

Autonomous and Connected Vehicles Transportation Policy Brief

An autonomous car is a vehicle capable of sensing its environment and operating without human involvement. The Society of Automotive Engineers (SAE) currently defines 6 levels of driving automation ranging from Level 0 (fully manual) to Level 5 (fully autonomous). These levels have been adopted by the U.S. Department of Transportation.

Connected vehicles combine advanced technology (advanced wireless communications, on-board computer processing, advanced vehicle-sensors, GPS navigation, smart infrastructure, and others) giving vehicles the ability to identify threats and hazards on the roadway and communicate this information over wireless networks to give drivers alerts and warnings.

FEDERAL Priorities

- Create a standards entity comprised of industry, technology, education and government partners to develop standards for interoperability and secure data communication.
- Develop standards for cybersecurity and regulate the data collected by autonomous vehicles preserve the privacy of vehicle owners and users (i.e., location data that can give away sensitive health related information)
- Adopt the standardized naming for advanced driver assistance technology created and updated by AAA, Consumer Reports, J.D. Power and the National Safety Council.
- Engage with all stakeholders to develop for adoption legislative policies for autonomous vehicles related to certification, licensing, training, and tort liability.
- Establish Federal Transit Administration policies and procedures that permit the use of Congestion Mitigation and Air Quality (CMAQ) funding to support connected and/or autonomous vehicle projects.

STATE Priorities

- Establish a source of grant funds to support local autonomous and connected vehicle projects.
- Support infrastructure improvements that support increased adoption and deployment of alternative fuel vehicles, including electric, compressed natural gas, and hydrogen fuel cell technologies.
- Utilize highway right-of-way assets to improve digital communications infrastructure, particularly in rural areas of Ohio and Michigan to close the broadband and cellular infrastructure gaps.
- Improve technology supporting transportation infrastructure across Ohio and Michigan including clear pavement markings and roadside communication units that support the deployment and testing of vehicle technologies.
- Ensure that, if states require a license to operate an automated vehicle, persons with disabilities cannot be excluded from getting a license based on their disability.

LOCAL Priorities

- Establish a network of Level 2 and DC Fast Charge stations to facilitate the broader deployment of all-electric and hybrid vehicles.
- Develop local policies for the operation of slow-moving autonomous vehicles in urban areas, prioritizing ease of movement for pedestrians and bicyclists.
- Support ongoing and future efforts in Ohio and Michigan to create a seamless transportation technology deployment strategy between states.