

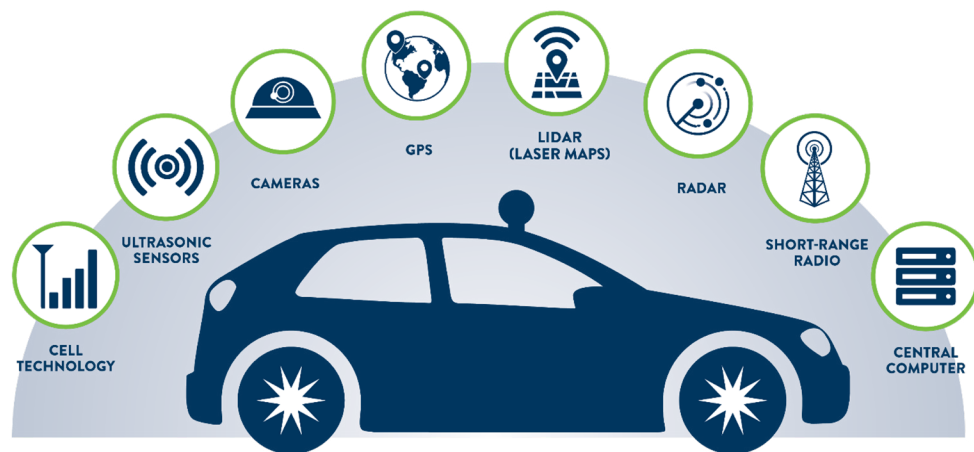
Automated Vehicles in Minnesota



WHAT ARE AUTOMATED VEHICLES?

Automated Vehicles (AVs): use technology to steer, accelerate and brake with little to no human input. Some vehicles still require a human to monitor the roadway, while other vehicles require no human intervention.

MnDOT supports the work of a broad coalition that includes representatives from government, private industry, advocacy groups, and the public—collaborating to plan and prepare for automated vehicles.



Levels of Automation



Levels 1 and 2 (warnings, braking, adaptive cruise control) are in use on Minnesota roads today. Higher levels (automated steering and self-driving vehicles) are being tested and deployed now, both in Minnesota and other states.

WHY IS AV TECH IMPORTANT TO MINNESOTA?

Automated Vehicles are the future of transportation. Vehicles with some level of automated technology are currently being driven on Minnesota roadways and highly automated vehicles are currently being tested in Minnesota and deployed in other states. These technologies have the potential to benefit Minnesotans in several ways.

Automated Vehicles have the potential to:

- Increase safety on our roads and highways
- Provide greater mobility, accessibility and equity by reducing transportation barriers
- Drive economic growth
- Place Minnesota at the forefront of innovation and technological advancement



Learn more about Minnesota CAV initiatives and future plans ➡

AV + Safety

In 2024 there were over 460 traffic fatalities in Minnesota, with human error playing a major role in many of them. AV technology has the potential to reduce the number of traffic deaths and play a significant role in reducing serious injuries in conjunction with traditional safety standards.

- AVs have the potential to **reduce crashes, deaths, and serious injuries** in conjunction with traditional safety standards.
- AV regulations and policies are currently **determined at a state and local level**.
- Minnesotans believe AVs have the potential to improve traffic safety if **appropriate regulations and safeguards** are implemented.
- Safety is, and will continue to be, a top priority for Minnesota AV partners when **planning and preparing** for a transportation future that relies on automated vehicle technology.

AV + Accessibility

Many Minnesotans have limited access to transportation which hinders their ability to access employment, healthcare and social gatherings, impacting their quality of life. AVs have the potential to increase access to transportation, especially for those with disabilities, are unable to drive themselves or live in rural communities. The State is working to maximize the potential benefits of AV technology for everyone.

- AV technology has the potential to ensure our transportation system **meets the needs of all people**.
- Meaningful **public and stakeholder engagement** is critical as we continue planning for the future of transportation.
- AV technology affects **all modes of transportation** regardless if you drive, use transit, walk, roll or bike.
- Minnesota partners are currently testing AV technology through **pilot programs across the state** to make sure AV technology works for all people and communities.

AV + Economy

As AV technology expands nationwide, Minnesota should not miss out on the related potential economic growth. An advancement in AV technology and usage is an investment in developing and improving our economy.

- AV progress may **advance economic opportunity** and bring economic investment to Minnesota.
- AV technology will **impact jobs across sectors** including transit, delivery, construction and freight. Minnesota is actively preparing for how jobs and training needs will change to ensure we have **a skilled and ready workforce**.
- Many Minnesota **businesses are active** in the AV industry, from tech start-ups to Fortune 500 companies in freight, manufacturing and engineering among others.

MOVING FORWARD

Minnesota has much to consider as AV technologies are adopted and the transportation sector is transformed. The following are action areas that need consideration:

-  **AV standards and guidance for...**
 - » Testing, technology, and performance
 - » Privacy and security
 - » Vehicle-to-everything (V2X) communication
 - » Location-based needs (construction zones, school zones, etc.)
-  **Role of state and local government in regulation**
-  **Safety verification of AV systems**
-  **Liability and insurance policies**
-  **AV infrastructure investments (smart technologies, pavement markings, etc.)**



STAY UP TO DATE

Sign up online for program updates and learn more about what AV partners are doing to plan and prepare. Contact the MnDOT's Connected and Automated Vehicles Office:

✉ CAV.DOT@state.mn.us

www.dot.state.mn.us/automated