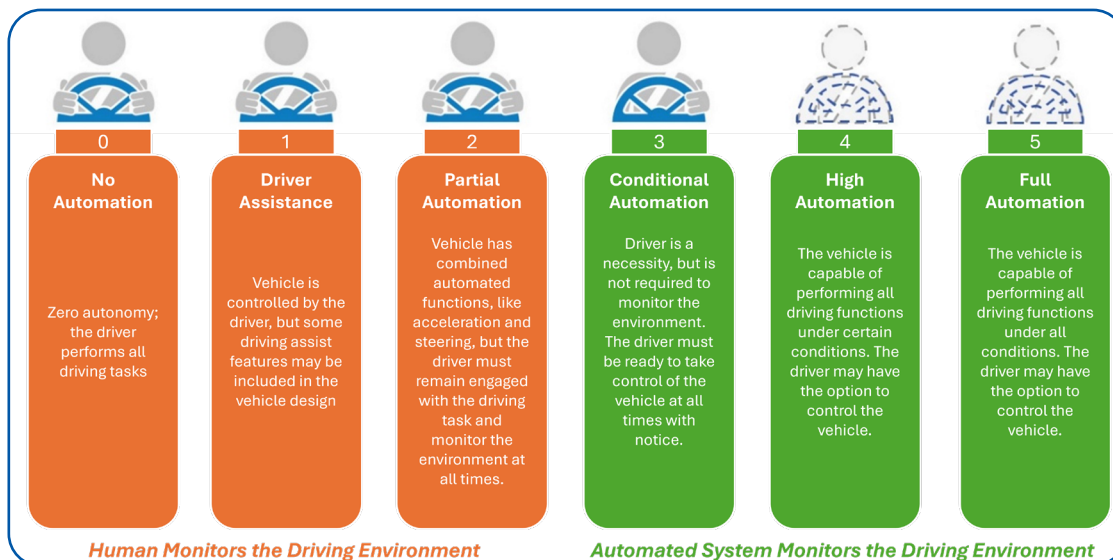


SECURING AUTONOMOUS VEHICLE LEADERSHIP

What is an Autonomous Vehicle (AV)?

An autonomous vehicle (AV) is a passenger car, truck, or delivery vehicle that is equipped with an automated driving system (ADS) that enables it to drive itself with varying degrees of human intervention. An AV relies on sensors, cameras, and artificial intelligence to perform driving tasks, including steering and braking, while monitoring and responding to the environment around it. As shown below, the Society of Automotive Engineers (SAE) classifies vehicle automation into six levels, ranging from no automation (level 0) to full automation (level 5). Levels 3, 4, and 5 are considered to be autonomous vehicles.

SAE Levels of Automation:



Source:
Society of Automotive
Engineers (SAE) and
National Highway
Traffic Safety
Administration

Benefits of Autonomous Vehicle Technologies:

- **Improve roadway safety for all road users.** Human behavior contributes to most crashes.¹ AVs do not drive impaired, get distracted, or speed excessively. They have the potential to mitigate the leading causes of roadway fatalities and injuries, including for pedestrians and cyclists.
- **Reduce congestion and pollution.** AVs can help reduce gridlock, traffic jams, and crashes, making travel more efficient and decreasing fuel use and greenhouse gas emissions.
- **Improve accessibility.** AVs can help fill existing gaps in transportation, particularly for seniors, individuals with disabilities, and those in communities without reliable access to public transit.
- **Create U.S. jobs.** According to a 2024 Chamber of Progress report, the AV industry could create between 114,000 and 455,000 jobs by 2039, depending on the modeling scenario. Data also show that 82% of current AV workers earn more than the median wage, and many of these jobs do not require a college degree.²
- **Cement U.S. leadership and advance innovation.** The U.S. must continue to lead in the development and deployment of autonomous vehicles and emerging mobility technologies. Doing so is critical for advancing automotive safety innovation and applied artificial intelligence.

¹ National Highway Traffic Safety Administration (NHTSA), "Critical Reasons for Crashes Investigated in the National Motor Vehicle Crash Causation Survey," February 2015, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812115>.

² Chamber of Progress, "Opportunity AV: How Many and What Types of Jobs Will Be Created by Autonomous Vehicles?" April 2024, <https://progresschamber.org/new-study-autonomous-vehicle-jobs-to-exceed-110k-in-u-s/>.

Risks of Federal Inaction:

- China is committed to winning the AV technology race. The success of the U.S. AV industry is an issue of both economic competitiveness and national security. We cannot become dependent on AV technologies manufactured in countries of concern, nor their supply chains.
- Without federal leadership on AVs, including a comprehensive federal regulatory framework, states have enacted conflicting and duplicative laws and regulations relating to vehicle equipment, testing and deployment protocols, data reporting, and first responder interaction and training.
- The patchwork of state requirements, coupled with the lack of regulatory certainty at the federal level, make it difficult for the industry to develop, test, and commercialize vehicles that can be operated across state lines, thereby limiting companies' ability to invest and scale. An AV that can legally operate in one state may be illegal in a neighboring state.

Policy Recommendations:

U.S. automakers and AV developers need an innovation-enabling framework that provides the regulatory certainty necessary to make long-term capital investments that will eventually make AVs broadly available to consumers. We urge Congress to pass a comprehensive federal AV framework this year. Such a framework should:

- Modernize regulations to create a path for the safe commercial deployment and sale of AVs while improving both safety and mobility.
- Provide critical federal leadership to regulate the testing and deployment of AV technologies.
 - » The framework must appropriately accommodate varying AV use cases, such as privately owned, fleet-operated, rideshare, and personal delivery vehicles.
 - » The federal law must provide a consistent, predictable, and durable federal approach by preempting state laws and regulations relating to vehicle design, construction, performance, equipment, and reporting.
- Incentivize states to modernize their motor vehicle and traffic laws to support personally owned ADS-equipped vehicles. Modernized laws would enable broader public access to this technology and ensure consumers can fully benefit from state regimes that recognize the ADS as the driver when engaged.
- Prohibit state motor vehicle licensing requirements from discriminating against individuals with disabilities with respect to the operation of level 4 and level 5 AVs.
- Create a national data repository to allow federal, state, and local regulators to monitor and share information about the safety records of AVs developers. Such data should include clear and objective requirements related to safety. This would also provide transparency to the public.
- Create a pilot program that allows AV developers to test and deploy at scale until the National Highway Traffic Safety Administration (NHTSA) finalizes the regulations necessary to fully implement the broader framework.
- Address, in an objective manner, current statutory and regulatory barriers stemming from "make inoperative" requirements for dual-use AVs, and clarify that manual controls and equipment intended only to support a human driver shall not be required for ADS-dedicated level 4 and level 5 vehicles.
- Direct NHTSA to publish a roadmap and expediently promulgate all necessary regulations.