

MEETING NOTES: CTB Innovation Subcommittee

DATE: Tuesday, September 14, 2021

TIME: 8:30 a.m.

The meeting of the Commonwealth Transportation Board (CTB) Innovation Subcommittee was held at the Virginia Department of Transportation Central Office Old Highway Building Computer Lab, 1221 East Broad Street, Richmond, VA 23219. Director of Transportation Research and Innovation Cathy McGhee presided and called the meeting to order at 8:30 a.m. on September 14, 2021.

Present: Mr. Rucker, Mr. Yates, Ms. DeTuncq, Mr. Kasprowitz and Ms. McGhee.

Absent: None.

- Approval of June 2021 minutes
The minutes from the June 2021 meeting were approved unanimously.

Advanced Air Mobility - DOAV Senior Aviation Planner Scott Denny provided an overview of advanced air mobility and a realistic update on where we are and the steps we are taking in Virginia to prepare for a future that includes electric vertical take-off and landing aircraft (eVTOLs). Given the complexity of integrating eVTOLs into the airspace, we may very well be 30 years out from the full vision of advanced air mobility but there are likely some use cases we could see earlier and certainly there are important steps to take with respect to how we prepare. Scott shared with us that the Aviation Board has passed a resolution in support of AAM in the Commonwealth and is standing up a work group to evaluate needs and opportunities. He also left us with a couple of issues that must be addressed:

- Safety – As in everything we do, safety must be at the forefront. At a minimum, we must adhere to whatever guidance the FAA puts out on AAM and how it is implemented and managed.
- Consistent land use and building codes – any aircraft in the air is the responsibility of the FAA but once it lands (or prior to takeoff) it is subject to local land use regulations. Given the vision for AAM with takeoffs and landings occurring away from traditional airports, this could be an incredibly complex process. Although guidance for heliports and private airfields does exist, the number of vertiports that may come in to play for eVTOLs will be challenging.

The subcommittee members encouraged the evaluation (both near and long term) of the impacts AAM might have on the overall transportation network and mode choice.

Update from the Office of Strategic Innovation - Director Hari Sripathi shared an overview of the work that is ongoing to encourage innovation at all levels of the organization. He spoke of both core innovations – those that might seem smaller in scale or complexity but can have significant impacts across the agency in both efficiency and cost - as well as transformation innovations – things like AAM and connected and automated vehicles. With respect to Core Innovations, the committee members asked for a quarterly report on how many innovation ideas are coming in and who they are coming from (are we really engaging staff across the agency in

our drive for innovation?), and whether or not some form of acknowledgement or incentive could encourage employees to bring ideas forward.

Future presentations will focus on outcomes from OSI – what has been accomplished and what the impacts might be.

Integrating CAVs into VDOT Functions – VDOT’s CAV Program Manager Amanda Hamm discussed the differences between connected, automated, and connected and automated vehicles. Although connected vehicles can exist without automation and automated vehicles can exist without connectivity. We see tremendous value added when connectivity is layered with automation, essentially extending situational awareness for automated vehicle that can otherwise not see beyond their onboard sensors. This is critical for meeting the safety goals we have for automation.

Amanda briefed the committee on a number of items from the news of CAV including a low-speed automated shuttle deployment in Yellowstone National Park, a National Highway Traffic Safety Administration investigation into Tesla following 11 crashes of Teslas into parked emergency vehicles, and the potential impact of the worldwide shortage of semi-conductors on automated vehicles.

Amanda also highlighted the work that VDOT is doing to understand and quantify our “readiness” for accommodating connected and automated vehicles within our network including the impact of pavement markings, signs, signals, and overall geometric characteristics.

Finally, Amanda highlighted a number of activities that are ongoing in partnership with Virginia Tech Transportation institute focused on improving safety in our workzones including a workzone mapping application, the development of a connected worker vest, and the development of an automated truck mounted attenuator.

Public Comments – *There were no public comments.*

ADJOURNMENT: The meeting adjourned at 9:45 a.m. on September 14, 2021. The next CTB Innovation Subcommittee meeting will be held on Tuesday, October 19, 2021, beginning at 8:30 a.m. in the Computer Lab of the Virginia Department of Transportation Central Office Old Highway Building located at 1221 East Broad Street, Richmond, Virginia 23219.