

2023 Maryland CAV Workshop Summaries

Freight

This document summarizes key takeaways from the Freight workshop hosted by the **Maryland CAV Working Group** in September 2023. The Working Group provides a central collaboration venue for the development and deployment of CAV technologies in Maryland.



Freight

What did I miss?

The MD CAV Freight Subgroup held a hybrid meeting on September 28, 2023 to identify key trends for CAV freight applications and areas of interest and need for Maryland.

Who can I contact to learn more?

- MD CAV Working Group (cavmaryland@mdot.maryland.gov)
- Guest Speaker: Richard Bishop, **Bishop Consulting**
- Guest Speaker: Richard Steiner, **Gatik**

Where can I get more information?

The meeting agenda and presentation materials are posted on the MD CAV Working Group website: cav.mdot.maryland.gov/working-group

Summary Points

CAV technology provides **opportunities** to move people and goods more efficiently, improve safety, and enhance economic productivity.

Potential **CAV freight use cases** include industrial, transport, terminal, yard, or port operations.

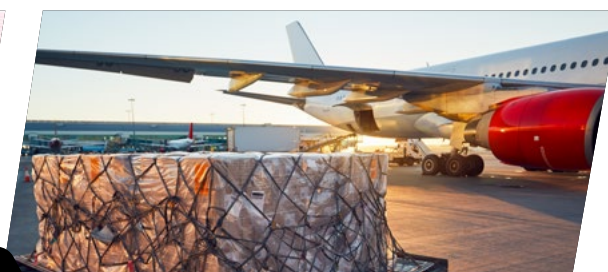
Freight technology is available for testing and deployment.

- Driver assistance systems for Commercial Motor Vehicles (CMVs) are proven but overall penetration rates are low.
- High level automation is available for use by yard trucks in trucking terminals, ports, or airports; and other edge cases such as forestry, oil and gas, construction, and agriculture.
- Electric trucks and drones for freight delivery are also available.

Workforce development is a key topic for CAVs—especially for freight use cases.

Potential Considerations for State and Local Agencies

- Collaborate within the CAV subgroups for clarifications on the regulatory framework for automated commercial motor vehicles testing and deployment.
- Consider additional outreach efforts to encourage industry leaders to engage with MD CAV.
- Support best practices for CAV freight applications by collaborating with the Commercial Vehicle Safety Alliance and with USDOT Federal Motor Carrier Safety Administration.
- Collaborate with industry to identify specific use cases that address challenges in Maryland.
- Participate in listening sessions with industry and government to understand the complexities and needs that might be addressed with CAV technology for Maryland freight to help define use cases.
- Explore the top-rated use cases, including:
 - Logistics to and from ports and airports
 - Short haul / middle mile
 - Warehousing / distribution center
 - Yard work – maintenance, charging, parking / storing
- Partner with industry to fund pilot projects that address specific needs.
- Host education opportunities for customers and the public on safety and operations.
- Support and expand on existing data freight AV feasibility in Maryland and consider designation of automated truck corridor(s) based on infrastructure readiness.
- Consider “Cross the Bay” UAV delivery competition.
- Establish partnerships between government, industry, training, and labor groups. Focus on filling gaps in the existing workforce to address driver shortages and recruitment challenges.
- Look to community colleges and entities accredited by the MD apprenticeship program as a starting point with programs already related to CAV and freight, including: Automotive Technician, Aviation, Commercial Driving License/Trucking, Diesel Technician, Freight Transportation and Distribution, Engineering Programs, Business Studies, Cybersecurity, and Information Technology.



FOR MORE INFORMATION

Visit cav.mdot.maryland.gov or send an email to CAVMaryland@mdot.maryland.gov.