responses suggest that it remains a priority for at least some participants. However, the development of an education plan requires a certain level of baseline understanding around the benefits and limitations of ADAS and AVs, and the free-form responses suggest this is an interest of some that has yet to be filled.



RANKING QUESTION #4: CAT-Oriented Activities *(rank in order of priority)*

- **Conduct scenario planning to explore alternative AV futures and potential impacts and policy implications**
- **Develop AV health and equity guiding principles to apply across all subcommittees**
- **Develop engagement opportunities for disadvantaged communities for Work Group discussions**
- **Based on policy goals, prioritize a list of deployment scenarios to enable focused policy and strategy discussion**

RESULTS

Interest in conducting scenario planning to explore alternative AV futures from participants may point to an interest or need for better understanding of potential impacts and policy implications.

26 Executive Committee member responses

Relating to CAT-oriented actions, participants demonstrated clear preference for the activity to “Conduct scenario planning to explore alternative AV futures and potential impacts and policy implications.” This was followed by the activities “Based on policy goals, prioritize a list of deployment scenarios to enable focused policy and strategy discussion” and “Development engagement opportunities for disadvantaged communities for Work Group Discussions.” This ranking would appear to suggest participants perceive the need for better understanding of possible impacts from alternative AV futures, which would help to inform subsequent opportunities such as prioritizing deployment scenarios to enable policy and strategy discussions, and to develop more targeted engagement opportunities for disadvantaged communities within Work Group discussions. Without thorough understanding of the different ways AV futures could evolve, and the policy implications each brings, it would be difficult to have a fruitful discussion on policy and strategy within the Work Group, as well as with the broader community.

Ranked fourth and last in this question was the activity to “Develop AV health and equity guiding principles to apply across all subcommittees”. Though ranked last in priority, free-form responses suggest this does not mean participants do not see this activity as important. On the contrary, health and equity were common considerations highlighted in the free-form responses. This may signal that while participants are concerned about health and equity, there lacks clarity on how guiding principles could be developed and applied across subcommittees without activities, such as scenario planning, to help them understand the various alternative futures. This further highlights the importance of prioritizing actions that contribute to building the collective understanding around the implications of ADAS and AVs.



WASHINGTON STATE

AUTONOMOUS VEHICLE WORK GROUP

CAT-oriented actions: Rank in order of priority



Following the focus area rankings, Executive Committee members were asked to provide free-form responses to two questions:

- **“What Action or Focus Area Did You Not See That You Feel Should Be Prioritized?”**
- **“In a Few Words, What Single Outcome Do You See as the Most Critical to the Success of this Group?”**

Responses to these two free-form questions resulted in some key points coming to the surface that highlight the complexity of the Work Group’s charge, purview, and ability to achieve the desired objectives within its remaining 3 years. The following section synthesizes these key points. The full list of free-form responses can be found in Appendix A at the end of this document.

- **Interest from participants in prioritizing achieving desired outcomes while also being at the leading edge of technology development poses a potential dichotomy the Work Group may need to contend with.**

Clear from the freeform responses were two key priorities. On the one hand, participants highlighted the need for the Work Group to provide guidance to ensure desirable outcomes for people across Washington, particularly from the perspectives of safety, mobility, and equity. However, on the other hand, there were also participants who emphasized the need to strategically position Washington at the leading edge of ADAS and AV testing and development, and the need for a light-touch regulatory environment to make Washington the nation’s place to innovate in the AV industry. In some ways, these are competing priorities, and pose a potential dichotomy the Work Group and Transportation Commission may need to contend with. In addition to considering the prioritization of actions, there may be a need to consider how the needs of different constituents and stakeholders are prioritized in this space.



- **Participants highlighted a need for better assessment and understanding of impacts from AVs to inform the development of policies and the implementation and deployment of potential use cases.**

In alignment with the outcomes of the rank order questions, participants indicated a clear interest in pursuing opportunities to gain a better understanding of expected impacts from AVs. Participants specifically highlighted needs around understanding the risks of testing on public roads, the broader transportation system, and the specific needs of people from disadvantaged communities who are already mobility constrained.

- **Better intergovernmental coordination and information sharing, both with other levels of government and other states was suggested as a key priority.**

Many participants highlighted the need for Washington to conduct better intergovernmental coordination and information sharing with other levels of government, as well as with other states. The responses emphasized that policies in this state need to align with federal policies, while also providing effective guidance to local governments. Participants also highlighted the need to collaborate with other states to ensure Washington does not function in a vacuum, and that the State is able to learn from the emerging state-of-practice being developed elsewhere.

RECOMMENDATIONS

Recommendations have been developed for how the Work Group can approach each action prioritized under the three broad focus areas, with suggestions for how each subcommittee can support the action going forward. These recommendations are meant to serve as a starting point for the Work Group and its subcommittees, providing an overview of each action, their benefits and implications, and how they may impact each subcommittee's purview.

The recommendations are documented in Appendix B (separate document) *WA AV Work Group Future Path Prioritization Recommendations Matrix*.

APPENDIX A: FREE-FORM QUESTION RESPONSES

FREE-FORM QUESTION #1: What Action or Focus Area Did You Not See That You Feel Should Be Prioritized?

EXECUTIVE COMMITTEE MEMBER RESPONSE	PRIMARY THEME
Anticipated impact of COVID-19 and state and local responses on AV deployments and use cases in Washington	Exploration of use cases
Risk assessment for testing on public roads	Assessment of impacts
Data privacy; Interoperability; legacy issues	System operations
We do need some focus on making testing and deployment happen in Washington	Washington based tech development
What kinds of applications are more implementable given the current AV technologies' maturity level?	Exploration of use cases
Identify potential for dedicated autonomous road corridors to facilitate freight shipping lanes	Guidance towards implementation and deployment
Develop a new 21st Century Transportation Plan that integrates AVs into all aspects of the plan, such as last mile, serving disadvantaged, etc.	Guidance towards implementation and deployment
Additional industry panels to education work group on what's really happening on AV	Raise local industry awareness
Comparative regulatory analysis - what are other states across the country doing?	Raise local industry awareness
Status of highway infrastructure - what do we need to change as a state?	Guidance towards implementation and deployment
I would suggest a high-level reference point - from the point of policy that needs to be changed. From the point of people who will use or be affected by AV tech. Companies will do fine innovating - this work group should focus on impacts of tech	Assessment of impacts
Funding to support broader participation in this work, focused on BIPOC participation	Assessment of impacts
Multi state collaboration to standardize regulations/ approach	Raise local industry awareness
Federal guidance and efforts they are taking at that level	Raise local industry awareness
Federal and other state cooperation. We should not operate in a WA only vacuum	Raise local industry awareness



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EXECUTIVE COMMITTEE MEMBER RESPONSE	PRIMARY THEME
Learning from other industries who are doing autonomous technology that is more widespread in adoption than AV is, such as aviation, and marine shipping.	Raise local industry awareness
Understanding who is currently left out/ negatively impacted by our transportation system and whether AVs will increase those disparities or create new ones	Assessment of impacts
Preparing and transitioning the workforce for changes in freight and supply chain work.	Assessment of impacts
Re: objective of the group: How do we continue to cultivate and nurture AV technology to improve mobility for all, reduce carbon emissions and help save lives, especially in the time of COVID-19? -- Charles	Guidance towards implementation and deployment

FREE-FORM QUESTION #2: In a Few Words, What Single Outcome Do You See as the Most Critical to the Success of this Group?

EXECUTIVE COMMITTEE MEMBER RESPONSE	PRIMARY THEME
Policy guidance for state agencies	Policy guidance for state agencies and local governments
WA is prepared for AVs and on the leading edge of deployment	Strategic positioning of WA at leading edge
Specific policy changes that keep people safe while expanding use of AV Tech	Guidance to ensure desired outcomes for people
Diversity and scale of AV deployment and testing in the state	Strategic positioning of WA at leading edge
Clear laws that enable and support AV deployment in the future	Strategic positioning of WA at leading edge
Clear, concise guidance that aligns with Federal for near term AV testing	Intergovernmental policy alignment
Accomplish several key milestones (policy, law, and applications) people would care	Guidance to ensure desired outcomes for people
The state is prepared to allow/receive AVs on our roadways	Strategic positioning of WA at leading edge
ADAS and vehicle automation systems improve the safety and mobility for all people traveling in Washington State	Guidance to ensure desired outcomes for people



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**AUTONOMOUS VEHICLE
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EXECUTIVE COMMITTEE MEMBER RESPONSE	PRIMARY THEME
Establish a foundation for safe and equitable deployment of AV technology	Guidance to ensure desired outcomes for people
Create a vision for how we want CAT to look/operate for Washington future	Guidance to ensure desired outcomes for people
An ecosystem that encourages AV development and implementation. We need more action in this space or the system will develop without us	Strategic positioning of WA at leading edge
Informing a legal and regulatory framework that encourages testing/ use of AV's	Strategic positioning of WA at leading edge
Policy guidance for the safe deployment of AV	Guidance to ensure desired outcomes for people
Policy recommendations on how to maximize benefits of AV's to our transportation system.	Leverage benefits of AVs for transportation system
Support for local government to prepare for deployment and infrastructure development and clear guidelines for data collection to inform future decisions	Policy guidance for state agencies and local governments
Education for all those impacted	Public education and awareness of impacts
Desired outcome: WA continues to be a leader in cultivating and nurturing AV technology innovation.	Strategic positioning of WA at leading edge
Policy direction to steer the industry toward positive impacts for the environment and to leverage current mass transit system options for those who would choose not to drive for whatever reason	Guidance to ensure desired outcomes for people
Policies that produce safe and equitable deployment of AV technology	Guidance to ensure desired outcomes for people
Definitive policies that align with the AV technology AND user-based needs for safe and cost-efficient implementation within the state	Guidance to ensure desired outcomes for people
Thoughtful planning that considered health, safety, mobility and equity	Guidance to ensure desired outcomes for people
Comprehensive study of equity issues of our current transportation system which allows us to develop a strategic approach to deploy AVs so that this technology bridges gaps/ reduce disparities	Guidance to ensure desired outcomes for people
A robust competitive innovative group of companies investing in Washington State. A light touch regulatory environment that makes Washington the nation's place to innovate in AV industry	Strategic positioning of WA at leading edge



APPENDIX B: WA AV Work Group Future Path Prioritization Recommendations Matrix

Appendix B is documented in a separate document.