MEETING NOTES

Iowa Advisory Council on Automated Transportation (ATC)

AUTOMATED
TRANSPORTATION

Tuesday, February 13 10 – 11 am CT https://iowadrivingav.org/

Attendees – 26 people

- Dylan Mullenix Des Moines Area MPO (Policy & Legislation Chair)
- Erin Mullenix Iowa League of Cities (Infrastructure Readiness Chair)
- Rick Peterson Iowa Economic Development Authority (Economic Development Chair)
- Colonel Nathan Fulk Department of Public Safety (Public Safety & Enforcement Chair)
- Stephan Bayens Department of Public Safety
- Ashley Nylen Highly Automated Systems Safety Center of Excellence (HASS COE), U.S. DOT
- Nicole Oneyear Iowa Division of the Federal Highway Administration
- Kathy Anderson, Beth Townsend Iowa Workforce Development
- Allison Meiners Iowa Motor Truck Association
- Robert Denson Des Moines Area Community College
- Doug Ommen and Travis Grassel Iowa Insurance Division
- Eric Porter Iowa Communications Network
- Shirley McGuire Federal Motor Carrier Safety Administration, Iowa Division Office
- Omar Ahmad, Dan McGehee, Cheryl Roe University of Iowa, Driving Safety Research Institute (DSRI)
- Neal Hawkins, Skylar Knickerbocker Iowa State University, InTrans
- Andrea Henry, Peggi Knight, David Lorenzen, Matt Miller, Tim Simodynes, Toni Smith Iowa DOT

1. Welcome

- A. Matt Miller became the Director of New and Emerging Transportation Technologies (NET) at the Iowa DOT in January of 2024. As part of this position, he assumed the responsibilities associated with the leading the ATC from Adam Shell. Matt is a graduate of the Certified Public Manager Program at Drake University. Matt has over 13 years of experience with the Iowa DOT. Most recently as the E-Construction Program Administrator, Matt worked with E-Ticketing, digital delivery, 3D models, drones, and GIS as-built capture. Previously, Matt worked on infrastructure projects with Peterson Contractors, Inc. for over 8 years and launched aircraft in the US Navy on the Theodore Roosevelt.
- B. Matt hosted the meetings to become familiar with the ATC members, discuss upcoming ATC meetings, and to start the process for updating the ATC council charter and vision documents.

2. ATC Council and Vision updates

A. The <u>ATC Council Charter</u> and member list (page 4-5) was shared. Each member was identified with their affiliation and their appropriate subcommittee. The subcommittee chairs for Policy and Legislation (P&L), Infrastructure Readiness (IR), Economic Development (EcDev), and Public Safety

and Enforcement (PS&E) were identified. All agreed to continue in their roles. Attendees were asked to identity required modifications and additions for the member list.

- Col. Fulk, Public Safety & Enforcement Subcommittee Chair, asked that Lieutenant Mike Current from the Iowa State Patrol be added to the contact list for future meetings. Lt. Current is currently serving on the <u>American Association of Motor Vehicle Administrators</u> (AMMVA) Automated Vehicle Subcommittee through 2026.
- B. <u>ATC Vision</u> updates: The vision document has not been updated in several years. Matt has been tasked with updating the document. He requested information from the council.
 - i. Infrastructure Readiness Subcommittee
 - a. After a discussion about road maintenance as it is associated to potholes and lane markings, the IR subcommittee chair Erin Mullenix suggested that the document be modified to include a statement that includes general infrastructure topics like evaluations, focusing on pavement markings and road conditions.
 - b. Dan McGehee, DSRI, stressed the importance of digital infrastructure. He highlighted that the council needs to continue thinking more broadly to identify ways to use sensors and other digital infrastructure options to identify issues like potholes more quickly.
 - c. Ashley Nylen, HASS COE, confirmed that physical and digital infrastructure readiness work is being done by colleagues at that federal level. Additionally, the National Cooperative Highway Research Program (NCHRP) has multiple studies focusing on physical infrastructure. Ashley plans to share different resources with the council.
 - d. Since the IR and EcDev subcommittees share focus areas (workforce, freight) and have had several joint meetings, Matt offered up the idea of combining them into one subcommittee. Neither Erin nor Rick thought this was necessary.
 - ii. Economic Development Subcommittee
 - a. No changes were identified for the vision document.
 - b. Beth Townsend, from Iowa Workforce Development indicated a desire for the organization to be more involved in the project.
 - iii. Policy & Legislation
 - a. No changes were identified for the vision document.
 - b. Matt mentioned that there were a couple legislative bills up for consideration related to automated vehicles.
 - c. Toni Smith is the Emerging Technology Program Manager for the Motor Vehicle Division of the Iowa DOT. She provided a summary of Iowa's progress with putting together a draft of rules/codes for automated vehicle use in Iowa. During this process, the team reviewed what other states were doing and met with states regarding multiple topics. The draft of this document has been shared with various stakeholders for feedback.
 - iv. Public Safety & Enforcement
 - a. No changes were identified for the vision document.
 - v. Research Development, Testing & Evaluation: Peggi Knight requested more defined objectives and directions for the research team. This was further discussed at the 2/15 meeting with Adam.

vi. Communication, Outreach, and Education: Andrea Henry requested a meeting to discuss and refine communication strategies. This was further discussed at the 2/15 meeting with Adam.

3. ATC meetings

- A. In-person meetings
 - i. Various locations were identified as potential opportunities for in-person meetings.
 - a. Rick Peterson suggested a meeting location for July.
 - b. Rob Denison offered a venue at the Des Moines Area Community College (DMACC). He added that there are great food options at the DMACC Bistro for lunch.
 - c. The League of Cities also offered a potential location.
 - ii. Discussed holding the next meeting in late summer or early fall 2024.
 - iii. This topic was discussed again at 2/15 meeting. Kathy Anderson agreed that DMACC was a great option. If this location is chosen, the meeting would be in April.

B. ATC Meetings & Speakers

- Future presentations should focus on logistics and barriers with an attempt to avoid marketing-oriented content. Speakers should highlight topics relevant to the four subcommittees. Attendees provided additional feedback regarding potential speakers and topics.
- ii. Col. Fulk highlighted that DSRI, InTrans, and AAMVA are great resources for presenting and identifying speakers. He thinks it is useful to highlight involvement of ATC members with various projects. He provided examples: a study with Virginia Tech and the International Association of Chief's of Police, InTrans pavement marking updates, AV Crash data working group meeting/visit at DSRI, and other DSRI related studies. One current DSRI study involves vehicles equipped with Advanced Driving Assistance Systems (ADAS) and law enforcement.
- iii. Dan McGehee identified Ashley Nylen as someone who may be able to provide an overview of automated vehicle testing/technologies in the US and Internationally. Ashley is open to setting up a work session with Dan and Matt to discuss valuable players to consider.
- iv. Neal Hawkins remarked at how good Adam was at sharing information from various meetings and other DOTs within the Mid America Association of State Transportation Officials (MAASTO).
 - a. Matt informed the group that Daniel Yeh has been attending the MAASTO meetings, however they are working on a transition for Matt to take on this role.
- v. Toni Smith thought it could be beneficial for future meetings to include key point summaries from individuals who attend various local, regional, and/or national meetings.
- vi. Dan McGehee suggested that Col. Fulk and/or Commissioner Bayens be informed about crashes of interest so that they can provide law enforcement or legal perspective about the crash to the council. Col. Fulk thought it was a great suggestion and he will stay connected with Matt about these types of incidents.

4. Subcommittee meetings

A. Erin Mullenix has found the joint IR and EcDev meetings beneficial. She suggested that the council consider having other joint subcommittee meetings. Perhaps the joint meetings could rotate. Joint meetings may be better at keeping individuals informed, while also helping to identify the best resources to work on grant opportunities.

5. ATC Bi-Weekly Clippings

- A. Matt solicited feedback from the group about the ATC bi-weekly clippings. To sign up: https://iowadrivingav.org/clippings.aspx
- B. The clippings will continue to be sent bi-weekly on Mondays at 7:00 a.m. Future clippings will include additional information as suggested by council members.
 - i. Include some additional context with clippings.
 - ii. Include supplemental articles from research side.
 - iii. Include various conferences and peer events. These will help to identify meeting summaries for future meetings.
- C. If you come across a link to an article that is behind a paywall/firewall, please email Cheryl Roe Cheryl-roe@uiowa.edu

Thursday, February 15 10 – 11 am CT



https://iowadrivingav.org/

Attendees – 6 people

- Paul Steier American Association of Motor Vehicle Administrators (AAMVA)
- Kathy Anderson Iowa Workforce Development
- Cheryl Roe University of Iowa, Driving Safety Research Institute
- Matt Miller, Adam Shell, Toni Smith Iowa DOT

1. Welcome

- A. Matt Miller introduced himself to the group.
- B. Matt shared the goal of the meetings, provided updates from the February 13th meeting, and asked attendees to introduce themselves.

2. Introductions

- A. Kathy Anderson is the Division Administrator of the Business Engagement Division at Iowa Workforce Development. She was appointed by Beth Townsend, the Director of Workforce Development, to participate on the council. Kathy highlighted their capacity to communicate with employers regarding perspective, concerns, and more.
- B. Paul Steier is the Director of Vehicle Programs with AAMVA. AAMVA will be publishing the newest edition of their AV guidance document next month. The document provides recommendations for jurisdictions, as well as recommendations for manufacturers or other entities that may be testing or piloting AVs. AAMVA encourages AASHTO members, DOTs, and other stakeholders to work together so there can be consistency from state to state. AAMVA also partners with Federal Motor Carrier Safety Administration, National Highway Traffic Safety Administration, and Commercial Vehicle Safety Alliance to provide a broader perspective from the federal side.
- C. Toni Smith is the Emerging Technology Program Manager for the Motor Vehicle Division of the Iowa DOT. Her position aligns with AV topics similar to Matt's but from a motor vehicle division perspective. She also attended the call on Monday.
- D. Adam Shell joined the call and provided an update about his transition to his position as Geographic Information Systems (GIS) Program Manager. Adam shared insights about documents for Matt and the ATC to review and topics to explore.
 - i. Roadway Automated Driving Systems Integration, Concept of Operations for Transportation Agencies: Version 1
 - 1. The document took several years to develop. It is worth noting that elements of this document are incorporated into some of the ATC documents, however some perspectives are presented differently. He encouraged the group to look at the "Use Cases" (page 7) and how they can align with the council. The four broader use cases identified in the document include: Freight and Package Delivery, Transit, Individual Travel and Commuting, and Agency Operations. A good use case within Agency Operations might be something that has been explored before, like garbage trucks or street cleaners. These are often lower speed on local roads. It is something with a clear operational design domain (ODD).

- ii. The ATC vision document is four years old and should be updated. He highlighted the importance to carry forward some of the key tactical areas in the updates. The AV Crash working group and addressing VRU safety were provided as examples for the Public Safety & Enforcement subcommittee.
- iii. Adam shared the <u>Economic Development Subcommittee meeting summary from May 2021</u> which included two presentations related to workforce development. One was provided by the Minnesota CAV Advisory Council. The other was provided by a Labor Market Analysis provided by Jill Lippincott, a former ATC council member.
 - Minnesota CAV council was part of an executive order which is different than in Iowa.
 He encouraged Matt to reach out to the Minnesota CAV council and other states'
 respective councils regarding their status, vision, and current projects. Paul Steier
 provided link to Maryland CAV.
 - Adam highlighted two resources from the labor market analysis that could provide good background information for Kathy and those within the EcDev Subcomittee: <u>University of Michigan Economic Growth Institute</u> and <u>Transportation Systems</u> <u>Management and Operations (TSMO)</u>
- iv. Adam suggested STEM and STEAM type outreach opportunities that utilize the University of Iowa, Iowa State, and community colleges. Another opportunity that was originally identified by Rick Peterson, EcDev Subcommittee chair was a learning center in Waukee, IA called Apex.
- v. When considering VRUs, there is a need to consider anyone outside the enclosure of the vehicle so pedestrians, bicyclists, motorcyclists, etc. A topic that may need to be considered how a personal delivery device on the sidewalk impact individuals using the sidewalk.
- vi. Communications, Outreach & Education and Research Development, Testing & Evaluation groups: Adam identified that initially these groups were viewed as cross-cutting with the four formal subcommittees. The groups are available to assist as necessary. Since their work is not clearly defined, Adam encouraged Matt to communicate with Andrea Henry and Peggi Knight regularly. The communications group updates the website, but also assists in various ways with grant opportunities and developing ATC documents. For example, the Policy and Legislation Subcommittee document Automated Transportation Planning Considerations.
- vii. Adam believed that the focus of ATC should align with the opportunities that are available. When choosing what to do, it is important to consider: the goal of project (deploy technology, public acceptance, education), funding (short-term vs long-term), implications to other operations (deployment may influence traffic signals, the need to clear vegetation, etc.), and more.
- viii. He thinks there are opportunities available to address workforce development.
- ix. He thinks ADAS educational campaigns align well with Public Safety and Enforcement Subcommittee, as well as the Communication, Outreach and Education working group.
- E. Cheryl Roe is the AV Transportation and Outreach Specialist at the University of Iowa Driving Safety Research Institute. The focus of her work involves automated vehicle functionality as it relates to safety, training, and outreach. In her role with the ATC, she supports the Iowa DOT (Adam, now Matt) with meeting agendas, summaries, and the bi-weekly clippings.

- i. Cheryl presented an idea to the group for consideration. She thought it would be beneficial to create an educational and/or outreach campaign about Automated Vehicles (AV) and Advanced Driving Assistance Systems (ADAS). She recently presented to multiple school-aged (10-17) groups and a few adults about AVs. They were inquisitive and eager to learn. She received positive feedback about their experience. The presentations included the SAE levels of automation and highlighted key topics from each of the four subcommittees and ADAS. She stressed the importance of including ADAS in the campaign because ADAS is what is available to drivers today and they are often misunderstood and/or misused. She felt the campaign could develop materials for in-person and/or virtual presentations, website content, videos, brochures, etc. DSRI could use these materials when contacted to attend STEM or STEAM festivals, provide tours, or give presentations about automated technology virtually or in-person.
- ii. Toni Smith thought this could be a great initiative. She too has been looking into an ADAS awareness campaign. Toni mentioned that a preliminary internal meeting was held with the IDOT Motor Vehicles Division to discuss potential topics and resources available. There could be an opportunity to partner with this initiative to create one unified message.
- iii. Cheryl suggested another possibility of a monthly webinar that may focus on a particular ADAS feature. A "Get to Know Your Car" type theme where the webinar focuses on what the ADAS can and cannot do (purpose, function, limitations of ADAS) as well as driver responsibilities. Toni brought up an article about ADAS impairment. A series like this could potentially address this topic.
- iv. Cheryl shared information about a current study that involves surveying and interviewing motorists and officers about near-crash and crashes that may include a vehicle equipped with at least one ADAS. It is a partnership between the lowa DOT and the Colorado DOT that aims to identify gaps in knowledge and the impact of ADAS features on crashes. The project's goal is to provide recommendations for various stakeholders, including infrastructure owners/operators, law enforcement, crash reporting agencies, departments of transportation, and original equipment manufacturers (OEMs) related to ADAS. Results of this study could provide some guidance for the campaign.
- F. Paul Steier noted a couple of things to consider when considering education.
 - i. Current research from AAA has shown that automatic emergency braking may not be as effective as once thought.
 - ii. https://comma.ai/ This is an aftermarket product (looks like a navigation device) that can be installed by the consumer that allows it to use the vehicle's ADAS features. This product has the potential to lead operators to believe that their vehicle can drive, say like a Level 3 vehicle, which may not be the case. AAMVA is considering how they may want to educate the community about a product like this. He can share information with the council, so the materials align.