

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 <u>iowadrivingav.org/</u>

Articles and upcoming events October 28, 2024

### **Infrastructure Readiness**

INVESTING IN AMERICA: Biden-Harris Administration Announces More than \$96 Million in Advanced Technology Grants to Improve Safety and Reduce <u>Travel Times</u> – *FHWA Press Release* 

The Biden-Harris Administration has announced over \$96.5 million in grants for 20 projects across 16 states under the Advanced Transportation Technology and Innovation (ATTAIN) program. Projects include deploying smart traffic technology, integrating vehicle-to-everything communication, and using artificial intelligence for traffic management.

<u>New Technique Could Help Self-Driving Cars See Their Surroundings</u> <u>Better</u> – *NC State University News* 

Researchers at NC State University have developed a new technique called Multi-View Attentive Contextualization (MvACon) to improve how self-driving cars map their surroundings. This technique enhances the performance of AI programs, known as vision transformers, which use 2D images from multiple cameras to create 3D representations of the environment. <u>Paper</u>

<u>Modern V2X Tech Offers Info Truckers Still Like in Vintage CB</u> <u>Radios</u> – *Construction Equipment Guide* 

The article discusses the adoption of modern Vehicle-to-Everything technology, which allows vehicles to communicate with each other and with infrastructure to enhance safety and efficiency. This technology is compared to vintage CB radios, which truckers still value for crucial information.

<u>Study: Use technology to assist senior, disabled and low-income riders</u> – *The Bay Link* 

A new study highlights the use of standardized software for data sharing to improve transportation for seniors, disabled, and low-income riders. The Transactional Data Specification standardizes data exchange for demand-responsive transportation, enhancing coordination among service providers and making trip booking more efficient. Ongoing demonstration projects aim to improve paratransit services by automating multijurisdictional trip bookings.

Research & Discoveries (R&D): "Economic Impacts of Removing Transportation Barriers to Employment for Individuals with Disabilities Through AV Adoption" From National Disability Institute – Autonomous Vehicle Industry Association (AVIA)

A study by the National Disability Institute shows that AVs can significantly boost employment for people with disabilities by removing transportation barriers. This could create 4.4 million jobs and add \$867 billion to the U.S. GDP. AVs are also expected to improve personal safety, independence, and access to healthcare. <u>Report</u>

West Virginia Invests \$4.7M in Road Safety Tech Upgrade - Transport Topics

West Virginia is investing \$4.7 million to upgrade its Road Weather Information System (RWIS) to enhance road safety. The project aims to provide real-time alerts to drivers about dangerous roadway conditions, helping to reduce weather-related vehicle crashes. The RWIS technology will be installed in 40 roadside weather stations across the state, collecting data on weather and road conditions to inform the West Virginia DOT's Traffic Management Center.

# **Policy & Legislation**

US Department of Commerce Issues Proposed Rule Limiting Imports of Chinese and Russian Connected Vehicles and Equipment – JD Supra

The proposed rule by the U.S. Department of Commerce aims to restrict the import and sale of Vehicle Connectivity Systems and Automated Driving Systems if they are designed, manufactured, or supplied by entities from China or Russia. This measure is intended to address national security concerns by limiting the influence of these countries in critical technology sectors.

<u>Ontario proposes to allow driverless truck testing in the province</u> – *Insurance Portal* 

Ontario has proposed a 10-year pilot program to allow the testing of automated commercial motor vehicles over 4,500 kilograms on its roads. This initiative aims to evaluate the safety and efficiency of driverless trucks under specific conditions.

<u>Pennsylvania allows vehicles without drivers, but don't expect to see them any</u> <u>time soon</u> – *Pittsburgh Union Progress* 

Pennsylvania has issued guidelines allowing self-driving vehicles to operate without an emergency driver. However, these vehicles are not expected to be seen on local streets soon due to the technology's current inability to handle rapidly changing weather conditions. The guidelines include requirements for vehicle marking, data reporting, and immediate incident reporting.

<u>California governor signs into law rule on autonomous vehicle violations</u> – Land Line

Gov. Gavin Newsom has signed into law a bill to allow law enforcement to take action when an autonomous vehicle violates the vehicle code. The new rule is also sets clear guidelines for autonomous vehicle companies when their driverless vehicles get into a wreck or encounter first responders.

#### NHTSA to address automated driving systems, other research topics - Land Line

NHTSA is set to spend three days discussing research on various topics, including automated driving systems, cybersecurity, and impaired driving. This initiative aims to address the growing concerns and advancements in these areas, ensuring that safety and regulatory measures keep pace with technological developments.

How autonomous vehicles can be integrated with public transport systems for urban mobility – World Economic Forum

AVs can improve urban mobility by reducing costs, enhancing traffic safety, and providing mobility for non-drivers. However, replacing human-driven cars with AVs alone could worsen congestion. Integrating AVs with public transport is crucial for efficiency and better service in low-density areas. Effective regulation and planning are essential to avoid negative impacts like increased congestion.

# **Economic Development**

<u>Uber teases new gig opportunities for humans in a world of autonomous</u> <u>cars</u> – *MSN* 

Uber is exploring new opportunities for humans in a future dominated by autonomous cars. The company envisions roles such as remote vehicle operators, maintenance technicians, and customer service representatives to support its driverless fleet. This initiative aims to balance the integration of autonomous technology with the creation of new job opportunities.

<u>T-Mobile's self-driving car partnership gives a glimpse of a future with private 5G</u> <u>networks</u> – *Android Police* 

T-Mobile has partnered with Miller Electric Company to introduce autonomous shuttles in Jacksonville, Florida, using a private 5G network. These driverless vehicles will operate along a three-mile route, ensuring maximum safety and communication. The rollout is expected in 2025, with potential expansion to other areas in the future.

BMW to produce V2X vehicles in China from 2025 - China Daily

BMW will start mass-producing cars with Vehicle-to-Everything (V2X) technology in China in 2025. BMW is collaborating with Chinese research institutions and local governments, particularly in Shenyang, to advance V2X applications and autonomous driving tests.

<u>Serve Robotics debuts faster, larger delivery robots to be deployed in 2</u> <u>cities</u> – *Smart Cities Dive* 

Serve Robotics has launched its third-generation delivery robots in Los Angeles. These robots are faster, larger, and more efficient, with improved safety features. They can travel twice as far and carry 15% more cargo. Serve plans to produce around 2,000 robots in 2025, following a major deal with Uber Eats and partnerships with companies like Shake Shack. How Wayve's driverless cars will meet one of their biggest challenges yet – *MIT Technology Review* 

Wayve, a UK-based driverless car startup, is expanding its operations to the US. Wayve's technology relies on end-to-end learning, where a single large model learns all driving tasks simultaneously, rather than using separate models for different tasks. This approach has shown promise in adapting within the UK, and the company is confident it will handle the transition to US roads.

### **Public Safety & Enforcement**

Out with the Old (Automatic Emergency Braking), In with the New - AAA

New 2024 model vehicles equipped with AEB avoided 100% of forward collisions at speeds up to 35 mph, compared to only 51% for 2017-2018 models. This progress is attributed to advancements in sensors and software. AAA emphasizes that drivers should remain attentive and not rely solely on AEB systems. <u>Full report</u>

<u>US probes Tesla's Full Self-Driving software in 2.4 million cars after fatal</u> <u>crash</u> – *Reuters* 

NHTSA has initiated an investigation into approximately 2.4 million Tesla vehicles equipped with the Full Self-Driving (FSD) feature. This probe follows reports of collisions involving these vehicles while using the FSD system.

<u>Arizona Parents Are Sending Kids in Driverless Taxis Because They Don't Trust</u> <u>Humans</u> – *The Drive* 

In Arizona, some parents are opting to send their children to school in driverless Waymo taxis to avoid potentially unsafe interactions with human drivers. Despite Waymo's policy against unaccompanied minors, parents prefer the perceived safety of AVs over human-driven services like Uber or Lyft. This trend highlights concerns about safety and trust in human drivers.

<u>Video shows self-driving Waymo car nearly crash into oncoming traffic in</u> <u>Arizona</u> – *ABC* 7

A recent video shows a Waymo self-driving car hesitating as it turned onto a road with oncoming traffic, causing concern for the passengers. Waymo stated that the car maintained a safe distance from other vehicles and emphasized their commitment to rider safety.

Waze will alert drivers about school zones and pedestrian crossings - Lexington

The City of Lexington has announced that the Waze navigation app will now alert drivers about active school zones and pedestrian crossings. This initiative aims to enhance road safety by providing drivers with advanced notice.

#### **Research, Development, Testing & Evaluation**

<u>Assessing Pavement Markings for Automated Vehicle Readiness</u> – *Minnesota Transportation DOT (Research Final Report- Principal Investigator- Adam Pike, Texas A&M Transportation Institute)* 

The project investigates how different pavement marking configurations affect the ability of automated driving systems to track these markings and maintain lane position. It focuses on camera-based systems that rely on pavement markings for navigation.

<u>The Induced Demand Implications of Alternative Adoption Modalities of</u> <u>Automated Vehicles</u> – *TOMNET Transportation Center (Final Report - authors: Irfan Batur and Ram Pendyala)* 

The project explores the potential for increased travel, or induced demand, due to the convenience of AVs. It examines how different modes of AV adoption personal ownership versus mobility-on-demand services—affect the likelihood of making additional trips. The findings indicate that both adoption modalities lead to more trips, but private ownership has a greater impact on induced demand. To mitigate this, the study suggests focusing on reducing private ownership of AVs to avoid negative consequences such as increased traffic and environmental impact.

Working to safely bring automated driving to rural roads - University of Iowa

Researchers at the University of Iowa's Driving Safety Research Institute have spent over three years studying the challenges AVs face on rural roads. Their federally funded pilot program tested an highly-automated shuttle on a route in Iowa, encountering various conditions like gravel roads, inclement weather, and unmarked lanes. The research aims to improve the safety and reliability of AVs in rural areas, ultimately enhancing transportation options for rural residents.

<u>AV Readiness Increases After a Two-Year Decline, J.D. Power Finds</u> – *J.D. Power* 

The recent study by J.D. Power and MIT shows a slight increase in consumer confidence in self-driving vehicles, with the index rising by 2 points to 39 out of 100. Despite this, confidence remains low due to concerns about safety, data privacy, and hacking. Key findings include that 83% of consumers want more safety

statistics, 86% want the ability to take control if needed, 64% are worried about data security, and 80% want to know how data is protected. Additionally, 71% do not expect to use pay-per-ride insurance for robotaxi services, and parents of teens prefer vehicles with Active Driver Assistance Systems (ADAS). <u>White paper</u>

Digital Testing Ground Set to Speed up Rollout of Self-Driving Vehicles – IOT World Today

Mcity, a 32-acre testing facility at the University of Michigan, is expanding its capabilities with digital technology to accelerate the rollout of self-driving vehicles. In collaboration with MITRE, Mcity will use simulation tools and a digital twin of its test environment to validate AVs remotely. This approach allows for extensive, repeatable testing in a virtual setting before real-world deployment, enhancing safety and efficiency.

# **Upcoming Events**

Improving Road User Experience with Smart Roads ITS America November 7, 2024 1:00 p.m.

#### **Presenters:**

To be announced

Iowa Advisory Council on Automated Transportation Meeting Tuesday, October 29 from 10 am - 12 pm

# **Recent Events**

Public Safety & Enforcement Subcommittee Meeting Materials Wednesday, September 25

Economic Development & Infrastructure Readiness Joint Subcommittee Meeting Materials Friday, September 27 Policy & Legislation Subcommittee Meeting Materials Wednesday, October 2