Maryland Connected & Automated Vehicles Working Group

Tuesday, December 14, 2021

2:00 pm – 4:00 pm

Hybrid: Virtual Meeting Link: https://attendee.gotowebinar.com/register/3338488256153196043
In Person, **if approved:** MDOT Headquarters, Hanover, MD

	AGENDA

2:00 pm	**Welcome & Opening Remarks**
	○ *Secretary Greg Slater, Maryland Department of Transportation (MDOT)***
	○ *Executive Director Jim Ports, Maryland Transportation Authority, Co-Chair***
	○ *Administrator Chrissy Nizer, Maryland Department of Transportation Motor Vehicle Administration (MDOT MVA), Co-Chair***
	    CAV Subgroups: Brief Updates from the Chairs
	    • Emergency Responder Subgroup – ***Van "Kevin" Stitcher***, Maryland State Police
	    • Freight Subgroup – ***Louis Campion***, Maryland Motor Truck Association
	    • Policy Subgroup – ***Cara LaPointe***, Johns Hopkins University Institute for Assured Autonomy
	    • Tech Subgroup – ***Ed Jones***, Prince George's Co Dept of Public Works & Transportation**

2:40 pm	**Building Safety Into CAV: Modeling, Simulation and Real-World Testing**
	○ Autonomous Systems Test Capability (ASTC),
	    John Whitt*, US Army Aberdeen Test Center*
	○ Virtual Open Collaborative Environment for Safety (VOICES)
	    Taylor Lochrane*, USDOT FHWA*
	○ Automated Commercial Motor Vehicle (CMV) Evaluation (ACE) Program and emergency response activities
	    Michael Lukuc*, Federal Motor Carrier Safety Administration (FMCSA)*
	○ Audience Participation Question & Answer session
	    Moderator*, **Roxane Mukai**, Maryland Transportation Authority*

3:40 pm	**Lightning Round of Updates - Companies filing Expression of Interest for MD CAV** Description about the Expression of Interest (EOI) process and an online form is located on the CAV landing page @ mdot.maryland.gov/MarylandCAV . Entities submit EOIs to express interest in research, testing and implementation of CAV in Maryland. Each company will provide a brief update to focus on active or pending plans for CAV work in Maryland, including partnership opportunities. *(see company/contact info on page 3)*
3:55 pm	**Closing:** Next meeting – April 29, 2022 @ 9:00am – 12:00 pm (TBD)

** denotes in-person speakers

SPEAKERS:

Taylor W.P. Lochrane, Ph.D., P.E.
CDA Program Manager
USDOT Federal Highway Administration
Taylor.Lochrane@dot.gov
https://highways.dot.gov/research/operations/CARMA

Dr. Lochrane is the Cooperative Driving Automation (CDA) Program Manager at the Federal Highway Administration, Office of Operations Research and Development. He is leveraging open-source software and using agile software development practices to accelerate innovative concepts aimed to increase the safety and improve the overall infrastructure efficiency of the transportation system using CDA technology. Through his leadership in the development of the CARMA^{SM} ecosystem, a larger community is enabled to participate in the development thought open collaboration and testing to accelerates CDA strategies from research to market. He is also the FHWA lead for Virtual Open Innovation Collaborate Environment for Safety (VOICES), part of a USDOT effort to deliver a distributed virtual platform that enables stakeholder virtual collaboration for research and interoperability testing of CDA features and use cases.

Mike Lukuc
USDOT Federal Motor Carrier Safety Administration (FMCSA)
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https://www.fmcsa.dot.gov/

Mike is an accomplished leader, manager, collaborator, and engineer with more than 20 years of expertise in transportation technology research, development, and product implementation programs across the public and private sectors. He recently returned to the U.S. Department of Transportation to lead FMCSA's Automated Commercial Vehicle Evaluation (ACE) Program. He began his career working General Motors test grounds where he was responsible for integrating new chassis control technology into future high-end vehicles, and his career has followed the evolution safety technology from lower levels of automation to connectivity to the higher levels of automation and Cooperative-Automated Driving Systems. In the latter part of this journey, Mike led early Advanced Driver Assistance System implementation programs at Daimler-Chrysler. He moved to NHTSA and led the USDOT's V2X safety research program from 2009-2014. Next, Mike moved to the Texas A&M Transportation Institute (TTI), where he created a new Connected and Automated Transportation program. This program established a public-private partnership with 9 organizations that developed and demonstrated the first proof-of-concept Level 2 commercial truck platooning system in North America. In his final stop before joining FMCSA, Mike established and managed Peloton Technology's Texas Operations and Test Center. This center managed the regional customer acceptance test program for their L1 truck platooning system and performed Verification and Validation Testing for both the Level 1 and Level 4 platooning systems. At both NHTSA and TTI, his programs have collaborated to develop innovative engineering tools and processes, including the combined testing of real and virtual connected vehicles and infrastructure devices.

John M. Whitt
Virtual Test Support Division Chief
Aberdeen Test Center
John.m.whitt4.civ@army.mil
https://www.atec.army.mil/atc/

Mr. John M. Whitt is the Virtual Test Support Division Chief at the US Army Aberdeen Test Center. His division is responsible for testing and analyzing software as well as creating and sustaining modeling and simulation tools to test upcoming Department of Defense and Other Government Agencies' autonomous ground vehicle requirements. John has been with Aberdeen Test Center for over fourteen years and has worked in the areas of ship and submarine shock testing, communications testing, body armor testing, instrumentation development, tactical vehicle testing, and autonomous systems test capability development.

Lightning Round Updates - Recent Companies filing Expression of Interest for MD CAV

Company	Contact	Brief Description
Red Hat, Inc.	**Parker Middel**** 1600 International Drive McLean, VA 22102 Phone: 703-346-2295 Email: pmiddel@redhat.com Website: https://www.redhat.com/	Red Hat works in the Data Exchange and Edge processing ecospace and is planning work in Maryland to help in the *Infrastructure* focus area of the *Maryland CAV Framework*. Red Hat can provide IT Data Management tools that will help Maryland collaborate, share data, and use that data for other uses. Red Hat can also help at the edge, between the vehicle and the Data Enterprise, by reducing data latency.
Skyline Technology Solutions	**John Contestabile**** Director, Public Safety Solutions 6956-F Aviation Blvd. Hanover, MD Email: jcontestabile@skylinenet.net Phone: 443-220-8090 Website: https://www.skylinenet.net/intelligent-transportation-systems	Skyline is under contract to operate the state's broadband fiber network; aka NetworkMaryland. This network has a point of presence in every county in the state and should be considered as part of the overall CAV communications architecture for backhaul. Additionally, Skyline is consulting with Sinclair Broadcasting who is implementing "Next Gen TV' [aka ATSC3.0] which provides yet another mechanism for distribution of data to the CAV network. In short, we believe the Md. CAV program should have some focus on the network architecture beyond the telecom providers and the DSRC spectrum. Both NetworkMD and ATSC3.0 are robust deployed networks in Maryland and can be leveraged immediately.
Verizon	**Jennifer Sherblom** Transportation Specialist / Strategic Planning Verizon Business Group Boston, MA Mobile:508-808-8024 Email: jennifer.sherblom@verizon.com	Super-fast, reliable and low-latency data transmission at the edge of the network is essential for connected vehicle safety. Verizon's 5G and multi-access edge compute (MEC) platforms bring the power of the cloud closer to the vehicle, lowering latency, offering massive bandwidth, and improving communications and connectivity between drivers, other cars, traffic lights, pedestrians and emergency vehicles to improve threat detection and avoid accidents when seconds matter most. Links: https://www.verizon.com/about/news/verizon-nissan-ccta-collaborate https://www.verizon.com/about/news/verizon-honda-test-5g-connected-autonomous-vehicles
Plus AI	**Wiley Deck** VP Government Affairs 20401 Stevens Creek Boulevard Cupertino, CA Email: wiley.deck@plus.ai Website: www.plus.ai or follow us on LinkedIn or YouTube	Plus is a global leader in autonomous driving technology for long-haul trucking, headquartered in Silicon Valley. Plus is developing high-performance full-stack Level 4 autonomous driving technology to enable driverless trucks. Plus's first commercial product, PlusDrive, is a driver-in solution that supports drivers to make long-haul trucking safer, more efficient, more comfortable, and more sustainable. PlusDrive is already being delivered to world-class customers including fleets and truck manufacturers.
Robotic Research, LLC	**Don Lefeve** Head of Commercial Business Development and Corporate Affairs 22601 Gateway Center Drive Clarksburg, MD 20871 Email: dlefeve@roboticresearch.com Website: https://www.roboticresearch.com/	Robotic Research is a global technology company specializing in autonomy and platooning solutions for commercial and defense customers. Founded in 2002, the Company has been a trusted technology partner to the public and private sector for nearly twenty years. From people to platforms, at home or overseas, Robotic Research is driven to make the way you move smarter, safer, and more efficient.