2025 Autonomous Trucking Conference:

AUTONOMOUS TRUCKING IN THE NORTHERN PLAINS AGENDA

With support from the Federal Motor Carrier Safety Administration, the Upper Plains Transportation Institute will host its 2025 conference on autonomous trucks at the Alerus Center in Grand Forks, North Dakota on September 15 and 16. The conference will provide a forum for autonomous truck companies; tech entrepreneurs; motor carriers; safety enforcement personnel; the agricultural, energy, and manufacturing industries; state and local governments; and community leaders to discuss the evolution of autonomous trucking in North Dakota and the northern plains. The conference will start at 1 p.m. on September 15 and conclude by 3 p.m. on September 16. A reception and networking opportunity will follow the program on September 15. Registration is free, and breakfast and lunch will be provided on September 16. The sessions will cover a range of timely topics including:

SEPTEMBER 15, 2025

1:00 p.m. Opening Remarks

1:15 p.m. How Do Autonomous Trucks Work?

- Alex Rudin, MITRE
- Gary McCarthy, Aurora Tech

In this session, autonomous vehicle experts will provide an overview of autonomous trucking technology including sensors, algorithms, fault monitors, and remote operations. This conversation will separate autonomous trucking myths from reality and provide an introduction to the technology for all audiences. This session will be paired with an autonomous vehicle exhibit so that participants can observe the systems up close.

2:00 p.m. Developments in Autonomous Trucking in the United States

- Richard Bishop, Bishop Consulting

Discussants

- Gary McCarthy, Aurora Tech
- Kevin Siegel, Kodiak Robotics
- Bart Teeter, Bot Auto

Autonomous trucking is growing and spreading across the southern and eastern United States. This dynamic industry is changing almost daily, with new users, customers, and routes coming online. While growth trends are apparent, many uncertainties remain. Different business models are being followed within the industry and the roles of original equipment manufacturers are in various stages of development. Additionally, autonomous truck developers and operators are faced with a variety of state policies and regulations and, up until now, the federal government's roles have not been formative. This panel of experts and industry leaders will explore key developments and trends in autonomous trucking from a variety of perspectives: autonomous truck developers and tech firms; original equipment manufacturers; commercial motor carriers; and government.

3:00 p.m. Break

3:15 p.m. State Perspectives on Autonomous Trucking

- Amanda Abruzzo, Arizona DOT
- Eric Belford, Montana DOT
- Michael Kisse, North Dakota DOT
- Cory Johnson, Minnesota DOT

In the absence of specific federal regulations, each state is developing its own policies, creating variations and uncertainties for the trucking industry. This session will delve into the roles and views of states in facilitating and overseeing autonomous truck services. A focus will be on creating a business and regulatory framework for success while assuring the public through a level of transparency. A panel of State Department of Transportation leaders and technical specialists will describe current and planned approaches to autonomous trucking. Areas of difference and consensus will be highlighted.

4:15 p.m. Challenges to Widespread and Year-Round Autonomous Truck Operations in Northern Regions

- Justin Johnson, PLUM Catalyst
- Eric Belford, Montana DOT

Many challenges remain before autonomous trucking can effectively penetrate rural areas in northern regions, which will require year-round operations over two-lane rural roads. These challenges include (1) operating and remotely monitoring autonomous trucks that must travel on two-lane rural roads and under extreme weather conditions; (2) the impacts of extreme cold on sensors and ADSs; (3) the implications of extreme winter conditions for safety inspections; and (4) change detection of operational conditions and appropriate responses. This session will highlight these and other challenges, existing and potential solutions, and ongoing research questions that will support expansion of autonomous trucking into rural and northern regions.

5:30 p.m. Networking Reception and Poster Displays

SEPTEMBER 16, 2025

7:00 a.m. Networking Breakfast (Provided)

8:00 a.m. Enhanced Inspection Procedures for Autonomous Trucks

- John Sova, Commercial Vehicle Safety Alliance
- Bart Teeter, Bot Auto

Inspection protocols are being finalized for autonomous trucks that will allow these vehicles to move efficiently between origin and estimation while providing maximum safety assurances. In this session, a panel of safety experts will describe the forthcoming North American safety inspection procedures and protocols, highlight success stories from regional pilots, and describe a vision for a consistent approach that will allow autonomous trucks to operate seamlessly over the national highway network.

9:00 a.m. Interactions Between Autonomous Trucks and First Responders

- Gary McCarthy, Aurora Tech
- Bart Teeter, Bot Auto

While autonomous trucks receive enhanced safety inspections at origin and destination, safety enforcement personnel may still need to interact with these vehicles enroute when responding to an emergency, issuing a citation, or in response to an identified vehicle issue. Moreover, recovery plans and procedures are necessary in situations where autonomous vehicles fail in a safe mode and must be retrieved along the roadside or other remote location. This panel of autonomous truck developers and safety experts will discuss the industry's first-responder plans and procedures and trainings available for first responders.

10:00 a.m. Break

10:15 a.m. Insurance and Liability for AVs

- Katelyn Magney-Miller, Partners for Automated Vehicle Education
- Ben Lewis, Simulytic

Autonomous trucks will be deployed across a range of business models, applications, and partnerships with different risk structures. Nonetheless, without a driver in the vehicle, traditional expectations for liability and insurance will need to change to enable this new driving paradigm. This discussion will cover current leading knowledge and industry practices regarding insurance and liability for autonomous vehicles.

10:45 a.m. Applications of Autonomous Trucks in Agriculture, Energy, and Rural Industries

- Maynard Factor, Kratos
- Kevin Siegel, Kodiak Robotics

Autonomous trucks have widespread applications including agriculture, mining, energy, logging, and yard operations, with new applications emerging regularly. As the technology continues to develop, autonomous trucking companies and their partners are identifying new applications that can benefit from driverless operations. This panel will cover a range of these current and potential applications, considerations for integration, and opportunities for growth or expansion in these domains.

12:00 p.m. Lunch (Provided)

1:00 p.m. Engagement, Education, and Workforce Development

- Katelyn Magney-Miller, Partners for Automated Vehicle Education
- Justin Johnson, PLUM Catalyst

While much of the development of autonomous trucks focuses on the vehicle itself, there are many other stakeholders involved in the process of their operation and deployment including policymakers, technology integrators, emergency responders, and the workforce. In order to effectively deploy autonomous trucks, all of these stakeholders must provide input into the deployment process and receive education on the necessary skills and information. This session will offer perspectives on engaging with stakeholders across the autonomous vehicle landscape in order to inform policymakers, educate the public, and develop a technical workforce.

2:15 p.m. Projecting the Next Decade of Autonomous Trucking

- Gary McCarthy, Aurora Tech
- Bart Teeter, Bot Auto
- Kevin Siegel, Kodiak Robotics
- Maynard Factor, Kratos

Autonomous trucking has changed rapidly over the past decade and is reaching a critical inflection point in 2025, where the first companies are beginning commercial driverless operations on public highways. In the next decade, companies will focus on scale and expansion, while continuing to develop their driving systems to support these goals. This discussion with experts and industry leaders will provide a forward-looking view at autonomous trucking, including the expected growth in the industry, and what steps new and interested stakeholders can take to prepare themselves for that growth. The session would feature a roundtable discussion including all AV developers present at the conference.

3:00 p.m. Q & A

SPEAKER BIOS

Amanda Abruzzo is the stakeholder relations manager with the Arizona Department of Transportation Motor Vehicle Division (ADOT/MVD). During her three years with ADOT/MVD, she has managed its autonomous vehicle (AV) program and led the state's Connected and Automated Vehicle team. Amanda also sits on various AV committees—including the American Association of Motor Vehicle Administrators Automated Vehicle Subcommittee—coordinates Arizona's Blue Envelope initiative, and collaborates with internal and external stakeholders on process improvement and overall communication. Amanda is passionate about collaborating to drive positive systemic change, supporting successful outcomes, and helping others strive to reach their full potential through positive leadership.

Amanda holds a master's degree in forensic psychology from Argosy University, a bachelor's degree in justice studies, and a certificate in public management from Arizona State University. She has more than 10 years of experience working in executive leadership positions in both the private and public sectors and spent seven years working as a part-time therapist at a behavioral health crisis hospital.

Eric Belford is administrator of the Montana Department of Transportation Motor Carrier Services Division. Eric retired as an enforcement major in 2018 after a 29-year career in law enforcement, including 22 years in commercial motor vehicle enforcement. He became the Commercial Vehicle Operations bureau chief in 2018, a position he held until October 2024 when he was promoted to administrator for the Motor Carrier Services Division. He is the current president of the National Conference of State Transportation Specialists and vice-chair of the International Registration Plan Board of Directors. Eric spent nine years on the International Fuel Tax Association (IFTA) Law Enforcement Committee and served as the committee chair.

Richard Bishop, principal at Bishop Consulting, has more than 30 years of experience in the domain of intelligent, connected, and automated vehicles, including automated cars, trucks, and robotaxis, and how they interact with our transportation system and society. He provides strategic consulting to automotive manufacturers, suppliers, and tech firms, as well as advising federal and state government agencies in the United States and abroad. Richard led Team Lux in the DARPA Urban Challenge and since then has "surfed the wave," working with a wide array of automated driving system developers. He also publishes articles regularly on Forbes.com, addressing the technology and commercial factors underpinning autonomous driving. Prior to establishing Bishop Consulting in 1997, Richard was program manager for vehicle-highway automation at the U.S. Department of Transportation Federal Highway Administration.

Maynard Factor is vice president of business development for Kratos Defense. He leads global sales, marketing, and new business development while also guiding long-term strategic planning, product development, and internal research and development initiatives. With deep expertise in driverless vehicles, ground robotics, and unmanned systems, Maynard has played a key role in advancing Kratos' autonomous vehicle (AV) efforts across military and commercial markets. He holds a B.S. in electrical engineering from the University of Florida and an MBA from the University of West Florida. from the University of Minnesota, and is a licensed professional engineer in Minnesota.

Cory Johnson is the statewide intelligent transportation systems (ITS) program engineer for the Minnesota Department of Transportation (MnDOT) Office of Connected and Autonomous Vehicles (CAV-X), a position he has held since 2010. He manages the engineering group that develops, tests, and deploys new and innovative CAV and ITS systems across the state of Minnesota. He is responsible for delivering both demonstration and full-scale operational projects that use all types of different technologies to improve the transportation system user experience.

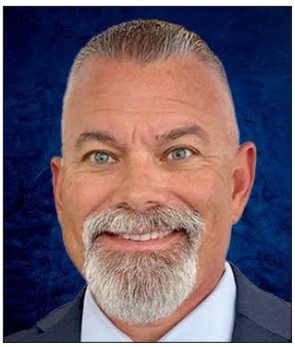
Cory has worked for MnDOT for more than 30 years in several positions, including state research director managing all aspects of the MnDOT research and implementation program as supported by MnDOT, county, and city leadership. Prior to that, Cory held engineering positions in Metro Water Resources, Metro Maintenance, and MnDOT's first Traffic Management Center. He earned a bachelor's degree with distinction from the University of Minnesota, and is a licensed professional engineer in Minnesota.

Mike Kisse is the assistant division engineer for the North Dakota Department of Transportation (NDDOT) Maintenance Division. He holds a bachelor's degree in civil engineering from the South Dakota School of Mines and Technology and is a registered professional engineer in North Dakota. Mike has been with NDDOT for 31 years.

Benjamin Lewis is vice president of business development at Simulytic (simulytic.com), an insurtech venture that leverages simulation technology and cutting-edge analytics to quantify the risk of autonomous vehicle (AV) deployments for insurers, reinsurers, and others in the property-casualty insurance industry. Before joining Simulytic, Ben served as vice president and general manager of Edge Case Risk Management at Edge Case, which offers safety engineering solutions for companies developing and fielding AV and embedded software systems. While there, he was similarly focused on breakthrough innovation centered on the risks of AV tech. Ben built a foundation of experience in insurance across multiple roles at Liberty Mutual Insurance, where he launched the company into the AV space and managed some of Liberty's largest and most strategic client relationships. Ben is a Chartered Property Casualty Underwriter (CPCU) and holds degrees from Rensselaer Polytechnic Institute and the F.W. Olin School at Babson College.

Katelyn Magney-Miller is the communications director for Partners for Automated Vehicle Education (PAVE), a coalition of industry, nonprofit, and academic institutions working to educate the public about automated vehicles. In her role, Katelyn leads the development of communications and media strategies for PAVE's public education and outreach programs. She also serves on the board of directors and manages marketing for Women in Automotive Technology (WAT), a diverse group of female subject-matter experts who are passionate about driving advances in the automotive and new mobility industries.

Before joining PAVE, Katelyn oversaw marketing and communications at VSI Labs, a research firm focused on advanced driver-assistance systems (ADAS) and automated driving technologies. She holds a bachelor's degree in communications from the University of Wisconsin–Madison and has more than 10 years of communications experience in the healthcare, finance, and automotive industries.



Gary L. McCarthy is the head of first responder policy at Aurora Tech, a company dedicated to the development of next-generation self-driving technology. He brings more than 25 years of experience in law enforcement to his current role. He transitioned into the AV field in 2020 and joined Aurora in 2021.

Before joining Aurora, Gary was employed by the State of Arizona, beginning as a police officer in 1994 and retiring as bureau chief in 2020. A significant portion of his professional career was dedicated to traffic safety, encompassing the investigation of serious and fatal collisions and instructing on DUI and DRE/HGN protocols. He is a distinguished alumnus of Northwestern School of Police Staff and Command.

Alex Rudin is the group lead for autonomy policy and strategy at MITRE, where he focuses on autonomy assurance, test and evaluation, and deployment, particularly in the on-road automated driving domain. He has extensive experience deploying autonomous vehicle services from his prior work as a field engineer at May Mobility. Alex currently serves as the vice chair of the Verification and Validation Task Force under SAE's On-Road Automated Driving Committee.

Kevin Siegel is head of business development and partnerships at Kodiak Robotics. He joined Kodiak in 2021 and has played a key role in growing the company's commercial partnerships with private fleets and national freight carriers. Prior to joining Kodiak, Kevin worked as a freight broker for a decade and gained experience in logistics and trucking operations. He earned a bachelor of science degree in finance at Ohio State University's Fisher School of Business.

John Sova joined the Commercial Vehicle Safety Alliance (CVSA) in January 2023 after 21 years of law enforcement service with the North Dakota Highway Patrol. Before joining CVSA, he served in the Highway Patrol's Motor Carrier Operations Division for 16 years, with the last five years as Motor Carrier Safety Assistance Program (MCSAP) coordinator. John held CVSA inspector certifications in all roadside and hazardous material courses and FMCSA safety investigator certification. He was an associate staff instructor for the Federal Motor Carrier Safety Administration's National Training Center in roadside inspection, part A and part B, and passenger carrier vehicle inspection. John also served as the CVSA Vehicle Committee chair, CVSA Automated Driving System Workgroup vice-chair, and CVSA Level VIII Electronic Inspection ad hoc chair. John is the CVSA staff liaison for the Enforcement & Industry Modernization Committee, where he continues to work on the development of the CVSA Enhanced Inspection Program for autonomous vehicles and the Level VIII Electronic Inspection.

Bart Teeter is director of fleet and operational safety at Bot Auto in Houston, TX. Before joining Bot Auto, he was a captain on the Texas Highway Patrol, where he specialized in commercial vehicle enforcement and autonomous vehicle integration. Bart contributes to industry discussions through his participation in the Autonomous Vehicle Industry Association (AVIA) First Responder Advisory Board, and has also served in leadership roles with the Texas Connected and Automated Vehicle Task Force and the Commercial Vehicle Safety Alliance.

Bart's background includes 23 years of service as a cryptologic linguist in the U.S. Army and Air Force Reserve, with deployments to South Korea and Iraq. This experience adds a unique dimension to his understanding of complex operational environments.