

Washington State Autonomous Vehicle Workgroup
Infrastructure and Systems Subcommittee
Draft 2019 Action Plan input received to date (02-05-19) in “track changes”

Activity	Action (Roles and Responsibilities Working Members)	12 Month - Deliverables
Activity #1: Develop policy goals and strategies with measurable illustrative actions based on regional and national “best practice” examples.	1. Assemble and share viable Cooperative Automated Transportation (CAT), Automated Vehicle (AV), Connected Vehicle (CV) and other automated transportation related <u>policy examples</u> in use regionally and nationally. The policy examples should contain goals, strategies, and illustrative actions.	12/15/18 – 23/28 <u>31/2019</u> : (Action #1)
	2. Review and provide comments to the examples (<u>documents, written statements</u>) distributed for review to assess which policy statements goals, proposed strategies and illustrative actions and <u>select which examples to move forward for more in-depth discussion and review.</u>	34/1/2019 – 45/30 <u>31/2019</u> : (Action #2)
	3. <u>Conduct a more in-depth review of the selected examples including, identifying qualitative and/or quantitative performance measures to guide near-term and long-term investment decisions. Product: Compendium of feasible policy goals, strategies, and illustrative actions with associated performance measures.</u>	56/1/2019 – 6/30/2019 : (Action #3)
	4. Develop a document and/or website that communicates the Product of Action 3 to enable broad engagement and outreach. <u>The target audience is working group members and interested persons for their use in outreach at their discretion. All documents and/or the website will be available to the public for use in disseminating information and receiving input.</u>	32/1/2019 – 6/30/2019 : (Action #4)
	5. <u>Develop and initiate an engagement and outreach approach to refine the Product of Action 3 toward initial policy recommendations.</u>	7/1/2019 – 9/30/2019 : (Action #5)
		8/1/2019 – 12/31/2019 : (Action #6)

~~December-February 6th~~5th, 2018~~2019~~

Commented [BT2]: What can we use from NHTSA’s Guidance Documents (e.g. AV 2.0 and 3.0)

Commented [BT1]: General Comments:

- 1.) Can this timeline be reduced from 12 months to 4 months?
 - 2.) Equity needs to be embedded in the policy goals, outcomes and process to understand and prevent negative impacts to communities, who benefits and who is impacted (e.g. limit access to opportunity (education, economic health, housing and neighborhood quality, transportation/mobility, and health and environment))
 - 3.) The responsibility for this Activity is not allocated. Suggest a RACI matrix or similar responsibility allocation tool.
 - 4.) An initial step should include defining how to limit the policy goals and strategies to the purview of the Infrastructure and Systems Subcommittee. It is likely that adopted policy will be more general in scope. Also need to define the mechanism for aligning this effort to broader and more general policy goals for CAT/AV policy for WA.
- Need to acknowledge that this is a very dynamic area and recognize the importance of monitoring ongoing national efforts and maintaining a library of reference documents. It can be a burdensome task just to keep up with all the work being done. E.g. a June 2018 summary of completed and in-progress work just within NCHRP:
http://onlinepubs.trb.org/onlinepubs/nchrp/docs/NCHRP20-102_CV-AV-Summary.pdf

Commented [BT3]: Recommended Actions:

- 1.) Health Impacts Study that incorporates equity and access to opportunity
- 2.) Apply a racial equity toolkit to all policy recommendations (due to limitations of who can effectively participate in the subcommittee process)
- 3.) Develop policy goals and values that are aligned across subcommittees based on the adopted values and goals of

Commented [BT4]: • Consider having an evaluation plan and score card to evaluate the impact of the initial policy recommendations. Seattle’s pilot scorecard could

Commented [BT5]: Who is the intended audience? General public, other subcommittees, other?

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<p>Activity #2: Develop a prioritized package of project proposal selection criteria to and administration recommendations to enable near-term pilot deployments.</p>	<p>1. Based on the pilot deployment options outlined in slide 9 from the October 24th Infrastructure and Systems Subcommittee Report (http://wstc.wa.gov/Meetings/AVAgenda/Documents/Oct24/WAWGEC-InfrastructureSCReport.pdf) to the AV Workgroup Executive Committee and the Product of Activity 1, Action #3, select a few pilot deployments and working group members to lead/support the development of project proposals selection criteria using the Template developed under Action 2.</p>	<p>7/01/19 – 9/30/2019: 12/15/18 – 1/31/2019: (Action #1)</p>
	<p>2. Develop project funding level targets and match requirement recommendations.</p>	<p>7/01/19 – 9/30/2019: 12/15/18 – 1/31/2019: (Action #2)</p>
	<p>3. Develop funding source and administration recommendations.</p>	<p>7/01/19 – 9/30/2019: 2/1/19 – 6/30/2019: (Action #3)</p>
	<p>2. Target Outcome: Finalized project selection criteria, funding level targets, match requirements, funding source and administration recommendations for use during the 2020 Legislative Session to enable near-term pilot deployments. Develop Project Proposal Template for use by working group members (WSDOT): Template will include (for example): Title, Description, Lead working group member(s), Support working group member(s), proposed Financing Model (new funds, existing and/or new grant programs, public/private partnership (hard/soft match), anticipated project cost, project location, project partners/stakeholders, performance measures,</p>	<p>10/1/19 – 12/31/2019: 7/1/2019 – 9/30/2019: (Action #4)</p>
	<p></p>	<p>10/1/19 – 12/31/2019: (Action #5)</p>

Commented [BT7]: General Comments
1.) Is there anything that should be included in a 2019 A/V Work Group Legislative Package? (Suggestion to assemble a package with a list of the top 5 or 6 priorities from the survey results.)

Commented [BT6]: General Comments
1.) Complete steps 1-4 before beginning Activity #2 to guide project proposals and project selections.

Commented [BT8]: Recommended Additions to the Project Proposal Template
1.) Indicate how the pilot deployments will achieve the vision provided for each agency and jurisdiction
2.) Each Pilot Project go through an equity screen or racial equity tool kit that connect with community outcomes.
3.) Focus Pilot projects to those that further access to public transit, facilitate livable communities and prioritize safety and active transportation.
4.) Project Proposal should include a series of community-driven performance measures.
5.) Consider requiring an explanation of how the project proposed would further policy goals and strategies identified in Activity #1 as part of the proposal template.
6.) What is the proposed funding source for projects selected?
7.) Project proposals should include an evaluation plan and score card with performance metrics that include GHG emissions and VMT. Seattle's pilot scorecard could serve as a useful template (See attached example above from Seattle DOT).



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	<p>project management approach, feasibility assessment with barriers to project success and potential mitigating steps, etc.)</p> <p>3. Develop Project Proposals</p> <p>4. Distribute Project Proposals for review, comment by working group members, other AV WG subcommittees, OFM, others....</p> <p>5.4. Target Outcome: Finalized project proposals in preparation for 2020 Legislative Session to enable near term pilot deployments.</p>	
Activity	Action (Roles and Responsibilities Working Members)	12 Month - Deliverables
<p>Activity #3:</p> <p>Immediate Action:</p> <p>Implement a SAE Level 1 Driver Assisted Truck Platooning Pilot Deployment</p> <p>tion:</p> <p>Compile a Year-end report on SAE Level 1 and 2 Driver Assistive Truck Platooning Testing and Pilot Deployment Activity in WA during 2019</p>	<p>1. Identify barriers (legislative, regulatory, other..) and questions that need to be addressed prior to implementing a Society of Automotive Engineers (SAE) Level 1 driver assistive truck platooning pilot deployments on public roads.</p> <p>2. Develop an implementation proposal with potential uses cases for Level 1 driver assistive truck platooning pilot deployments. The implementation proposal will include issues such as: Which roads; What conditions; What requirements; What duration, What number of Trucks; Implemented by Whom; With input/oversite from Whom; Under What authority; etc..</p> <p>3. Select a use case, target implementation date and outline a communication plan for stakeholders and the traveling public.</p> <p>4. Target Outcome: Completion of a SAE level 1 driver assistive truck platooning pilot deployments on public road(s) in Washington state during 2019.</p>	<p>Complete at end of 2019:</p> <p>11/1-/19 - 12/31/19: (Action #1)</p> <p>12/15/2018 - 1/31/2019: (Action #1)</p> <p>2/1/19 - 4/30/2019: (Action #2)</p> <p>5/1/2019 - 6/30/19: (Action #3)</p>

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Commented [BT9]: General Comments

- 1.)What distinguishes this from the other states' pilots?
- 2.)How will the results refine or localize the outcomes from other states to help WA?
- 3.)How will the outcomes be measured and the data used? E.g. WA has interesting terrain and weather conditions that differ from FL, whereas Seattle and NOVA (I-66 demonstration) have similar traffic conditions. See FHWA BAA Truck Platooning Early Deployment Assessment Phase 1 RFP for detailed, defined approach to pilots incl. performance measures & stakeholder engagement: https://www.fbo.gov/index?s=opportunity&mode=form&iid=1672f8034a9d6f63ce676d67ec15a192&tab=core&_cvi_ew=0 Regional cooperation is particularly important for this topic. The Mid-America Freight Coalition is a transportation pooled fund project that has recently published a regional regulatory framework for truck platooning. <http://midamericafreight.org/wp-content/uploads/2018/09/MAFC-Truck-Platooning-2018-08-13-1-1.pdf>
- 4.) Request a risk assessment, declared conflicts of interest, and safety analyses in the implementation proposal.
- 5.) Include a mitigation and remedial plan that identifies what actions will be taken if something does not go as planned. There should also be a plan for information sharing with the State, such as crash / collision / failure data.

Commented [BT10]: General Comments

- 1.) Is there anything that should be included in a 2019 A/V Work Group Legislative Package?

Commented [BT11]: Include details such as which lanes

would be used by the pilot deployment (same as all trucks? a single lane?), what time of day would the deployment take place (peak / off-peak hours, when the traffic speed is free flowing or at lower speeds? Or is this 24 hours a day?). Also the project should identify which emergency response teams should be notified of deployment (times/locations) to ensure awareness within the jurisdictions that could be responding and a quick emergency response, if needed.



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	<p>1. <u>Plan to gather a year-end 2019 report on driver-assistive platooning activity conducted during the year in WA. Information to be gathered:</u></p> <ul style="list-style-type: none"> a. <u>list level (L1/L2) of testing or pilot deployments on WA public roads; and description of corresponding test/pilot;</u> b. <u>which roads; weather and traffic conditions</u> c. <u>types and numbers of trucks involved in each test/pilot;</u> d. <u>tested/piloted by what OEM or technology developer entities</u> <p>Target Outcome: <u>Produce a year-end 2019 report on driver-assistive platooning activity conducted during the year in WA.</u></p>	<p>7/1/2019 – 12/31/19; (Action #4)</p>
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Suggestions to include Additional and/or Alternate Activities

- 1.) Consider an assessment of Washington’s statewide transportation needs and how CAT/AV/CV technologies can address these needs, given Washington’s unique transportation environment, mix of climates, and rural/urban areas. It would also be helpful to include a step that defines WSDOT’s role in the planning and implementation of CAT in Washington, to the extent that it may extend to policy decisions and recommendations that extend beyond the usual state highways.
- 2.) Identify opportunities to advance connected vehicle applications for WSDOT’s highway operations, such as highway safety, traffic management, and traveler information. WSDOT has extensively invested in ITS technologies and communications infrastructure over the past 20+ years. It would be beneficial to examine how these investments can be leveraged to streamline CV deployments, and similarly, how the current ITS investment strategy may evolve as a result of emerging CV applications.