

HAV Advisory Committee Summary

Date / Time / Location	W 12-Aug-2020 / 1300-1500 / Skype Meeting
Attending/ Representing	HAV Advisory Committee: Steve D’Ettorre (SD), Eric Donnell (ED), Thomas Foley (TF), Melissa Froelich (MF), Jason Gerard (JG), Yassmin Gramian (YG), Michael Humphryes (MH), Erik Johanson (EJ), John Lacek (JL), Ted Leonard (TL), Shannen Logue (SL), Alison Pascale (AP), Nolan Ritchie (NR), Matt Rucci (MR), Josiah Shelly (JoS), Kristofer Snader (KS), Frank Snyder (FS), Kyle Wagonseller (KW), Kelley Yemen (KY)
	Additional Attendees: Rachelle Celebrezze (RaC), Sarah Clark (SC), Roger Cohen (RoC), Natasha Fackler (NF), Roy Gothie (RG), Mark Kopko (MK), George McAuley (GM), Joseph Murzyn (JM), Kurt Myers (KM), Ngani Ndimbie (NN), Jason Sharp (JaS), Kevin Tobias (KeT)
	PennDOT Consultant Team: Jeff Bergsten (JB), Scott Seibel (SS)

Key Points and Decisions:	Action Items:
<p>1. Annual Report (MK)</p> <ol style="list-style-type: none"> a. The draft annual report, required in Act 117, has been distributed to committee members for review. b. The committee members agree that the report appropriately represents the work completed by the committee to date. c. The report will be finalized by W 19-Aug-2020 and distributed to all members as well as posted on the PennDOT website. 	<p>➤ Committee send additional comments on the Annual Report to MK prior to W 19-Aug-2020</p>
<p>2. PennDOT Updates (MK)</p> <ol style="list-style-type: none"> a. The AV Testing Guidance 2.0 <ol style="list-style-type: none"> i. The testing guidance has been finalized and will be issued to testers and posted on the PennDOT website. The update process consisted of four rounds of revisions and over 40 hours of conversations with AV testers. ii. All new testers must comply with the guidance immediately and existing testers must apply once their authorization expires. iii. Key updates and revisions to the document include the following: <ol style="list-style-type: none"> 1. Testers must provide additional information if they provide rides to members of the general public. 2. Criteria established to transition from two safety operators to a single safety operator in the vehicle. 3. Testers must report testing locations by zip code (previously it was by county). 4. Testers must provide additional information about their Operational Design Domain. 5. Testers must report additional information as part of their semi-annual data collection form. 6. Established restrictions for commercial vehicles. 7. Shortened the maximum crash reporting time. 8. Requires an Emergency Service Responders Plan. b. Incident Response Plan (MK) <ol style="list-style-type: none"> i. PennDOT has been working with first responders, various levels of government, and other entities to determine the best communication line for incident response. 	

<ul style="list-style-type: none"> ii. Utilizing single-point communication, tying into existing processes, ensuring scalability, and coordination with the federal government were focused on while developing the incident response plan. iii. PennDOT has been working to develop a mobile application field guide for first responders to provide the information necessary to safely secure and handle the vehicle, notify appropriate agencies, and record the incident location. 	
<p>3. Personal Delivery Device (PDD) Legislation (JoS)</p> <ul style="list-style-type: none"> a. An amendment is currently being drafted with PennDOT regarding the proposed PDD legislation. b. In general, it is thought that additional oversight is needed in legislation, especially in terms of enforcement. The hearing stated PDD should be treated as a pedestrian, which causes concern with the committee members (i.e. traversing against vehicular traffic flow in the roadway when sidewalks are not present). It was noted that size, weight, and capabilities seem to exceed e-bike legislation. c. Legislation should be drafted in a way to allow PennDOT to evolve with the changing technology. d. Once PennDOT provides feedback to the draft, it will be shared with stakeholders for additional feedback. e. It was noted to be mindful of the regulatory process as this would be a path forward of how the general assembly would authorize AVs on the roadway. f. Both bills (Senate Bill 1199 & House Bill 2699) call for the expansion of the HAV Advisory Committee to add a PDD representative. 	<ul style="list-style-type: none"> ➤ Committee reach out to JoS with any questions or recommendations regarding PDD legislation
<p>4. Communications and Engagement Plan Update (KT)</p> <ul style="list-style-type: none"> a. Local Government Survey <ul style="list-style-type: none"> i. A local government survey was conducted, and 436 responses have been received so far. There is still work to do to reach out to the municipalities that did not receive the survey or did not reply. ii. The overall goal of the local government survey is to collect pertinent information about emerging technology from local and regional officials to tie into the AV Communications and Engagement Plan. iii. 13 municipalities responded that they already have ordinances, resolutions, or executive directives pertaining to AVs. These municipalities can contribute to the development of best practices on the local level. b. General Public Survey <ul style="list-style-type: none"> i. A survey for the general public is being finalized to gauge interest and knowledge of emerging technology. The committee and the AV Task Force previously provided feedback on the survey, which has been incorporated. ii. PennDOT is looking to partner with organizations who can help reach more and different demographics across Pennsylvania. 	<ul style="list-style-type: none"> ➤ Committee send KT recommendations for partnering organizations to assist in the distribution of survey information to PA residents

<p>iii. Private sector stakeholders should also be identified. These stakeholders can be a helpful force in terms of education.</p>	
<p>5. Platooning Transit Vehicles Update (MK)</p> <ul style="list-style-type: none"> a. A work order for the platooning transit vehicle feasibility research project is currently being scoped and should receive notice to proceed in early September. The final product will consist of a high level feasibility study report/presentation. b. The project has gained interest from USDOT, municipalities, and transit authorities. c. Similar research was previously conducted by Japan about 15 years ago, but not to the extent planned for this project. However, any previous research or work being done regarding this topic will be leveraged. Connecticut DOT is currently moving forward with a similar project but is planning on utilizing a Bus Rapid Transit line (and our project would just use existing roadway lanes). d. The work order high level feasibility study is expected to take about 28 weeks after receiving notice to proceed, which is just slightly longer than NR's proposed six month timeframe. 	<ul style="list-style-type: none"> ➤ PennDOT to authorize Work Order for this platooning transit vehicles high level feasibility Study.
<p>6. Liability Discussion (JL)</p> <ul style="list-style-type: none"> a. A research initiative was proposed by the PA Insurance Department for the AV Task Force with the following charges: <ul style="list-style-type: none"> i. To conduct qualitative research into current and potential liability surrounding the operation of HAV's and HAV production. This research shall consist of discussions, interviews, meetings, presentations, and other forms of qualitative research with industry participants. The goal of the research shall be to develop an understanding of the entire HAV industry and where liability issues may now or in the future become problematic. ii. To conduct an analysis and qualitative research into the steps being taken by other states in regard to HAV and liability issues including policy actions, legal actions, legislation, regulation, or other relevant action in relation to HAV's and liability. iii. To produce a report summarizing the core findings relating to this charge. The report may be submitted in a form which the Task Force deems appropriate including a written report, presentation, or other similar method. b. HAVs are unique and once they are in stage 4 and stage 5 of automation, they are not analogous to anything else. c. It was clarified that the goal of this initiative is to better understand the implications and not to propose legislation. d. It was noted that this initiative may be a task to be done at a national level, and it would be difficult to conduct adequate research before development is further along. e. Similar work regarding products liability was completed by the New York Bar and should be used as a starting point. An aspect of this proposed 	<ul style="list-style-type: none"> ➤ Committee reach out to MK if interested in participating in the continued liability discussion. ➤ MK coordinate with interested committee members to set up a meeting to continue the liability discussion and determine if it is appropriate for this Advisory Committee to take on the proposed research work suggested by JL.

<p>initiative is to look at the ecosystem as a whole to determine if products liability is the best system to appropriately allocate costs.</p> <p>f. It was decided by the committee to explore the proposal further before charging the AV Task Force with the initiative as to not duplicate anything that has been done before, and to determine that this is best addressed by individual states instead of nationally.</p>	
<p>7. The following questions were asked for an open discussion:</p> <p>a. What other agencies and/or organizations should the Commonwealth be engaging? (MK)</p> <ul style="list-style-type: none"> i. Additional university partners ii. The Public Utility Commission has previously attended AV Task Force meetings, but closer communication should be conducted to increase their involvement. iii. The Pennsylvania Motor Truck Association is interested in platooning technology and should be re-engaged with the AV Task Force. iv. Bring in and engage rural representatives in the AV Task Force. This may be done through the local government subcommittee of the AV Task Force. v. Engage the Families for Safe Streets Greater Philadelphia and the Philadelphia Vision Zero Alliance to participate in the AV Task Force. <p>b. How can Pennsylvania support secondary and tertiary industries as part of the supply chain to AVs to boost economic development, especially outside major urban areas? (SD)</p> <ul style="list-style-type: none"> i. Connections may be made with partners and manufacturers looking to pivot to more needed products. ii. Research may be done to determine areas of potential collaboration. iii. Forums or other resources may be benefit in setting up a more coordinated introduction between parties. <p>c. Aside from education, what should the Commonwealth be doing to ensure consistency and interoperability throughout the state? (MK)</p> <ul style="list-style-type: none"> i. The National Conference of State Legislatures (NCSL) should be reached out to determine any best practices or processes used in other states. NCSL has an AV Primer on their website detailing what other states have done on legislation. ii. Issues that AV testers have run into may be insightful and worth pursuing. <p>d. Aside from changes to the vehicle code, what needs to be addressed prior to the deployment of highly automated vehicles? (MK)</p> <ul style="list-style-type: none"> i. Big picture issues and an unclear business model. ii. How to create and support scalability. iii. Engaging public transit agencies. iv. Curbside management. 	<ul style="list-style-type: none"> ➤ PennDOT engage entities listed in Summary Item 7.a. ➤ Committee send additional feedback regarding Summary Item 7.b to SD. ➤ PennDOT reach out to NCSL for Summary Item 7.c. ➤ MK follow up with MF regarding best practices and insights for Summary Item 7.c.