WASHINGTON STATE
AUTONOMOUS VEHICLE
WORK GROUP

Washington State Transportation Commission

AV Work Group Executive Committee Meeting

September 28, 2022

Washington State Transportation Commission

Agenda

WASHINGTON STATE AUTONOMOUS VEHICLE WORK GROUP

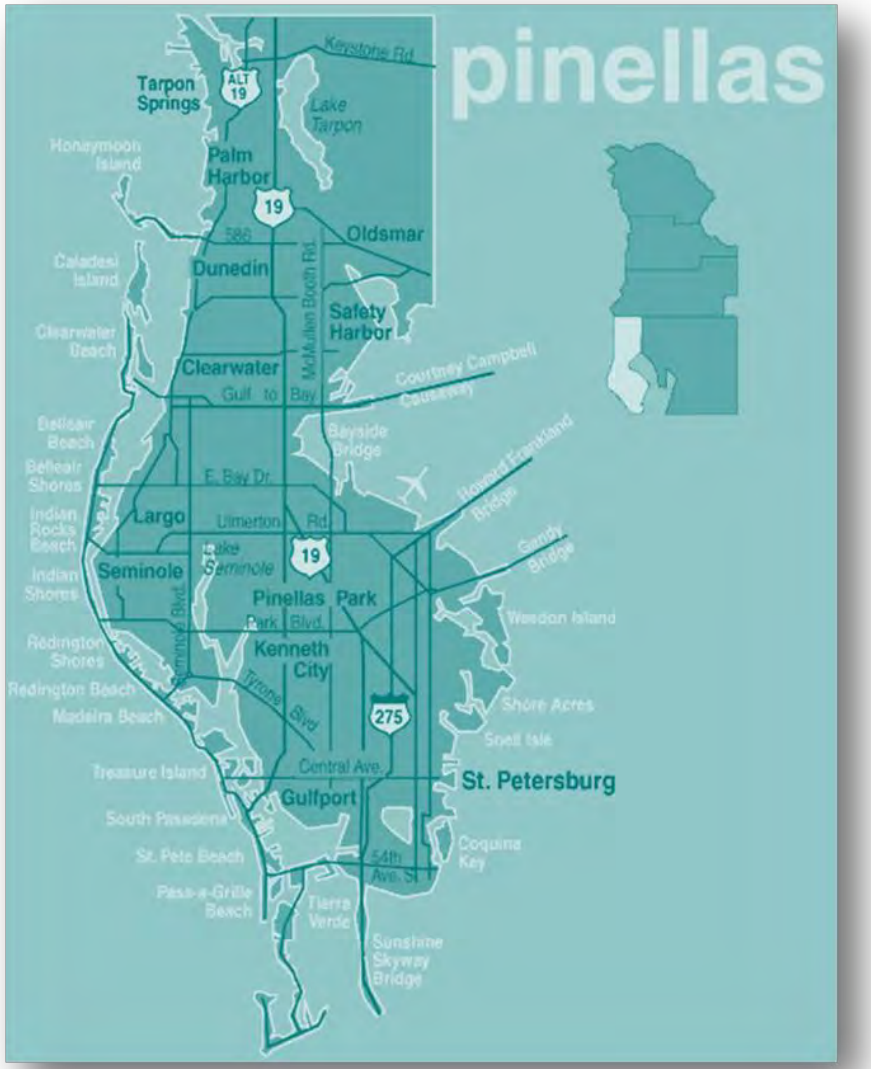
TIME	DESCRIPTION	PRESENTER
10:00	**Welcome, Introductions, & Virtual Meeting Operations**	**Jim Restucci**, Chair, *AV Work Group Executive Committee*
10:10	**Pinellas Suncoast Transit Authority's Autonomous Vehicle Advantage Program**	**Jacob Labutka,** Senior Planner, *Pinellas Suncoast Transit Authority*
10:55	**Department of Licensing Implementation of AV Legislation (HB 2676)**	**Beau Perschbacher,** Legislative and Policy Director, *Washington State Department of Licensing* **Jill Johnson,** Legislative and Special Project Manager, *Washington Department of Licensing* **Daniel Hagen,** Autonomous Vehicle Program Specialist, *Washington Department of Licensing*
11:25	**AV Roadmap to the Future – Key Component: Agency Readiness**	**Scott Shogan**, Vice President, *WSP USA*
11:55	***LUNCH BREAK***	***30 MINUTES***
12:25	**Labor Implications of Autonomous Vehicles**	**Brenda Wiest,** Vice President and Legislative Director, *Teamsters 117*
1:00	**Equity and AV Paper**	**Dr. Andy Dannenberg,** Affiliate Professor, *University of Washington* **Saba Fatima,** Paper Development Lead, Former University of Washington Student, *Cannon Design*
1:45	**AV Pilot Proposal**	**Scott Shogan**, Vice President, *WSP USA*
2:05	**2022/2023 Recommendations**	**Reema Griffith,** Executive Director, *Washington State Transportation Commission* **Markell Moffett,** Technical Principal, *WSP USA*
2:15	**Executive Committee Member Items**	*Open forum for members*
2:25	**Closing Remarks**	**Jim Restucci**, Chair, *AV Work Group Executive Committee*
2:30	**ADJOURN**	

A Diva Named AVA:
An Autonomous Vehicle Story

9/28/2022

Pinellas Suncoast Transit Authority

PSTA – Pinellas County



Pinellas Suncoast Transit Authority

PSTA Transportation Innovation

- PSTA is incorporating transportation technologies that are:
  - **A**utonomous ✓
  - **C**onnected ✓
  - **E**lectric ✓
  - **S**hared ✓
- PSTA is a nationally recognized leader in innovation

Operated Shuttles

Beep has operated two NAVYA & Olli shuttles for PSTA.

Drive System

- Motor: Electric
- Operating speed: up to 15 mph

Energy

- Operating time: 7-9 hours
- Charge duration up to 90%: 3-4 hours

Sensors

- Light Detection & Ranging (LiDAR)
- Cameras
- Dedicated GPS Base
- Safety sensors that detect obstacles in roadway

Meet AVA

- AVA (Autonomous Vehicle Advantage) is the latest temporary resident of Pinellas County
- **St. Petersburg:**
  - Operated Nov ‘20 – Mar ‘21
  - AVA provided almost 5,000 rides
  - An average of 63 people per day rode AVA
- **Dunedin:**
  - Operated May – June ’21
  - AVA provided over 2,000 rides
  - An average of 85 people per day rode AVA
- **Clearwater:**
  - Operated Feb – Mar ‘22
  - AVA provided over 2,700 rides
  - An average of 89 people per day rode AVA

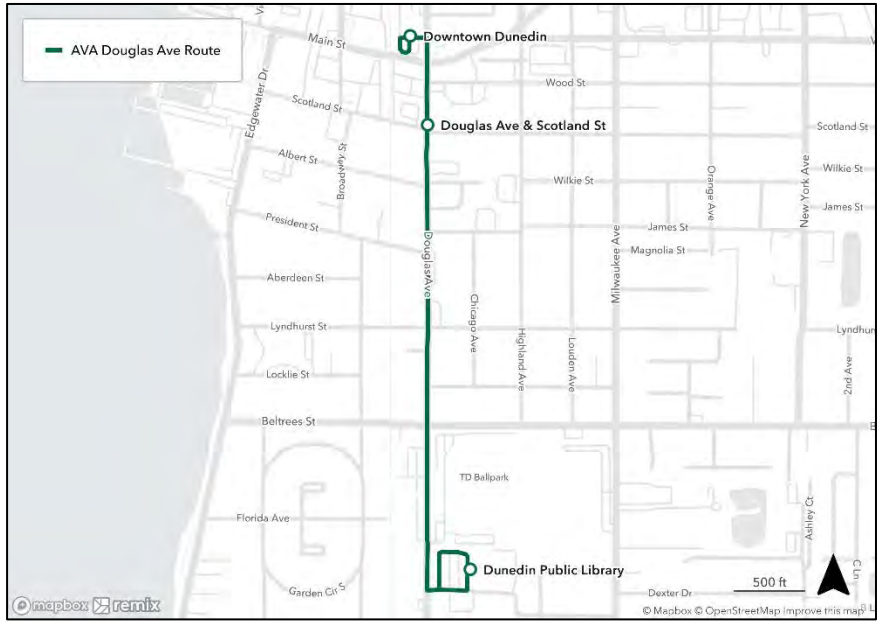
St. Petersburg AVA Route

- 2 shuttles were deployed with 1 attendant for customer safety and feedback per shuttle
- Shuttle operated on a continuous 1-mile loop along Bayshore Drive
- Fare-free service
- Operated Wed – Sun from 10am to 10pm
- Project was funded through a FDOT Commuter Assistance Program (CAP) grant with matching funds from PSTA

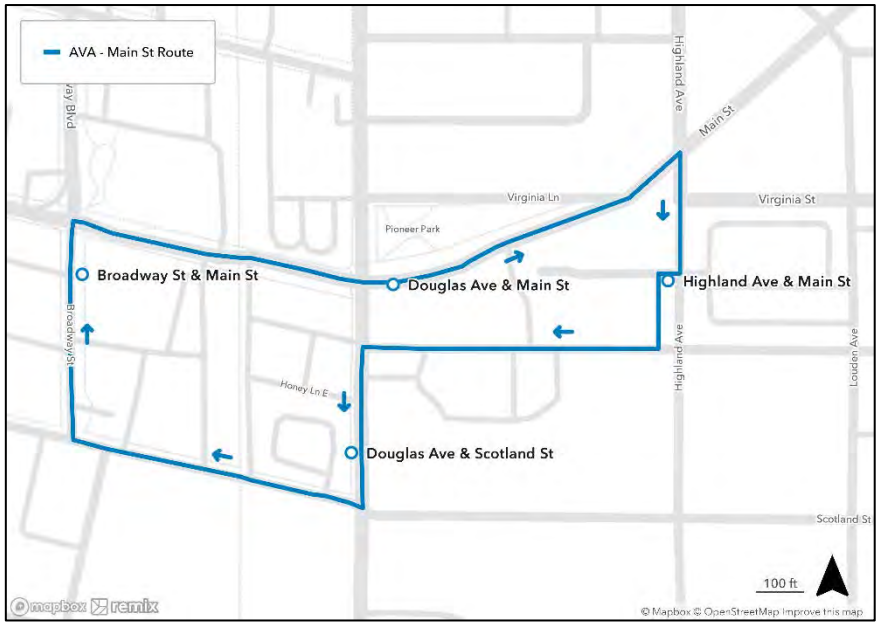
Dunedin AVA Routes

- 2 shuttles were deployed with 1 attendant for customer safety and feedback per shuttle
- Shuttle operated on a continuous loop along Douglas Ave & Main St
- Fare-free service
- Operated Wed – Sun from 10am to 10pm
- Returned to Douglas Ave late April 2022

Douglas Ave



Main St



Clearwater AVA Route

- 2 shuttles were deployed with 1 attendant for customer safety and feedback per shuttle
- Shuttle operated on a continuous 1.5 mile loop along Gulfview Blvd
- Fare-free service
- Operated Tues – Sun from 10am to 10pm

AVA ADA Day

- PSTA hosted an ADA Day to demonstrate how the shuttle accommodates assistive mobility devices

AVA First Responder Day

- PSTA hosts a First Responder Session before each deployment so that police/fire/paramedics can learn about the AV shuttles

AVA Demonstration Takeaways

Expect the unexpected

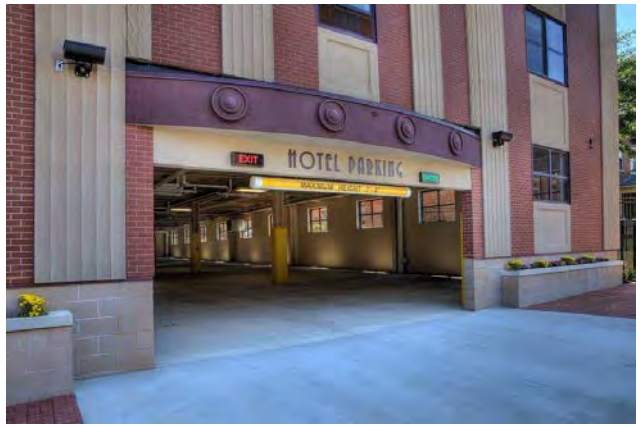
Plan for regulation

NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Sharing is caring

Slow your roll

Sleeping's hard when you're tall



Scooters!

Pinellas Suncoast Transit Authority

Data

- Data from a total of 161 participants were obtained. The distribution of the population obtained from the questionnaire is generally consistent with the results of the local information from the American Community Survey 5-Year Data.

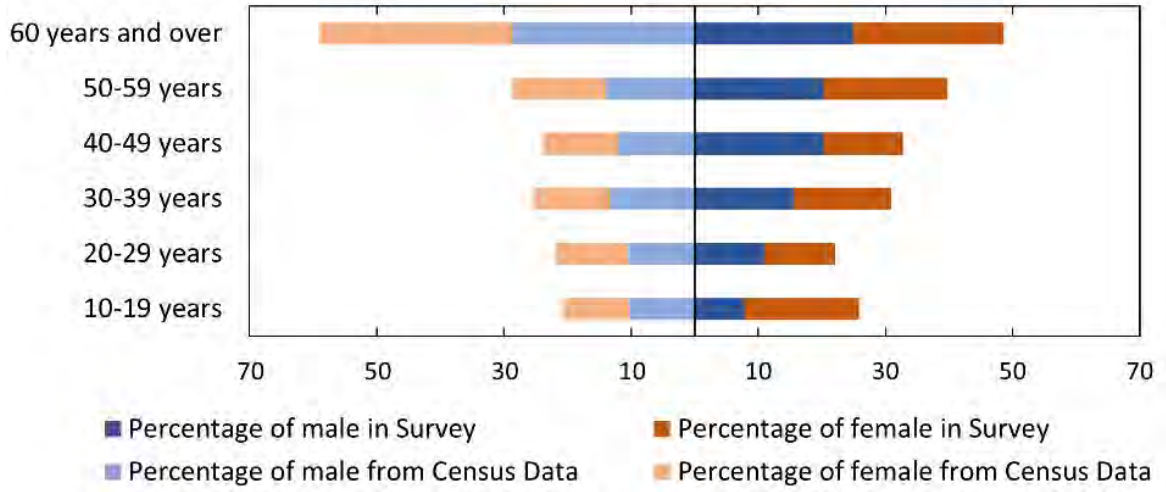


Fig 1. Comparison of gender and age distribution of participants and the local population

Initial Result

- After taking a ride on the autonomous shuttle (AS), the number of participants who think AS is comfortable has increased.

TABLE 1. Opinion of the AS before a ride

Perception of comfort	Percentage (%)
Very comfortable	13.66
Comfortable	42.24
Normal	33.54
Uncomfortable	10.56
Very uncomfortable	0

TABLE 2. Opinion of the AS after a ride

Perception of comfort	Percentage (%)
Very comfortable	21.74
Comfortable	37.89
Normal	24.84
Uncomfortable	13.66
Very uncomfortable	1.86

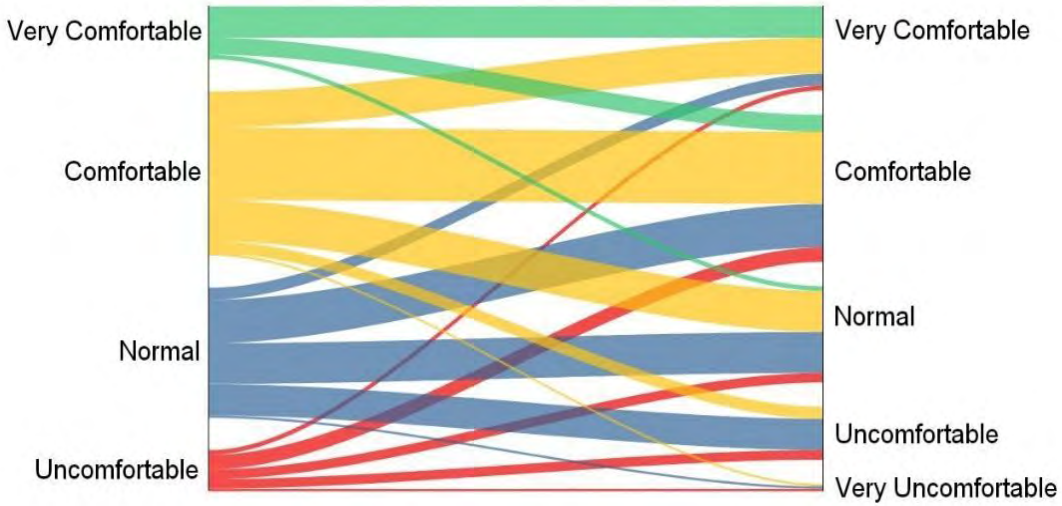


Fig 2. People's perception of the comfort of AS changes before and after the ride

Influencing Factors

- Table 3 presents a summary of all significant variables found at least in one of the initial opinions and opinion change models:
  a) Participants with long commute times intend to be conservative on AS comfort, but their opinions may be significantly changed toward the positive side after a successful ride.

Variable Description	Initial perception of comfort	Positive Change in the comfort perception
Older age indicator (1 if the participant was over age 50, 0 otherwise)	-	n
Female indicator (1 if the participant is female, 0 otherwise)	n	n
High-income indicator (1 if the participant has annual personal income higher than 200k, 0 otherwise)	-	+
Long commute time indicator (1 if participant's commute time is longer than 30 minutes, 0 otherwise)	-	+
Drive alone indicator (1 if the main commute mode of the participant is driving alone, 0 otherwise)	+	n
Autonomous riding experience indicator (1 if the participant has autonomous riding experience before test ride, 0 otherwise)	n	n
Highly interested in new technologies indicator (1 if the participant is highly interested in new technologies, 0 otherwise)	+	n
Number of hard breaks	n	-

Note: In the initial opinion model, "+" indicates the variable with a positive effect on the initial opinion, "-" with a negative effect on the initial opinion; In the opinion change model, "+" indicates the variable contributing to positive opinion change, "-" maintaining the same opinion or worse; "n" indicates no significant effects.

Future

- Data collected through demonstration program will inform future deployments of autonomous vehicles
- Potential Future Public Transit AV Deployments
  - Microtransit / MOD
  - Bus yard operations
  - Bus on shoulders
  - Bus Rapid Transit

Strategic Partnerships

Vehicle Roadmap Strategy

FMVSS Compliant

nauya

local motors

LIGHTNING MOTORS

mobileye

BENTELER makes it happen

2020

- Experimental platforms
- Autonomous: 12mph
- Regulated: 25mph roads
- 8 - 10 passengers
- ADA Compliant & Accessible

2021

- Automotive w/ ADS
- Autonomous: 25MPH
- Driven: 55MPH
- Seating: 8 -10 passengers
- FTA Buy America Compliant

2022

- Automotive-grade
- Autonomous: 30+ mph
- ADA Compliant & Accessible
- Seating: 10 passengers
- FTA Buy America Compliant

Jacob Labutka, AICP

Senior Planner

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Department of Licensing
ESHB 2676 Implementation

Beau Perschbacher, Policy and Legislative Director, DOL

Jill Johnson, Legislative and Special Project Manager, DOL

Daniel Hagen, Autonomous Vehicles Program Specialist, DOL

WASHINGTON STATE DEPARTMENT OF LICENSING

Overview

- **Current AV Requirements**
  - **Self-Certification Form**
  - **Proof of insurance**

- **Upcoming Requirements in ESHB 2676**
  - **Law enforcement notifications**
  - **Collision/moving violation reporting**

- **Administrative Actions and Future Plans**

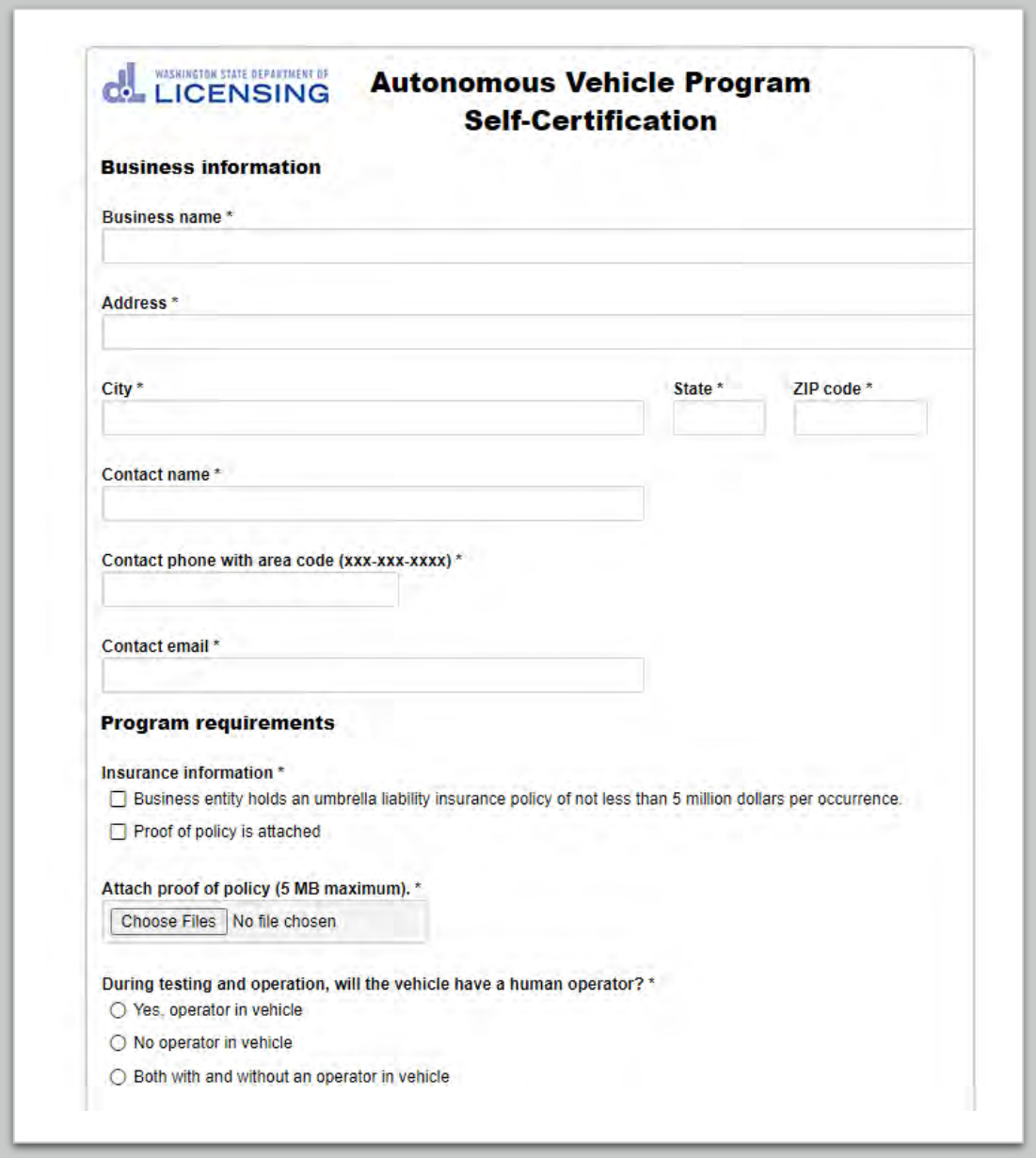
WASHINGTON STATE DEPARTMENT OF LICENSING

Current AV Requirements

- **Completed DOL self-certification form** (RCW 46.92.010)

- **Proof of insurance:** Testing entities must maintain an umbrella liability insurance policy that covers at least $5 million in AV-related damages (RCW 46.30.050)

- **Testing can be performed with or without human operators present** (Executive Order 17-02)



WASHINGTON STATE DEPARTMENT OF LICENSING

Autonomous Vehicle Program Self-Certification

Business information

Business name *

Address *

City * State * ZIP code *

Contact name *

Contact phone with area code (xxx-xxx-xxxx) *

Contact email *

Program requirements

Insurance information *

- ☐ Business entity holds an umbrella liability insurance policy of not less than 5 million dollars per occurrence.
- ☐ Proof of policy is attached

Attach proof of policy (5 MB maximum). *

Choose Files No file chosen

During testing and operation, will the vehicle have a human operator? *

- ○ Yes, operator in vehicle
- ○ No operator in vehicle
- ○ Both with and without an operator in vehicle

Self-Certification Form

- The self-certification form is available on the DOL website and may be electronically submitted.
- DOL receives and maintains self-certification records.
- Proof of insurance coverage required at self-certification
- DOL maintains a list of current self-certified companies on public website; dol.wa.gov

Upcoming Requirements in ESHB 2676

Effective October 1, 2022:

- To test on public roadways, entities must supply DOL with the following information:
  - Contact information
  - Planned testing locations
  - Vehicle Identification Numbers (VIN) for the test vehicles, and
  - Proof of insurance (effective June 2020)

- Testing entities must annually report to DOL any AV-related vehicle collisions or moving violations that occur during testing on a public roadway; by February, each year.

WASHINGTON STATE DEPARTMENT OF LICENSING

Upcoming Requirements in ESHB 2676 (Cont.)

- Testing entities must provide 14-60 days notice to applicable law enforcement agencies prior to testing on public roadways

- DOL must provide public access to materials received from self-certified companies

- DOL must summarize and report information received from testing entities to the legislature on an annual basis

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Administrative Actions

- Updates to the self-certification form are in progress

- The creation of the new annual incident reporting form is also in progress
  -First annual reports will be due February 2023, covering calendar year 2022

- DOL has hired an additional staff member to administer the new autonomous vehicle requirements

Questions?

AutonomousVehicles@dol.wa.gov

WASHINGTON STATE DEPARTMENT OF LICENSING

WASHINGTON STATE
AUTONOMOUS VEHICLE
WORK GROUP

AV Work Group
Roadmap to the Future

Agency Readiness

Scott Shogan, *WSP*

Washington State Transportation Commission

Roadmap to the Future

The "**Roadmap to the Future**" will serve as the Work Group's Legacy Deliverable and be a resource for law makers to consider future actions

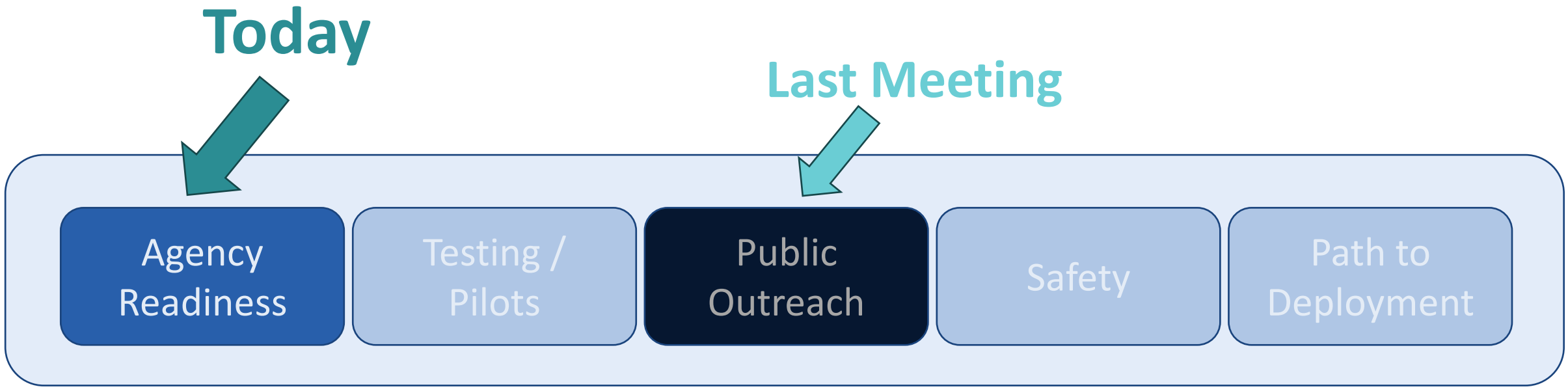
- Deliver at the end of 2023 *(when the Work Group sunsets)*
- A plan for the future, how Washington can continue to prepare for AVs

Key components of the "Roadmap"

Agency Readiness	Testing / Pilots	Public Outreach	Safety	Path to Deployment

Roadmap to the Future

Remaining Executive Committee meetings will focus in on each of the key components, one at a time



Agency Readiness Goals

- Adapt as transportation infrastructure becomes increasingly intertwined with new mobility services, digital communication, and AVs
- Maintain good relationships with private and non-profit sector partners in the AV space
- Be organized for innovation, more flexible and nimble than in the past

Agency Readiness Activities to Date

- DOL Self-Certification Program
  - $5M Umbrella Insurance Requirement
  - HB2676 Section 2 reporting and notifications
- Adopt 8 CAT policy goals to support and guide Work Group strategy
- Clarify definition of AV to Level 4 and 5 only
- Repeal RCW 46.37.480 for television screen ban

Agency Readiness Activities to Date

Mentimeter polling question

Looking Ahead: Agency Readiness

Identify what public agencies need to revise, implement, or remove to support the regulation and state administration of AV testing and deployment.

Topic: Regulation and Policy

Examples	Goal	How
• Legislation & RCW • Motor Vehicle Code • Agency-specific policies • *Integration and/or interaction with federal and local policy as well*	• Align with State goals (e.g., climate, transportation, safety, etc.) • Understand needs for state-level policy	• Evaluate existing language • Identify gaps • Develop new or revised policies, statute, processes • Define federal vs. state vs. local roles

Topic: Resources

Examples	Goal	How
• Agency knowledge base • Partnerships to strengthen knowledge base • Cross-agency collaboration	• Have in-agency knowledge and expertise in AV space • Maintain a network of public, private, non-profit, and community collaboration	• Agency staff training and development • Ongoing collaboration and engagement (e.g., through a work group, steering committee, etc.)

Topic: State Resource Improvements

Examples	Goal	How
• Transportation infrastructure • Connectivity • Technology readiness	• Prepare state-level resources and assets for safe testing and deployment of AVs • Minimize negative and maximize positive impacts changes could have	• Identify existing resources to improve; execute • Identify new resources; plan for • Define impacts to state resources and communities

Agency Readiness Activities to Date

Mentimeter polling question

Thank You!

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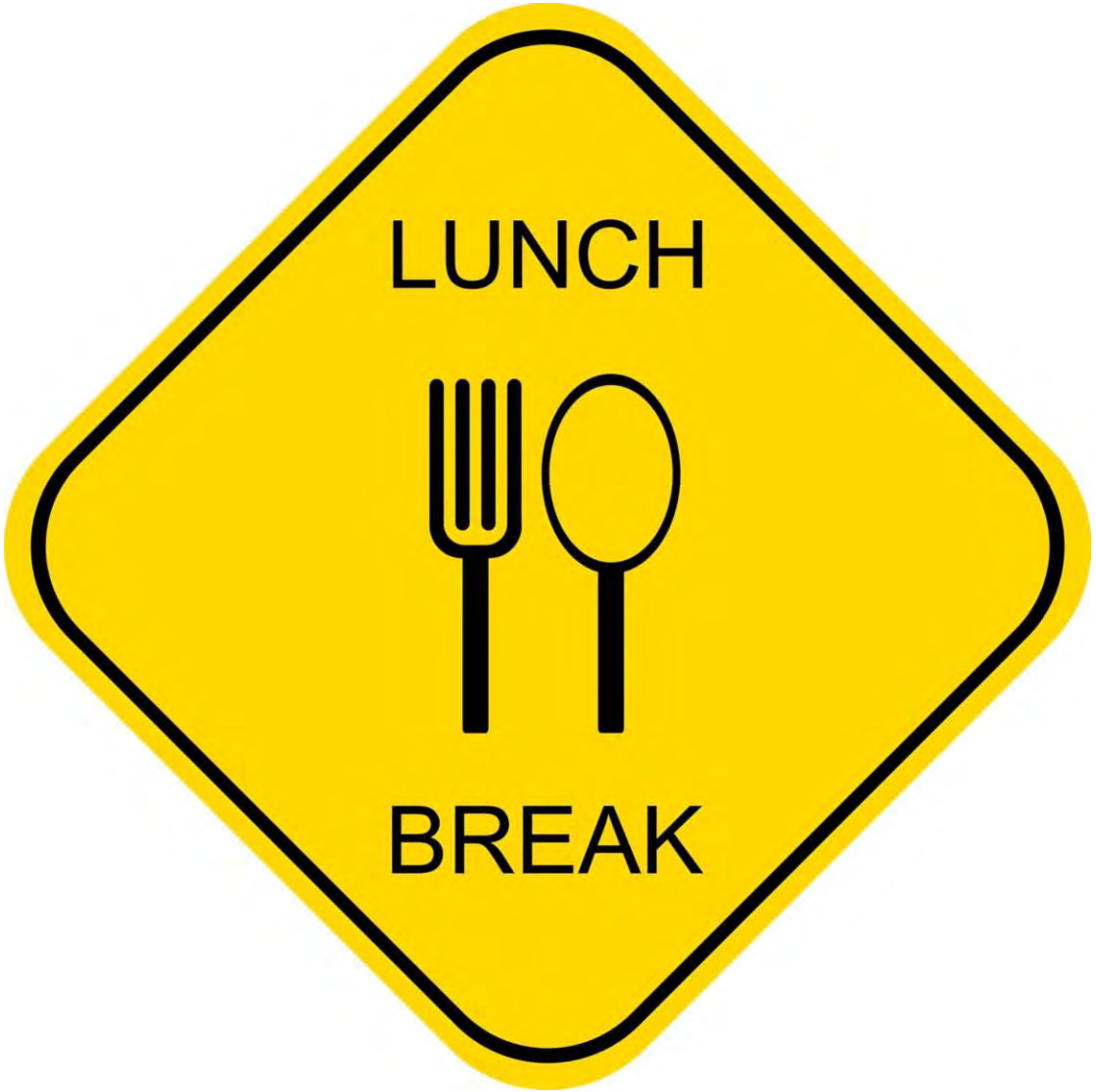


Be back at…

12:25 p.m. PT

Labor Implications of Autonomous Vehicles

Brenda Wiest, Vice President and Legislative Director, *Teamsters 117*

Materials for the "**Labor Implications of Autonomous Vehicles**" presentation will be presented live during the June 6th Executive Committee meeting

Equity Issues Associated with the Widespread Implementation of Autonomous Vehicles

Saba Fatima, Cannon Design, Baltimore
Chieh Hsiu Lee, Independent Consultant, Seattle
Andrew L. Dannenberg, Affiliate Professor, University of Washington, Seattle

Autonomous Vehicle Work Group Executive Committee
Washington State Transportation Commission
September 28, 2022

Background

- Transportation options impact people's access to jobs, education, food, healthcare, and social relations
- Groups with limited transportation options include low-income persons, racial minorities, immigrants, women, people with disabilities, seniors, teenagers, and rural residents
- The introduction of **autonomous vehicles (AVs)** may increase or decrease inequities related to transportation access

Equity Efforts in Washington State

- Equity is now considered in many statewide policies, not specific to AVs.
- The state Equity Office, created in 2020, has a 5-year plan addressing equity in areas such as school campuses, digital divide, financial literacy, and others.
- The state's 2021 Healthy Environment for All (HEAL) Act is designed to promote environmental justice and to reduce environmental and health disparities among communities of color and low-income households

Methods

- Reviewed equity discussions in 7 known articles about public health impacts of AVs
- Used snowballing technique to identify AV and equity discussions in 60 other papers that cited these articles or were cited by these articles
- Focused on fully automated vehicles, SAE Levels 4 and 5
- Organized findings into ten areas in which AVs could positively or adversely impact equity

Areas of Equity Concerns in AVs

Initial development and deployment of AVs

(1) Assessment of community mobility needs and priorities
(2) Education and outreach
(3) Disparities in infrastructure quality
(4) Equitable provision of customer services

Equitable access to AVs

(5) Access by persons with low incomes
(6) Access to smartphones and credit cards
(7) Shared infrastructure services
(8) Barriers to shared AV use, including women's safety
(9) Access by disabled persons

Long term impacts of widespread AV use

(10) Loss of existing transport-related jobs

1. Community Mobility Assessment

Importance

- Community needs should be assessed to tailor AV services to varied geographic and social requirements
- Community priorities may include improvement of existing public transit and sidewalks before AV improvements

Possible policies

- Require community mobility needs assessments including active outreach to disadvantaged populations as part of AV planning process
- Promote fleets of shared AVs rather than individually owned AVs to enhance community benefits and reduce inequities

2. Education and Outreach

Importance

- Persons with low education or limited English proficiency may be less aware of AV issues and less able to provide informed input in community participatory processes.

Possible policies

- Increase public awareness by conducting active educational outreach about AVs to persons with low education before gathering community opinions.
- Provide outreach in multiple languages to assist persons who have limited English proficiency.

3. Infrastructure Quality Disparities

Importance

- Improvements in existing roads to accommodate AVs may be disproportionately made in higher income areas

Possible policies

- Prioritize improving lane markings and signals and overall road maintenance to benefit all road users
- Develop procedures to assure equitable distribution of roadway improvements and funding

4. Equitable Access to AVs Across All Neighborhoods

Importance

- Enhanced access to AV services for persons in neighborhoods with racial and ethnic minorities helps prevent those areas from being isolated from the city

Possible policies

- Review proposed AV geographic service areas and service times to ensure there is equitable access in all neighborhoods
- Develop a process to assess whether the data used for artificial intelligence algorithm training are collected equitably from minority populations

5. Access to AVs by Persons with Low Incomes

Importance

- Access to AV services for persons with low incomes will help reduce unequal access to opportunities and daily needs services and will help improve quality of life

Possible policies

- Provide targeted subsidies to support AV use by low-income persons
- Engage persons from disadvantaged communities in the development of AV policies
- Incentivize the implementation of affordable shared AVs

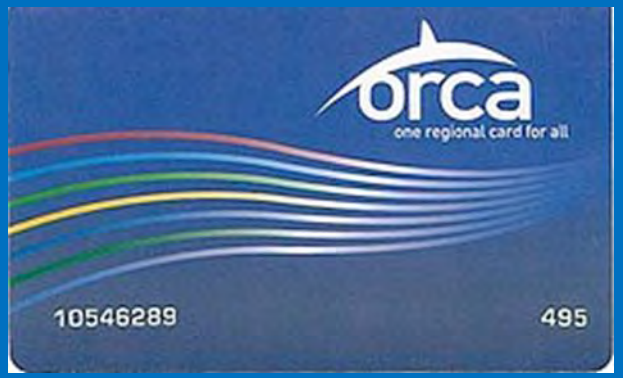
6. Access to Smartphones

Importance

- Low-income persons and seniors may not have smartphones or credit cards needed to use AVs

Possible policies

- Offer alternative communication and payment options for low-income persons
- Offer simpler methods for seniors to contact AVs



7. Shared Infrastructure Services

Importance

- Sharing of infrastructure and services between AVs and other transport modes helps lower overall investment and maintenance costs
- Infrastructure investments are more equitable if they benefit multiple transport modes

Possible policies

- Prioritize investments in filling potholes, improving lane markings, and providing pedestrian and bicycle infrastructure to help AVs and other transport modes
- Give lower priority to roadway-to-vehicle communication technologies, detailed mapping, and designated lanes that primarily help AVs

8. Barriers to shared AV Use: Safety

Importance

- Women may be more concerned than men about sharing an AV ride with a stranger
- Vulnerable persons based on age, disability, gender, race, or ethnicity may be less comfortable sharing an AV with a stranger

Possible policies

- Develop capacity for vulnerable persons to select AV ride-sharing partners without creating discrimination concerns
- Include camera surveillance & voice-activated emergency call buttons inside AVs
- Provide option for users to automatically notify emergency contact whenever riding in an AV

9. Access to AVs by Persons with Disabilities and Seniors

Importance

- AVs may reduce inequities in access to transport mobility, increase personal independence, and reduce social isolation for persons with disabilities and for seniors

Possible policies

- Provide AV services that exceed minimum ADA requirements for accommodating disabilities
- Require a percent of AVs to accommodate needs of wheelchair users
- Provide targeted subsidies and assistance for persons with disabilities and seniors
- Support research to understand factors affecting acceptance of AVs as a transportation choice

10. Potential Disruption of Existing Transport Jobs

Importance

- Widespread AV use may lead to fewer jobs related to driving taxis, buses, and trucks which would disproportionately impact persons with low levels of education

Possible policies

- Identify new jobs that may include AV maintenance and dispatching
- Develop job retraining targeted to transport-related workers whose jobs may become obsolete

Policies for AV Implementation in a State or Local Jurisdiction

1. Include representatives of disadvantaged populations in AV policy and planning stages
2. Develop a framework to assess AV affordability for persons with low incomes
3. Develop a process to assess equity in funding AV infrastructure improvements

Policies for AV Implementation in a State or Local Jurisdiction (cont.)

4. Develop strategies to encourage AV ride sharing with policy incentives
5. Develop job retraining programs for persons losing transport jobs
6. Develop ongoing monitoring and evaluation of AV services

Policies for Permitting Processes for AV Service Providers in a State or Local Jurisdiction

1. Review how the company plans to accommodate AV accessibility for persons with mobility, vision, and hearing disabilities
2. Review the safety and security procedures for vulnerable AV users, especially women and minorities
3. Review the procedures for protecting the privacy of AV users, such as in-car videos and destination addresses

Policies for Permitting Processes for AV Service Providers in a State or Local Jurisdiction (cont.)

4. Review the AV service area and service times proposed by the company
5. Review the artificial intelligence (AI) algorithms used to guide the AV services

Study Limitations

- Field of AVs is growing rapidly - new studies now in progress may have been missed
- Unable to review potentially relevant proprietary information of AV companies
- Focused on passenger AVs and excluded other AV uses such as delivery vehicles and shuttles
- Impacts on equity of artificial intelligence algorithms used to guide AVs are difficult to ascertain
- Most recommendations relate to widespread AV use, not to AV testing pilot phase

Conclusions

- Our suggested policies related to AVs are compatible with other existing Washington state policies to promote equity
- The current work is designed to increase the focus on equity in the ongoing efforts of the AV Work Group

Conclusions (continued)

- Widespread use of AVs may have positive effects for disadvantaged persons, such as decreased motor vehicle injuries and increased transport options
- Potential negative impacts include inequitable AV access for disadvantaged persons and inequitable infrastructure investments
- Public sector policies informed by professionals in public health, social services, transportation, and other fields can help maximize the positive and minimize the adverse impacts on equity as AV use increases

Questions or Comments

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WASHINGTON STATE
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AV Pilot Proposal

Scott Shogan, *WSP*

Washington State Transportation Commission

Transportation Commission 2021 Recommendation

Advance a state AV pilot program

WSTC and AV Work Group to establish scope & plan, and report back to Legislature by the 2023 session

Why an AV Pilot?

Logical next step to the AV Work Group process

An AV pilot would put efforts of the Work Group to the test in a real-world environment and serve as a culmination of lessons learned

Why an AV Pilot?

To allow stakeholders to:

- Gain hands-on exposure to AV technology
- Identify policy unique to Washington State needed for safe deployment
- Develop approaches to harness AV opportunities in an equitable manner

Pilot Facts

What this pilot IS	What this pilot is NOT
Opportunity for first-hand experience with technology	A testing and research effort for AV developers
Approach to identify policy needs, agency readiness considerations and regulatory hurdles	A long-term service offering competing with other non-AV approaches
Chance to understand how tech can serve disadvantaged communities and identify barriers to access	Duplication of other states' efforts

AV Pilot Goals and Objectives

Equity

- Transit accessibility
- Disadvantaged communities
- Barriers to access

Public Awareness

- Understanding of capabilities
- Educate on safe use
- Measure public opinion

Organizational Knowledge

- Agency roles
- Partnerships
- Regulatory framework
- Preparedness

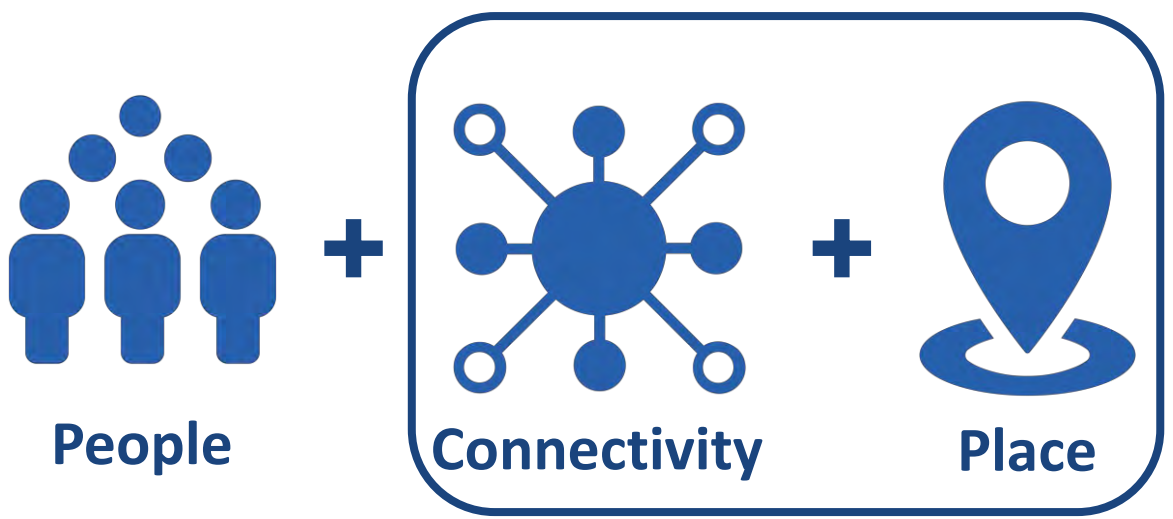
AV Pilot Goals and Objectives

Support Mandate to Prepare for AVs

Per the directive in current law to the WSTC and AV Work Group, a pilot will help inform the final legacy deliverable to the legislature in 2024

AV Pilot Use Case

Last-mile or point-to-point solutions to increase accessibility to transit in urban and small city/town settings



Feedback Received During Last Meeting

- Don’t focus solely on last mile – could be point-to-point service
- Fill a need/gap
- Pilot proposal needs to come with all of the resources, including technology and human resources for deploying and operating
- This pilot is not trying to solve everything, it is one piece in a larger puzzle
- A pilot like this could help signal that WA is looking towards higher occupancy – decrease congestion and increase accessibility
- A priority goal of the pilot should be encouraging the safe deployment of AVs in our region
- Emphasis on connections to *existing* transit
- How does piloting a last mile / transit AV solution benefit communities more than a non-AV last mile / transit solution?

Stakeholder/Industry Outreach and Feedback

- Presentation to Washington State Transit Association in June
  - » Concerns about level of effort to agencies
- Request for Information issued in August to industry
  - » 3 Respondents
  - » One technology company and two turn-key service providers
  - » Validated interest and capability of industry to fulfill the pilot concept and objectives
  - » Provided cost range $500K - $3M based on ODD, vehicle types, and pilot durations

2022 Recommendation to the Executive Committee

Support development and funding of an AV pilot program

Recommend to the legislature to appoint a lead state agency and provide funding for an AV pilot program to further advance the mission of the AV Work Group

AV Pilot Use Case Refinement

Use Case Type	Examples
Last Mile Service	Transit hub to community center Transit hub to shopping center Transit hub to healthcare facility
Point-to-Point Service	Community center to shopping center Residential area to healthcare facility Residential area to jobs hub

Two Operating Environments Sought

Urban

Small City/Town

Pilot Details

- Turn-key pilot delivery:
  - » Route planning
  - » Infrastructure deployment
  - » Vehicle delivery and testing
  - » Securing permits as required
  - » Pilot operation and staffing
  - » Develop operations, safety, and communications plans
  - » Coordinate with stakeholders and partners
  - » Prepare summary reporting
- Recommendation of $2M funding
  - » Turnkey services
  - » Two locations: urban and small city/town
  - » Minimum 6 months operation

AV Pilot Proposal

Administration

- **Lead State Agency:** Define operating locations, identify agency partners, secure pilot provider(s), and oversee pilot
- **Agency Partners:** Assist lead agency in defining operating locations, coordinating on-the-ground needs, promotion in community
- **Industry Partners:** provide vehicles, technical and program support (turnkey operation)

Potential Agency Partners

- Transit agencies
- Local/municipal entities
- Institutional
- Non-profits

AV Pilot Proposal

Schedule

- **Fall 2022** – Finalize and advance pilot recommendation to WSTC and the legislature
- **2023 Legislative Session** – Seek and secure legislative support and funding
- **Summer/Fall 2023** – Determine local partners, issue RFP, and secure vendor
- **2024** – Conduct pilot planning and launch pilots
- **2025** – Conclude pilot and report findings to the Governor and Legislature

Thank You!

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AV Work Group
2022/2023 Recommendations

***Reema Griffith**, WSTC*
***Markell Moffett**, WSP*

Washington State Transportation Commission

AV Work Group: Unaddressed Recommendations 2018-2021

WASHINGTON STATE AUTONOMOUS VEHICLE WORK GROUP

Year	Source	Recommendation	Executive Committee Action	WTSC Action	Current Status
2018	University of Washington Law School	Preempt local regulation to prevent unnecessary roadblocks to deployment of autonomous vehicles	Require further evaluation	No action taken	No further action was taken.
2018	University of Washington Law School	Update Definitions: revise the RCW to accommodate new technologies.	Require further evaluation	No action taken	No further action was taken.
2018	University of Washington Law School	Self-Certification: promote innovation and freedom to develop new technologies	Require further evaluation	No action taken	No further action was taken.
2018	University of Washington Law School	Enhanced Infrastructure: encourage local, state, and federal improvements in road systems and technologies to support AVs	Require further evaluation	No action taken	No further action was taken.
2018	University of Washington Law School	Update current data security laws: “lead the pack” in securing driver and user data	Require further evaluation	No action taken	Topic discussed and recommended again in 2019.

AV Work Group: Unaddressed Recommendations 2018-2021

WASHINGTON STATE AUTONOMOUS VEHICLE WORK GROUP

Year	Source	Recommendation	Executive Committee Action	WTSC Action	Current Status
2018	Safety Subcommittee	Conduct public education campaign	Recommend delaying until further work can be done by the work group.	No action taken	No further action was taken.
2018	Safety Subcommittee	Conduct Health Impact Assessment (HIA)	Endorsed	Endorsed	Topic discussed and recommended again in 2019.
2019	Health & Equity Subcommittee	Conduct Health Impact Assessment of AVs	No voting action	Endorsed*	The Health & Equity Subcommittee reevaluated this recommendation in 2020, refocusing towards a structured public outreach campaign and collection of testing location data, which the subcommittee recommended at the end of 2020.
2019	System Technology & Data Security Subcommittee	Adopt "AV Privacy and Data Security Principles" and "Data Standard revision 0.1" developed by the subcommittee	Request further exploration of best practices and standards	Agreed with Executive Committee action	No further action taken.

AV Work Group: Unaddressed Recommendations 2018-2021

WASHINGTON STATE AUTONOMOUS VEHICLE WORK GROUP

Year	Source	Recommendation	Executive Committee Action	WTSC Action	Current Status
2020	Safety Subcommittee	Requirement for a Law Enforcement/ First Responder Interaction Guide	Endorsed	Endorsed	Originally included in SB5460. Removed from Substitute SB 5460 in March 2021.
2020	Licensing Subcommittee	Amendment of RCW 46.92.010 to enable rulemaking by the Department of Licensing for the Self-Certification Program	Endorsed	Endorsed	Originally included in SB5460. Removed from Substitute SB 5460 in March 2021.
2020	Health and Equity Subcommittee	Conduct structured public outreach	Endorsed	Endorsed	No further action taken.
2020	Health and Equity Subcommittee	Identification of testing locations	Endorsed	Endorsed	No further action taken.
2020	Infrastructure and Systems Subcommittee	Increased investment on enhanced roadway pavement markings	Endorsed	Endorsed	No further action taken.
2020	Infrastructure and Systems Subcommittee	Support WSDOT's work zone data initiative	Endorsed	Endorsed	No further action taken.

AV Work Group: Unaddressed Recommendations 2018-2021

WASHINGTON STATE AUTONOMOUS VEHICLE WORK GROUP

Year	Source	Recommendation	Executive Committee Action	WTSC Action	Current Status
2021	WSTC	Advance a state AV pilot program, establish scope & plan and report back to Legislature by 2023 session	No action taken	Endorsed	WSTC and Work Group developing AV pilot proposal, anticipate proposing recommendation to Legislature in November 2022.

Executive Committee Member Items

Open Forum

WASHINGTON STATE AUTONOMOUS VEHICLE WORK GROUP

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Closing Remarks

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Closing Remarks

- **Recap Today's Meeting:**
  - » Action Items
  - » Agreements / Decisions

- **Important Dates:**
  - » October 18, 2022 – AV Work Group presentation to Transportation Commission
  - » November 15, 2022 – Annual AV Work Group Report due to Governor & Legislature

Thank You!

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