



State of Wisconsin Department of Transportation

WisDOT CAV Strategic Work Plan 2021-2023

The Wisconsin Department of Transportation (WisDOT) is committed to safely integrating Connected and Automated Vehicle (CAV) technologies into the state's multi-modal transportation system for the benefit of the traveling public.

The 2021-2023 Strategic Work Plan describes the department's goals and objectives to position WisDOT and the state of Wisconsin to integrate CAV and related emerging technologies into the state's transportation system.

In support of the goals and objectives, implementation plans will be developed to further define action items, deliverables, and critical timelines.

GOALS:

- ✓ Build on past and current department initiatives to leverage and advance WisDOT's efforts to actively respond to the rapid evolution of CAV and related technological advances.
- ✓ Develop a coordinated and comprehensive response to CAV technology, focused on integration of this and other emerging technologies into department operations, policy, planning, multi-modal transit, and project development, as well as across the state, to continue to provide a safe and efficient transportation system.
- ✓ Leverage CAV technologies to provide new opportunities and more equitable access to Wisconsin's transportation system for non-driving populations.

OBJECTIVES:

Statute, Policy, and Regulation – Define policies that direct/guide legislative recommendations to responsibly accommodate/integrate emerging CAV technology to meet the department's mission, vision and values.

- Key Action Items: Review state statutes; actively deliberate draft legislative policies to regulate the operation, licensing requirements, liability, governance and enforcement of CAV technology on the transportation system. Participate in regional and national discussions pertaining to CAV legislative issues to ensure success of WisDOT's policy program.

Communications and Outreach – Develop and implement a communication strategy designed to educate and inform all stakeholders including government (local, state, federal, Tribal Nations), industry, legislative, and the general public about the Department’s goals pertaining to CAV, as well as to address questions and concerns regarding the anticipated integration of CAV technology.

- Key Action Items: Communications strategy, active management of information sharing

Partnerships – Build and maintain partnerships to ensure the department is aware of and responsive to opportunities to collaborate at the local, regional, and national levels; engage with academia and industry to explore technology testing and pilot options within the state; and support stakeholder efforts in CAV integration that align with WisDOT’s goals and objectives.

- Key Action Items: Engage a full range of stakeholders (e.g., Wisconsin Automated Vehicle External advisory committee (WAVE), regional and national groups, government, national research organizations, academia, private); Facilitate coordination among WisDOT stakeholder committees – Wisconsin Non-Driver Advisory Committee (WiNDAC), Freight Advisory Committee, motor carriers, driver training schools, etc. Coordinate with academic and private sector for awareness of initiatives, build knowledge and expertise, and leverage efforts.

Organizational Alignment, Coordination, and Readiness – Establish a coordinated department-level focus to CAV that leverages and builds upon existing agency efforts and provides a framework for agency divisions to adapt and respond to emerging CAV technologies, while safely maintaining, developing, and operating the state transportation system.

- Key Action Items: Establish a governance structure to facilitate coordination across the department. Align and dedicate resources to meet needs identified for CAV. Research and analyze potential workforce impacts on organizational, informational technology (IT), and system operations. Review of policies and procedures to ensure appropriate response and readiness.

Develop Transportation System Infrastructure and Operations Readiness – Build upon current department efforts to leverage available and emerging technology to support the safe and efficient operation of the transportation system.

- Key Action Items: Continue efforts to prepare the state’s infrastructure for CAV integration, including infrastructure improvements that facilitate connection between the vehicles and adjacent structures (vehicle to infrastructure (V2I); including Operations and Maintenance; e.g., signal and roadside units; signing and pavement marking) development and maintenance to support Connected and Automated Vehicles. Assess Connected Vehicle infrastructure equipment needs. Integrate DTSD/BTO’s Intelligent Transportation System Integration Plan into strategic work activities.

Research, Testing, and Pilot Projects – Continue and expand department collaboration and exploration of national, regional, state, academic, and private research opportunities and partnerships to promote value-added research to assist and guide deployment.

- Key Action Items: Investigate collaborative national and regional research options including mobility, planning, and feasibility of a regional truck platooning pilot. Research new opportunities for Connected Vehicle data streams use in improving operations or design.

Data Governance and Security – Build upon and expand existing department efforts to collect, manage, analyze, and disseminate related CAV data that includes establishing security protocols to protect and support agency and statewide needs. Research new opportunities for Connected Vehicle data streams use in improving operations or design.

- Key Action Items: Review and confirm/define the department's data governance structure and related protocols; assess agency security protocols and measures to confirm effectiveness; assess need to develop IT network management and security policies for CAV data.

Law Enforcement and First Responder Services – Understand and make available clear expectations for law enforcement and first responders when encountering CAVs on Wisconsin's roadways. Offer technical information and educational resources to local law enforcement and first responders.

- Key Action Items: Understand expectations and needs of law enforcement and first responders when encountering CAVs, including crashes, on Wisconsin roadways. Assess optimal communication channels and process.

Note: Certain important transportation topics such as -but not limited to- enhanced mobility, planning and freight issues will be addressed in more than one Objective Area subcommittee as appropriate.