

MEETING NOTES

Iowa Advisory Council on Automated Transportation (ATC) Economic Development and Infrastructure Joint Subcommittee Meeting

Wednesday, October 2

11:00 a.m. – 12:00 p.m. CT

Action Items:

- Create AV Working Group: Anyone interested in being a part of the group should email to Matt Miller, Cheryl Roe, or Dylan Mullenix.
- If you plan to attend the ATC meeting on October 29th at the University of Iowa [Driving Safety Research Institute](#) (DSRI), please complete the questionnaire regarding dietary needs and ADS for Rural America demonstration rides when it arrives in your email.

Attendance – 15 attendees

- Dylan Mullenix – Des Moines Area MPO Executive Director, Policy and Legislation Subcommittee Chair
- Stephan Bayens – Iowa Department of Public Safety
- Matt Burkey – Iowa Bicycle Coalition
- Todd Coffelt – Iowa Department of Natural Resources
- Marcus Coenen – FHU
- Travis Grassel – Iowa Insurance Division
- Eric Johnson – Arnold Motor Supply/The Merrill Company
- Ashley Nylen – US DOT, Office of the Assistant Secretary – Research & Technology, Highly Automated Systems Center of Excellence
- Steven Spears - University of Iowa School of Planning & Public Affairs
- Skylar Knickerbocker – Iowa State University
- Omar Ahmad and Cheryl Roe – University of Iowa, Driving Safety Research Institute (DSRI)
- Brenda Freshour-Johnston, Peggi Knight, and Matt Miller – Iowa DOT

1. Welcome and introductions – *Dylan Mullenix, Policy & Legislation Subcommittee Chair*

- a. Dylan welcomed everyone and briefed the group on the meeting guidelines and provided an overview of the agenda.
- b. There were not any new subcommittee members to introduce.

2. AV Update – *Matt Miller*

- a. Iowa DOT Website, along with other state agency websites, is undergoing updates to become more mobile-friendly and improve navigation. The [Iowa DOT Automated Transportation](#) page has seen updates, particularly within the [Policies and Procedures](#). The page references the Iowa code allowing vehicles to operate without a driver. Currently, cities and counties cannot do much to prevent it. The Iowa DOT is working with AV companies to ensure responsible implementation. The site provides contact information for vendors, directing them to Toni Smith at the DOT, who has also reached out to other states to gather valuable information

- b. Iowa DOT Meetings with Texas, City of Austin, and Ontario.
- After attending the [Automated Road Transportation Symposium](#), Toni Smith, Cheryl, and Matt met with representatives from the [Texas Connected and Autonomous Vehicle \(CAV\) Task Force](#), the [City of Austin](#), and the Ontario Ministry of Transportation (MTO). They aimed to understand how they prepared for AV testing and learn about their experiences with various companies.
 - Each representative discussed having stakeholder groups that meet periodically to discuss AV topics. The Texas CAV Task Force includes members from TxDOT, local governments, transportation officials, community members, and industry. The Texas Transportation Institute assists subcommittees, especially with white papers. They produce reports every other year.
 - The City of Austin has various stakeholder groups: police, fire, EMS, and an airport working group meet monthly, another city group meets monthly, and a larger stakeholder group, including disability groups, universities, school police, schools, Texas DOT, NHTSA, and AV companies, meets twice a year. The School for the Deaf wants AVs to avoid certain streets, while the School for the Blind wants AVs. This larger group also discusses handling special events like football games and concerts.
 - Like Iowa, regulatory control is minimal. Austin provides an “Expectations” document, including maps of schools, fire departments, bridges, and a calendar of events. Austin also provides information about how the city plans to issue citations and ask about ride-share needs for electricity. Texas representatives mentioned something similar, a “welcome” packet, which includes considerations and contacts.
 - Texas and Austin encourage AV companies to showcase their trucks at “petting zoos” to various entities, including police, fire, EMS, government, and the public. This allows people to see, touch and interact with the vehicles which can increase awareness about what to expect. They suggest getting AV companies in front of elected officials before setting up operations, emphasizing the value of building relationships.
 - Texas has an interactive [AV Dashboard](#) that informs the public about each AV company operating in Texas. The dashboard includes the type of service, vehicle description, status in Texas, safety driver, location, website, and service area.
 - Austin has [incident dashboard](#) that displays various types of AV related incidents such as blocking traffic, collisions, near misses, nuisances, ignoring Austin Police Department (APD) directions, or safety concerns. The dashboard includes the entity that submitted the report such as the fire department, APD, Austin Transportation & Public Works, EMS, and the public shown on a map and a chart. The public can report an AV incident using an [Autonomous Vehicle Incidents Public Form](#). These incidents can be filtered by AV company or viewed collectively. Each incident is reported to the AV company almost immediately.
 - AV companies may request specific road markings and signs, raising questions about infrastructure investment. One example provided was the standardization

of signs. For instance, a sign indicating “No Turn on Red during school hours” may confuse AVs.

- AV companies will seek access to data exchanges like the Work Zone Data Exchange. Sharing information about significant events that may impact roads is crucial. These events could be planned, such as construction, sporting events, and concerts, or unplanned, like fires, shootings, or hazmat-related incidents.
- Austin is working to incorporate Mobility Data Specification (MDS) through [Open Mobility Foundation](#). MDS is a digital tool that helps cities manage transportation. It can standardize communication and data-sharing between cities and private companies which can enhance vehicle management and better outcomes for the community.
- Communication is imperative to building trusting relationships. It is important to know the key points of contact within the AV company, but also within the municipalities, fire & law enforcement departments, and the state. The AV should provide the “BIG” picture upfront: short-term and long plan, type of vehicle, number of vehicles, ODD, route, and whether there will be safety operators. AV companies should also communicate changes, such as removing safety operators or changing the ODD or route. A suggestion was made to consider a dedicated email account for AVs, which the then would be forwarded to the other points of contact.
- [Ontario Automated Vehicle Pilot Program](#) is a 10-year pilot program which allows AVs to test on Ontario’s roads. Initially in 2016, a driver was required, but since 2019, this requirement has been removed. AV companies must apply to the MTO to conduct test. The application must specify where and when tests will occur, the duration, the types of vehicles being used, and whether the vehicles will include driver(s). Additionally, companies must provide details about the vehicle including compliance with federal safety measures and standard safety equipment like steering wheels and pedals. Applications for vehicles lacking standard safety equipment may take longer because they need federal approval. The program requires that each AV company provide an annual report about their testing for each AV type. The report must include number of vehicles being tested, kilometers travelled, roadway types, speed limits, road conditions, time of day, and system disengagement which were system-generated, and operator generated. Unlike Texas and Austin, data is not publicly shared.
- Considerations: Iowa needs to decide the level of control they want over AV testing, including when authorities can step in and pause operations. While involving municipalities can lead to positive outcomes, it may also impact timelines. Other considerations include the state’s comfort level with the number and type of AVs, suitable and off-limit locations for testing, thresholds for bad weather, and whether the AV company has its own thresholds for testing. Additionally, the state should determine if it wants safety assessment reports and, if so, what requirements these reports should meet.

3. AV Working Group Roundtable Discussion – Matt Miller

- a. Director Marler tasked Matt with forming an AV Working Group to focus on future AV deployment, policy, and information gathering. The group would meet and report back to the ATC group and potentially the governor's office.
- b. Matt called for volunteers, welcoming anyone interested. He suggested subcommittee chairs join the group. He also emphasized the importance of including members from the communities that may be impacted by a deployment. It is important to have law enforcement, MPOS, fire, and EMS.
- c. Cheryl urged the subcommittee to think about individuals that may represent groups that Matt have not mentioned. Anyone is welcome and getting perspective from many different stakeholders is important. For example, the City of Austin has representatives from the School for the Blind and the School for the Deaf on one of their groups.
- d. If you interested or know someone might want to be on the AV working group, please contact Matt Miller, Cheryl Roe, and/or Dylan Mullenix.

4. Driving Safety Research Institute – Omar Ahmad

- a. Omar Ahmad, Deputy Director at DSRI shared information about three AV-related projects, one funded and two proposed however due to time constraints it was not included. Summary of those projects provided.
- b. [ADAS for Bustang Intercity and Regional Bus Transit](#) – The Colorado DOT, in partnership with Colorado State University and the University of Iowa, received funding from the Federal Transit Administration for this demonstration project. It will feature three fully equipped public transit service buses of different sizes, each outfitted with aftermarket ADAS technology, including ACC, AEB, blind spot intervention, and lane-keeping assistance. These buses will operate on two different revenue service routes. DSRI will focus on training transit drivers on the ADAS and evaluating the impact of this training. For additional project details: [Project fact sheet](#)
- c. [Rural Autonomous Vehicle Research Program](#) – DSRI along with several other universities – Virginia Tech, Auburn, and Western Virginia – submitted two proposals for this program: one for the “movement of people”, and one for the “movement of goods”. DSRI's role leverages years of testing on Iowa's rural roadways to address shortcoming and advance the project to the next level. The team was notified that the “movement of people” proposal made it through the initial review process and recently presented the proposal to a group of reviewers. Omar shared a four-minute pitch video that was shared during that presentation.
- d. [Strengthening Mobility and Revolutionizing Transportation](#) (SMART) – DSRI took part in a SMART Program Stage 1 proposal led by the University of Iowa's (UI) CAMBUS, the university's free public transportation system that serves both the UI campus and UI Healthcare. This project aims to expand CAMBUS's on-demand service to a new UI Healthcare facility currently under construction. The plan involves using DSRI's ADS transit and retrofitting several CAMBUS ADA paratransit buses with automation

capabilities to serve the new healthcare facility as well as the two existing facilities. DSRI will be involved with training UI CAMBUS drivers for operating the ADS vehicle.

5. Recent & Upcoming Meetings

- a. **Public Safety & Enforcement Subcommittee Meeting** – Wednesday, September 25, 2024
- b. **Economic Development and Infrastructure Readiness Joint Subcommittee Meeting** – Friday, September 27, 2024
- c. **Iowa Advisory Council on Automated Transportation Meeting** – Tuesday, October 29, 2024, from 10:00 a.m. – 12:00 p.m. In-person meeting to be held at the University of Iowa Driving Safety Research Institute. Virtual option will be available. ADS for Rural America Demonstration Drives available upon request.

ATC SUBCOMMITTEE MEETING

Policy &
Legislation Subcommittee
Meeting
OCTOBER 2, 2024



Automated drive

Destination: 50° 43' 50.34" N - 6° 10' 55.294" E
Arrival: 08:55 pm - Distance 783 miles

TCP/IP: 192.56.327.684.1
SYNC: **enabled** | Sensors: **active** | Cameras: **active**

Automated drive

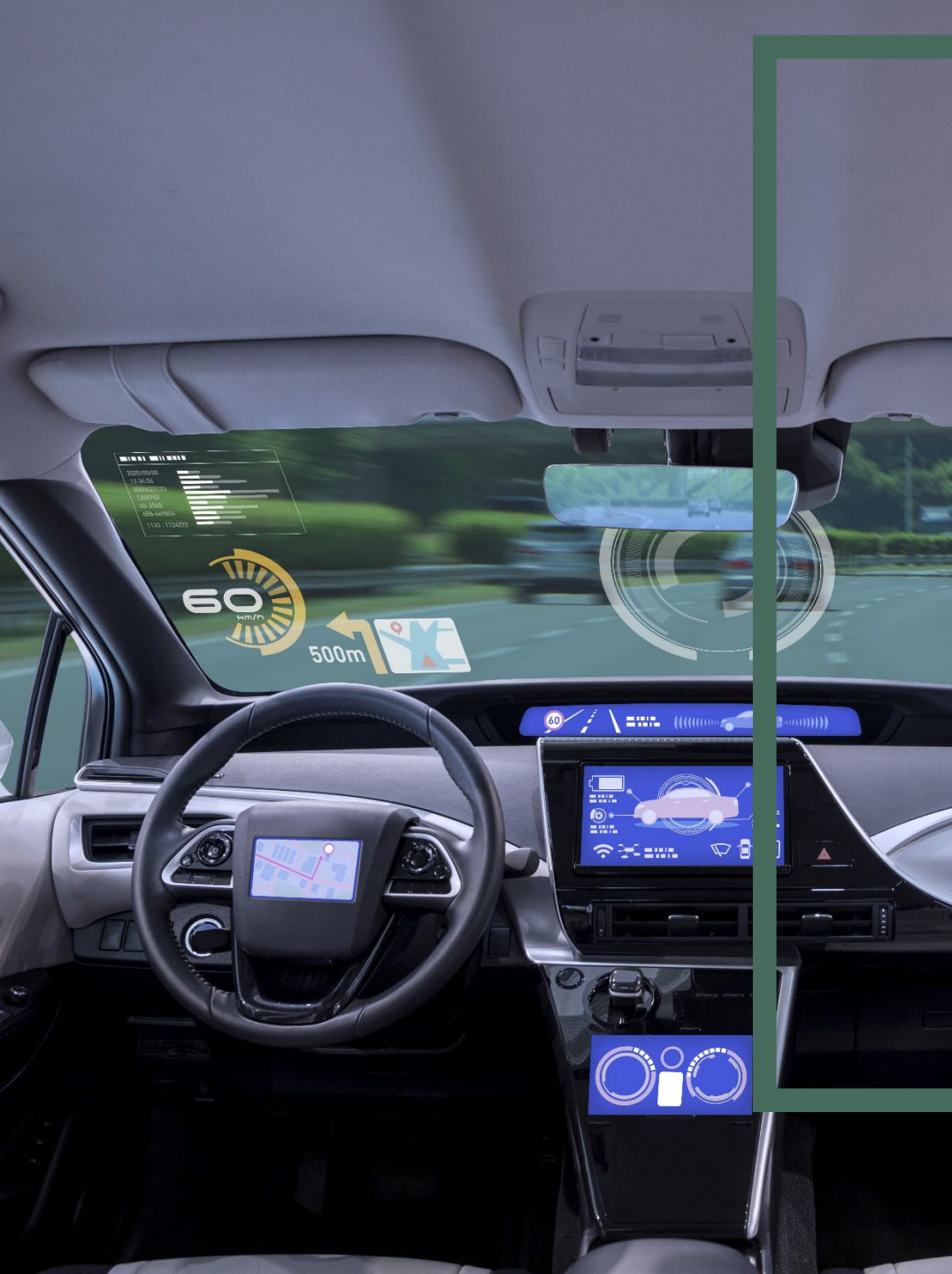
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MEETING AGENDA

1. **Welcome, Introductions, and Subcommittee Update** – Dylan Mullenix, Policy & Legislation Subcommittee Chair
3. **AV Update** – Matt Miller, Iowa DOT
 - a. Iowa DOT Automated Transportation webpage update
 - b. Iowa DOT meetings with Texas, City of Austin, and Ontario
4. **AV Task Force Roundtable Discussion** – Matt Miller, Iowa DOT
5. **DSRI AV Project Update** – Omar Ahmad, DSRI
6. **Recent and Upcoming Meetings**
 - a. Public Safety & Enforcement Subcommittee Meeting – Wednesday, September 25
 - b. Policy and Legislation Subcommittee Meeting – Wednesday, October 2
 - c. Iowa Advisory Council on Automate Transportation Meeting – Tuesday, October 29 from 10:00 a.m. – 12:00 p.m., hosted at the [University of Iowa Driving Safety Research Institute](#), virtual option available. [ADS for Rural America](#) demonstration drives available by request.

WELCOME AND INTRODUCTIONS

Dylan Mullenix –
Policy & Legislation
Subcommittee Chair





AV UPDATE

Iowa DOT Automated Transportation Webpage Update

Summary of Iowa DOT meetings

IOWA DOT AUTOMATED TRANSPORTATION UPDATE

The screenshot displays the Iowa DOT website's automated transportation section. At the top, the Iowa DOT logo is on the left, and navigation links for DMV, TRAVEL, BUSINESS, FORMS, CONTACT US, and A-Z INDEX are on the right. A search bar prompts users to 'KNOW WHAT YOU'RE LOOKING FOR? TRY OUR A-Z INDEX'. The main header reads 'AUTOMATED TRANSPORTATION' over a background image of a car with sensor waves. A left-hand navigation menu lists: AUTOMATED TRANSPORTATION HOME, OVERVIEW, BENEFITS, AUTOMATED VEHICLES TESTING AND OPERATING, KEY TERMINOLOGY, PLANNING & VISIONING, POLICIES & PROCEDURES (highlighted), INITIATIVES & PROJECTS, STAKEHOLDER ENGAGEMENT, PARTNERS & MEMBER ORGANIZATIONS, PUBLICATIONS, and CONTACT US. The main content area features a 'POLICIES & PROCEDURES' section with an illustration of a car, cyclist, and pedestrian with sensor waves. Below this is the 'AUTOMATED DRIVING SYSTEMS FRAMEWORK' section, which contains text about 2019 legislation (Senate File 302) and Iowa Code sections 321.514 to 321.519. The 'AUTOMATED TRUCK PLATOONING & FOLLOWING DISTANCE' section includes three sub-sections: 'DISTANCE REQUIREMENTS' (with a ruler icon), 'PLATOONING PROCESS' (with a wheel icon), and 'CONSIDERATIONS' (with a brain icon). A vertical red bar on the right side of the page contains the text 'How did we do?'.

<https://iowadot.gov/automatedtransportation/Policies-Procedures>



AV UPDATE

Iowa DOT Automated Transportation Webpage Update

Summary of Iowa DOT meetings

IOWA DOT MEETING SUMMARY

- Texas AV Task Force, City of Austin, and Ontario Ministry of Transportation (MTO)
- Task Force and/or stakeholder groups
 - All stakeholders have a responsibility to share information – Task force “opens doors”
- Like Iowa, their regulatory control is minimal
 - “Welcome” and/or “expectations” document
 - Interactions with police, fire, EMS, government officials and public – “petting zoos” and ride-along
- AV deployment dashboard, incident data dashboard
 - [Texas AV data](#) [Austin AV Incidents](#) [Austin AV Incident Public Form](#)
- Infrastructure needs and cost
 - Data Exchange (i.e., Work Done Data Exchange)
- Communication is KEY
 - AV’s plan (ODD, route, safety operator(s), short term and long-term, etc.)
 - Points of contact (AV company, cities, state, fire, police, etc.)



AV TASK FORCE ROUNDTABLE DISCUSSION

Volunteers are needed

Cross-section representation

Inform policy

Regular reporting to the Iowa Advisory Council and the Governor's office

DRIVING SAFETY RESEARCH INSTITUTE PROJECT UPDATE

Presented by Omar Ahmad, DSRI



DRIVING SAFETY RESEARCH INSTITUTE

- [ADAS for Bustang Intercity and Regional Bus Transit](#) – funded FTA
 - Colorado Department of Transportation
 - Demonstration of three fully equipped public transit service buses with aftermarket ADAS technology.
 - DSRI role: training operators and evaluation materials
- [Rural Autonomous Vehicle Research Program](#) – proposal
 - Virginia Tech Transportation Institute, Auburn University, and West Virginia
 - Opportunities for transporting people and/or goods
 - Transportation of people proposal has made it through the initial evaluation process
- [Strengthening Mobility and Revolutionizing Transportation \(SMART\) Grant Program](#) – proposal
 - Project led by University of Iowa Cambus
 - ADS shuttle to be used to provide service to new UIHC location in North Liberty
 - Cambus vehicle will be equipped with ADS hardware and software
 - DSRI to train UI Cambus staff for operating ADS vehicle



RECENT AND UPCOMING MEETINGS

Public Safety and Enforcement Subcommittee Meeting – Wednesday, September 25 from 11:00 a.m. – 12:00 p.m.

Economic Development and Infrastructure Readiness Joint Subcommittee Meeting – Friday, September 27 from 1:30 – 2:30 p.m.

Iowa Advisory Council on Automated Transportation Meeting – Tuesday, October 29 from 10:00 a.m. – 12:00 p.m.

In-person meeting to be held at the University of Iowa Driving Safety Research Institute. Virtual option available. ADS for Rural America demonstration drives available by request.



THANK YOU