

Destination CAV:

Connected and Automated Vehicles in Minnesota



WHAT ARE CONNECTED AND AUTOMATED VEHICLES?

You may be familiar with automated or “self-driving” vehicles, but connected vehicles aren’t as commonly understood. So, what’s the difference?

Connected vehicles

Connected vehicles use technology to either communicate with each other, connect with traffic signals, signs and other road items, or obtain data from cloud technology.

Automated vehicles

Automated vehicles 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.

Minnesota is anticipating a transportation future that includes connected and automated vehicles. Vehicles with some level of automated technology are currently being driven on Minnesota roadways and fully-automated vehicles will likely be available to purchase in the near future. Infrastructure allowing for connected vehicles such as fiber optic cable, sensor networks and smart traffic signals is currently being tested and in use.



WHY IS CAV IMPORTANT TO MINNESOTA?

Connected and automated vehicles are the future of transportation. These technologies can benefit people in Minnesota in several ways.

-  Increasing safety on our roads and highways
-  Providing greater mobility, accessibility and equity by reducing transportation barriers
-  Reducing traffic congestion and improving traffic flow
-  Improving public health and benefiting our environment
-  Driving economic growth
-  Placing Minnesota at the forefront of innovation and technological advancements

Minnesota is planning and preparing for CAV with a focus on maximizing these potential benefits and making sure CAV works for everyone.

-  MnDOT offered free driverless shuttle rides on Nicollet Mall in downtown Minneapolis during the Super Bowl events of 2018.

Credit: Dan Browning, Star Tribune

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WHAT IS MINNESOTA DOING TO PREPARE?

Destination CAV

"Destination CAV" is Minnesota's umbrella CAV program that includes work happening across the state. This work involves many partners across government, private industry, advocacy groups and academia, all collaborating to plan and prepare for CAV in Minnesota.

CAV Demonstrations

MnDOT and partners will continue testing real-world demonstrations in different locations and capacities across Minnesota. Demonstrations aim to:



Engage Minnesotans about the potential benefits and opportunities of this technology



Improve how automated vehicles drive and function in all weather conditions



Identify changes to infrastructure needed to safely operate automated vehicles on public roads

So far, Minnesota has tested fully automated shuttles in the downtowns of Minneapolis and Rochester and is working with partners across Minnesota to develop future demonstration projects.



 Pictured above is the Med City Mover: a CAV shuttle that operated for 12 months in downtown Rochester starting in late summer 2021.

HOW CAN YOU GET INVOLVED?

People across Minnesota play a significant role in shaping how Minnesota CAV partners implement CAV technology through project-level input and decision-making opportunities. Future public involvement opportunities include:



Surveys



Demonstrations



Industry events



And more!

Questions or comments

Please submit to CAVchallenge.DOT@state.mn.us

Want to be the first to hear about CAV news and involvement opportunities?

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