



Fully Autonomous Vehicle (FAV)

COMMITTEE MEETING

August 14, 2025



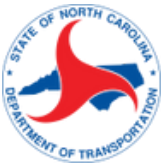
PREPARED BY

fountainworks

FACILITATION • MANAGEMENT CONSULTING

FAV Committee Members

Name	Title	Representing
Brian Mayhew	State Traffic Engineer, North Carolina DOT	Secretary of Transportation
John Hardin	Executive Director, Board of Science, Technology & Innovation	Secretary of Commerce
Chuck Whitehead	Legislative Affairs Attorney	Commissioner of Insurance
Tim Wilson	Captain, Commercial Vehicle Enforcement Section	North Carolina State Highway Patrol
Lawrence Capps	Chief, Knightdale Police Department	North Carolina Association of Chiefs of Police
Charles Blackwood	Sheriff, Orange County Sheriff's Office	North Carolina Sheriffs' Association
Justin Owens	Senior Research Scientist	University of North Carolina Highway Safety Research Center
Renee Gibson	Director of Government Affairs, Autonomous Vehicle Industry Association	Autonomous vehicle industry
Tara Andringa	Executive Director, Partners for Automated Vehicle Education	Autonomous vehicle industry
Torrey Dixon	Special Deputy Attorney General	Attorney General's Office, familiar with motor vehicle law
Terry Green	Chief, State Capitol Police	Local law enforcement
Dan Bennett	Vice President, Fleet and Asset Management, Old Dominion Freight Line	Trucking industry, designated by the North Carolina Trucking Association
Debbie Smith	Director, Charlotte Department of Transportation	Planner from an urban area, designated by the North Carolina League of Municipalities
Wallace Nelson	Perquimans County Commissioner, Board of Commissioners Chair	Planner from a rural area, designated by the North Carolina Association of County Commissioners



AGENDA

NC Fully Autonomous Vehicle (FAV) Committee Second Quarterly Meeting – Calendar Year 2025

August 14, 2025
2:00 – 4:00 p.m. ET
1 S Wilmington St.
Room 150 Raleigh,
NC 27606

2:00 p.m.	Welcome and Introductions	Brian Mayhew
	Background: Where We’ve Been	Sarah Searcy
	NCDOT Research Update	Curtis Bradley
	Strategic Plan Update	Kimley-Horn
	Identifying NC’s Top 3 Priorities for FAV	Fountainworks
	Defining the Committee’s Vision, Mission, and Purpose	Fountainworks
	Wrap-Up and Next Steps	Brian Mayhew
4:00 p.m.	Adjournment	

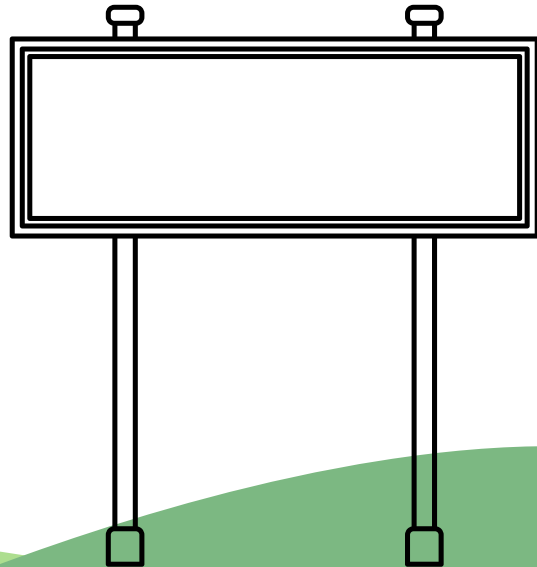
Committee Meeting Objectives:

- 1. Establish a Shared Understanding of the Committee’s Purpose and Mandate:**
Ensure all members are aligned on the legislative foundation, goals, and scope of the FAV Committee. This will aid in the development of the committee charter.
- 2. Build Relationships and Shared Commitment:** Begin fostering collaboration and trust among members through introductions and shared discussion.
- 3. Set the Stage for Ongoing Engagement:** Confirm expectations for participation, communication, and next steps to maintain momentum between meetings.

Our Hopes

What is one hope
you have for the FAV
Committee?

Write it on the
billboard!



Notes

Background

FAV Committee's Duties and Membership

Duties of the FAV Committee

2017



NC General
Assembly
enacts
SL 2017-166
(HB 469)

July

SL 2017-166 (HB 469) enacted Article 18 in Chapter 20 ([G.S. § 20-400 – 403](#)) to:

- Regulate the operation of fully autonomous vehicles (FAV) and
- Create an FAV Committee within the Department of Transportation.

Duties. – The Committee shall meet regularly, and at a minimum four times a year, to:

- Consider matters relevant to fully autonomous vehicle technology,
- Review State motor vehicle law as they relate to the deployment of fully autonomous vehicles onto the State highway system and municipal streets,
- Make recommendations concerning the testing of fully autonomous vehicles,
- Identify and make recommendations for Department of Transportation traffic rules and ordinances, and
- Make recommendations to the General Assembly on any needed changes to State law.

Staff. – The Department of Transportation shall provide staff and meeting space, from reasonably available resources, to the Committee.

2018



March

FAV
Committee
Convenes

FAV Committee Membership

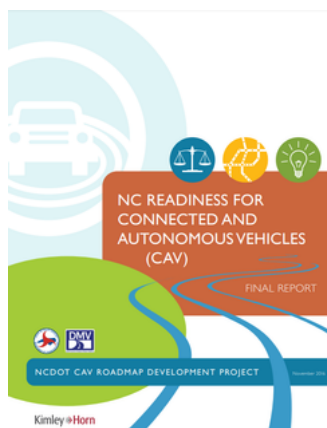
Membership. – The following persons shall serve on the Committee:

1. Secretary of Transportation, or the Secretary's designee.
2. The Secretary of Commerce, or the Secretary's designee.
3. The Commissioner of Insurance, or the Commissioner's designee.
4. A representative of the Highway Patrol, designated by the Commander.
5. A representative of the North Carolina Association of Chiefs of Police, designated by its Executive Director.
6. A representative of the North Carolina Sheriffs' Association, designated by its President.
7. A representative of the University of North Carolina Highway Safety Research Center, designated by the Director.
8. At least two representatives from the autonomous vehicle industry, designated by the Secretary of Transportation.
9. A representative of the Attorney General's Office, designated by the Attorney General, who is familiar with motor vehicle law.
10. A representative of local law enforcement, designated by the Secretary of Transportation.
11. A representative of the trucking industry, designated by the North Carolina Trucking Association.
12. A planner from an urban area, designated by the North Carolina League of Municipalities.
13. A planner from a rural area, designated by the North Carolina Association of County Commissioners.
14. Two members of the North Carolina Senate, designated by the President Pro Tempore of the Senate.
15. Two members of the North Carolina House of Representatives, designated by the Speaker of the House.

FAV Committee – Next Steps

Recommendations Based on Committee Feedback

- Update and confirm committee membership.
 - Letters of appointment with periodic recommitment.
- Web-based resources.
- Charter.
- Strategic plan update.
- Task force model with workplans.
- Industry outreach.
- Public engagement.
- Annual report.



FAV Committee Webpage

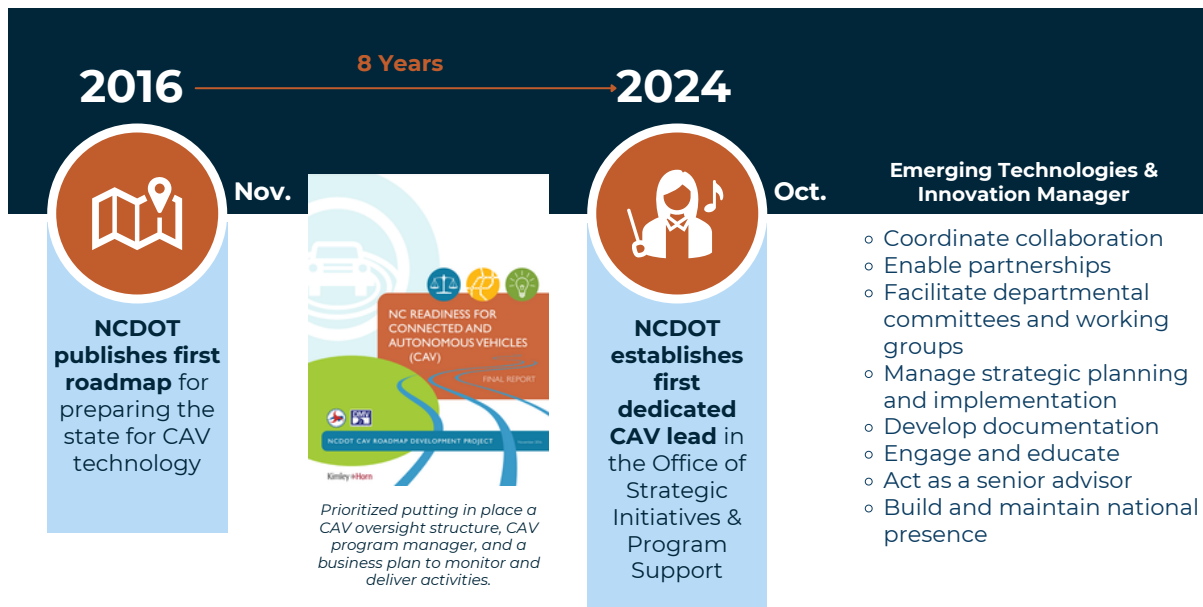


<https://connect.ncdot.gov/groups/FAV/Pages/default.aspx>

- Purpose and Duties
- Membership
- Meeting Agendas and Minutes
- Resources
 - National
 - State
 - Local

NCDOT's CAV Activities

Connected and Automated Vehicle Activities



Connected and Automated Vehicle Activities



CAV Program Next Steps

2025

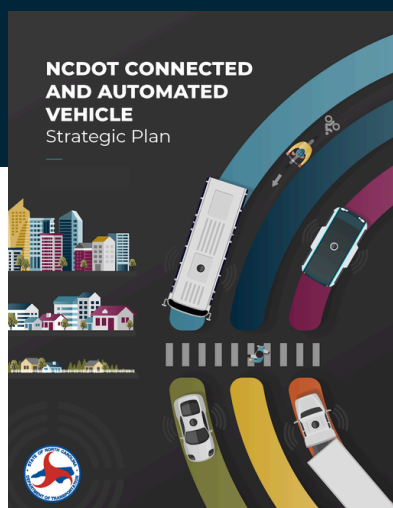


NCDOT's CAV program will leverage our existing expertise across the important disciplines needed to advance the work, our foundational programs and projects, and the strong external perception of our state and national engagement.

- **Strategic plan** with incremental and achievable activities;
- Inclusive **vision, mission, and goals** for how we investigate and solve problems related to CAV;
- **Charter** for committees and working groups;
- **Process for collaboration** and pathway for industry partnerships supported by a **communications plan** and **webpage**;
- **Process for policy review and development**; and
- Recruitment of champions from executive leadership to drive **sustained funding and resources**.

CAV Program Next Steps

2025



Foundational Activities

- Accomplishments to Date
- Complementary Plans and Initiatives
- Key Stakeholders

NCDOT's CAV Roadmap

- Mission and Vision
- Guiding Principles
- Goals
- Focus Areas and Priority Questions
- Objectives



NORTH CAROLINA
Department of Transportation

NCDOT Research Engagement Summary: Connected & Automated Vehicles

Curtis T. Bradley, Ph.D.
Manager of Research & Development
August 14, 2025

Connecting people, products and places safely and efficiently with customer focus, accountability
and environmental sensitivity to enhance the economy and vitality of North Carolina

[ncdot.gov](https://www.ncdot.gov)

CAV Summary

Contents for CAV Research

- Summary of Research Programs
- Transportation Centers of Excellence
- Long Term Research
- Technology Transfer / Implementation
- Technical Assistance
- National Cooperative Highway Research Program (NCHRP)

Summary of Research Programs



Summary of Research Programs

Transportation Centers of Excellence	Long-Term Research	Technology Transfer / Implementation	Technical Assistance	National Cooperative Highway Research Program
<ul style="list-style-type: none">• Multi-University Collaboration• Basic / Innovative Research Focus• 2-3 Years Duration – ~\$1,000,000 Funding	<ul style="list-style-type: none">• Core NCDOT Research Program• Applied Research Focus• 2-3 Years Duration – \$100-\$250K Funding	<ul style="list-style-type: none">• Implementation Assistance• Focus on Development, Pilots, Training / Workshops• 1-2 Years Duration – \$50-\$200K Funding	<ul style="list-style-type: none">• Short-Term Applied Research• Synthesis, White Papers, etc.• 120 Hours Duration – \$15-\$30K Funding	<ul style="list-style-type: none">• National Pooled Fund Program• Research, Synthesis, etc.• 1-3 Years – 5.5% of SP&R Funding

Transportation Centers of Excellence



TCE 2020-01: Advanced Transportation Technology Safety and Policy

Project #1: Impacts of
CAV-Ready Infrastructure
on Vulnerable Road Users:
Guidance for North
Carolina's Local and State
Transportation Agencies

Project #3: Operational
and Economic Impacts of
CAVs



University of
North Carolina –
Chapel Hill



Appalachian
State University



University of
North Carolina at
Charlotte

ncdot.gov

CAV Summary

TCE 2020-02: Mobility and Congestion

Project #2: Smart
Connected and
Automated Vehicle Fleet
Management: Developing
Regional Dispatch
Decision Support for
Congestion Mitigation



North Carolina
State University



Duke University



University of
North Carolina –
Chapel Hill

ncdot.gov

CAV Summary

TCE 2020-03: Connected and Autonomous Vehicle Technology

Project #1: CAV Impacts
on Traffic Intersection
Capacity and
Transportation Revenue

Project #2: Assessing
North Carolina
Readiness for CAVs in
Traditional and
Emerging Infrastructure
Needs



North Carolina
A&T State
University

Project #3: Developing
and Implementing CAV-
UAV Collaboration for
Advancing the
Transportation Systems

Project #4: Assessing the
Impact of Connected
and Automated Vehicles
on Work Zones



North Carolina
State University

Project #5: Evaluating
Connected and Secure
Edge Infrastructure for
Scalable Hardware-in-
the-Loop CAV Testbeds

Project #6: Define and
Implement Potential
Use Cases for
Deployment of CAVs



University of
North Carolina at
Charlotte

Long-Term Research



Long-Term CAV Research

	RP2017-25: Feasibility and Demonstration of Small Automated Vehicles as a Viable Transit Solution in NC
	RP2019-11: Impacts of Autonomous Vehicle Technology in Transportation Systems
	RP2019-28: Enhancing AV Traffic Safety through Pedestrian Detection, Classification, and Communication
	RP2022-16: Developing and Operationalizing a Testbed of Connected Self-Driving Shuttles to Test and Develop CAV Applications in NC
	RP2023-11: Guidance on Considering CAVs in Travel Demand Models

Short-Term Research



Short-Term CAV Research

TA2025-07 – “Review the State-of-the-Art Studies on the Public’s Perception of Advanced Driver Assistance Systems and Assess the Actual Performance”		
* “National and State Level Approaches to Automated Vehicle Certification”	* “State DOT Policy and Regulatory Approaches to Robotaxi Teleoperations”	* “A Platform for Social Media Tracking, Evaluation, Engagement, and Response for ADAS Technologies (STEER-ADAS)”

*Projects that have yet to start.

Technology Transfer



CAV Technology Transfer / Implementation



RP2023-35: "Microtransit Pilot Project in Greensboro, NC"



TT2025-05: "Piloting the Remote-Controlled Operation of Automated Driving Shuttles"

National Cooperative Highway Research Program



CAV Technology Transfer / Implementation



NCHRP 20-68D U.S. Domestic Scan
23-02: "Recent Experiences in
Advancing and Deploying of
Automated Vehicle Technologies"

NCHRP 20-24(147): "Peer Exchange
and Research to Identify Best
Practices for Testing, Monitoring and
Deployment of Automated
Transportation Solutions to Support
Safety, Equity and Operational
Efficiency"



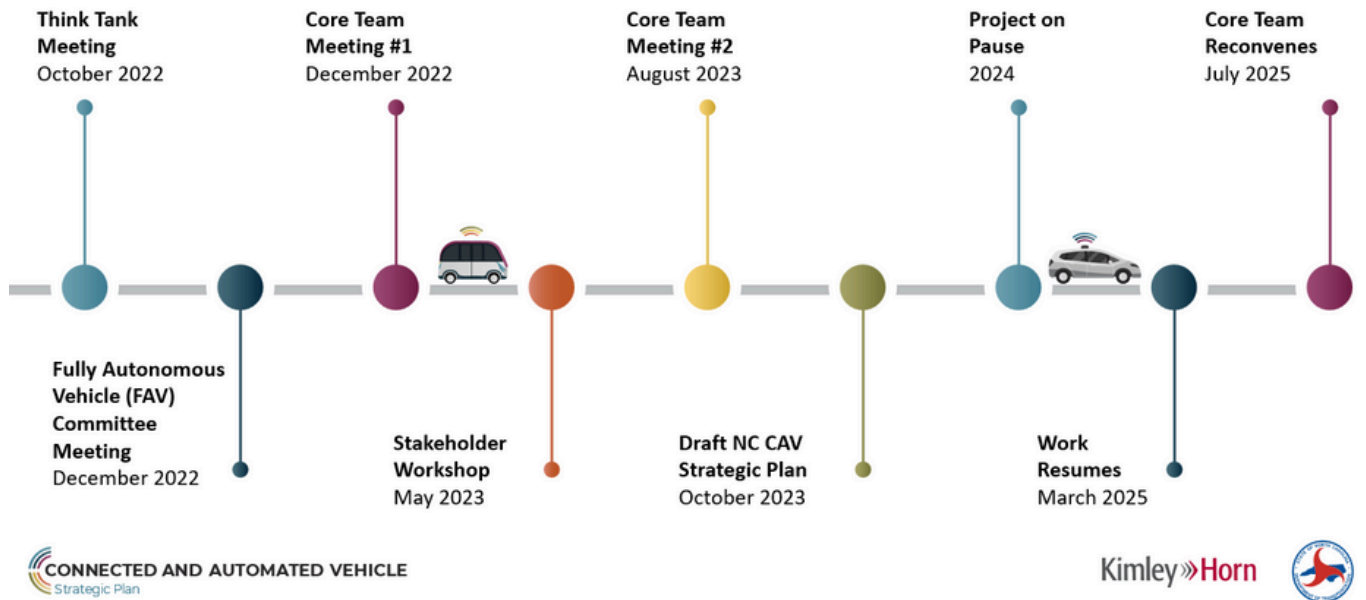
Strategic Plan Update

NCDOT CONNECTED AND AUTOMATED VEHICLE Strategic Plan

JULY 2025

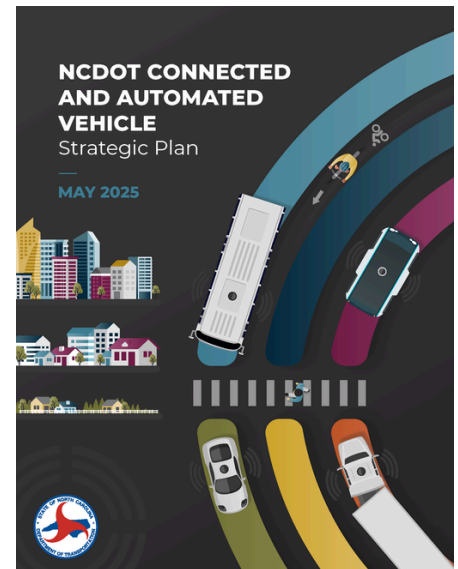


Strategic Plan – Process

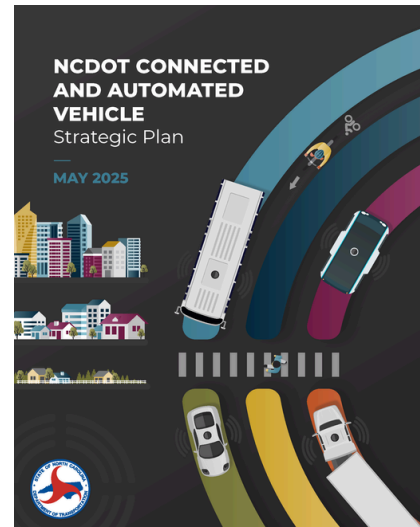


Plan to include:

- **Messages from NCDOT**
- **Executive Summary**
- **Introduction**
 - Plan Purpose and Process
 - Key Terms and Definitions
 - State of the Practice
- **Foundational Activities**
 - Accomplishments to Date
 - Complementary Plans and Initiatives
 - Key Stakeholders
- **NCDOT's CAV Roadmap**
 - Mission and Vision
 - Guiding Principles
 - Goals
 - Focus Areas and Priority Questions
 - Objectives



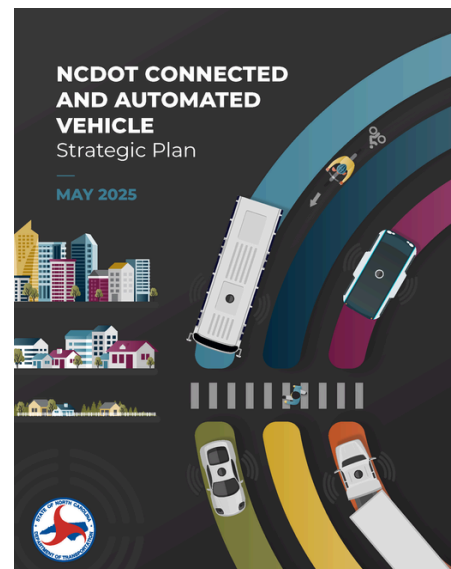
- July 2025 – Draft provided to Core Team
- August 2025 – Integrate Core Team comments
- September 2025 – Schedule to adopt Final Plan



Kimley»Horn



- **Alignment with NCDOT's Mission and Vision**
- **Tailoring to priorities and needs related to CAV**



Kimley»Horn



Our Priorities

Share your Top 3 priorities for North Carolina regarding Fully Automated Vehicles (FAVs). Think about how you want NC to prepare to be a leader in CAV. Consider areas such as:

- Policy or legislation
- Infrastructure (signs, markings, signals)
- Safety
- Data sharing and regulation
- Funding
- Testing and deployment
- Any other areas of interest

My Top Three Priorities

Write them below.

1

2

3

Discussion Questions

Who are we?

Who is the FAV Committee in your view—is it primarily an advisory group, a task force, a public education body, or something else?

What work will we do?

What kind of work do you think the committee should focus on?

How does our committee fit into the bigger picture?

How would you like to interact with the NCDOT, the public, etc.?

Our Purpose

NCDOT FAV Committee Purpose Statement

To lead North Carolina's efforts in preparing for a future with fully autonomous vehicles by aligning innovation, infrastructure, regulation, and public interest in a cohesive and forward-looking strategy.

Use the space below to capture reflections, thoughts, and feedback on the purpose statement above.

Additional Notes

Space for notes/ideas/brainstorms/questions:

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