

Maryland Connected & Automated Vehicles Working Group

Thursday, December 7, 2023

TIME: Demonstrations 10:00 am – 1:00pm; Meeting 1:30pm – 4:00pm

In Person: Johns Hopkins Applied Physics Laboratory, 11100 Johns Hopkins Rd, Laurel, MD 20723

If you plan to attend this in-person meeting, then you must register at this link.

<https://forms.office.com/g/u2eHcdgcXb>

ALL must register to track for max capacity in the facility. Confirmation will be emailed within a day or two of your registration and is on first-come basis with allowances for inclusion of as many organizations as possible.

AGENDA	
10:00 am	Demonstrations / Showcase Tables / Networking <ul style="list-style-type: none">• May Mobility AV Demo Rides – Level 4 Toyota Sienna with autonomous driving kit; FMVSS compliant and drive by wire solution. Sign up for a time slot to get a VIP ride at https://calendly.com/maymobility/mdcavdemorides• University of Maryland SAE Level 4 Vehicle for CAV Research - Level 4 connected automated vehicle for testing and CAV research with an automated driving system software is identical to Federal Highway Administration’s CARMA for enhancing capabilities and ensuring compatibility.• Johns Hopkins Applied Physics Lab & Perrone Robotics – AV “Olli” shuttle for CAV Research and the Perrone AV TONY package.• P3Mobility• DEVCOM ARL Robotics Research Collaboration Campus (R2C2)
1:30 pm	Welcome & Opening Remarks <ul style="list-style-type: none">• <i>Administrator Chrissy Nizer, Maryland Department of Transportation Motor Vehicle Administration (MDOT MVA), Chair</i>• <i>Director Bart Paulhamus, Intelligent Systems Center, Johns Hopkins Applied Physics Laboratory</i>• <i>Executive Director Jim Bellingham, Johns Hopkins Institute for Assured Autonomy</i>
1:45 pm	CAV: Recommendations for Local Jurisdictions & the Region <ul style="list-style-type: none">• <i>Eileen Singleton, Baltimore Metropolitan Council</i>
2:00 pm	North Carolina DOT – Mobility Use Cases for AVs <ul style="list-style-type: none">• <i>Sarah Searcy, North Carolina Department of Transportation</i>
2:15 pm	Today’s Demonstrations: Details & Opportunities <ul style="list-style-type: none">• <i>David Carroll, May Mobility</i>• <i>Terry Yang, University of Maryland College Park</i>• <i>Ed Pavelka, Johns Hopkins Applied Physics Laboratory</i>
2:30 pm	Short Break – Showcase Tables / Networking

2:40 pm	<p>Panel Discussion: CAV Risk, Liability, & Insurance</p> <ul style="list-style-type: none"> • Greg Rodriguez, Stantec • Kelly Hernandez, Nationwide • Steve Miller, IOA Insurance Office of America <p>MODERATOR: Phil Dacey, MDOT Motor Vehicle Administration</p>
3:40 pm	<p>Lightning Round Updates – Companies filing Expression of Interest for MD CAV</p> <p>Expressions of Interest (EOI) are submitted from entities interested in research, testing and implementation of CAV in Maryland; process and an online form can be found under <i>Collaboration with Industry</i> at cav.mdot.maryland.gov Each company will provide a brief update to focus on active or pending plans on CAV in Maryland, including partnership opportunities.</p>
3:50 pm	<p>Announcements & Questions</p>
4:00 pm	<p>Adjourn</p> <ul style="list-style-type: none"> • Next meeting in April 2024

SPEAKERS:



David Carroll

david.carroll@maymobility.com
724.986.9150
maymobility.com

David Carroll is the Director of Business Development for May’s Business to Business and University sectors. He started his career in higher education in recruitment at Willamette University and other institutions for eight years prior to entering the technology and mobility sectors. He brings vast customer success, autonomy and mobility experience having spent time in senior positions at Lyft and Argo AI prior to joining May. David is highly focused on and passionate about outcomes, bringing pragmatic mobility

solutions to the general public and underserved populations to change the world for the better through transportation.



Kelly Hernandez

FCAS, MAAA, AVP, PL Telematics
Nationwide Insurance
Mobile 614-288-7162
Email: Kelly.hernandez@nationwide.com

Kelly Hernandez has been in the insurance industry for over 20 years in roles spanning Loss Reserving, Pricing, and most recently Product Development. She is a leader of telematics innovation specifically focused on Nationwide’s telematics programs SmartRide and SmartMiles. A few highlights of this work include introducing a proprietary telematics scoring model, the SmartRide mobile app program, a connected car program, and most recently, Nationwide’s pay-per-mile auto program, SmartMiles. Kelly is a Fellow of the Casualty Actuarial Society and a proud graduate of The Ohio State University.



Steve Miller, CIC, CRM

Managing Partner / Innovation Lead
Insurance of America
Cell 925-395-8902
Schedule a [Meeting](#)
Email: Steve.Miller@ioausa.com

Steve joined IOA in 2020 and quickly began building out our Innovation and Mobility Division. His client's industries include transportation, technology, and manufacturing. Under Steve's leadership, IOA's Innovation Group has received national acclaim. Risk & Insurance Magazine recognized Steve as a

Transportation and Technology Power Broker in 2021 and 2022, largely for his work in future mobility and autonomy.



Ed Pavelka

Asymmetric Operations Sector
Johns Hopkins University / Applied Physics Lab
11100 Johns Hopkins Road, Laurel, MD 20723-6099
Office: 240-592-1566
Cell: 240-302-9217
Email: Ed.Pavelka@jhuapl.edu

Ed Pavelka is a former developmental Test Pilot for the U.S. Marine Corps and works as a Senior Systems Engineer at the Johns Hopkins Applied Physics Laboratory. In his role with the Institute for Assured Autonomy Ed leads research and development efforts on two autonomous shuttles while engaging community and industry experts

on ways to advance autonomous vehicles in the air, on land, and at sea. Ed and his team are excited to partner with community, government, and industry on projects that will safely increase mobility options, advance technology, and provide critical policy advice.



Greg Rodriguez

Mobility Policy Principal
Stantec
1299 Pennsylvania Avenue, NW, Suite 405, Washington D.C. 20004
Email: Greg.Rodriguez@stantec.com

Greg is a nationally recognized subject matter expert for policy, regulatory, and legal issues related to transportation and innovation. He uses his unique legal, regulatory, and policy experience to assist clients with the development of policies and operational frameworks focused on the safe and effective

deployment of transportation technologies into communities across the country, including demand-responsive mobility, automated and connected vehicles, dockless micromobility, unmanned drones (both aerial and ground), and zero-emission vehicles. His services to clients include the completion of comprehensive policy and regulatory analysis to identify barriers to the deployment of technology-focused solutions and recommended frameworks focused on the incorporation of flexible and data driven governance structures. His approach focuses on collaboration, education, and facilitation to align interests and support the development of implementable strategies to support the evolution of the transportation system beyond the status quo. He is also a co-founder of the Mobility Podcast.



Sarah E Searcy

Senior Advisor for Innovation
Integrated Mobility Division
North Carolina Department of Transportation
Email: sesearcy1@ncdot.gov
Phone: (919) 707-4694

Sarah Searcy is an applied research professional and program manager with over eleven years of experience serving North Carolina to advance safe, equitable, and innovative multimodal transportation throughout the state. As the Senior Advisor for Innovation in the North Carolina Department of Transportation (NCDOT)'s Integrated Mobility Division, she directs projects and programs that improve shared mobility options and promote transportation systems that work for everyone. Sarah manages the Connected Autonomous Shuttle Supporting Innovation (CASSI) program for NCDOT to pilot connected and automated vehicles (CAV) in partnership with communities across the state. Prior to joining NCDOT in 2021, Sarah was with the Institute for Transportation Research and Education (ITRE) at NC State University for over eight years, most recently as the Bicycle and Pedestrian Program Manager. Sarah is a Fulbright award recipient and two-time East Carolina University alumna with a bachelor's degree in Art and Anthropology and a master's degree in Sociology.



Eileen Singleton

Principal Transportation Engineer
Baltimore Metropolitan Council
Email: esingleton@baltometro.org
[linkedin.com/in/eileen-singleton-a091b519](https://www.linkedin.com/in/eileen-singleton-a091b519)

Eileen Singleton, Principal Transportation Engineer, joined the Baltimore Metropolitan Council in 1998. Her work supports projects and committees that enhance the safety, security, reliability, efficiency, and equity of the region's transportation network through the use of transportation system management and operations (TSMO) strategies and the congestion management process. Eileen is a member of the TRB Regional TSMO Committee. She is a graduate of the Operations Academy and the Maryland Climate Leadership Academy. Eileen is a registered Professional Engineer in Maryland.



Xianfeng (Terry) Yang

Assistant Professor and Director of the Maryland-Transportation Research & Artificial Intelligence Lab (M-TRAIL)
University of Maryland
1173 Glenn Martin Hall, 4298 Campus Dr., College Park, MD 20742
Office: 301-405-2881
Email: xyang@gmail.com
[linkedin.com/in/xianfeng-terry-yang-5043243a](https://www.linkedin.com/in/xianfeng-terry-yang-5043243a)

Dr. Yang is an Assistant Professor in Transportation Engineering at the University of Maryland, College Park (UMD). He directs the Maryland Transportation Research and Artificial Intelligence Laboratory (M-TRAIL). Before joining UMD, he was an Assistant Professor at the University of Utah. His current research mainly focuses on CAV, artificial intelligence (AI) for transportation, and traffic safety. During the past six years, he has been leading over 30 projects, as PI or Co-PI, and the majority of those are funded by the US Department of Transportation (USDOT), Federal Highway Administration (FHWA), Department of Energy (DOE), National Science Foundation (NSF), Maryland Department of Transportation State Highway Administration (MDOT SHA), and Utah Department of Transportation (UDOT). He is an active member of two TRB committees (ACP 25 and AMR 20) and the secretary of the ASCE AI for Transportation committee.

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

Company	Contact	Brief Description
<p>DEVCOM ARL Robotics Research Collaboration Campus (R2C2)</p>  <p>https://arl.devcom.army.mil/r2c2/r2c2-research/</p>	<p>Jeffrey R. Westrich Associate for Research and Experimentation Science of Intelligent Systems Division</p> <p>jeffrey.r.westrich.civ@army.mil</p> <p>7237 Graces Quarters Road Middle River, MD 21220</p>	<p>Opened in late 2020, the Army Research Laboratory's Robotics Research Collaboration Campus (R2C2) is a 500-acre site in eastern Baltimore County that is designed to bring together researchers from government, industry, and academia to advance autonomous system research. Here, the Army has invested about \$16 Million into facilities, instrumentation, and equipment for the site. The Army Research Laboratory invites interested parties to form collaborations with Army researchers to create the next generation of autonomous systems.</p>
<p>P3Mobility</p>  <p>https://p3mobility.com/</p>	<p>Roger Brook Partnerships and Growth Officer</p> <p>roger.brook@p3mobility.com</p> <p>330 E Liberty Street Ann Arbor, Michigan 48104</p>	<p>P3Mobility is interested in partnering with state and local stakeholders in Maryland to deliver V2X technology solutions, including revenue-generation capabilities, that are standards-based and leverage 5.9GHz, high-bandwidth WiFi, and Cellular spectrum to future-proof interoperability, scalability, and financial sustainability. We are interested in supporting a project to (i) demonstrate the safety benefits of connecting autonomous freight or delivery trucks with V2X capabilities, including leveraging adjacent WiFi spectrum and edge computing, (ii) to demonstrate potential revenue generation from commercial freight traffic signal priority subscriptions and/or from configurable Road User Charges to help fund installing and operating V2X infrastructure, and (iii) to demonstrate how V2X protects data privacy in order to boost public trust around this technology.</p>
<p>TriHydro</p>  <p>www.trihydro.com</p>	<p>Shane Zumpf Senior Vice President</p> <p>szumpf@trihydro.com</p> <p>Direct (307) 745-7474 Mobile (307) 760-2199 1252 Commerce Drive Laramie, WY 82070</p>	<p>Since 2015 and one of the first connected vehicle (CV) pilot projects in Wyoming, Trihydro has been actively contributing to developing and deploying CVs, providing technical support and solutions that help DOTs achieve their CV goals and improve safety and mobility. Through Situation Data Exchange, we help DOTs to create and deliver travel information messages and WZDx feed to areas beyond RSUs deployment. Trihydro also has built event streaming platforms for several DOTs. We are happy for the chance to introduce our work to Maryland DOT.</p>

Questions?

Email: CAVMaryland@mdot.maryland.gov