



Washington State  
Transportation Commission

# AUTONOMOUS VEHICLE WORK GROUP

2023 ANNUAL REPORT



WASHINGTON STATE  
AUTONOMOUS VEHICLE  
WORK GROUP

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State of Washington  
TRANSPORTATION COMMISSION

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January 2, 2024

Dear Governor Inslee, and Members of the Senate & House Transportation Committees:

On behalf of the Washington State Transportation Commission and the Autonomous Vehicle (AV) Work Group, we are pleased to submit our final annual report of Work Group learnings, findings, and recommendations. This report reflects the efforts undertaken by the Work Group in 2023, per requirements set forth in RCW 47.01.510, as well as a culmination of all the Work Group's efforts since its inception in 2018.

The AV Work Group was established in 2018 to develop policy recommendations addressing the safe operations of autonomous vehicles on public roadways in the state. Over the past five years, the Work Group has identified 28 recommendations for advancing AV-related policy in the state. This report represents the culmination of learning, knowledge sharing, and findings of the Work Group during its purview, led by the 35-member Executive Committee made up of public, private, and non-profit organizations, supported by seven state agency led subcommittees.

We hope you find this report of findings and recommendations helpful and supportive of your deliberations as the state prepares for the safe operations of AVs on our public roadways in the future.

Sincerely,

Deborah C. Young, Chair  
Washington State Transportation Commission

James. A. Restucci, Vice-Chair  
Chair, Autonomous Vehicle Work Group  
Executive Committee

# EXECUTIVE SUMMARY

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During its five-years in operation, the Work Group accomplished successful collaboration across public and private partners, vetting, and agreeing to 29 recommendations, convening of over 100 meetings, and establishing the foundation for state-level policy advancement to prepare for the safe operation of AVs on the state's public roads.



## EXECUTIVE SUMMARY

The Transportation Commission sincerely thanks the Governor and State Legislature for its leadership in this arena, the AV Work Group Executive Committee for their direction and guidance, and all of the Subcommittees' co-chairs, lead agencies, and subcommittee members for all of the work put in on this important and sometimes challenging topic.

As the final and legacy deliverable from the Transportation Commission, with key direction and valuable input from the Work Group, the "Roadmap to the Future" report (separate document) sets the stage for advancing the state's AV policy. This Roadmap serves as a foundational resource for future AV-related decision making in Washington.

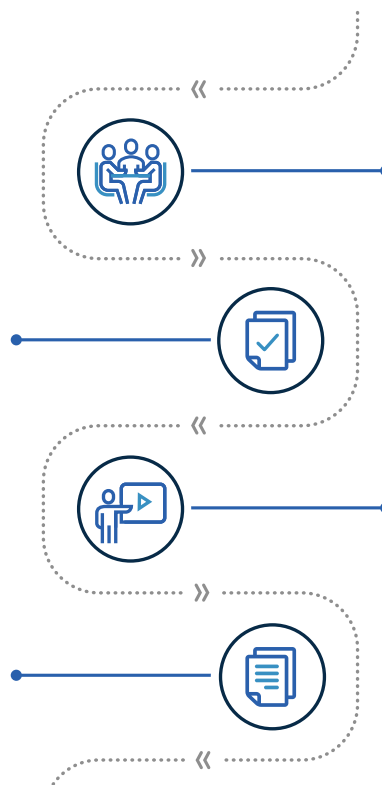
As the state continues to evaluate and advance its AV-related policy, the Transportation Commission and AV Work Group encourage continued active collaboration among stakeholders, knowledge sharing across jurisdictions, exploration of potential policy opportunities and implications within the AV space, and ongoing communication and engagement around AVs in-state and nationally.

### RECOMMENDATIONS

- ▶ 29 total recommendations
- ▶ 17 endorsed
- ▶ 8 Acted Upon/Legislated

### LEGISLATION

- ▶ HB 2676 (2020) - Enacted
- ▶ HB 2470 (2020) - No action
- ▶ HB 1731 (2021) - Superseded
- ▶ SSB 5460 (2021) - Enacted
- ▶ SB 5594 (2023) - No action



### MEETINGS IN 2021

- ▶ 16 Executive Committee meetings
- ▶ 102 Subcommittee meetings
- ▶ Joint Subcommittee meetings
- ▶ WSTC/Agency Collaboration

### EDUCATION AND ENGAGEMENT\*

- ▶ Gov: NHTSA, AAMVA, States, etc.
- ▶ Industry: IIHS, AV Companies, etc.
- ▶ Advocates: DRW, ULC, Reason Foundation, etc.
- ▶ Academia: UW, Carnegie Mellon, etc.

\*100+ total presentations from public & private partners

## 2023 WORK GROUP RECOMMENDATIONS

In its final year, the Work Group presents several recommendations for consideration by the Governor and Washington State Legislature, including the need for ongoing collaboration and development of state AV policy, the “Roadmap to the Future” legacy deliverable (separate document) as a foundational resource for continuing to advance state AV policy, and several previously endorsed recommendations to further consider and take action on. These recommendations are outlined below.

TABLE 1 | 2023 Work Group Recommendations

SOURCE	RECOMMENDATION
<b>New Recommendations Brought Forth in 2023</b>	
<b>Transportation Commission</b>	Appoint state-level entity to continue ongoing AV policy development.
<b>Transportation Commission</b>	Adopt the “Roadmap to the Future” as foundational resource for future AV-related decision making in Washington.
<b>Previous Work Group Recommendations for Further Consideration and Action</b>	
<b>Safety Subcommittee</b>	Requirement for a Law Enforcement / First Responder Interaction Guide.
<b>Licensing Subcommittee</b>	Amendment of RCW 46.92.010 to enable rulemaking by the Department of Licensing for the Self-Certification Program.
<b>Health &amp; Equity Subcommittee</b>	Conduct structured public outreach.
<b>Health &amp; Equity Subcommittee</b>	Identification of testing locations.
<b>Infrastructure &amp; Systems Subcommittee</b>	Increased investment on enhanced roadway pavement markings.
<b>Infrastructure &amp; Systems Subcommittee</b>	Support WSDOT’s work zone data initiative.
<b>Transportation Commission</b>	Carry out a state-sponsored AV pilot.



# INTRODUCTION

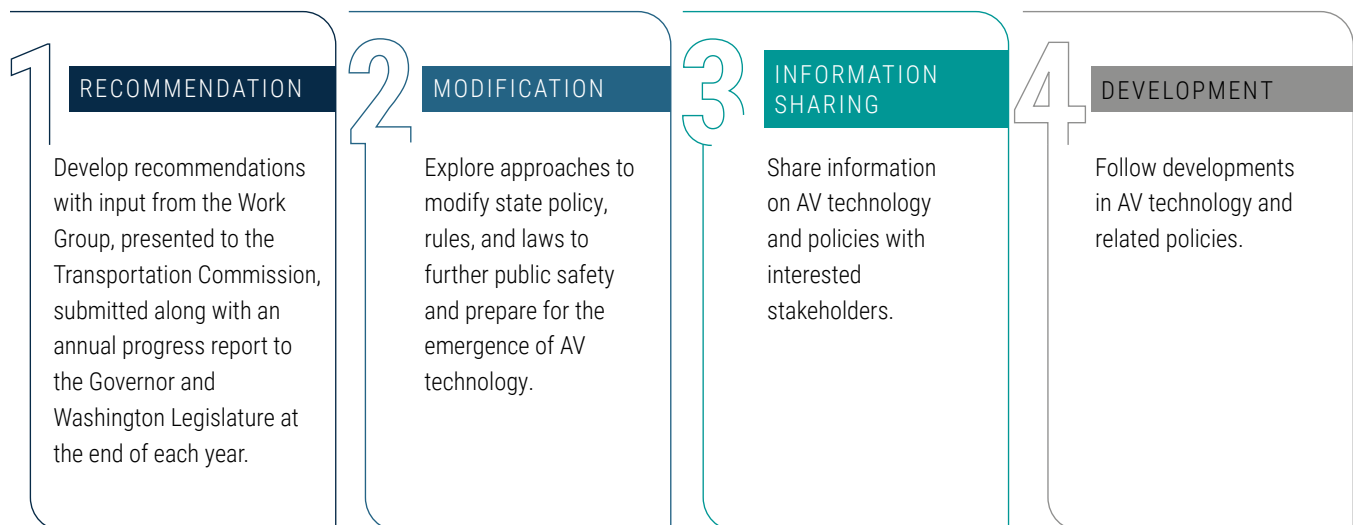
Autonomous vehicle (AV) technologies continue to advance at various speeds across the world, with some regions deploying AVs operationally while others are conducting AV testing, and some regions not yet allowing the testing or deployment of AVs at all. AVs may offer benefits and improvements to the transportation space, such as potentially increased safety with the removal of distracted human driving, however there are still many potential impacts and implications the deployment of AVs may bring that need to continue to be explored and vetted. To that end, the State of Washington established the Autonomous Vehicle Work Group ("Work Group") in 2018, directing the Washington State Transportation Commission ("Commission") to convene an executive and legislative work group to develop policy recommendations to address the operation of autonomous vehicles on public roadways in the state.

## PURPOSE OF THE WORK GROUP

The primary purpose of the Work Group was to identify regulatory, policy, and operational changes needed to enable safe operation of autonomous vehicles on Washington's public roadways, and to provide recommendations to the Transportation Commission. The Transportation Commission, in consideration of the Work Group's recommendations, in turn made recommendations to the Governor and Washington Legislature each year of the Work Group's purview (2018-2023). More information on the makeup of the Work Group and how it developed recommendations is detailed in the next chapter of this report.

### The Work Group was charged with the following:

The Washington State AV Work Group, first convened on June 27, 2018, and operated through December 31, 2023.



## PURPOSE OF THIS DOCUMENT

RCW 47.01.510<sup>1</sup> requires the Transportation Commission to document the Work Group's efforts during each calendar year and submit to the Governor and Legislature. This annual report serves as the Work Group's final annual report to the Governor and Legislature. It documents the organization of the Work Group, summarizes key activities accomplished during the 2023 calendar year as well as the entire Work Group's purview, presents final AV-related recommendations put forth by the Work Group and Transportation Commission, summarizes the "Roadmap to the Future" legacy deliverable (separate document) to serve as guidance for future AV-related decision making in Washington, and concludes the Work Group's efforts for its sunset on December 31, 2023.

<sup>1</sup> RCW 47.01.510: <https://app.leg.wa.gov/RCW/default.aspx?cite=47.01.510>



# WORK GROUP OVERVIEW

Led by the Commission, the Work Group has served as a public forum for a variety of stakeholders – public, private, community, academia, and advocacy groups – to share insights and have a collaborative discussion on evaluating and setting administrative, legislative, and operational policies regarding the ultimate safe operation of AVs on Washington's public roadways.



The Work Group was comprised of a 35-member Executive Committee and 7 topic-specific subcommittees throughout each year of its purview to explore potential AV impacts, considerations, challenges, and opportunities.

FIGURE 1 | AV Work Group Organization

## AV WORK GROUP EXECUTIVE COMMITTEE



Government Representatives and Key Stakeholders from:

- Governor
- Four members from Senate
- Four members from House
- Insurance Commissioner
- DOL Director
- WSDOT Secretary
- WSP Chief
- Traffic Safety Commission Director
- State Chief Information Officer
- Transportation Commission Member
- Health Secretary
- Employment Security Director
- Labor & Industries Director
- Data, Technology & AV Testing
- Shared, Electric, TNC & Transit
- Automakers
- Local Governments
- Consumers/Traveling Public
- Environment
- Academic
- Underrepresented Communities
- Freight
- Labor

## SUBCOMMITTEES



### HEALTH & EQUITY

TBD Lead Agency

Co-Chairs: Dr. Andrew Dannenberg, UW School of Public Health

- Health and equity considerations related to autonomous vehicles, such as air quality, water quality, noise, green space, mental well-being, physical activity, safety, and social connections
- Engagement from communities, prioritizing communities of color

### INFRASTRUCTURE & SYSTEMS

WSDOT Lead Agency

Co-Chairs: Roger Millar, WSDOT; Alison Cochran, PACCAR

- Roadway infrastructure
- Traffic management
- Transit service & vehicles
- Advertising
- Right of way
- Multi-modal transportation
- Mobility as a service

### LIABILITY

Insurance Comm. Lead Agency

Co-Chairs: David Forte, Office of the Insurance Commissioner; Harris Clarke, PEMCO

- Insurance
- Tort liability
- Criminal law
- Judiciary

### LICENSING

DOL Lead Agency

Co-Chairs: Beau Perschbacher, DOL; Drew Wilder, Vicarious Liability Risk Management LLC

- Manufacturer Vehicle Testing
- Pilot certification
- Vehicle registration
- Driver's licensing
- Rules of the road

### SAFETY

WTSC & WSP Lead Agency

Co-Chairs: Captain Dennis Bosman, Washington State Patrol; Manuela Papadopol, Designated Driver

- Traffic safety
- Law enforcement
- Synchronization with other safety priorities
- Drivers and vulnerable users and hazards

### SYSTEM TECH & DATA SECURITY

State CIO Lead Agency

Co-Chairs: Zack Hudgins, Office of the Chief Information Officer; Michael Schutzler, Washington Technology Industry Association

- Data & information management
- Cybersecurity
- Privacy protection

### WORKFORCE

ESD and L&I Lead Agency

Co-Chairs: Brenda Wiest, Teamsters; Caitlyn Jekel, Washington State Employment Security Department; Allison Drake, Washington State Department of Labor & Industries

- Worker safety & worker rights
- Worker displacement/job loss
- Worker retraining and transition
- Industry impacts



## EXECUTIVE COMMITTEE

The Work Group Executive Committee was made up of leaders and experts across public, private, academia, community, and advocacy partners. Executive Committee membership was established in law, with additional membership appointments made by the Transportation Commission after the Work Group first convened in 2018 to ensure the full range of perspectives was being captured. The final Executive Committee membership is listed below.

**TABLE 2 |** AV Work Group Executive Committee Membership (as of November 2023)

MEMBER NAME AND TITLE	ORGANIZATION
<b>Members Added by Transportation Commission</b>	
<b>James (“Jim”) A. Restucci, Work Group Chair and Commissioner</b>	Washington State Transportation Commission
<b>Shive Batra, Work Group Vice Chair and Commissioner</b>	Washington State Transportation Commission
<b>Senator Joe Nguyen</b>	Washington State Legislature
<b>Senator Claudia Kauffman</b>	Washington State Legislature
<b>Senator Curtis King</b>	Washington State Legislature
<b>Senator Ann Rivers</b>	Washington State Legislature
<b>Representative David Hackney</b>	Washington State Legislature
<b>Representative Shelley Kloba</b>	Washington State Legislature
<b>Representative Mary Dye</b>	Washington State Legislature
<b>Representative Leonard Christian</b>	Washington State Legislature
<b>John Batiste, Chief</b>	Washington State Patrol
<b>Mike Kreidler, Insurance Commissioner</b>	Office of the Insurance Commissioner
<b>Marcus Gasper, Director</b>	Department of Licensing
<b>Roger Millar, Secretary</b>	Department of Transportation
<b>Debbie Driver, Senior Policy Advisor</b>	Governor’s Office
<b>Members Added by Transportation Commission in 2019</b>	
<b>Joel Sacks, Director</b>	Department of Labor & Industries
<b>Cami Feek, Commissioner</b>	Employment Security Department
<b>Bill Kehoe, State Chief Information Officer</b>	Washington Technology Solutions (WaTech)
<b>Laura Johnson, Director of Policy and Technology for the Division of Disease Control and Health Statistics</b>	Department of Health
<b>Shelly Baldwin, Director</b>	State Traffic Safety Commission
<b>Dr. Yin Hai Wang, Director</b>	STAR Lab, University of Washington
<b>Justin Leighton, Executive Director</b>	Washington State Transit Association
<b>Bruce Agnew, Fellow</b>	ACES Northwest & Discovery Institute
<b>Greg Spotts, Director</b>	City of Seattle Transportation Department
<b>Curt Augustine, Senior Director of State Affairs</b>	Alliance for Automotive Innovation
<b>Brenda Wiest, Legislative Director</b>	Teamsters 117
<b>Todd O’Brien, Public Works Director</b>	Adams County
<b>Vacant Seat</b>	Puget Sound Sage
<b>Bryan Mistele, CEO</b>	INRIX
<b>Mellani McAleenan, Senior Manager of Public Affairs</b>	AAA of Washington
<b>Bryce Yadon, State Policy Director</b>	Futurewise
<b>Ariel Wolf, State Counsel</b>	Autonomous Vehicle Industry Association
<b>Steve Gordon, Principal</b>	Gordon Truck Centers
<b>Aidan Ali-Sullivan, State Policy &amp; Government Affairs</b>	Waymo
<b>Anna Zivarts, Program Director of Disability Mobility Initiative</b>	Disability Rights Washington

## WORK GROUP PROCESS EVOLUTION

At the outset of the Work Group in 2018, a tiered, bottom-up approach was established, where subcommittees curated ideas organically, bringing vetted ideas to the Executive Committee for consideration. The Executive Committee would in turn vet and send recommendations on to the Commission for final evaluation and endorsement, who in turn would present to the Governor and Legislature in the legislatively mandated annual progress and recommendations report.

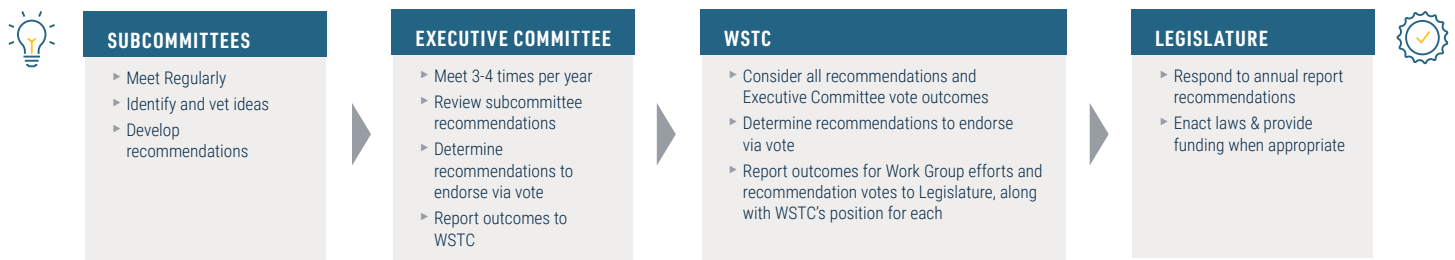
How ideas were brought to the table, vetted, discussed, and pushed through the levels of involved entities evolved over the life of the Work Group, as lessons were learned on the best ways to grow and bet ideas into matured recommendations for Governor and legislative consideration and action.

In the last years of the Work Group, the process for flowing an idea through to a recommendation shifted to starting with the Commission, pulling in subcommittees and agency leads to foster and grow ideas and vet through a variety of stakeholders. The Commission would then bring the vetted recommendations to the Executive Committee for input prior to submitting to the Governor and Legislature in the annual report.

This shift allowed for flexibility in exploring a wide range of concepts for AV-related policy and operational considerations across interested parties before requiring structured Work Group investment and input, saving Work Group time to review matured ideas.

The starting and ending Work Group processes are outlined in figures 2 and 3 below.

**FIGURE 2 |** Starting Work Group Process (2018-2020)



**FIGURE 3 |** Ending Work Group Process (2021-2023)





# WORK GROUP ACTIVITIES AND LEARNINGS: 2018 THRU 2023

The Work Group convened June 2018 through November 2023, cultivating knowledge sharing across the AV space across various jurisdictions at the local, state, and national level. Over 100 presentations were given to the Work Group, ranging from federal government agencies to AV companies and research institutes.

Over the Work Group’s purview, several themes rose to the top of the conversation and driving priorities in policy evaluation and development, including safety, equity, terminology and definitions, AV testing and pilots, and the development of legislation based on various aspects of AV policy identified by the Work Group. These themes are discussed below.

## SAFETY

The topic of AV safety ranges widely, from ‘how safe is safe enough’ to allow an AV to operate on a public roadway, to how law enforcement and first responders interact with an AV, to how best to educate and inform the public of AV technologies on the roads today and those coming in the future. Some of the key safety activities and discussions the Work Group engaged in include:

- The Insurance Institute for Highway Safety (IIHS) presented to the Work Group on multiple AV safety topics, including its findings on safety effects of advanced driver assistive systems (ADAS) and its vehicle ratings program for partially automated vehicles. The IIHS continues to research and evaluate automated and partially automated vehicles as the technologies continue to evolve and become more present on public roadways.
- The University of Washington (UW) Technology Law and Public Policy Clinic conducted research in coordination with the Work Group on several topics, including safety-related aspects of AVs, such as AV safety implications for vulnerable road users and establishing an approach to safety for Washington State that could be implemented (including permitting, operations, and notification expectations).
  - » Information on the UW latest research, “Connected & Autonomous Vehicle Testing Law and Policy Recommendation”, can be found in Appendix X of this report.
- The Safety and Licensing Subcommittees developed a recommendation for AV companies self-certified with the Department of Licensing (DOL) to develop and maintain a law enforcement and first responder interaction guide. This guide would equip law enforcement and first responders with information on how to safely and effectively interact with AVs that do not have a safety driver onboard the vehicle.
  - » This interaction guide was recommended to and endorsed by the Work Group and Transportation Commission in 2020 and included in draft legislation ([House Bill 1731<sup>2</sup>](#)) in 2021, but was ultimately removed from superseding legislation that passed ([Substitute Senate Bill 5460<sup>3</sup>](#)). The recommendation was brought forward again in 2022 and in this final Annual Report to consider for further action.

## EQUITY

The topic of equity and the potential benefits and impacts AVs may present for equitable access was interwoven across Work Group activities, discussions, and recommendations. The consideration for and engagement with underserved and traditionally marginalized communities is essential to develop comprehensive AV policy in Washington State.

<sup>2</sup> House Bill (HB) 1731, Washington State Legislature 2021 session. <https://app.leg.wa.gov/billssummary?billnumber=1731&year=2021>

<sup>3</sup> Substitute Senate Bill (SSB) 5460, Washington State Legislature, 2021 session. <https://app.leg.wa.gov/billssummary?Year=2021&BillNumber=5460>



Some of the key equity topics the Work Group explored include:

- In 2019, the Work Group recognized that equity an integral topic in the exploration of AV policy, and established the Health & Equity Subcommittee.
- The Health & Equity Subcommittee identified several potential implications AVs may present in terms of equity, and presented recommendations to bring equity to the forefront of the conversation, including two key recommendations:
  - » Conduct structured public outreach, ensuring inclusion of traditionally marginalized communities in the conversation. This recommendation was endorsed in 2020, again in 2022, and is presented in this Annual Report for further action.
  - » Identification of AV testing locations, to understand where AV companies are testing and ensure that inequitable distribution of AVs occurs. This recommendation was endorsed in 2020, again in 2022, and is presented in this Annual Report for further action.
- The co-chair of the Health & Equity Subcommittee, Dr. Andrew Dannenberg, coauthored a research paper related to AVs and equity implications, currently in draft pending publishing. This draft research manuscript is under review as of December 2023 with an unknown publication date; parties interested in learning more and gaining access to the manuscript once published can contact Dr. Andrew Dannenberg at [adannen@uw.edu](mailto:adannen@uw.edu). The research paper identified ten key areas of consideration in terms of equity issues associated with AV implementation.
  - » Assessment of community mobility needs and priorities;
  - » Education and outreach;
  - » Disparities in infrastructure quality;
  - » Equitable distribution of customer services;
  - » Access to AVs by persons with low incomes;
  - » Access to smartphones and credit cards;
  - » Shared infrastructure services;
  - » Barriers to shared AV use;
  - » Access to AVs by persons with disabilities; and
  - » Disruption of existing transportation jobs.

Similar research was conducted by the University of Oregon, “A Framework for Shaping the Deployment of Autonomous Vehicles and Advancing Equity Outcomes: Knight Autonomous Vehicle Initiative”, in 2021<sup>4</sup>.

## TERMINOLOGY AND DEFINITIONS

The standardization of AV terminology is happening across the country and internationally. There is a need for consistency among jurisdictions developing AV policy, federal level activities, and within the AV industry. The Work Group learned from various stakeholders the issues with AV terminology and definitions, as well as

<sup>4</sup> University of Oregon, 2021. “A Framework for Shaping the Deployment of Autonomous Vehicles and Advanced Equity Outcomes: Knight Autonomous Vehicle Initiative”. A Framework for Shaping the Deployment of Autonomous Vehicles and Advanced Equity Outcomes: Knight Autonomous Vehicle Initiative ([uoregon.edu](https://uoregon.edu))

developed a recommendation to clarify Washington's AV definitions. Some of the topics and discussions held are represented below:

- The IIHS presented to the Work Group on the importance of clearly delineating between automated vehicles, partially automated vehicles, and ADAS-equipped vehicles.
- The definition of a “driver” shifts as autonomous vehicles start operating on public roadways, especially when it comes to assigning liability in the case of an incident. The Liability Subcommittee explored this topic, and one of the Work Group's Executive Committee members, Representative Shelley Kloba, presented a legislative concept set for the 2024 session that could support the clarification of “driver” as it relates to AVs and liability implications.
- The Work Group identified the need to more clearly define “autonomous vehicle” in state law, putting forth a recommendation that resulted in passing legislation in 2021 (SSB 5460) and that autonomous vehicles in Washington State only apply to [SAE automation levels 4 and 5<sup>5</sup>](#).

## TESTING AND PILOTS

Preparing for AVs is a complex conversation. To help the state identify areas for further consideration as well as topics ready for policy development, conducting AV testing and operating an AV pilot can enable the state to vet concepts and policies against AVs in a real-world environment. Being involved in AV testing and/or conducting an AV pilot allows the state to provide the public first-hand experience with AV technologies and services, explore operational considerations unique to Washington State, and identify opportunities to leverage AVs to increase equity and access (such as using AVs to supplement transit by providing first/last mile services). The Work Group explored various AV testing and pilot topics, including some examples below:

- Several jurisdictions presented to the Work Group on their AV testing and pilot activities and lessons learned, including California, Arizona, Minnesota, Michigan, Utah, and the City of Seattle.
- The UW evaluated policy recommendations that could be explored through a state-sponsored AV pilot, including how other states have approached AV testing and their lessons learned.
- The Infrastructure & Systems Subcommittee developed draft selection criteria in 2019 to support identification and selection of near-term pilot deployment proposals and projects, that could be leveraged by the state in future AV pilot consideration.
- The Work Group identified testing and pilots as a key priority for further consideration and action. The Transportation Commission recommended a state-sponsored AV pilot in 2022, for a 6-month operational AV pilot in both a rural and an urban setting, supplementing transit services to expand access to underserved communities. This recommendation is presented again in this report for further action.

5 SAE J3016 Levels of Driving Automation: <https://www.sae.org/blog/sae-j3016-update>

## ENACTED LEGISLATION BASED ON WORK GROUP RECOMMENDATIONS AND INPUT

Of the many recommendations brought forth by the Work Group during its purview, several recommendations resulted in state legislation, highlighted in this section.

### **HB 2470 (2020 – did not pass): Addressing the automated operations of vehicles.**

- This legislation was modeled after the Uniform Law Commission’s Automated Operations of Vehicles Act, including requirements for vehicle registration, compliance with rules of the road, violation responsibilities, and driver’s licensing requirements and exemptions.
- The legislation ultimately did not pass.

### **HB 2676 (2020 - enacted): Establishing minimum requirements for the testing of autonomous vehicles.**

- Companies looking to test on public roadways in Washington must supply the DOL with contact information, planned testing locations, vehicle identification numbers, and proof of \$5 million umbrella insurance policy information (effective June 2020).
- Testing entities to annually report to the DOL any AV-related vehicle collisions or moving violations that occur during testing on a public roadway by February of the following year (effective October 2022).

### **HB 1731 (2021 - superseded): Enhancing requirements for autonomous vehicle testing.**

- Establishes several AV-related definitions.
- Provisions to provide rulemaking authority for the DOL for the AV self-certification program.
- Requirement for self-certified AV companies to provide NHTSA voluntary safety self-assessments to the DOL.
- Requirements for AVs testing with a human operator present as well as without a human operator present.
- Self-certified AV companies must establish and provide a law enforcement and first responder interaction guide.

### **SSB 5460 (2021 - enacted): Implementing recommendations of the autonomous vehicle work group.**

- Creates a definition of “autonomous vehicle” to only include SAE levels 4 and 5, for the self-certification pilot program.
- Repeals RCW 46.37.480 section 1 relating to prohibition of television viewers in vehicles – the 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.



**SB 5594 (2023 – did not pass): Concerning the operation of fully autonomous vehicles.**

- Establishes several AV-related definitions.
- Allows for fully operational deployment of AVs on Washington public roadways.
- Establishes requirements for fully operational AVs, including financial responsibility, licensing, insurance, accident and collision provisions, and AV operation governance assignment to the DOL.

Information on these and other key areas of exploration, evaluation, discussion, and development conducted during the Work Group’s purview can be found in the Work Group’s Annual Reports (2018 thru 2022).

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## SUBCOMMITTEE FINAL REPORTS OUT TO THE WORK GROUP

Four subcommittees presented on final findings and potential recommendations in 2023. Each subcommittee’s final reports out are outlined below.

### Health & Equity Subcommittee

Identified eight key health and equity issues related to AVs (associated with the draft research paper in Appendix X). These key issues are considered in potential actions in the “Roadmap to the Future” legacy deliverable report discussed later in this report.

- Community mobility priorities
- Conduct education and outreach first
- Access for all neighborhoods
- Access for low income and those lacking smartphones and credit cards
- Disparities in infrastructure investments
- Shared AV use barriers
- Barriers to AVs for persons with disabilities
- Disruption of existing transportation jobs

Refreshed a previously endorsed subcommittee recommendation: Conduct Public Outreach

- This recommendation would include education about AVs, presentation of scenarios involving AV use, and feedback from community participants.
- This recommendation is included in Chapter 4 of this report.

### Liability Subcommittee

Discussed the learnings and activities conducted by the subcommittee during its convening:

- IIHS discussion on ADAS and available data
- ULC draft of uniform automated operation of vehicles model act
- Met with legal practitioners of Washington vehicle liability laws

- Discussions with auto insurer and American property and casualty association on data needed to assign liability
- Researched term and definitions used to define “driver”
- Discussed federal policy and future leg action prospects related to liability coverage with national association of insurance commissioners
- Met with Washington leading domestic auto insurance company to discuss acquiring claim data involving automated vehicles
- Brought forth considerations based on learnings during subcommittee convening
- Moving from auto liability to product liability structure would be harmful to consumers
- Law enforcement and insurance companies require timely (and inexpensive) access to vehicle data for period immediately preceding an incident to accurately assign liability

### **Licensing Subcommittee**

Refreshed two outstanding recommendations previously endorsed through the Work Group:

- Law Enforcement Interaction Plan – self-certified AV companies to submit plan before operating; precedence in other states
- Rulemaking authority for DOL for AV self-certification program – allows DOL to provide more guidance to existing and potential AV companies about the self-certification program

### **Workforce Subcommittee**

Discussed workforce considerations, including

- Employment impacts across various industries
- Unique challenges related to trucking, such as troubleshooting, load monitoring, etc.
- Public and school transportation settings
- Limitations in data necessary to assess scale of workforce impacts

Brought forth potential recommendations for further consideration:

- Data needs – recommend legislature fund comprehensive analysis of industry and workforce, including worker surveys to supplement available data
- Exploration of policies to provide support for worker transition – training, reemployment services, enhancement of job seeker support, expand safety net programs

Other subcommittees did not convene during 2023. More information on subcommittee activities, meetings, findings, and recommendations can be found in Work Group Annual Reports 2018 thru 2022.





# RECOMMENDATIONS

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In its final year, the Work Group presents several recommendations for consideration by the Governor and Washington State Legislature, including the need for ongoing collaboration and development of state AV policy, the "Roadmap to the Future" legacy deliverable (separate document) as a foundational resource for continuing to advance state AV policy, and several previously endorsed recommendations to further consider and take action on. These recommendations are outlined below.



## RECOMMENDATION

## Appoint State-Level Entity to Continue Ongoing AV Policy Development

During its five-year purview, the AV Work Group provided a forum for collaboration on Washington State policy around AVs across various stakeholders, including public sector, private industry, advocacy groups, community partners, academia, and trade associations. This forum allowed for the vetting and maturation of many ideas and recommendations for advancing the state's policies to prepare for the safe operation of AVs on its public roadways.

AV developments, learnings, and potential shifts in policy will be ongoing and, as such, the Transportation Commission recognizes the need to continue this collaboration and curating of policy and operational considerations to develop balanced and comprehensive AV policy in Washington.

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**The Transportation Commission recommends that a state-level entity be appointed, authorized, and resourced to continue monitoring and collaboration activities for developing comprehensive state AV policies.**

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The appointed state-level entity can coordinate with public and private partners as appropriate to continue monitoring government and industry shifts related to AV policy and technologies, share learnings, identify potential policy needs and changes, and provide guidance to decision makers as AV policy in Washington State continues to evolve.



## RECOMMENDATION

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## Adopt the “Roadmap to the Future” as foundational resource for future AV-related decision making in Washington

Based on the information and insights that have been gathered through the course of the Work Group’s efforts, the “Roadmap to the Future” serves as the Work Group’s legacy deliverable to provide the Governor and Legislature guidance on the key areas and considerations for continued focus after the Work Group sunset on December 31, 2023, to prepare for the future safe operation of AVs on Washington’s public roadways. The Roadmap is sectioned into six building blocks that serve as the key areas necessary to continue to research, understand, develop, and refine for ongoing preparations for AVs: Agency Readiness, Public Outreach, Equity, Safety, Testing & Pilots, and Path to Deployment.

Each of these six building blocks address their relevance and importance in the context of AV preparation and possible actions for consideration by decision makers as AV preparation and policy development continues in Washington.

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**The Transportation Commission recommends this Roadmap be adopted as the foundational resource for future AV-related decision making in Washington.**

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The Roadmap and its potential actions provides guidance and resources to decision makers as areas of focus to continue developing and refining state-level policy as the AV space continues to evolve. Examples of where each possible action identified in the Roadmap is being undertaken in other jurisdiction provides context and potential options and resources for advancing each action.

## RECOMMENDATION

## Consider Previous Work Group Recommendations for Further Action

Seven recommendations brought forth and endorsed by the Work Group and Transportation Commission in previous years were not addressed by the Legislature, are detailed again here for further consideration and action by the Governor and State Legislature.

These seven recommendations advance various aspects of AV-related policy in the state, and can support the ongoing refinement of state-level AV policy in the near-term. These recommendations were acknowledged again at the final AV Work Group meeting and to the Transportation Commission in late 2023 as items the Work Group continues to support for further action by decision makers. The seven recommendations are outlined in the table below.

YEAR	SOURCE	RECOMMENDATION	ESTIMATED COST	STATUS AS OF DEC 31, 2023
<b>2020/ 2022</b>	Safety Subcommittee	Requirement for a Law Enforcement / First Responder Interaction Guide.	Unknown	Included in HB 1731 (2021), superseded by SSB 5460 with interaction guide language removed.
<b>2020/ 2022</b>	Licensing Subcommittee	Amendment of RCW 46.92.010 to enable rulemaking by the Department of Licensing for the Self-Certification Program.	Unknown	Included in HB 1731 (2021), superseded by SSB 5460 with DOL rulemaking authority language removed.
<b>2020 / 2022</b>	Health & Equity Subcommittee	Conduct structured public outreach.	\$30,000	Recommended by Executive Committee and Commission in 2020 and again in 2022 for further action.
<b>2020 / 2022</b>	Health & Equity Subcommittee	Identification of testing locations.	Unknown	Recommended by Executive Committee and Commission in 2020 and again in 2022 for further action.
<b>2020 / 2022</b>	Infrastructure & Systems Subcommittee	Increased investment on enhanced roadway pavement markings.	\$10M per year ongoing investment for equipment, materials, and labor for WSDOT pavement marking maintenance operations.	Recommended by Executive Committee and Commission in 2020 and again in 2022 for further action.
<b>2020 / 2022</b>	Infrastructure & Systems Subcommittee	Support WSDOT's work zone data initiative.	\$1M per year ongoing investment for equipment and service fees.	Recommended by Executive Committee and Commission in 2020 and again in 2022 for further action.
<b>2022</b>	Commission	Carry out a state-sponsored AV pilot.	\$2M for a six month pilot operating in two settings, rural and urban (per 2022 recommendation)	Executive Committee and Commission endorsed recommendation to support development and funding of an AV pilot program, to appoint a lead state agency, and provide funding with an estimated need of \$2 million. No further action was taken.

## LOOKING BACK: ALL RECOMMENDATIONS BROUGHT FORTH BY WORK GROUP 2018-2023

A total of 29 recommendations were curated and brought forth to the Executive Committee and Commission during the Work Group's purview, 2018-2023. The table below is the comprehensive list of all recommendations, as well as their status as of the conclusion of the Work Group, including several the Work Group and Commission recommend the Governor and Legislature consider for further action. Recommendations not yet addressed, as referenced in the section above, are shaded in grey in the table below for easy identification.

YEAR	SOURCE	RECOMMENDATION	STATUS AS OF DEC 31, 2023
2018	Executive Committee	Develop and implement a communications strategy and plan, and launch a stand-alone website for the Work Group.	Acted On. Commission appropriated \$100,000 to establish the website and develop a communications plan.
2018	University of Washington (UW) Law School	Preempt local regulation to prevent unnecessary roadblocks to deployment of autonomous vehicles.	Executive Committee recommended further evaluation, as the Work Group had just formed. The UW continued providing research and evaluation of policy areas for consideration through life of Work Group.
2018	UW Law School	Update definitions: Revise the RCW to accommodate new technologies.	Executive Committee recommended further evaluation, as the Work Group had just formed. The UW continued providing research and evaluation of policy areas for consideration through life of Work Group.
2018	UW Law School	Self-Certification: Promote innovation and freedom to develop new technologies.	Executive Committee recommended further evaluation, as the Work Group had just formed. The UW continued providing research and evaluation of policy areas for consideration through life of Work Group.
2018	UW Law School	Enhanced Infrastructure: Encourage local, state, and federal improvements in road systems and technologies to support AVs.	Executive Committee recommended further evaluation, as the Work Group had just formed. The UW continued providing research and evaluation of policy areas for consideration through life of Work Group.
2018	UW Law School	Control Liability: Impose liability on AV systems and manufacturers while autonomous systems are in operations.	Implemented through HB 2676 (2020).
2018	UW Law School	Update current data security laws: "Lead the pack" in securing driver and user data.	Topic discussed and recommended again by System Technology & Data Security Subcommittee in 2019.
2018	Safety Subcommittee	Conduct public education campaign.	Executive Committee and Commission recommended delaying until further work could be done by the Work Group. Recommended again in 2020 and 2022.
2018	Safety Subcommittee	Conduct Health Impact Assessment (HIA).	Topic discussed and recommended again by Health & Equity Subcommittee in 2019.
2019	Liability Subcommittee	Consideration to enact legislation requiring self-certified (through DOL) AV testing companies to maintain umbrella liability insurance no less than \$5 million per occurrence for damages.	Implemented through HB 2676 (2020).
2019	Infrastructure & Systems Subcommittee	Adopt eight policy goal statements revised by the Subcommittee from the Washington State Department of Transportation (WSDOT) Cooperative Automated Transportation (CAT) Policy Framework.	Adopted and incorporated into draft statewide CAT Policy Framework.
2019	Infrastructure & Systems Subcommittee	Develop statewide CAT/AV Policy Framework that integrated WSDOT CAT policy goals along with policy goals developed by other subcommittees.	The Infrastructure & Systems Subcommittee developed the draft statewide CAT Policy Framework that incorporated the adopted policy goals, and coordinated with other subcommittees to evaluate and refine the policy goals and supporting draft strategies and illustrative actions.

YEAR	SOURCE	RECOMMENDATION	STATUS AS OF DEC 31, 2023
2019	Safety Subcommittee	Establish "Health & Equity" Subcommittee under the Work Group.	Health & Equity Subcommittee established mid-2019.
2019	Health & Equity Subcommittee	Conduct HIA of AVs.	The Health & Equity Subcommittee reevaluated this recommendation in 2020, refocusing towards a structured public outreach campaign and collection of testing location data.
2019	Executive Committee	Establish "Workforce" Subcommittee under the Work Group.	Workforce Subcommittee established mid-2019.
2019	Executive Committee	Appoint a disabilities rights representative entity to the Executive Committee.	Disabilities Rights representative was appointed to the Executive Committee mid-2019.
2019	System Technology & Data Security Subcommittee	Adopt "AV Privacy and Data Security Principles" and "Data Standards revision 0.1" developed by the subcommittee.	Executive Committee and Commission requested further exploration of best practices and national standards. No further action was taken.
2020	Safety Subcommittee	Clarify the State's definition for autonomous vehicle.	Implemented through SSB 5460.
2020	Safety and Licensing Subcommittees	Repeal Section 1 of RCW 46.37.480 on TV screens for companies conducting driverless testing.	Implemented through SSB 5460.
2020 / 2022	Safety Subcommittee	Requirement for a Law Enforcement / First Responder Interaction Guide.	Included in HB 1731 (2021), superseded by SSB 5460 with interaction guide language removed.
2020 / 2022	Licensing Subcommittee	Amendment of RCW 46.92.010 to enable rulemaking by the Department of Licensing for the Self-Certification Program.	Included in HB 1731 (2021), superseded by SSB 5460 with DOL rulemaking authority language removed.
2020 / 2022	Health & Equity Subcommittee	Conduct structured public outreach.	Recommended by Executive Committee and Commission in 2020 and again in 2022 for further action.
2020 / 2022	Health & Equity Subcommittee	Identification of testing locations.	Recommended by Executive Committee and Commission in 2020 and again in 2022 for further action.
2020 / 2022	Infrastructure & Systems Subcommittee	Increased investment on enhanced roadway pavement markings.	Recommended by Executive Committee and Commission in 2020 and again in 2022 for further action.
2020 / 2022	Infrastructure & Systems Subcommittee	Support WSDOT's work zone data initiative.	Recommended by Executive Committee and Commission in 2020 and again in 2022 for further action.
2021	Commission	Advance a State AV Testing Program.	Work Group developed a state-sponsored AV pilot recommendation in 2022.
2022	Commission	Carry out a state-sponsored AV pilot.	Executive Committee and Commission endorsed recommendation to support development and funding of an AV pilot program, to appoint a lead state agency, and provide funding with an estimated need of \$2 million. No further action was taken.
2023	Commission	Appoint state-level entity to continue ongoing AV policy development.	New recommendation for consideration.
2023	Commission	Adopt the "Roadmap to the Future" as foundational resource for future AV-related decision making in Washington.	New recommendation for consideration.



