

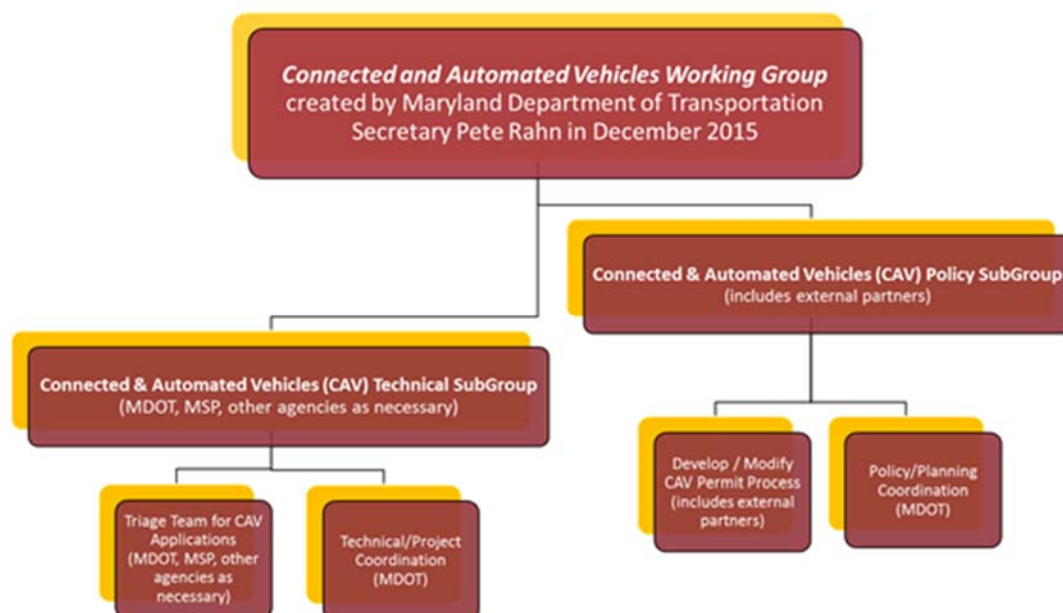
Overview of Maryland’s Work on Connected and Automated Vehicles

Background

Self-driving vehicles have the potential to transform how we live and work – to save lives by reducing traffic crashes, and provide more travel options for people who are not able to drive. While Maryland is open for business and eager to realize the life-saving and economic benefits of this innovative technology, the safety of all who travel our roadways comes first. Many vehicles already on the road have automated features. Cruise control is an automated feature that has been around more than 50 years; some modern cruise control systems can automatically maintain a set following distance relative to the car ahead for *auto stop and go* in traffic jams. Other automated features include lane departure warning and assist, traction control, parking assist, and collision alerts. To prepare for this changing transportation landscape, Maryland Department of Transportation (MDOT) and many partners are working together to ensure the safety of all roadway users as we move toward the future of transportation.

Maryland Connected and Automated Vehicles (CAV) Working Group

In 2015, Maryland Transportation Secretary Pete Rahn established the *Connected and Automated Vehicles (CAV) Working Group* as the central point of coordination for the development and deployment of emerging CAV technologies in Maryland. The Working Group handles strategic planning for MDOT concerning connected and automated vehicles. The group includes a diverse membership of transportation stakeholders, including elected officials, state and local agency representatives, highway safety organizations, representatives from the private sector and automotive industry. The group evaluates the latest research, tracks federal and state laws, policies and programs, and coordinates with other agencies, organizations, and businesses to set the course for the future of automated and connected vehicles in Maryland.



Actions by Maryland Department of Transportation

Some of this information is from our landing page for Connected and Automated Vehicles (CAV) at <http://www.mva.maryland.gov/safety/MarylandCAV.htm>. Included there, you can also find direct links to the USDOT page and Federal Guidance documents, and you can find links to all the previous agendas and slide presentations for meetings of Maryland's Connected and Automated Vehicles Working Group.

There are two Subgroups stemming from the Working Group (WG). The initial Policy Subgroup was created to draft the Permit Process for Testing Highly Automated Vehicles in Maryland as recommended by Guidance issued by the United States Department of Transportation (USDOT) in late 2016. The Permit Process is a simple framework and allows for many unique circumstances, which was approved by the WG and has been in place since May 2017. It is intended to generate a collaborative, constructive and expedient pathway for manufacturers and other entities interested in testing in Maryland, also while maintaining a safe environment for all who use Maryland's transportation systems and facilities. However, because these technologies continue to evolve, the Process is a living document to be reviewed and amended as necessary to be consistent with federal guidance and with the needs of the state. We are currently reviewing the Process for any potential changes with USDOT just releasing their 2017 Guidance on this issue, which includes Best Practices for State Legislatures.

The first step of the Permit Process is for an entity to submit an Expression of Interest (EOI) (from the landing page), and since May 2017 there have been five EOIs with one company moving forward to testing. We want to engage on all things CAV and encourage any entities interested in discussions on potential collaboration to submit an Expression of Interest. Then if needed and when ready, we help them through the HAV permit process to test SAE Levels 3, 4, and/or 5 automated systems on public roadways.

Through the discussions of the Working Group and as we begin dialogues with entities interested in testing here in Maryland, we are learning a tremendous amount about the myriad of aspects that are part of CAV issues, and we are strengthening MDOT's position to be an efficient and effective point-of-entry. The other Subgroups and Coordination Teams you see on the chart, are working hard to be on top of the exponentially emerging info on CAV that is evolving daily (research, white papers, best practices, guidance), and also working hard to be ready with information, inventories of potential options in Maryland, and contacts throughout the State that can guide entities while always considering safety as a primary goal.