



# MEETING SUMMARY

## MEETING ATTENDEES

Attendee	Representing
Patrick Anding	NC Division of Motor Vehicles
Michele Bailey	NC Division of Motor Vehicles
Jeff Barghout	Robocist, Inc.
Chris Blue	Town of Chapel Hill
Zac Chambers	HNTB
Thomas Chase	Institute for Transportation Research and Education
Chuck Church	NC Division of Motor Vehicles
Jeff Dale	Kimley-Horn and Associates
Torrey Dixon	NC Department of Justice
Mark Ezzell	NC Governor's Highway Safety Program
Anna Gallup	City of Charlotte
John Hardin	NC Department of Commerce
Amanda Good	Kimley-Horn and Associates
Travis Ingold	NC State Highway Patrol
Kendell Jackson	NC State Highway Patrol
Jeff Jaeger	NC Department of Transportation
Dennis Jernigan	NC Turnpike Authority
David Jones	HNTB
Jennifer Keel	NC Division of Motor Vehicles
Katie Kingsbury	Brooks Pierce
Martin Kinnamon	City of Charlotte
Kevin Lacy	NC Department of Transportation
Joe Memory	NC State Highway Patrol
Thomas Moore	Cardinal Government Affairs on behalf of General Motors
Tim Peterson	NC State Highway Patrol
Sam Pierce	Monteith Construction Corporation
John Policastro	NC Automobile Dealers Association
Laura Sandt	UNC Highway Safety Research Center
Judy Schmidinger	NC Division of Motor Vehicles
Frank Sculetta	NC Community College System
David Smith	City of Charlotte
David Spencer	Town of Cary
Stephanie Sudano	NC Department of Transportation
Jason Wager	Centralina Council of Governments
Katie Wong	Kimley-Horn and Associates
Leila Yahyapour	SAS



## MEETING NOTES

Attendees were welcomed to the meeting followed by a brief outline of the meeting agenda. Today's meeting included one presenter, David Spencer from the Town of Cary, to discuss Cary's Connected Vehicle Program.

### *In the Know*

#### **Town of Cary Connected Vehicle Program (David Spencer)**

David Spencer described the Town of Cary's history of work with connected vehicles, including participation in the Signal Phasing and Timing (SPaT) Challenge, conceptualizing a connected vehicle (CV) program for Cary, and eventual grant funding to support the CV program. The CV program has many functions, including traveler information, emergency vehicle preemption, pedestrian crossing applications, and railroad crossing applications. Cary hopes for widespread use of the Travel Safely application, created by their partner, Applied Information, to maximize the benefit of the system. Cary has already begun to promote the use of the Travel Safely smartphone app, which uses the cellular network to send communications to users.

David discussed concerns about latency, stating that none of Cary's CV applications are urgent safety messages, so a bit of latency is acceptable. Furthermore, he mentioned that the application does have lower latency if it is open and visible on the user's phone. Cary is a willing partner to test additional CV messages. Lower latency is essential for many applications, just not the ones they are currently testing.

Concerning pedestrian and cyclist safety and distraction with phones, most of the safety benefits to pedestrians and cyclists will come from warnings to motorists when a pedestrian or cyclist is detected. The smartphone app gives updates to users audibly if the application is not the main application being used.

### *Discussion for CAV Readiness in NC*

Prior to the FAV Committee meeting, agencies were given an opportunity to provide feedback on five questions through a Google form and then during the FAV Committee meeting. The following is the feedback to those questions.



## Gaps, Disruptions, Mitigations

*What is the biggest gap/disruption for your agency regarding CAV?*

- Lack of comfort/experience
- Transportation agency readiness
- No designated funding for regional coordination
- Personnel skills/dedicated CAV position
- Standardized communications platforms for maintenance
- Process for inspecting and enforcement with AVs
- Law enforcement interactions with AVs
- The need for consistent training related to AVs
- Transparency for testing and sharing information with the public at large
- Developing a method for long term transportation planning of AVs
- Interoperability across manufacturers, particularly for gathering data
- Ability to analyze the autonomous vehicle data for crash investigations
- Rules for crossing state line in AVs

*What are you doing/plan to do to mitigate those disruptions? Fill those gaps?*

- Partner with colleagues
- Identify and pursue grant and pilot opportunities
- Update regional roadmap and work to assemble a task force
- Adjust workload or work smarter to allow for focus on CAVs
- Continue collaboration between state, local, and private agencies
- Align ourselves with more experts to help diversify our skill sets

## Capitalizing on Opportunities

*What do you see as the biggest opportunity for your agency/company regarding CAV?*

- Partnership with colleagues
- Collaboration and coordinating with others
- Establish uniform technical or process language
- Community support and willingness to try new technologies
- Development of new skills for rewarding careers
- Advancement to spur additional economic development
- Opportunity to combine efforts with UAS for synergy



*What are you doing/plan to do to capitalize on this opportunity?*

- Launch an innovative task force
- Refreshing the regional focus for the region's task force
- Prioritizing technology programs
- Community outreach on next steps and new programs
- Additional opportunities for education and training
- Collaborating across the country with other states and industry
- Piloting new technologies
- Incorporating multidisciplinary state-of-the-art research topics into portfolio
- Strengthen partnerships at the local, state, and national levels
- Maintaining a good state of practice across the state
- Get planning organizations on the same page as they incorporate AVs into their transit plans

### **Other Considerations for the Strategic Plan**

*Are there other points you think should be considered in the Strategic Plan?*

- There is an investment in infrastructure by the federal government that encourages agencies to have shovel ready projects to fund when asked
- Consistent messages, language, methodologies across the state
- Get regional support, not just local support for CAVs
- Standardized operating systems similar to OBD II
- Collaboration with NHTSA and other states on data reporting, specifically for collisions
- Specific goals with target dates along with what support is needed to achieve goals
- Performance evaluation criteria for annual goal evaluation
- Working across jurisdictional boundaries
- Think about collaboration across states, particularly for commercial vehicles

### *Additional Updates*

- Laura Sandt provided an AV curriculum [organization's training](#) for any input or feedback and shared additional links regarding some research projects and references:
  - [Advancing crash investigation with CV/AV data Phase 2](#)
  - [Sharing Spaces with Robots: The Basics of Personal Delivery Devices](#)
  - [Personal Delivery Devices \(PDDs\) Legislative Tracker V1.0](#)



- We are looking to put together a core team to contribute to the North Carolina CAV Strategic Plan. We have reached out to some people already who we know will be active participants and would like more people to volunteer if you are willing to be an active participant.
- HB 814 was recently passed and is attached as part of the summary. This is the Bill that allows fully autonomous vehicles to operate exclusively at all times in autonomous mode to waive requirements for installation, maintenance, or inspection of vehicle equipment required for human drivers to operate the vehicle.
- We will be moving forward with draft definition language regarding remote operations of vehicles as this becomes a bigger topic in the AV world.

Finally, Amanda Good and Kevin Lacy thanked the Committee members and guests for their attendance and participation, and the meeting was adjourned.