



# MEETING SUMMARY

## 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

### Meeting Objectives

- **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.
- **Build Relationships and Shared Commitment:** Begin fostering collaboration and trust among members through introductions and shared discussion.
- **Set the Stage for Ongoing Engagement:** Confirm expectations for participation, communication, and next steps to maintain momentum between meetings.

#### Committee Members Present (\* indicates virtual attendance)

Name	Organization
Tara Andringa*	Partners for Automated Vehicle Education
Dan Bennett*	Old Dominion Freight Line
Charles Blackwood	Orange County Sheriff's Office
Lawrence Capps*	Knightdale Police Department
Torrey Dixon	NC Department of Justice
Renee Gibson*	Autonomous Vehicle Industry Association
Stephen Gunter on behalf of Terry Green	State Capitol Police
John Hardin	NC Commerce
Brian Mayhew	NC Department of Transportation
Wallace Nelson*	Perquimans County Board of Commissioners
Justin Owens*	UNC Highway Safety Research Center
Debbie Smith*	City of Charlotte
Tim Wilson*	NC State Highway Patrol

#### Committee Members Absent

Name	Organization
Chuck Whitehead	NC Department of Insurance

#### Guests Present (\* indicates virtual attendance)

Name	Organization
Julie Brenman	Fountainworks
Jeff Dale	Kimley-Horn and Associates
Dustin Earle*	Glydways
Mark Ezzell	NC Governor's Highway Safety Program
Kenda Gaynham*	Fountainworks
Brian Graham	Kimley-Horn and Associates

<b>Guests Present (* indicates virtual attendance)</b>	
<b>Name</b>	<b>Organization</b>
Logan Gunthrop	NC Department of Transportation
Ben Hughes	NC Department of Transportation
Joe Hummer	NC Department of Transportation
David Jones*	HNTB
Ali Karimoddini*	North Carolina A&T State University
William Kincheloe*	NC Department of Insurance
Katelyn Kingsbury*	Brooks Pierce
Joe Milazzo*	Regional Transportation Alliance
Drew Moretz*	Brooks Pierce
Nick Pilipowskyj*	Perrone Robotics
John Policastro*	NC Automobile Dealers Association
Rusty Rogers*	Waymo
Judy Schmidinger*	NC Division of Motor Vehicles
Natalie Schulte	NC Commerce
Sarah Searcy	NC Department of Transportation
Scott Slusser	NC Department of Transportation
Ed Turlington*	Brooks Pierce
Meredith Van Duyn*	Mott MacDonald
Matt Walsh*	Waymo
Xin Wang*	NC Department of Transportation
Rachel Werz	Fountainworks
Sarah Yager*	May Mobility

## Call to Order

The North Carolina Fully Autonomous Vehicle (FAV) Committee convened for its second quarterly meeting of calendar year 2025 on August 14, 2025 at the NCDOT Transportation Building at 1 South Wilmington Street in Raleigh, NC and on Microsoft Teams.

**Brian Mayhew**, FAV Committee Chair, welcomed attendees to the meeting and introduced the meeting's agenda. The meeting included the following topics:

- Welcome and Introductions
- Background: Where We've Been
- NCDOT Research Update
- Strategic Plan Update
- Identifying NC's Top 3 Priorities for FAV
- Defining the Committee's Vision, Mission, and Purpose
- Wrap-Up and Next Steps
- Adjournment

Brian then introduced the team supporting the FAV Committee, including:

- **Sarah Searcy**, Emerging Technologies and Innovation Manager in the Office of Strategic Initiatives and Program Support at NCDOT.

- **Jeff Dale** and **Brian Graham** from Kimley-Horn and Associates, who are supporting the development of NCDOT's Connected and Automated Vehicles (CAV) Strategic Plan.
- **Julie Brenman** and **Rachel Werz** from Fountainworks, who are supporting the FAV Committee.

**Julie Brenman** of Fountainworks gave a brief orientation to the [handout packet](#) for committee members attending in person. The handouts included the agenda, presentation slides, and other materials to support discussions during the meeting.

Julie then asked committee members to introduce themselves by sharing their name, their role or organization, and one hope they have for the committee. The hopes of the committee members were:

- Set priorities to make automated vehicles easier and more efficient for consumers.
- Framing FAVs as not if, but WHEN.
- Learn from others in the room and leverage expertise.
- When automated vehicles are introduced, safety is the focus.
- In learning mode and seeking opportunities.
- Continuing relationship-building.
- Find common ground.
- Transparency and training for drivers.
- Bring ideas to the table.
- Show value of this committee.
- Desire to show momentum and action in the next couple years.
- Identify actionable steps.
- How to do public engagement and education.
- Be prepared for FAVs.
- Safety for bicyclists and pedestrians.
- How to prepare communities for infrastructure for FAVs.
- Find out where we are going and how to get there.
- Channel for communications between automated vehicle companies and NC.
- Safety and assessing plans of action.
- Infrastructure support.
- Making sure laws are in place to support.
- Implement a plan for FAVs to safely serve citizens.

## **Background: Where We've Been**

### *FAV Committee's Duties and Membership*

After the call to order, opening remarks, and introductions, **Sarah Searcy** reviewed how the FAV Committee was established, its membership composition, and its expected duties.

The committee was established by law in July 2017 when the North Carolina General Assembly enacted Session Law 2017-166 (House Bill 469) as Article 18 in Chapter 20 of the North Carolina General Statutes ([G.S. § 20-400 – 403](#)). The law regulates the operation of FAV and creates an FAV Committee within the Department of Transportation. The committee first convened in March 2018 and meetings have been held on a regular basis since then.

The FAV Committee is required to meet at least 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 DOT traffic rules and ordinances, and*
- *Make recommendations to the General Assembly on any needed changes to State law.*

The law further specifies that the Department of Transportation will provide staff and meeting space from reasonably available resources to the committee.

The law defines the committee membership based on 15 different designations as follows:

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.*

### *Establishing Leadership and Oversight*

**Sarah Searcy** shared that NCDOT reengaged the committee at the start of the calendar year. NCDOT has been making changes informed by feedback gathered in the one-on-one meetings with committee members and review of the committee's historic records, including past meetings and activities.

Recommendations and next steps were shared in the previous committee meeting that was held in February 2025. Since February, NCDOT has:

- Updated and confirmed all committee membership except for the legislative appointments, including providing letters of appointment with two-year terms.

- Created web-based resources, including a [webpage](#) for committee members and guests to access meeting agendas, summaries, and other documentation related to the committee's work.
- Started developing a charter to document the purpose of the committee, the roles and responsibilities of its members, how the committee is structured and organized, and the logistics for accomplishing work.
- Resumed NCDOT's CAV Strategic Plan update.
- Improved industry outreach by meeting with companies to familiarize them with the committee and NCDOT's CAV activities.

Additional recommendations under consideration but not yet adopted include transitioning the committee to a task force model with workplans and developing an annual report that captures what the committee accomplished during the previous calendar year. Moving forward, NCDOT will publish meeting agendas, minutes, and other relevant information for the committee to a new webpage. The [webpage](#) includes a description of the committee's purpose and duties, membership, historic meeting documentation, and links to national, state, and local resources. NCDOT is also in the process of establishing a dedicated [ncdot.gov](#) email address for communications related to the committee.

Sarah shared that it has been over eight years since NCDOT published its first roadmap in 2016 to prepare North Carolina for CAV technology. That initial roadmap prioritized establishing an oversight structure, designating a program manager, and developing a business plan to monitor and deliver activities. However, these foundational elements were not implemented at the time. Sarah was hired in October 2024 as the first dedicated CAV lead within NCDOT's Office of Strategic Initiatives and Program Support. Her role was envisioned to coordinate collaboration across sectors, enable strategic partnerships, facilitate departmental committees and working groups—including the FAV Committee—and manage strategic planning and implementation for CAV initiatives. She also serves as a senior advisor on emerging technologies and innovation. Sarah emphasized that her team is here to support the committee and the formal establishment of NCDOT's CAV program.

### *NCDOT's CAV Activities*

**Sarah Searcy** pointed out that the work of the committee will include automated vehicle technology that is currently available, its capabilities and limitations, and how the state prepares for the technology in its current stage and as it develops. To provide context for what this means for North Carolina, Sarah briefly reviewed NCDOT's CAV activities that were completed by teams across the department in collaboration with communities, companies, and universities. A [one-page summary](#) with QR codes that link to some of these examples was provided to committee members in their handouts.

Between 2016 and 2024, laws were passed to define and regulate fully autonomous vehicles and create the FAV Committee. Laws were passed to modify existing state statutes regulating the distance between motor vehicles traveling on the roadway to allow platooning as a step toward enabling connected vehicle platooning technology. Laws were also passed to regulate the use of personal delivery devices like sidewalk robots and to authorize the operation of neighborhood occupantless vehicles. These are fully autonomous vehicles that are low-speed and designed to transport cargo without an occupant.

Demonstrations and pilots were conducted that include:

- Connected and automated shuttles through the Integrated Mobility Division's Connected Autonomous Shuttle Supporting Innovation ([CASSI](#)) program and N.C. A&T State University's [Aggie Auto](#) program.
- Connected truck platooning in collaboration with Volvo Trucks North America, FedEx, and the North Carolina Turnpike Authority.
- Multimodal connected intersections.
- Automated, real-time driver alerts for sudden slowdowns and work zones.

Education and engagement have included hands-on technology demonstrations at events like the N.C. Transportation Summit and participation in national conferences, panels, working groups, and committees.

NCDOT has supported research to explore the impacts of CAV and the state's readiness for the technology. Sarah welcomed **Curtis Bradley**, Research and Development (R&D) Manager at NCDOT, to share information about this research.

### **Guest Speaker: Curtis Bradley – NCDOT Research Update**

**Curtis Bradley** presented an overview of CAV research supported by NCDOT. His presentation highlighted the structure of NCDOT's research programs, university partnerships, technology transfer efforts, and national collaborations, emphasizing the department's commitment to advancing CAV readiness through applied and innovative research.

#### *Summary of Research Programs*

NCDOT funds investigations into CAV-related topics through [multiple research programs](#):

- **Transportation Centers of Excellence:** Multi-university collaborations focused on basic and innovative research. Basic research explores emerging concepts and anticipates future needs. Each center has a duration of 2–3 years with up to \$1 million in funding. Curtis noted that while the R&D Unit manages these projects, it does not control the funding.
- **Long-Term Research Program:** Described as the “bread and butter” of the R&D Unit, this program focuses on applied research intended to inform decision-making. Projects typically take 18 months from idea to kickoff, run for 2–3 years, and receive between \$100,000 and \$250,000 in funding.
- **Technology Transfer and Implementation Program:** Designed to bridge the gap between research and practice, this program supports training, conferences, pilots, and development activities that implement research findings. Projects are typically 1–2 years in duration and receive between \$50,000 and \$200,000 in funding. Curtis emphasized that this program can be used not only for NCDOT-led projects but also to support the implementation of research from national programs.
- **Technical Assistance Program:** A short-term research mechanism used for synthesis reports and white papers. For these projects, NCDOT consults with faculty from eligible University of North Carolina (UNC) System universities or Duke University. Projects are up to 120 hours in duration (15

workdays of individual consultation) and typically receive between \$15,000 and \$30,000 in funding.

- **Transportation Pooled Fund:** This [national program](#) allows NCDOT to collaborate with other states on shared transportation issues. Projects typically span 1–3 years and are supported through the State Planning and Research (SPR) program, which allocates 5.5% of its budget to this effort.

### *Transportation Centers of Excellence, Long-Term Research, and Short-Term Research*

**Curtis Bradley** highlighted three Centers of Excellence that have conducted CAV-related research:

- **[TCE 2020-01: Advanced Transportation Technology Safety and Policy](#)**
  - UNC Chapel Hill, Appalachian State, and UNC Charlotte collaborated on two projects under the theme of advanced transportation technology, safety, and policy. These projects examined the operational and economic impacts of CAVs and infrastructure readiness for vulnerable road users.
- **[TCE 2020-02: Mobility and Congestion](#)**
  - NC State University, in partnership with Duke University and UNC Chapel Hill, led a project focused on smart fleet management for CAVs.
- **[TCE 2020-03: Connected and Autonomous Vehicle Technology](#)**
  - N.C. A&T State University, in partnership with NC State University and UNC Charlotte, conducted the most direct and extensive CAV research. Their initial Center of Excellence supported three projects on traffic impacts, infrastructure readiness, and CAV-Uncrewed Aerial Vehicle (UAV) collaboration. Due to their success and ability to leverage additional resources from NASA, Verizon, and the City of Greensboro, NC A&T was awarded additional funding by NCDOT to expand the scope of the Center of Excellence to include projects on CAV impacts in work zones, secure edge infrastructure, and use case development.

Curtis highlighted several long-term CAV-related research projects that have been completed:

- **[RP 2017-25: Feasibility and Demonstration of Small Automated Vehicles as a Viable Transit Solution in NC](#)**
- **[RP 2019-11: Impacts of Autonomous Vehicle Technology in Transportation Systems](#)**
- **[RP 2019-28: Enhancing AV Traffic Safety through Pedestrian Detection, Classification, and Communication](#)**
- **[RP 2022-16: Developing and Operationalizing a Testbed of Connected Self-Driving Shuttles to Test and Develop CAV Applications in NC](#)**
- **[RP 2023-11: Guidance on Considering CAVs in Travel Demand Models](#)**

Curtis also reviewed short-term CAV research projects that have been recently completed or are soon to begin:

- **TA 2025-07: 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 (not yet started)*

- *State DOT Policy and Regulatory Approaches to Robotaxi Teleoperations (not yet started)*
- *A Platform for Social Media Tracking, Evaluation, Engagement, and Response for ADAS Technologies (STEER-ADAS) (not yet started)*

### *Technology Transfer*

**Curtis Bradley** emphasized the value of the Technology Transfer Program in supporting real-world implementation. He highlighted two recent projects:

- **[RP 2023-35: Microtransit Pilot Project in Greensboro, NC](#)**
  - Led by NC A&T, this project piloted automated shuttles with safety drivers for one month on a one-mile route that connected the university to downtown Greensboro. The project provided valuable insights into the shuttles' performance and public interaction.
- **[TT 2025-05: Piloting the Remote-Controlled Operation of Automated Driving Shuttles](#)**
  - As a follow on to the Greensboro pilot, NC A&T is developing a prototype teleoperations platform to investigate remote operation of the automated shuttles.

Curtis noted that the deliverables for all completed projects are publicly accessible on the [NCDOT website](#). If a report is not available online, interested parties are encouraged to reach out to the R&D Unit directly to request access.

Curtis also mentioned that NCDOT provides match funding for university-led research that aligns with departmental priorities. One such collaboration, the Center for Regional and Rural Connected Communities ([CR2C2](#)), received \$250,000 in [match funding](#) from NCDOT to support its efforts.

Curtis concluded by highlighting NCDOT's participation in two active National Cooperative Highway Research Program (NCHRP) initiatives:

- A [domestic scan](#) focused on recent experiences in advancing and deploying automated vehicles.
- A [peer exchange](#) exploring practices for testing, monitoring, and deploying connected and automated vehicle technologies.

Curtis noted that these national efforts complement NCDOT's internal research and help ensure that the department remains aligned with best practices and emerging trends across the country.

### **Strategic Plan Update**

**Sarah Searcy** shared that NCDOT has begun to formalize its CAV program in 2025 by building on the department's expertise, its foundational programs, projects, and plans, and its strong relationships with partners across sectors.

NCDOT is:

- Connecting resources across the department to inform a strategic plan with incremental and achievable activities that looks back at the 2016 roadmap in an intentional way.



- Setting an inclusive vision, mission, and goals for how to investigate and solve problems related to CAV.
- Developing a charter for committees and working groups to document their structure, organization, and logistics.
- Creating a communications plan and a webpage that supports collaboration and pathways for industry partnerships.
- Determining ways to improve processes for policy review and development.
- Continuing to recruit champions from executive leadership to drive sustained resources.

So far at the national level this year, NCDOT has:

- Developed and submitted [formal comments](#) on the National Highway Traffic Safety Administration's Automated Driving System-equipped Vehicle Safety, Transparency, and Evaluation Program, or AV STEP, notice of proposed rulemaking.
- Collaborated with ITS America's Automated Vehicles Standing Committee to develop an [AV Policy Framework](#) that was voted on and approved by ITS America's Board of Directors.
- Participated in a [State DOT CAV Peer Exchange](#) alongside representatives from 38 other state DOTs.

NCDOT looks forward to working with the FAV Committee to strategically and intentionally advance its work on CAV in North Carolina. Sarah concluded by welcoming the team from Kimley-Horn and Associates to present an update on the CAV Strategic Plan.

**Brian Graham** from Kimley-Horn and Associates provided an update on the development of NCDOT's CAV Strategic Plan. He shared that initial work began in October 2022 with a think tank meeting that included industry stakeholders, followed by input from a core team at NCDOT, other public agencies, and the FAV Committee. A draft plan was developed but paused to allow for the hiring of a dedicated CAV lead. With Sarah's appointment as NCDOT's CAV lead, the effort resumed earlier this year.

The draft plan is currently under review by a core team at NCDOT. Once feedback is received, revisions will be applied, and the plan will be shared with a broader audience for comment. The structure of the plan includes:

- Messages from NCDOT and an executive summary.
- Introduction and planning process.
- Definitions and state-of-the-practice review (statewide and national).
- Summary of foundational activities and complementary initiatives.
- Identification of key stakeholders.
- A detailed CAV roadmap including mission, vision, guiding principles, goals, focus areas, priority questions, and 20 proposed objectives.

Brian noted that the roadmap is designed as a central section of the plan to make it easy for readers to access the core strategies. The final version is expected to be ready for adoption next month, with the mission and vision aligned to NCDOT's broader goals and tailored to the CAV context.

### Identifying NC's Top 3 Priorities

Following the strategic plan update, **Julie Brenman** facilitated a discussion to identify the committee's top priorities for advancing FAV technology in North Carolina. Committee members were invited to share their perspectives, and their input was captured on a virtual whiteboard (Mural), where stars were used to visually indicate areas of consensus.

**Sheriff Charles Blackwood** began the discussion by sharing that he was encouraged by the progress made since the committee last met. He noted that autonomous vehicle technology is already being implemented in North Carolina and emphasized the importance of planning future phases of deployment. He suggested that the committee should focus on establishing a phased approach to implementation, particularly for freight vehicles such as platooning trucks. He also emphasized the need for legislation to support these phases and ensure safe deployment.

**John Hardin** followed by highlighting the importance of policy and legislation. He raised a question about the committee's jurisdiction and how state-level efforts align with federal regulations. He expressed interest in gaining a clearer understanding of the interaction between federal, state, and local laws and suggested that the committee invite a federal representative to a future meeting to help clarify these issues.

**Dan Bennett**, speaking from the perspective of a fleet operator, identified safety, infrastructure, and testing and deployment as his top priorities. He focused on the practical aspects of implementation, including how to train staff and build operational capacity. He emphasized the importance of understanding how deployment would work in real-world conditions and how to prepare for it.

**Debbie Smith** shared that her top priorities were policy and legislation, safety, and infrastructure. She emphasized the role of cities in building and maintaining infrastructure and expressed concern about local governments being left out of the policy-making process. She stressed the importance of ensuring that cities are actively involved in shaping the rules and decisions that will affect them.

**Tara Andringa** added public engagement and education to the list of priorities. She emphasized the need for a proactive plan to educate communities and engage stakeholders. She noted that public understanding of autonomous vehicle technology is limited and that outreach efforts should help residents understand how the technology will affect their lives. Later in the discussion, Tara elaborated on the importance of clarifying the differences between driver assistance technologies (such as Level 2 systems) and highly automated (Level 4) or fully autonomous vehicles (Level 5). She shared examples of outreach efforts, including an educational exhibit that her team organized at the Texas State Fair featuring autonomous trucks.

**Justin Owens** emphasized the importance of safety for vulnerable road users, particularly in complex environments such as construction zones and law enforcement interactions. He also supported broader public education efforts to build understanding and trust.

**Chief Lawrence Capps** identified infrastructure readiness and testing and development as his top priorities. He raised questions about whether North Carolina's highways and roadways are equipped to support FAV integration and whether there should be a prioritization of commercial versus personal

vehicle deployment. He emphasized the need to assess current capabilities and define a phased testing process.

Based on the discussion and Mural input, the following priorities emerged:

- **Safety** (★★★★)
- **Policy and Legislation** (★★★)
- **Infrastructure** (★★★)
- **Testing and Deployment** (★★★)
- **Public Engagement and Education** (★★)

The committee also reflected on the division of responsibilities:

- **Government domain:** Policy/legislation, infrastructure, safety, and public engagement.
- **Private sector domain:** Data sharing, funding, and testing/deployment.

Understanding these roles will help the committee define its scope and ensure effective collaboration across sectors.

**Julie Brenman** concluded the discussion by noting that these priorities will help shape the committee's purpose and guide future action planning.

## Defining the Committee's Vision, Mission, and Purpose

### *Checking Our Understanding*

To begin the discussion, **Rachel Werz** of Fountainworks revisited some logistical expectations for the FAV Committee. She emphasized that this meeting serves as a reset and an opportunity to confirm alignment with the committee's legislatively mandated structure. Rachel proposed that the committee commit to meeting quarterly, as required by law, and encouraged in-person participation to foster stronger engagement.

Rachel also introduced the idea of rotating meeting locations and incorporating site visits to relevant projects or facilities tied to agenda topics. Committee members expressed interest in visiting sites within North Carolina that could help them better understand testing and deployment opportunities, particularly for commercial vehicles and transit applications. The Aggie Auto program at N.C. A&T State University was mentioned as a potential site for a future meeting. **Sarah Searcy** invited members to continue suggesting ideas for future visits.

### *Foundational Questions for Discussion*

**Rachel Werz** then facilitated a discussion around three foundational questions:

#### **Who Are We?**

Committee members reflected on the role and identity of the FAV Committee. There was consensus that the committee currently serves multiple functions—as an advisory group, a task force, and a public

education body. Members described the committee as a catalyst, capable of channeling energy into focused efforts that could attract attention and resources.

It was noted that the committee's purpose is broad for now but may narrow over time as priorities become more defined. Members emphasized the importance of being proactive to stay on the radar of the legislature and other decision-makers. One member pointed out that state government has many committees and boards, and that it is up to this group to push information to the legislature and governor to fulfill its legislatively mandated function.

There was also discussion about the need for legislative engagement, with a reminder that four legislative seats on the committee remain vacant.

### **What Work Will We Do?**

Committee members discussed the kind of work they want the committee to focus on. There was agreement that the committee should not be limited to information sharing but should aim to produce actionable outcomes.

Suggestions included:

- **Conducting an analysis of policy and technology gaps**, which is already identified as a task in the CAV Strategic Plan under development by NCDOT. Members expressed interest in sharing the findings at a future meeting.
- **Developing visual messaging and success stories** to promote the committee's work, while being mindful of tone and audience. Members agreed that professional communicators should handle public-facing materials.
- **Focusing on a few high-impact priorities** to make a meaningful contribution and attract attention. Members suggested that this approach could help the committee build credibility and momentum.
- **Promoting North Carolina as a leader** in autonomous vehicle innovation, with one member proposing a branding concept: "First in Autonomous," building on the state's legacy as "First in Flight."
- **Creating an elevator speech** to clearly communicate the committee's purpose and value.

It was noted that the committee does not have a dedicated budget, which may influence the scope of its activities.

### **How Do We Fit Into the Bigger Picture?**

Committee members discussed how the FAV Committee should interact with NCDOT, the public, and other partners across the state. Ideas included:

- **Producing an annual report** to document and share progress.
- **Using social media** to communicate with the public and legislature.
- **Learning from other states** that have successfully structured similar efforts.
- **Using the strategic plan** as a guide for decision-making and prioritization.

Members emphasized the importance of structuring meetings and support systems to make the most of limited time. With only four meetings per year, each lasting about two hours, the committee must be intentional about how it uses its time and resources.

### *Responding to a Draft Purpose Statement*

**Rachel Werz** presented a draft purpose statement for the committee and invited feedback:

*"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."*

Committee members offered several suggestions:

- Replace "fully autonomous" with "automated" to better reflect the range of technologies under consideration and align with NCDOT's internal language.
- Remove "efforts" to make the statement more direct and assertive.
- Add "safety" to the list of aligned elements, given its central role in the committee's priorities.
- Consider simplifying the ending by removing "cohesive and forward-looking strategy," as "future" already implies forward-looking.

After discussion, the committee agreed on a revised draft purpose statement:

*"To lead North Carolina in preparing for a future with automated vehicles by aligning safety, innovation, infrastructure, regulation, and public interest."*

This updated statement will be used to inform the development of the committee's charter, which will clarify its purpose, roles, and relationship to other NCDOT efforts.

### **Wrap-Up and Next Steps**

As the meeting came to a close, **Sarah Searcy** confirmed that the next FAV Committee meeting is scheduled for **December 9, 2025 from 10:00 a.m. to 12:00 p.m. ET** as a virtual meeting. Given the strong engagement and productive discussion during this session, Sarah asked the group whether there was interest in shifting the December meeting to an in-person format.

Several committee members expressed a clear preference for in-person meetings. Members noted that face-to-face interaction fosters stronger collaboration and deeper discussion. While acknowledging that some participants are located across the state or out of state, those attending virtually also indicated that traveling for an in-person meeting would be feasible with advance notice. Sarah confirmed that the planning team would lean toward an in-person format for December, while still accommodating virtual participation for those who need it.

Sarah also addressed a technical issue with the [meeting handouts](#), noting that Microsoft Teams had blocked PDF uploads during the session. Although links were attempted, they did not work for many participants. She assured the group that the handouts would be sent out separately and promptly after the meeting.

In closing, **Brian Mayhew** thanked everyone for their time, effort, and thoughtful contributions. He expressed enthusiasm for continuing the committee's work and developing actionable steps based on the committee's discussions.

The meeting's action items included:

- **Send the draft CAV Strategic Plan to committee members** for their review and feedback.
- **Continue developing the committee charter**, incorporating input from the discussion on the committee's purpose, roles, and structure.
- **Begin scheduling meetings for calendar year 2026** by using a poll to gather availability and maximize participation.

Committee members were also invited to suggest presentation topics for future meetings. Members expressed interest in updates on federal policy, as well as examples from other states that have successfully structured automated vehicle initiatives. Sarah noted that the team would follow up to gather preferences on these topics before finalizing the agenda.

Finally, committee members were encouraged to provide feedback to Sarah and the Fountainworks team on the balance of future meetings—whether they should focus more on guest presentations or on identifying and advancing committee action items. The group discussed the idea of hosting webinars between meetings to engage with national experts and supplement the committee's work.

## **Adjournment**








**Brian Mayhew** adjourned the meeting with thanks and appreciation from the facilitation team.

## Attachment A: Mural Presentation



### Fully Autonomous Vehicles (FAV) Committee Meeting August 14, 2025

#### ● AGENDA

-  Welcome & Introductions
-  Background: Where We've Been
-  NCDOT Research Update
-  Strategic Plan Update
-  Setting Priorities for FAV in NC
-  Defining the Committee's Vision, Mission, & Purpose
-  Wrap-Up and Next Steps

#### ● ROLES

<b>Participants</b>	FAV Committee Members
	Guests
<b>Facilitators / Support &amp; Coordination Team</b>	NCDOT
	Fountainworks
	Kimley-Horn

#### ● WAYS OF WORKING

- Committee Members - Cameras on!
- Active participation
- Share knowledge generously

#### ● OUTCOMES

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.



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## **Background: Where We've Been**

*Sarah Searcy*

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## **FAV Committee's Duties and Membership**

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## 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**

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## FAV Committee Membership

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

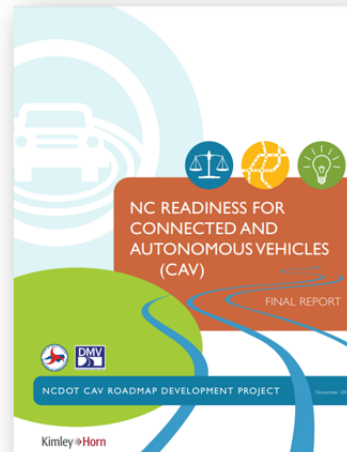
1. Secretary of Transportation, or the Secretary's designee.
2. The Secretary of Commerce, or the Secretary's designee.
3. The Commissioner of Insurance, or the Commissioner's designee.
4. A representative of the Highway Patrol, designated by the Commander.
5. A representative of the North Carolina Association 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.

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## 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.



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## FAV Committee Webpage



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

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

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## NCDOT's CAV Activities

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### Connected and Automated Vehicle Activities

2016

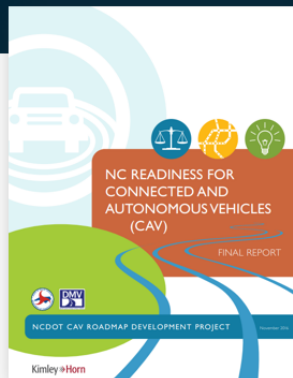
8 Years

2024



**NCDOT publishes first roadmap** for preparing the state for CAV technology

Nov.



*Prioritized putting in place a CAV oversight structure, CAV program manager, and a business plan to monitor and deliver activities.*



**NCDOT establishes first dedicated CAV lead** in the Office of Strategic Initiatives & Program Support

Oct.

#### Emerging Technologies & Innovation Manager

- Coordinate collaboration
- Enable partnerships
- Facilitate departmental committees and working groups
- Manage strategic planning and implementation
- Develop documentation
- Engage and educate
- Act as a senior advisor
- Build and maintain national presence

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## Connected and Automated Vehicle Activities



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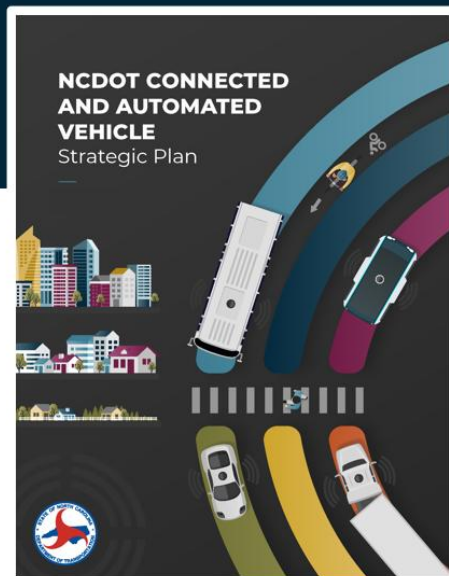
## CAV Program Next Steps



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## 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





## Getting to Know Each Other



## Hopes





# NCDOT Research Update

## *Curtis Bradley*

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**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

## 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

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Summary of Research Programs

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



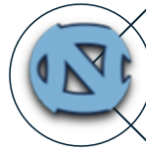
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CAV Summary

## 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

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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

**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**

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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



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CAV Summary

## CAV Technology Transfer / Implementation



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



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

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CAV Summary

## National Cooperative Highway Research Program

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## 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"

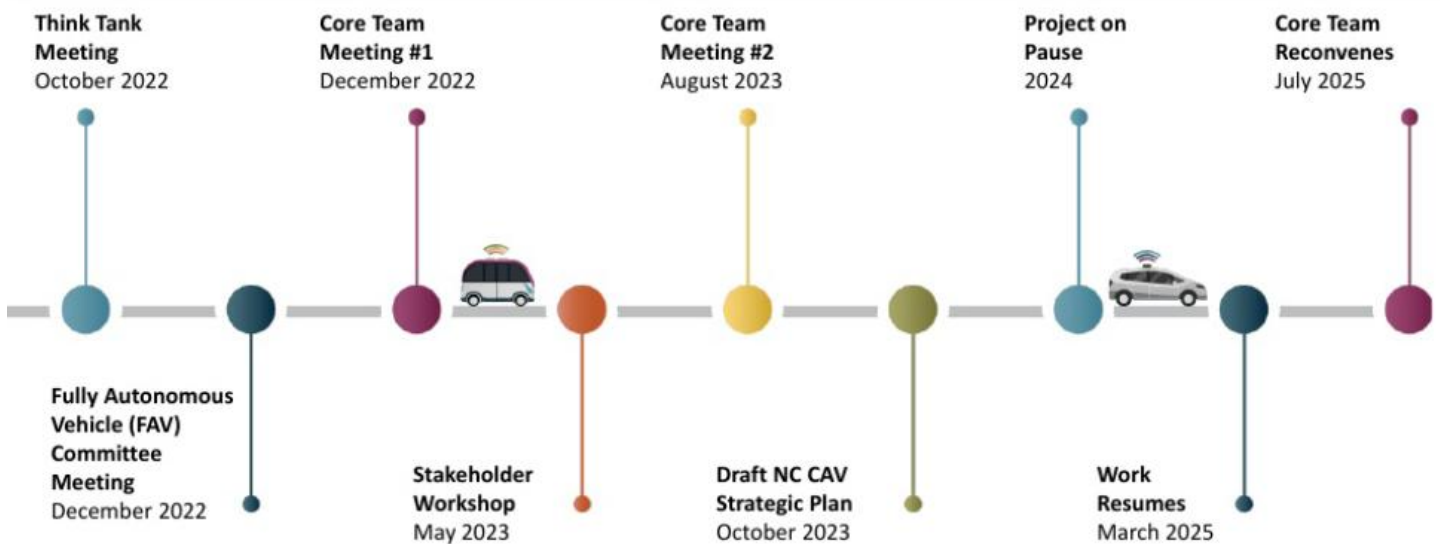


## Strategic Plan Update *Kimley-Horn*

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## Strategic Plan – Process

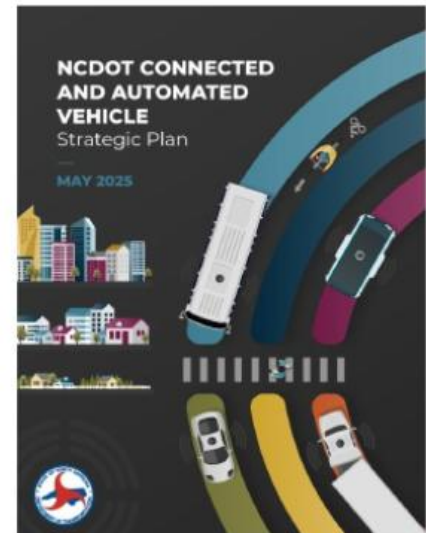




## Strategic Plan – Outline

### 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

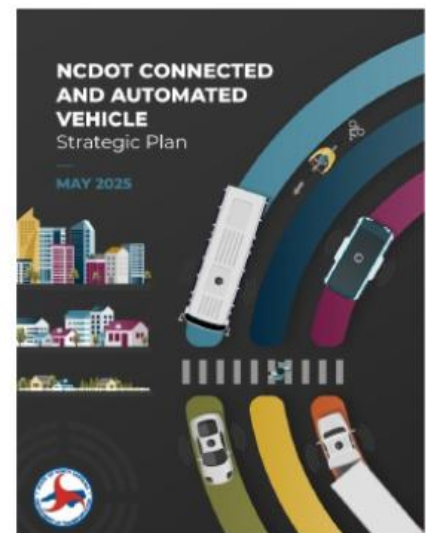


Kimley»Horn



## Strategic Plan – Schedule

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

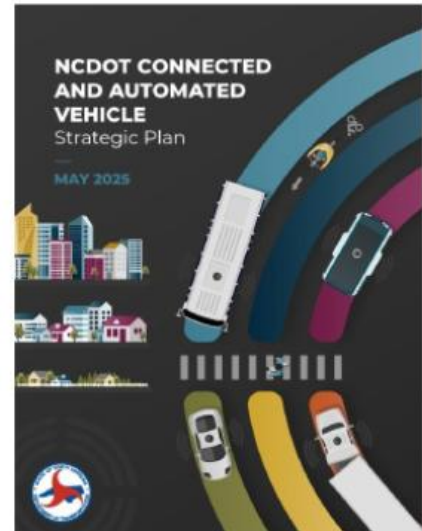


Kimley»Horn



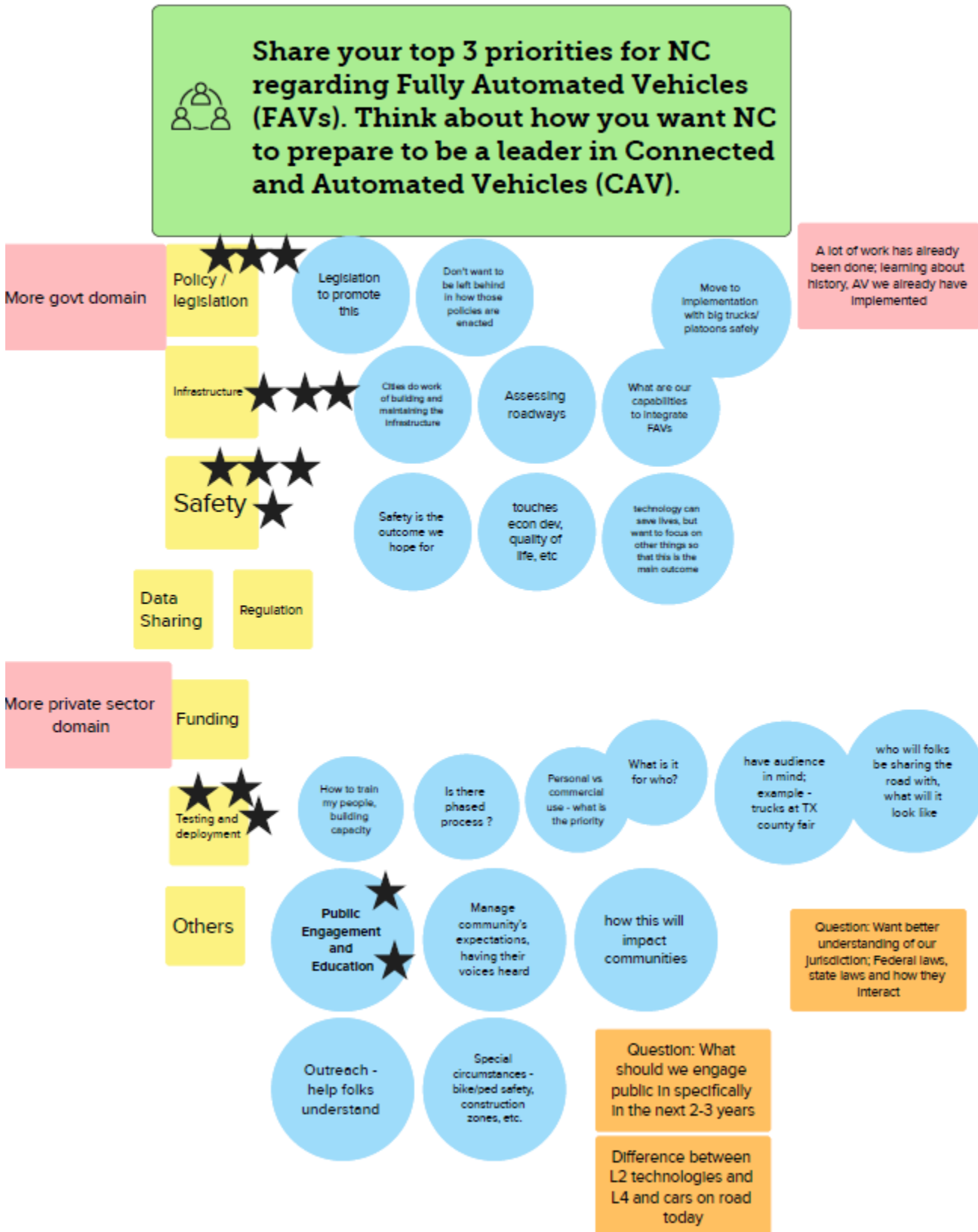
## Strategic Plan – Mission and Vision

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





## Identifying NC's Top Three Priorities for FAV





## Checking Our Understanding

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### Logistics of committee and confirming expectations

Quarterly meetings

In person strongly encouraged

Poll to share available times for future meetings

### Location of committee meetings

Site visits

Tied to agenda topics

Any ideas?

transit and commercial

Interested in NC site visits, particularly about transit

urban robo taxi is a lower priority

TX state fair example



## Defining the Committee's Vision, Mission, & Purpose



### 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?*

**All of the above**

Until we get further down the road, our purpose is broad. It will narrow in future

We need to be proactive to stay on radar of legislature

State Govt has lots of committees, task forces & boards

We need to push info to legislature and governor - the people that originally asked

**What do they know? There is a lot that has been done**

Note: there are 4 legislative seats on the committee that are vacant

**Be a catalyst**

put energy into something to get attention



### What work will we do?

*What kind of work or contributions do you think the team should focus on?*

**Not just information sharing**

Analysis of policy and technology needs?

**What are the gaps?**

Can see if we can share at next meeting

this is in the strategic plan as a task

There is no budget identified by legislature

**Focus on a few priorities**

There is a lot that falls in our purview - want to touch it all

But also need to focus in the short term to get an audience

**Make a splash with some key issues**

First In Flight play on words: First in Autonomous

**NC: Be a leader and not a follower**

tie to economic impact and businesses that would locate here

Begin with the end in mind:

Visuals of safety, electronics, NC coast

**Promote success stories**

Be careful about the message we deliver

The committee is not the ones to do the ads; a professional firm

**We need an elevator speech about our purpose**



### How does our team fit into the bigger picture?

*How should the FAV Committee interact with the NCDOT, the public, partners across the state, guests, etc.*

Want to start doing an annual report - share the progress

**Want to share information** via social media

to legislature and public

Who has done it well and what are their successes?

**Strategic Plan to guide us**

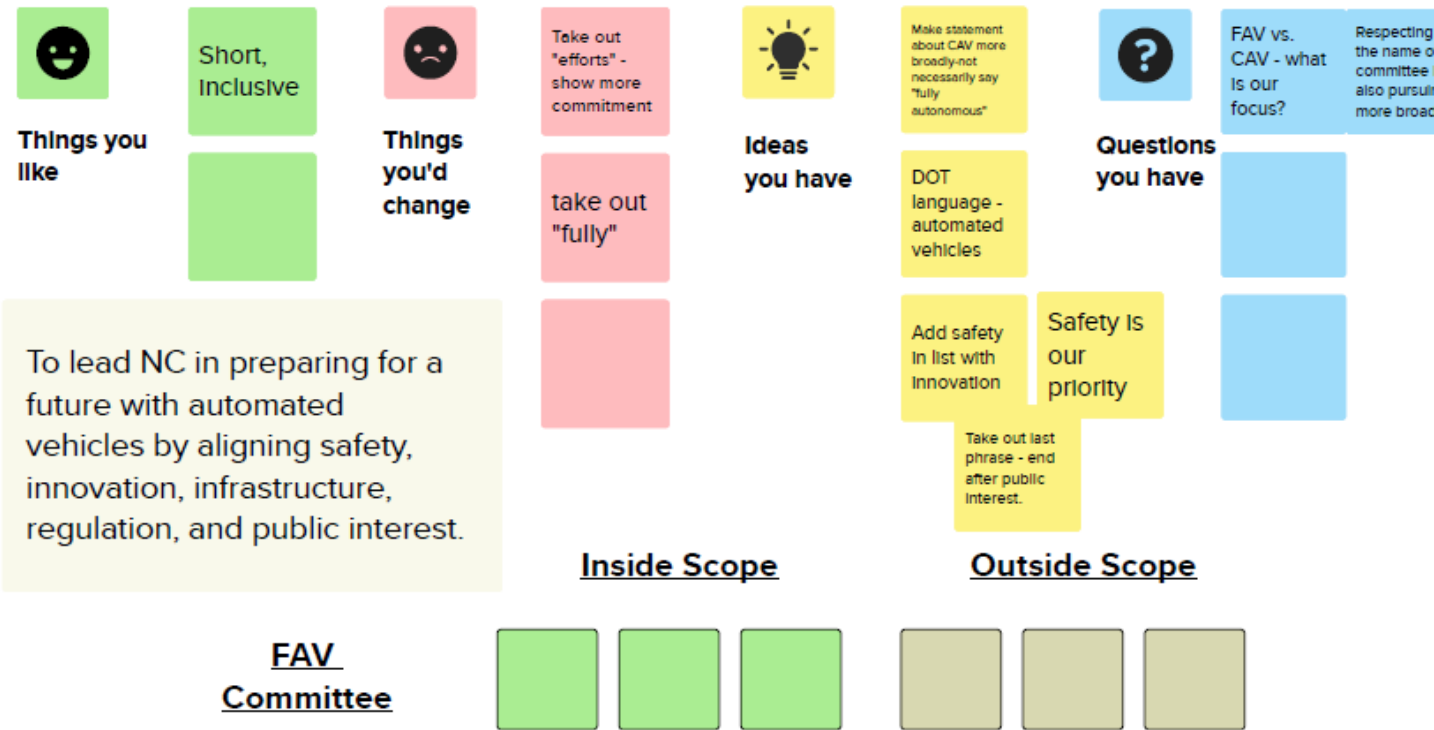
How can we structure ourselves to make the most of our meetings

and make the most impact



## Defining the Committee's Vision, Mission, & 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.*





## Next Steps

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### FAV Committee:

Agenda topics

Draft charter

Gap analysis

Panel - MD, TX, MN

virtual

Other States/ inspiration

Federal updates

### Fountainworks:

Sharing meeting notes

Charter draft

Scheduling Poll for 2026 meeting dates

MONDAY - Sarah - share draft strategic plan with FAV committee

Share handout materials to FAV committee

TOMORROW - Rachel - Send email tomorrow with link