

The lowa Advisory Council on Automated Transportation is intended to increase roadway safety, personal mobility, and freight movement within the state of lowa by advancing highly automated vehicle technologies. The Council provides guidance, recommendations, and strategic oversight of automated transportation activities in the state. The structure of the ATC Press Clippings is done to align with the subcommittees and working groups that exist for the Council while aiming to keep the Council and other interested parties informed. Learn more at iowadrivingav.org/

Articles and upcoming events July 8, 2024

Infrastructure Readiness

Ohio opens SmartLane on Interstate 275 in Cincinnati - Lane Line

The Ohio DOT has opened the first SmartLane on westbound Interstate 275 in Cincinnati, designed to alleviate congestion during peak hours. This new lane allows vehicles to use the inside shoulder as a fourth lane during morning rush hour. The lane is part of a larger \$22.3 million project aimed at reducing traffic and improving safety.

Getting ready for AVs? 93% of US municipalities say yes - ITS International

A study reveals that 93% of U.S. municipalities believe they need to prepare for AVs within five years. The research highlights a keen interest in using artificial intelligence (AI) to prioritize road safety, with 52% of city tech leaders supporting its use. The survey underscores the ongoing need for collaboration among city leaders, manufacturers, and safety advocates to navigate the transition to advanced transportation systems while addressing the rise in road fatalities.

Port of Bilbao and Kapsch announce launch of connected vehicles project – Traffic Technology Today

The Port of Bilbao in Spain, in collaboration with Kapsch TrafficCom, has launched a new CV project aimed at enhancing road safety and traffic management through real-time data collection. The project includes the strategic placement of three new roadside units (RSUs) and one virtual RSE within the port to facility communication between vehicles and infrastructure. The integration with the existing <u>A8 highway</u> project allows for improved traffic and safety within the port area.

Smart intersections may be the next technology revolution. See how Utah will implement them. – *The Salt Lake Tribune*

Utah is set to implement technology that will upgrade intersections with sensors to communicate with vehicles, providing real-time data on traffic, weather, and road conditions, thereby improving safety and efficiency. The initiative includes signal prioritization for buses, which is expected to significantly speed up public transit commutes. Snowplows will have V2X technology, which allows for operators to clear roads faster and give drivers warnings about plow zones.

Robotaxi Mania Upstages Autonomous Bus Progress – Autoweek

Alexander Dennis is set to build three Enviro100AEV autonomous electric buses for the Cambridge Connector project, which aims to deliver autonomous bus services in the city. The project will see these buses enter service in 2025 after a period of testing and training. This initiative is a significant step towards enhancing operational efficiency and adding flexibility to transport networks with autonomous technology.

Policy & Legislation

<u>Autonomous car rules advancing faster than the vehicles themselves: UN</u> – *Tech Xplore*

The development of AV technology is being outpaced by the advancement of international regulations, with the United Nations expecting rules for their use to be ready by mid-2026. Safety concerns and high development costs have slowed the progress of fully autonomous cars, which are still years away from widespread use.

<u>Automakers ask NHTSA to scrap new automatic emergency braking rule</u> – *Autoblog*

Major automakers have requested that NHTSA reconsider a new rule that mandates advanced automatic emergency braking systems in new cars and trucks by 2029. The automakers argue that the rule's requirements are "practically impossible with available technology" and could lead to unexpected braking, increasing the risk of rear-end collisions.

A House committee is scrutinizing LiDAR and IoT cyber risks from China – Nextgov

The U.S. House of Representatives is investigating the cybersecurity risks associated with Chinese-made LiDAR and IoT components, which are prevalent in autonomous vehicles, drones, and other items. Concerns have been raised about these devices potentially facilitating intelligence-gathering and cyberattacks on critical U.S. infrastructure. The committee is considering legislative action to restrict the use of such technology.

<u>California, Delaware lawmakers advance limitations on autonomous trucks – Land Line</u>

California and Delaware lawmakers are moving forward with legislation that imposes limitations on autonomous trucks that would require a human safety operator to be physically present in AV with a gross weight over 10,001 pounds during operation, whether for testing, transporting goods, or passengers. This reflects concerns about the rapid development of autonomous technology and its implications for commercial vehicles and highway safety.

<u>Green light for autonomous vehicles: Beijing unveils biggest regulation in 5 years – Yahoo Finance</u>

Beijing's municipal government has introduced a comprehensive regulation to support the development of autonomous driving technology. The new regulation aims to foster technological breakthroughs in key areas such as sensors, semiconductors, and algorithms, and includes plans for a citywide safety monitoring platform for driverless cars. It also outlines provisions for data use and mapping services by autonomous vehicles.

Economic Development

Rimac launches autonomous rideshare service Verne – ADAS & Autonomous Vehicle International

Rimac has launched an autonomous rideshare service named Verne. This service is part of the broader trend towards autonomous, connected, electric, and shared

mobility, which is transforming transportation. The two-seater Verne vehicle was designed with a spacious interior more akin to a living room than a traditional car and does not have a steering wheel.

Waymo One is now open to everyone in San Francisco - Waymo

Waymo One has expanded its service in San Francisco, making it available to everyone in the city. The service has been scaling up over time, with tens of thousands of weekly trips, and now offers 24/7 autonomous rides across the city.

Toyota to unveil first 'full' self driving EV next year as it chases Tesla – Electrek

Toyota's move is seen as an effort to compete with Tesla and other EV technology leaders. The upcoming Bozhi 3X SUV will feature driver-assist features similar to Tesla's Full Self-Driving technology, including the ability to drive on roads, avoid obstacles, and park autonomously.

<u>Uber and Aurora announce 'long-term' driverless truck deal after successful pilot – The Verge</u>

Uber Freight and Aurora Innovation have partnered to launch Premier Autonomy, a program that provides early access to Aurora's driverless miles for Uber Freight carriers. This collaboration aims to improve utilization and business efficiency through autonomous technology, with driverless hauls expected to begin by the end of 2024.

<u>Autonomous Vehicles Can Make All Cars More Efficient</u> – *IEEE Spectrum*

AVs have the potential to drive more efficiently than humans, with research showing they could boost fuel efficiency by up to 30%. The NEXTCAR program's demonstration showcased how autonomous features and an eco-driving module can optimize energy usage without impeding traffic flow. This advancement not only improves the fuel economy of the AV itself but also influences the driving behavior of all cars in the vicinity.

Public Safety & Enforcement

<u>UX work underway to make alphabet soup, control icons easier on drivers</u>– *SAE International*

Efforts are underway to standardize the icons for Advanced Driver-Assistance Systems (ADAS) to improve user experience and ensure drivers understand various vehicle controls. A member of the SAE committee on controls and display standards, highlighted the confusion caused by the multitude of ADAS feature acronyms and control icons that differ between vehicles. The goal is to make these icons more recognizable across different manufacturers while maintaining brand identity.

Police pulled over a Waymo car for driving in the oncoming lane - The Verge

In Phoenix, a Waymo AV was pulled over by police after mistakenly driving into an oncoming traffic lane. The incident, which did not result in a ticket, was due to the vehicle encountering inconsistent construction signage and being temporarily unable to navigate back to the correct lane. This event highlights the learning opportunities for autonomous driving in real-world scenarios.

Most automated driving systems are lousy at making sure drivers pay attention, insurance group says – AP

An IIHS study has found that most automated driving systems are inadequate at ensuring drivers remain attentive and do not provide strong enough warnings to enforce proper behavior. Only one out of 14 systems tested received an "acceptable" rating, with the rest rated as "marginal" or "poor". The study aims to encourage automakers to adopt standards for driver monitoring and response, addressing a regulatory gap left by NHTSA.

Explainer: Driver-Assist Tech is Not an Autonomous Vehicle – Autonomous Vehicle Industry Association (AVIA)

AVIA urges journalists, policymakers, and industry representatives to clearly delineate between driver-assist technology and AVs. Driver-assist technology – including Tesla's Autopilot and features like lane-assist, parking aids, and automatic emergency braking – requires a licensed, attentive human driver. AVs meanwhile, perform the entire driving task. When consumers do not understand the difference, it increases safety risks and driver-assist misuse.

Research, Development, Testing & Evaluation

<u>Drivers Would Give Data for Life Saving: Risky Driving Persists</u> – *Auto Connected Car News*

A report from Arity indicates that 86% of U.S. drivers are willing to share their driving data if it could help prevent loss of life, highlighting the importance of data in enhancing road safety. Despite advancements in vehicle technology, risky driving behaviors like distracted driving have increased by 30% since 2019, and traffic fatalities have risen by 30% over the past decade.

<u>Final Report: Assessing Safety and Mobility Benefits of Autonomous Ride Sharing Services</u> – *University of Florida*

A study on autonomous ride-sharing services among older adults in Florida revealed a positive shift in their perceptions after using an autonomous shuttle. The research showed increases in the participants' intention to use, trust, and safety feelings towards the service, as well as recognizing its potential benefits and accessibility. However, the study also highlighted challenges and limitations, emphasizing the need for tailored educational strategies to prepare older adults for using autonomous shuttles as a mobility option.

<u>Germany Launches Fully Autonomous Self-Driving Taxi Transit Trial</u> – *IOT World Today*

Germany has initiated its first trial of Level 4 autonomous vehicles for public transport in the Rhine-Main region, specifically in the city of Darmstadt and the western part of the Offenbach district. The project is testing six NIO ES8 SUVs equipped with Mobileye Drive autonomous driving system on public roads, aiming to establish an autonomous on-demand shuttle service. Initially, these self-driving taxis will operate without passengers to collect data, with a safety monitor behind the wheel and remote supervision from a control center.

Google's self-driving cars might finally change my life – Fast Company

A journalist describes the experience in the Waymo One as compared to traditional ride-sharing services. The Waymo allowed for adequate time to buckle up as compared to usual human drivers. It also had thoughtful drop-off locations. The ride was smoother than other AVs experienced, but it was also more cautious, resulting in longer travel times. The unique routing reflects an emphasis on safety over speed.

<u>How drivers and cars understand each other</u> – *Tech Xplore*

A project, involving Fraunhofer and other partners, is developing AI functions for automation levels two to four by integrating sensors and language models to create vision language models. These models aim to enhance the convenience and safety of cars, providing context-sensitive interactions and ensuring drivers are aware of the vehicle's automation level.

Upcoming Events

<u>Virtual Reality Simulation to Evaluate Drivers' Mental Models of Advanced</u> Vehicle Technologies

Safety Research Using Simulation (SAFER-SIM), University of Iowa Tuesday, July 9 3:00 p.m.

Presenter:

Anuj Pradhan - University of Massachusetts-Amherst

Attention and Adaptation of Teen Drivers to Driving Automation Systems Safety Research Using Simulation (SAFER-SIM), University of Iowa Thursday, July 11 3:00 p.m.

Presenter:

Dr. Shannon Roberts – University of Massachusetts-Amherst

PAVE Virtual Panel – "Global Perspectives: How Legal Frameworks and Safety Standards are Shaping ADAS & AV Development Partners for Automated Vehicle Education (PAVE) Wednesday, July 24 10:00 a.m.

Presenters:

Giovanni Giancaspro – TomTom Stephanie Leonard – TomTom David Ward – Towards Zero Foundation and Global NCAP

<u>Identifying outcome measures to evaluate effectiveness of consumer education</u> and training for vehicle automation

Safety Research Using Simulation (SAFER-SIM), University of Iowa Thursday, July 30 3:00 p.m.

Presenter:

Anuj Pradhan – University of Massachusetts-Amherst