Connected and Automated Vehicle Technology
Communications and Outreach Strategy

from WisDOT CAV Strategic Work Plan 2021-2023

The advent of Connected and Automated Vehicle (CAV) technology brings many opportunities to public transportation, but perhaps the most important is outreach and communication. The strategy for quality public communication is broken down and organized into several areas:

Communication and Outreach - Three basic messaging objectives

- Provide all audiences with a basic understanding of CAV technology and its impact on our transportation system.
- Highlight the benefits of CAV technology and its potential to address crucial transportation challenges; from highway safety to meeting the transportation needs of non-drivers to addressing equity issues.
- Assure audiences that WisDOT understands the questions and concerns they have about CAVs and is working together with partners from academia, business, law enforcement, and all levels of government, to address them.

Communication and Outreach - Audiences

An "audience" is defined as groups of people whose attitudes, perceptions, and behavior WisDOT seeks to inform through various communications strategies.

Six primary audiences have been identified for communicating CAV technologies, planning, and implementation efforts. Many of these audiences will have similar communications needs, as well as unique needs based on their specific interests in CAV.

- **General audiences** – The residents of Wisconsin, whose understanding of and attitudes toward CAV will condition support for deployment of the technology.
- **Local government officials** – Leaders at the county, township and municipal levels with operational or decision-making responsibilities regarding transportation.
- **State and federal policy makers** – Legislators, the staff of regulatory agencies, and others responsible for public policy.
- **Law enforcement and first responders** – Law enforcement and first responders will have concerns specific to roadway safety, on-site crash scene recovery, and expediting post-crash medical transit.
- **Academic and industry** – Businesses and institutions that are researching and developing technology that could potentially be deployed in Wisconsin.
- **Business users** – Businesses that may be interested in adopting CAV technology in Wisconsin.

Messaging – General

- *Safety* – CAV technology can anticipate and prevent driver error and assist/manage the flow of traffic in ways that will lead to fewer crashes, injuries, and deaths. It can help prevent work zone crashes and give emergency vehicles priority at controlled intersections.
- *Mobility* – CAV may expand existing mobility options and make new ones possible, for example, by enabling transit systems to expand service or providing automated ride services. It can help address the issue of "transit deserts" where options for getting to jobs, medical care and shopping are limited, by providing better connections between modes of transportation. It may provide the "last mile" service that helps transit riders get to their final destinations with the addition of smaller shuttles. It can help address the transportation needs of non-drivers – the

elderly, people with disabilities, low-income individuals, young people – by offering off-shift driverless taxi services. And by better connecting non-automobile transportation modes CAVs will enable more people to make regular use of non-motorized modes, such as walking and biking, for their daily travel needs.

- *Economic development* – Just as broadband Internet service before it, a community that supports CAV technology will have a competitive advantage economically. Businesses that need to take advantage of connected freight options could locate in communities where that is possible. And communities with more mobility options could attract more people to live there, increasing the labor force.
- *Equity* – Increased mobility options will help our transportation system better meet the needs of all Wisconsin residents, including those who are often underserved by our current system, promoting greater equity and a more inclusive community.

Messaging – Local Governments
Background
- Various levels of CAV technology are available today. Automated shuttles, transit systems, delivery vehicles, and freight vehicles are being tested and piloted today. The sooner we act, the more likely we are to have a safe, efficient system that works for everyone.
- Road maintenance jurisdictions do not matter to motorists. They will expect their connected and automated features to work wherever they go, just as they expect cellular data service today.
- Many of the needed changes – fiber networks and cellular broadband, for example – provide many benefits to communities besides facilitating CAV technology.

Policy questions
- How safe is the technology for other motorists, pedestrians and bicyclists?
- Who is responsible for installation, ownership, testing, and maintenance of the CAV technology and infrastructure improvements?
- How does the technology change state and federal standards for road construction and maintenance?
- Does the technology work on unmarked rural roads and in inclement weather?
- How are jurisdictional boundaries affected by the technology?
- Who is liable in an AV crash or for failures of CAV infrastructure?
- What is protocol for first responders approaching a driverless disabled or abandoned vehicle?
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Messaging – State and Federal Policy Makers
Legislators and policy makers will have concerns specific to their roles in government.
- Levels of government intervention in the adoption of CAV technology.
- WisDOT decision-making process for deployment.
- Allocation of revenue for the adoption of CAV technology and role of the private sector, federal agencies, state and local governments in generating revenue.
- Statutory and regulatory changes to support the adoption of CAV technology.
- Standardization of technology to ensure that it functions across jurisdictional boundaries.

Messaging – Academic and Industry Stakeholders
These stakeholders are going to have a fairly high awareness of the nature and state of development of CAVs. Primary information needs will revolve around understanding how state government

activities may affect research projects, product development and deployment. Their work is likely to involve confidential or proprietary information regarding unpublished research, technology under development and data collection.

- Statutory and regulatory changes the state is considering to facilitate CAV work in Wisconsin and the ability of institutions to develop, test and implement CAVs.
- Potential opportunities for getting involved in CAV pilots, demonstrations, deployments; and the process for submitting a product for testing.
- Wisconsin material investments in facilitating the adoption of CAV technology.
- State decision-making that will foster growth and affect the CAV technology market within the state.

Messaging – Law Enforcement/First Responders

Law enforcement and first responders will have concerns specific to their roles in government.

- Ensure CAV technology improves highway safety.
- Enhance the ability of law enforcement and first responders to do their jobs. (Connected snowplows and emergency vehicles, the use of robots and other automated tools to respond to emergency situations, etc.).
- Law enforcement participation in the development of traffic laws and regulations needed for safe deployment of technology.
- Extensive investment in new law enforcement and first responder protocols, training, and equipment

Messaging – Business Users

Wisconsin companies may wish to incorporate CAV technology in their fleets. This might include trucking and logistics firms or any industry that maintains its own freight hauling capacity. The policy issues for such businesses will be driven by their interest in adopting and operating the technology on Wisconsin roads.

- The regulation of CAV commercial applications.
- The creation of new, or increases in, registrations and fees.
- The amount of regulation and permitting processes for CAV freight operations.
- Changes to, or new, liability regulations in Wisconsin.
- Regional continuity (or replication) of CAV vehicle and commercial regulations.

Current legal status of AUTOMATED, AUTONOMOUS, or SELF-DRIVING vehicles

Wisconsin state law currently requires an operator to be behind the wheel and in physical control of a vehicle at all times while driving on Wisconsin roadways.

As with any other vehicle that is operated on the roadway, the operator or owner is responsible for the appropriate and safe operation of the vehicle while driving it. This includes the use of any technology the vehicle is equipped with, any malfunctions of the vehicle, and adherence with current state law and the Motorist's Handbook.

Channels of Communication and Outreach

	General Audience	Local Governments	State/Federal Policymakers	Academic and Industry	Law Enforcement First Responders	Business Users
Level of CAV knowledge of audience	Low - Medium	Low	Low - Medium	Medium - High	Low - Medium	Low
Communication channels currently used	Media relations, social media, public information meetings, advertising Participation in stakeholder committees	State Emergency Management Center Communications regarding local projects, local programs, etc. Tribal Affairs Group WisDOT-sponsored stakeholder committees MPO board and technical advisory committees	Personal briefings Committee hearings Ongoing participation in federal programs Interagency meetings and communication	Participation on boards and committees Regular training, meetings, other communications	State Emergency Management Center Mobile Architecture for Communications Handling (MACH) Public safety campaigns	Committee meetings
Audience examples	WiNDAC advisory committee of non-drivers Agricultural advocates Rural issue advocates	Local government and councils Tribal Governments County highway commissioners Public works departments Wisconsin Counties Association Wisconsin County Highway Association Wisconsin League of Municipalities Wisconsin Towns Association Transit groups Metropolitan and Regional Planning Commissions	Federal Highway Administration (FHWA) Wisconsin state government agencies Legislators – general Legislators – committees National Highway Traffic Safety Administration Federal Motor Carrier Safety Administration	Wisconsin Automated Vehicle External advisory committee (WAVE) Mid America Association of State Transportation Officials (MAASTO) American Association of State Highway Transportation Officials (AASHTO) Wisconsin universities CV (Connected Vehicle) Pooled Fund	Traffic Incident Management Enhancement (TIME) Coalition Wisconsin Chiefs of Police Association Wisconsin Fire Chiefs Association	Wisconsin Motor Carriers Association (WMCA) Freight Council Airports Fleet companies Rail Council

For more information about Connected and Automated Vehicle technology in Wisconsin, contact:

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