MEETING NOTES

Iowa Advisory Council on Automated Transportation (ATC)
Public Safety & Enforcement Subcommittee Meeting

Tuesday, December 8, 2020
1:00-2:00 pm CT

Action Items:

- Adam Shell and Daniel Yeh – continue engaging and collaborate with statewide TIM and safety community
- Brian Ursino to furnish example LEIP to Colonel Fulk to circulate to the subcommittee

1. Welcome and introductions – Col. Nathan Fulk, Public Safety & Enforcement Subcommittee Chair
    - Attendees – 27 people
        - Colonel Nathan Fulk (Public Safety & Enforcement Subcommittee Chair) – Iowa State Patrol
        - Brian Ursino, Paul Steier – American Association of Motor Vehicle Administrators (AAMVA)
        - Bruce Anderson – Iowa Automobile Dealers Association
        - Commissioner Stephan Bayens, Catherine Lucas – Iowa Department of Public Safety
        - Rachel Bennett – Iowa County Engineers Association
        - Meredith Terpstra – AAA the Auto Club Group
        - Theresa Litteral – Iowa State University, InTrans
        - Peter Rafferty, Lia Yakumithis – Gannett Fleming
        - Adam Shell, Assistant Chief Tom Bruun, Steve Gent, Alex Jansen, Andy Lewis, Renee Jerman, Tim Simodynes, Steven Stonehocker, Susan Fenton, Sam Sturtz, Dennis Kleen – Iowa DOT
        - Dan McGehee, Omar Ahmad, Jacob Heiden – University of Iowa, National Advanced Driving Simulator
        - Two dialed in by phone
    - Fatalities Reduction Task Force Initiative
        - Iowa DOT, Iowa Department of Public Safety, and the Iowa Governor's Traffic Safety Bureau are working on a Fatality Reduction Task Force to align with highway safety initiatives. The focus of the group is to identify media strategies, enforcement initiatives, and legislative priorities to immediately put into action. The goal is to save lives, reduce fatalities below 300 in 2021, and have zero serious or fatal injuries to our employees while working on the job. Collaboration is key with internal and external stakeholders across the state.

2. Autonomous Vehicles are Coming: What Law Enforcement Needs to Know – Brian Ursino, American Association of Motor Vehicle Administrators (AAMVA) Law Enforcement Program Director
    - Brian Ursino served in the Washington State Patrol for 30 years before joining AAMVA as Director of Law Enforcement. AAMVA represents Motor Vehicle Administrators of all 69 states, provinces, and territories of the U.S. and Canada. They work to support uniformity and reciprocity among jurisdictions. They also provide guidance and best practices on emerging issues.
    - AAMVA published "Jurisdictional Guidelines for the Safe Testing and Deployment of Highly Automated Vehicles, Edition 1" in May 2018. This report provides "recommendations to jurisdictions that facilitate a consistent regulatory framework to balance current public safety with the advancement of vehicle innovations, to reduce crashes, fatalities, injuries, and property damage." These voluntary recommendations help jurisdictions regulate AVs while allowing flexibility to adapt to their community's specific needs.
    - AAMVA published "Safe Testing and Deployment of Vehicles Equipped with Automated Driving Systems Guidelines, Edition 2" in October 2020 to update and expand content and scope throughout the document.
        - Chapter 4 – Vehicle Considerations: Subsection 4.8 (new) discusses the point when the technology replaces the human as the driver. Subsection 4.10 (new) is only applicable to states with mandatory annual vehicle safety inspection programs (14 of 50 states).

- Chapter 5 – Driver Licensing Consideration: Subsection 5.3 (new) is of interest to law enforcement because some technologies allow for remote operation by someone outside the vehicle. Will the remote driver need appropriate license endorsements? What happens when the operate and vehicle are in separate states? Who then would be the lead investigator? Subsection 5.9 (new) focuses on training motor vehicle agency staff on vehicle technologies. Will drivers be able to use advanced driver-assistance systems (ADAS) in their driving tests? The goal is a national standardized testing model from DMVs. Subsection 5.10 (new) focuses on commercial driver licensing (CDLs)
- Chapter 6 – Law Enforcement Considerations: 6.6 Law Enforcement/First Responder Interaction Plans (LEIP) (new) – written by a manufacturer for a first responder with guidance on how to interact with the vehicle or how to contact some from the company at any time. There isn't a standardized format, but some framework may help provide consistency for first responders. 6.7 Law Enforcement Protocol (LEP) for Level 4 and 5 Vehicles – written by law enforcement, for law enforcement to provide policy and general guidelines on how to interact with vehicles. Arizona Department of Public Safety wrote an LEP. It's written and owned by the Arizona Highway Patrol, and it's accessible by all Arizona law enforcement. It's important to understand the distinction between an LEIP (written by manufacturer) and an LEP (written by law enforcement). Fire service is in front of law enforcement for national standardized testing and training for first responders on AV.
- Chapter 7 – Other Consideration: 7.1 (new) focuses on cybersecurity for automated vehicles. 7.2 discusses data collection, which can have different meaning for different groups. Law enforcement is familiar with Event Data Recorders (EDR) that collects data on the driver operating system. What data does law enforcement need to know? At the time of the crash, was automation engaged? Was a warning given? What other data may be useful, while understanding personal privacy concerns?
- Chapter 8 – Next Steps: Subcommittee is developing two whitepapers to augment Edition Two. The whitepapers will discuss Automated Delivery Vehicles and Impact to Distracted Driving Laws. Law Enforcement subgroup is in the final steps of distracted driving whitepaper. This document explores how new technologies impact current distracted driving laws.

3. PS&E Work Plan & Tactical Actions

a. Update on AV Perspective from recent Law Enforcement Meetings – Col. Fulk
   - International Association of Chiefs of Police recently met and most of discussion was around 2020 pandemic. Colonel Fulk spoke at the meeting on Iowa safety strategies. Automation will continue to be in the discussion moving forward.

b. Inform TIM and Safety Community on engagement and collaboration plans – Col. Fulk, Adam Shell, Daniel Yeh
   - Daniel Yeh and Adam Shell from Iowa DOT recently presented to the statewide Traffic Incident Management (TIM) committee to provide updates on the automated transportation initiatives happening in Iowa. They informed the group of various resources provided below, and discussions and engagement will be continuing:
     - National Highway Traffic Safety Administration's Voluntary Safety Self- Assessment
     - Transportation Safety Advancement Group's CV/AV Needs Specific to Emergency Response
     - Partners for Automated Vehicle Education's Virtual Panels
     - National Cooperative Highway Research Program – Preparing TIM Responders for CAVs
     - U.S. Department of Transportation Automated Driving System Demonstration Grants

c. Central Iowa Crash
   - A West Des Moines law enforcement officer was injured by an impaired driver that was rely too much on vehicle lane assist technology. This story is an example here in Iowa how automated transportation affects the state.

4. Open Discussion – All subcommittee members
    - Partners for Automated Vehicle Education (PAVE) held an AV education brainstorming session to review exist gaps and emerging needs including driver training. The group discussed what public agencies across the nation are doing and what to do moving forward. There are many collaboration opportunities with various stakeholder groups.
    - NHTSA AV TEST Initiative Tracking Tool shows locations and information about AV testing by companies and agencies in the US. The Iowa AT Vision and Iowa DOT CAT Service Layer Plan are listed on the tool.

5. Information and key upcoming dates

    - Iowa ATC Meeting: Q1 of 2021

ATC SUBCOMMITTEE MEETING

Public Safety & Enforcement

December 8, 2020

WELCOME AND INTRODUCTIONS

Col. Nathan Fulk –

Public Safety & Enforcement Subcommittee Chair

AUTONOMOUS VEHICLES ARE COMING: WHAT LAW ENFORCEMENT NEEDS TO KNOW

BRIAN URSINO, DIRECTOR, LAW ENFORCEMENT, AAMVA

IACP 2020
OCTOBER 21-23 | theIACPconference.org
IACP 2020 Virtual Training Event and Expo

AUTONOMOUS VEHICLES ARE COMING: WHAT LAW ENFORCEMENT NEEDS TO KNOW

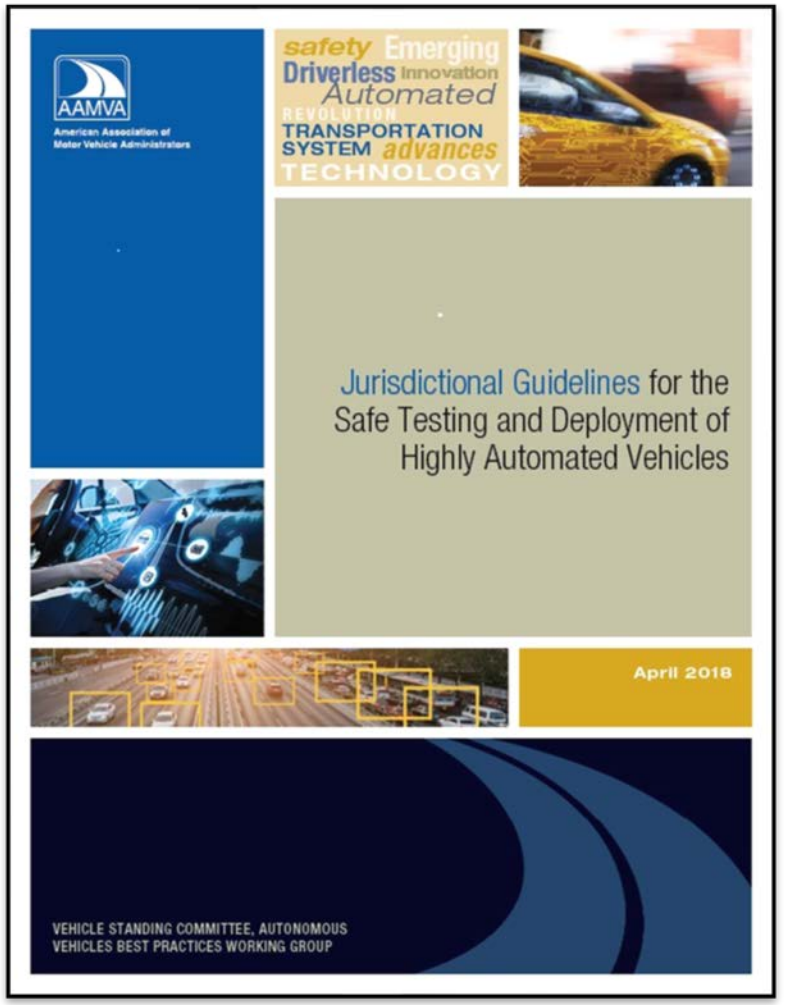
Provides voluntary recommended guidelines to:

- Jurisdictions (State & Provincial Motor Vehicle Licensing Authorities and Law Enforcement)
- Manufacturers and Other Entities (MOEs)

Purpose:

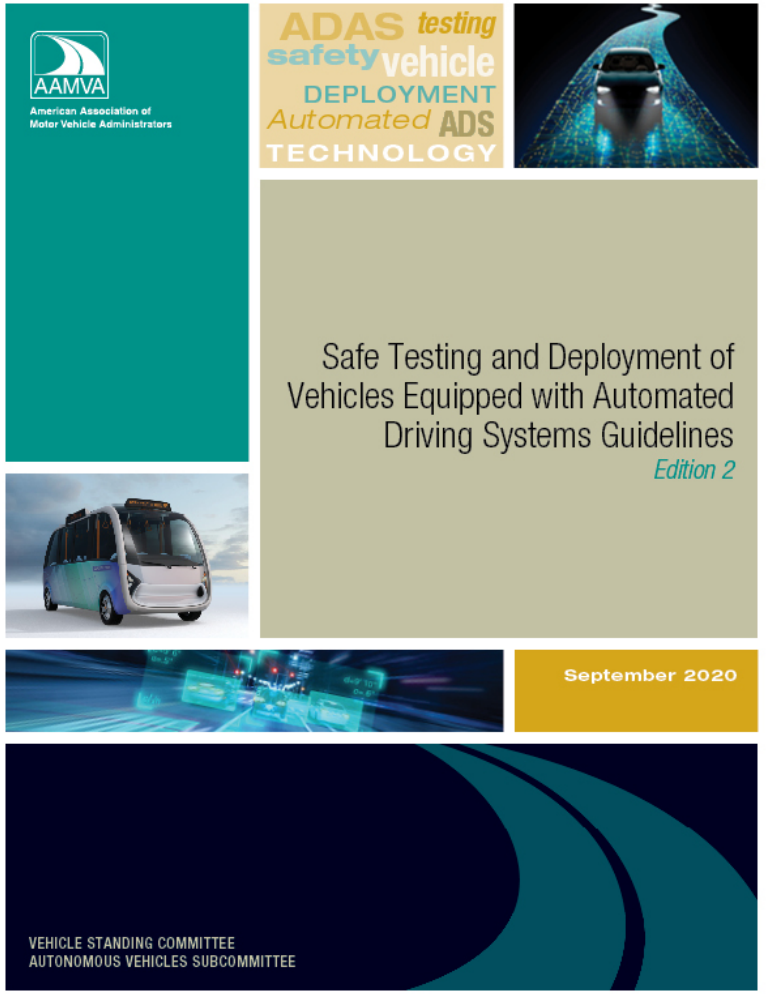
Provide recommendations to jurisdictions to facilitate a consistent regulatory framework to balance public safety needs with the advancement of vehicle innovations, to reduce crashes, fatalities, injuries, and property damage.

Edition 1 Published May 2018



SAFE TESTING AND DEPLOYMENT OF VEHICLES EQUIPPED WITH AUTOMATED DRIVING SYSTEMS GUIDELINES

Retitled Edition 2 was published in October 2020



#IACP2020

TABLE OF CONTENTS: PRESENTATION OVERVIEW

Chapters:

1. Executive Summary
2. Definitions and Acronyms
3. Administrative Considerations
4. **Vehicle Considerations**
5. **Driver Licensing Considerations**
6. **Law Enforcement Considerations**
7. **Other Considerations**
8. **Next Steps**

CHAPTER 4. VEHICLE CONSIDERATIONS

Chapter 4 (contains 36 recommendations)

Subsections

4.1 Application and Permit for Manufacturers or Other Entities to Test Vehicles on Public Roadways

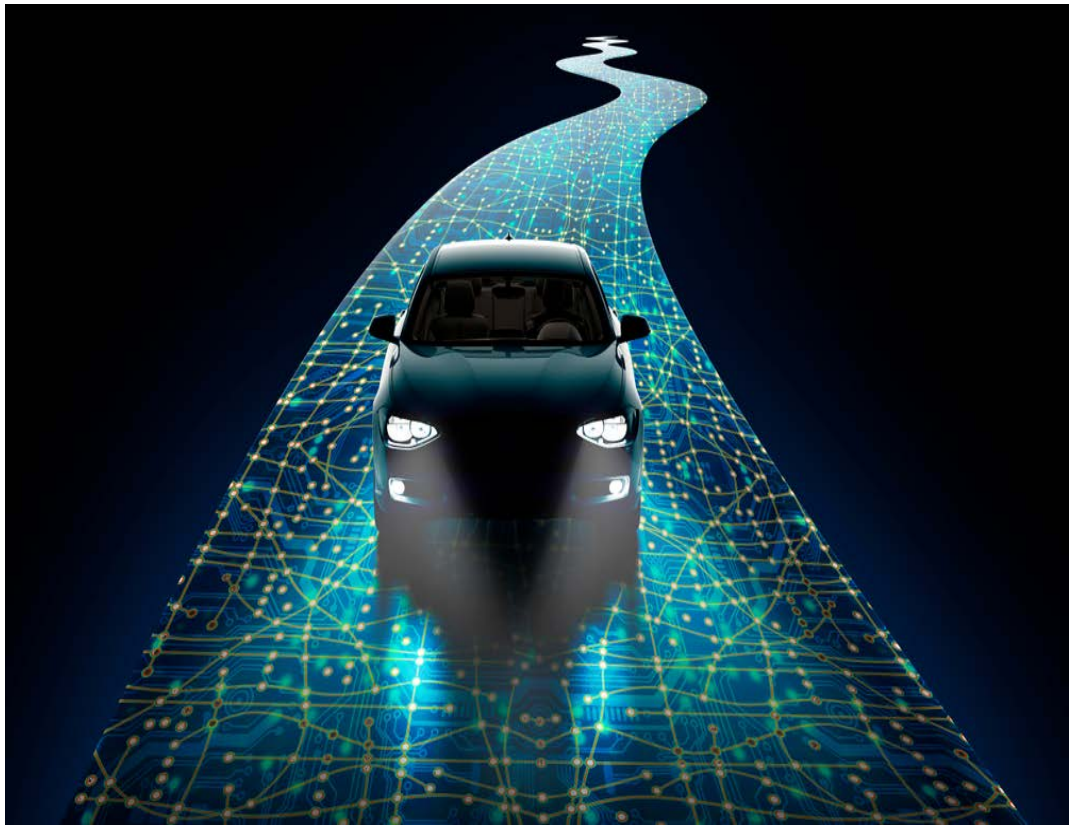
4.2 Actions on Permit Process

4.3 Information on the Manufacturer's Certificate of Origin (MCO) and New Vehicle Information Statements (NVIS)

4.4 Titling and Branding for New and Aftermarket ADS-Equipped Vehicles

4.5 Vehicle Registration

4.6 License Plates



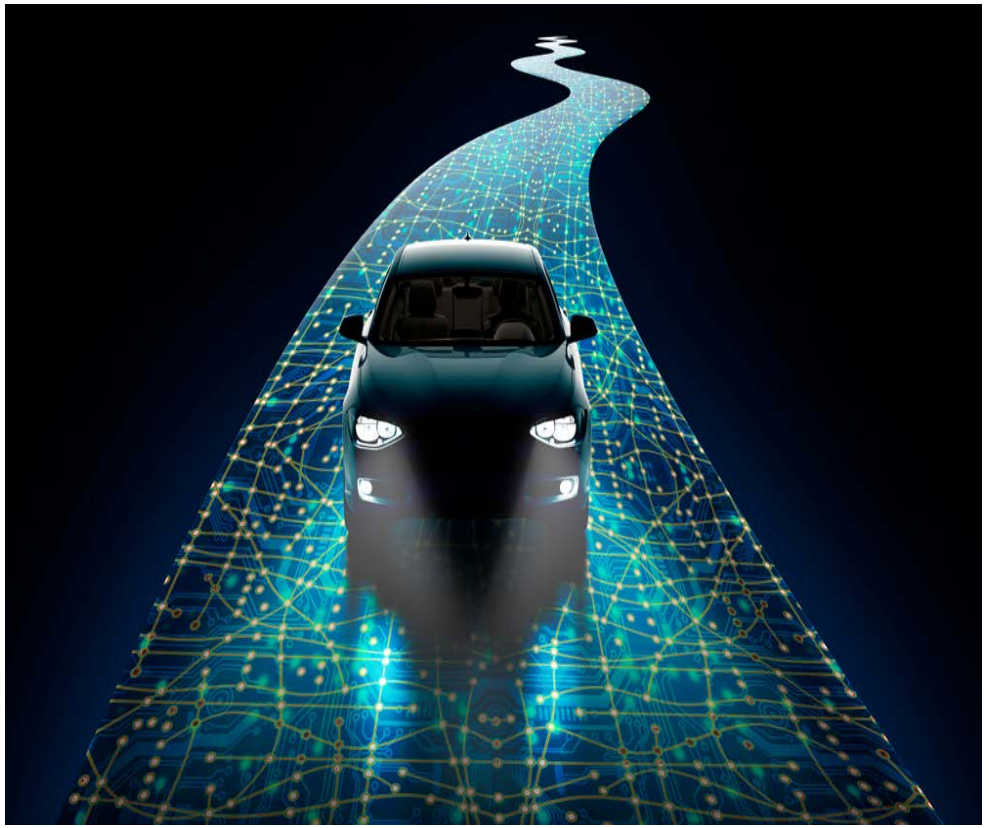
CHAPTER 4. VEHICLE CONSIDERATIONS (CONT.)

4.7 Financial Responsibility also known as Mandatory Liability Insurance

4.8 Jurisdictional Approval of the ADS as the Driver *New Section in Edition 2*

4.9 Federal Motor Vehicle Safety Standards (FMVSS) and Canadian Motor Vehicle Safety Standards (CMVSS) – rewritten and updated

4.10 Periodic Motor Vehicle Inspections *New Section in Edition 2*



CHAPTER 5. DRIVER LICENSING CONSIDERATIONS

Chapter 5 (contains 36 recommendations)

Subsections

5.1 Driver and Passenger Roles Defined

5.2 Driver License Requirements for Testing by Manufacturers and Other Entities (MOE)

5.3 Remote Driver *New Section in Edition 2*

5.4 Endorsements and Restrictions for Deployed Vehicles

5.5 Driver Training for Drivers on Vehicle Technologies – updated

5.6 Training for Driver Educators and Considerations for Driver Education and Driver Training Programs – rewritten and updated

CHAPTER 5. DRIVER LICENSING CONSIDERATIONS (CONT.)

5.7 Driver License Skills testing with Vehicle Technologies

5.8 Training Motor Vehicle Agency Examiners on Vehicle Technologies

5.9 Training Motor Vehicle Agency Staff on Vehicle Technologies *New Section in Edition 2*

5.10 Commercial Driver Licensing (CDL) *New Section in Edition 2*

AAMVA AVSC: LAW ENFORCEMENT SUBGROUP

Captain Rick Arnold, Michigan State Police
Chief Chris Childs, California Highway Patrol
Captain John Ehmsen, Colorado State Patrol
Mr. Kevin Jacobs, Florida Dept. of Highway Safety and Motor Vehicles
Staff Sergeant Terry McDonnell, New York State Police
Brian Ursino, Director of Law Enforcement, AAMVA

CHAPTER 6. LAW ENFORCEMENT CONSIDERATIONS

Chapter 6 (contains 36 recommendations)

6.1 Vehicle Identification

(includes 1 Jurisdiction Recommendation and 1 MOE Recommendation)

6.2 Crash/Incident Reporting

(includes 2 Jurisdiction Recommendations and 3 MOE Recommendations)

6.3 Criminal Activity

(includes 2 Jurisdiction Recommendations and 3 MOE Recommendations)

6.4 Distracted Driving

(includes 1 Jurisdiction Recommendation and 4 MOE Recommendations)

CHAPTER 6. LAW ENFORCEMENT CONSIDERATIONS (CONT.)

6.5 Establishing Operational Responsibility and Law Enforcement Implications
(includes 2 Jurisdiction Recommendations)

6.6 Law Enforcement/First Responder Interaction Plans (LEIP) *New Section in Edition 2*
(includes 2 Jurisdiction Recommendations and 2 MOE Recommendations)

6.7 Law Enforcement Protocols (LEP) for Level 4 and 5 Vehicles *New Section in Edition 2*
(includes 3 Jurisdiction Recommendations)

Very Important to understand the distinction between an LEIP and an LEP

CHAPTER 6. LAW ENFORCEMENT CONSIDERATIONS (CONT.)

6.8 Law Enforcement/First Responder Safety and Training

(includes 1 Jurisdiction Recommendation and 2 MOE Recommendations)

6.9 Adherence to Traffic Laws

(includes 2 Jurisdiction Recommendations and 1 MOE Recommendation)

6.10 Vehicle Response to Emergency Vehicles, Manual Traffic Controls and Atypical Road Conditions

(includes 2 Jurisdiction Recommendations and 2 MOE Recommendations)

6.11 System Misuse and Abuse

(includes 2 Jurisdiction Recommendations and 2 MOE Recommendations)

CHAPTER 7. OTHER CONSIDERATIONS

Chapter 7 – New chapter (includes 36 recommendations)

7.1 Cybersecurity for Vehicles with Automated Driving Systems

New Section in Edition 2

- Includes 2 MOE Recommendations and
- 4 Cyber Security reference documents

7.2 Data Collection

CHAPTER 8. NEXT STEPS

The subcommittee is currently developing two whitepapers to augment Edition two:

- Automated Delivery Vehicles
- Impact to Distracted Driving Laws

AAMVA AVSC: LAW ENFORCEMENT SUBGROUP

Captain Rick Arnold, Michigan State Police
Chief Jeff Dixon, Florida Highway Patrol
Lieutenant Christopher Kinn, Ohio State Highway Patrol
Assistant Chief David Jenkins, California Highway Patrol
Brian Ursino, Director of Law Enforcement, AAMVA

CONTACTS FOR QUESTIONS

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Rick Arnold ArnoldR@michigan.gov

PUBLIC SAFETY & ENFORCEMENT WORK PLAN & TACTICAL ACTIONS

Update on AV Perspective from recent Law Enforcement Meetings – Col. Fulk

PUBLIC SAFETY & ENFORCEMENT WORK PLAN & TACTICAL ACTIONS

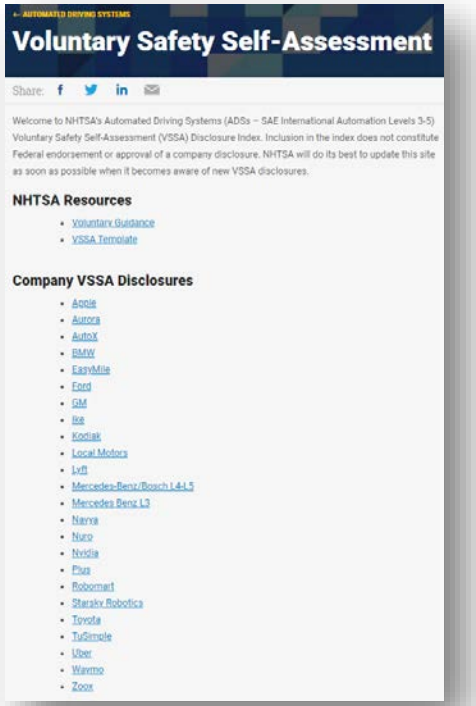
Inform TIM and Safety Community on engagement and collaboration plans

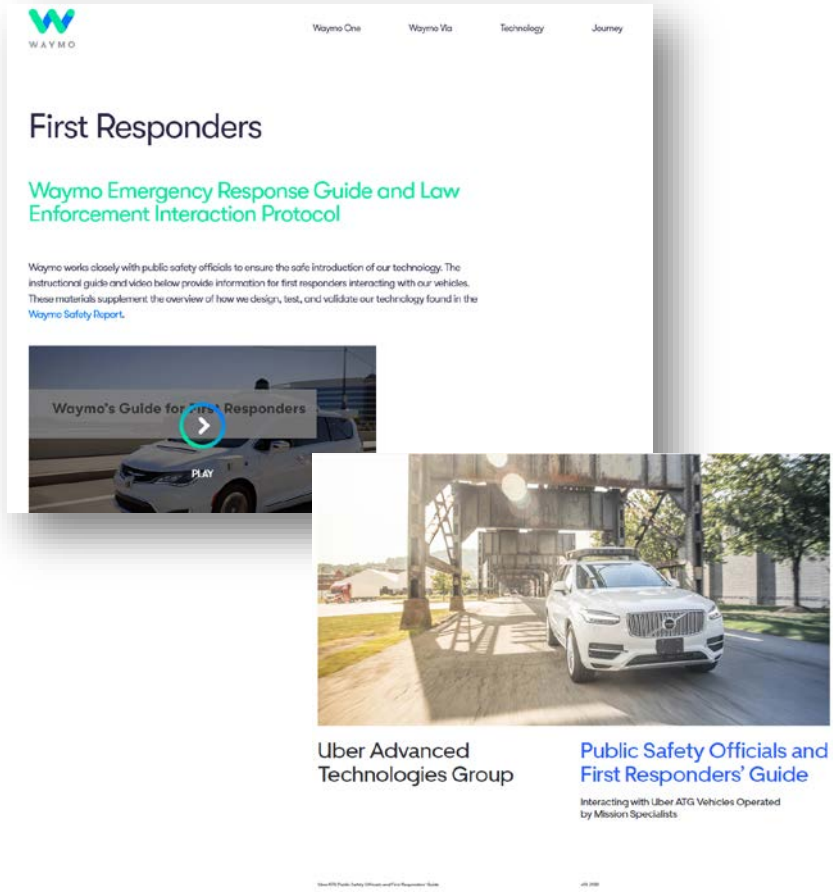
Col. Fulk, Adam Shell, Daniel Yeh

TIM AV-RELATED RESOURCES & ITEMS TO MONITOR

NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

https://www.nhtsa.gov/automated-driving-systems/voluntary-safety-self-assessment





TIM AV-RELATED RESOURCES & ITEMS TO MONITOR

TRANSPORTATION SAFETY ADVANCEMENT GROUP
Promoting Technology for Public Safety

CV/AV Needs Specific to Emergency Response – White Paper – May 2020

http://www.tsag-its.org/

PARTNERS FOR AUTOMATED VEHICLE EDUCATION

Virtual Panels

October 28th: *How First Responders Are Preparing for Autonomous Vehicles*

November 18th: Driverless, But Not Alone: The Public Sector Relationships That Make Waymo's Driverless Deployment Possible

(Recordings on PAVE YouTube Channel)

https://pavecampaign.org/

TIM AV-RELATED RESOURCES & ITEMS TO MONITOR

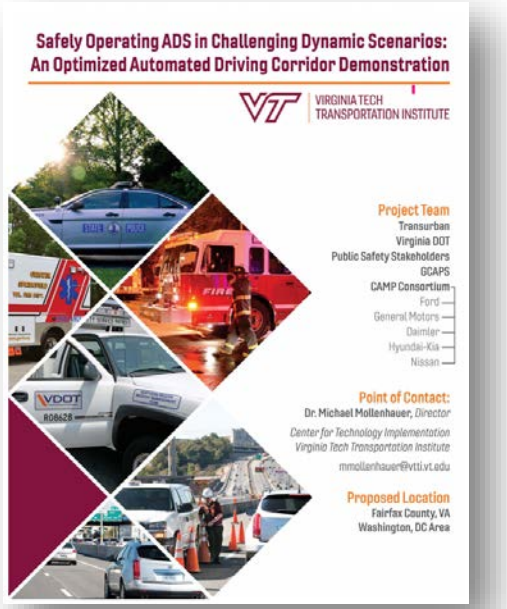
NCHRP NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

[NCHRP 20-102(16): Preparing TIM Responders for CAVs]

U.S. Department of Transportation

Automated Driving System Demonstration Grants

https://www.transportation.gov/av/grants



PUBLIC SAFETY & ENFORCEMENT WORK PLAN & TACTICAL ACTIONS

Central Iowa Crash

Police: West Des Moines cop injured by driver drinking and watching a movie on vehicle dashboard

Philip Joens Des Moines Register

Published 2:11 p.m. CT Nov. 10, 2020 | **Updated 7:06 a.m. CT Nov. 11, 2020**

View Comments

A man who seriously injured a West Des Moines police officer in a crash early Sunday admitted to investigators that he had been drinking alcohol and was playing a movie on his dashboard of his vehicle when the accident occurred.

West Des Moines police officer Jon Kaufman was waiting for a tow truck during a traffic stop near Westown Parkway on Interstate Highway 35 whena car driven by John Schwartz, 61, of Kellogg, crashed into his patrol vehicle, police said.

In addition to drinking and watching a movie, Schwartz admitted to crash investigators that he had the cruise control set and relied too much on vehicle lane assist technology, according to an Iowa State Patrol obtained incident report obtained Tuesday by the Des Moines Register.

A search warrant was obtained for blood and urine samples and charges are pending those results, said Iowa State Patrol Sgt. Alex Dinkla said.

Source: https://www.desmoinesregister.com/story/news/crime-and-courts/2020/11/10/state-patrol-driver-watching-movie-during-crash-struck-officer/6235683002/

OPEN DISCUSSION

Partners for AV Education (PAVE) -

Public Sector Advisory Council brainstorming session on AV education

PAVE PUBLIC SECTOR ADVISORY COUNCIL
BRAINSTORMING SESSION ON AV EDUCATION

- PAVE Coalition
- Advisory Councils (Academic & Public Sector)
- AV Education Brainstorming Session

PARTNERS FOR AUTOMATED VEHICLE EDUCATION

https://pavecampaign.org/

Virtual Panel Recordings: *PAVE YouTube Channel*

PAVE PUBLIC SECTOR ADVISORY COUNCIL
BRAINSTORMING SESSION ON AV EDUCATION

Themes (DRAFT)

- Current CAV Educational Efforts
- Existing Gaps & Emerging Needs
- CAV Education Needs (Challenges)
- Roadmap Forward – Best Practices
- Next Steps

PARTNERS FOR AUTOMATED VEHICLE EDUCATION

https://pavecampaign.org/

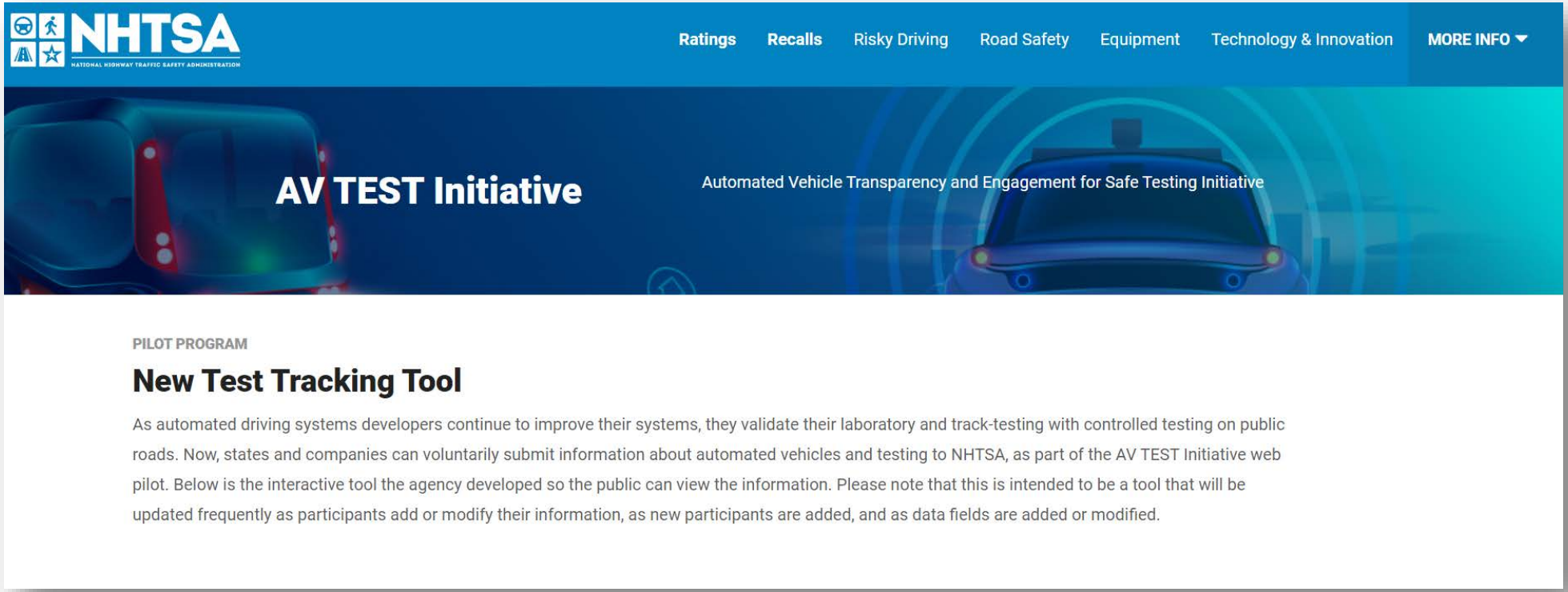
OPEN DISCUSSION

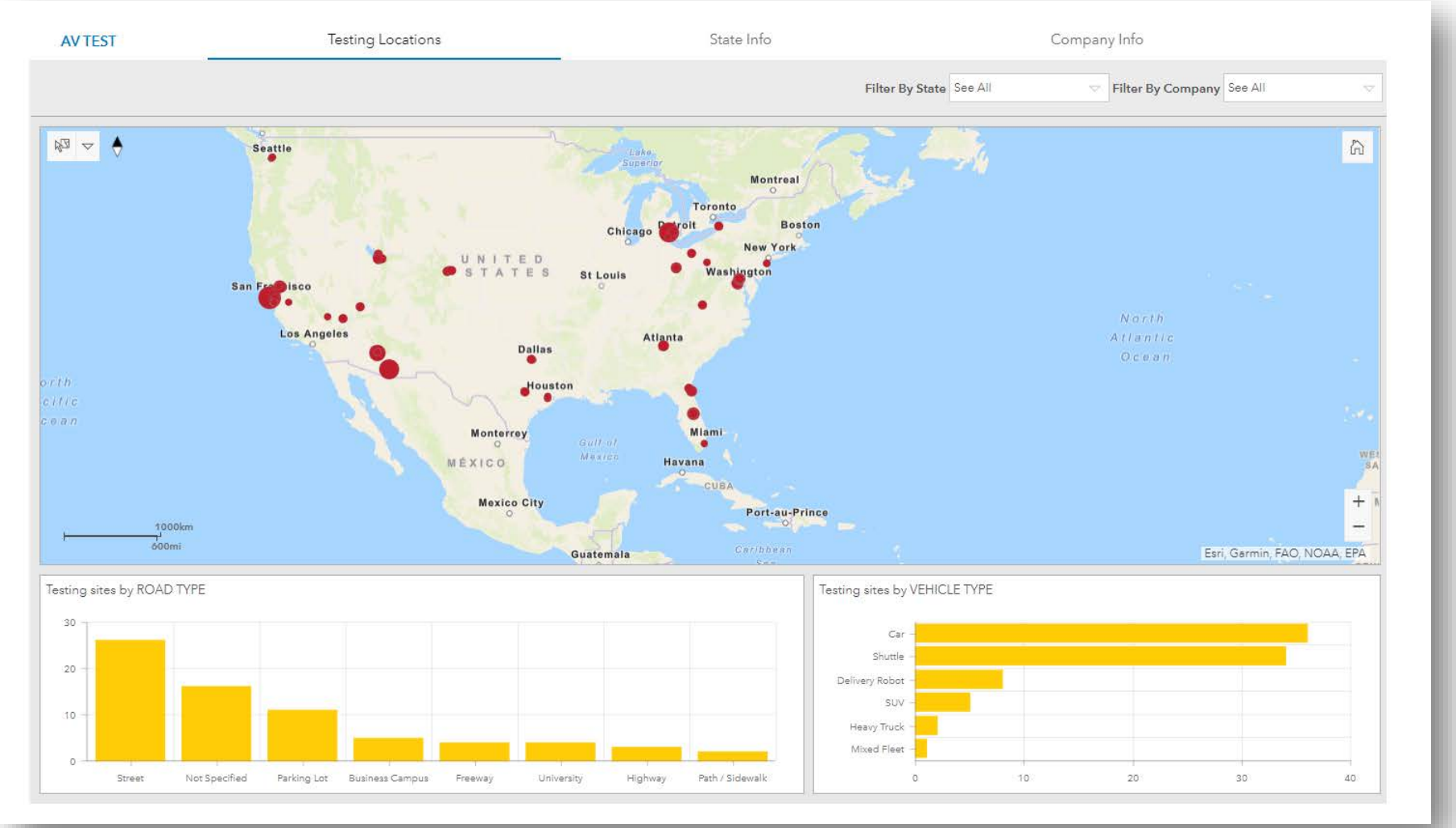
NHTSA AV TEST Initiative

NHTSA

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

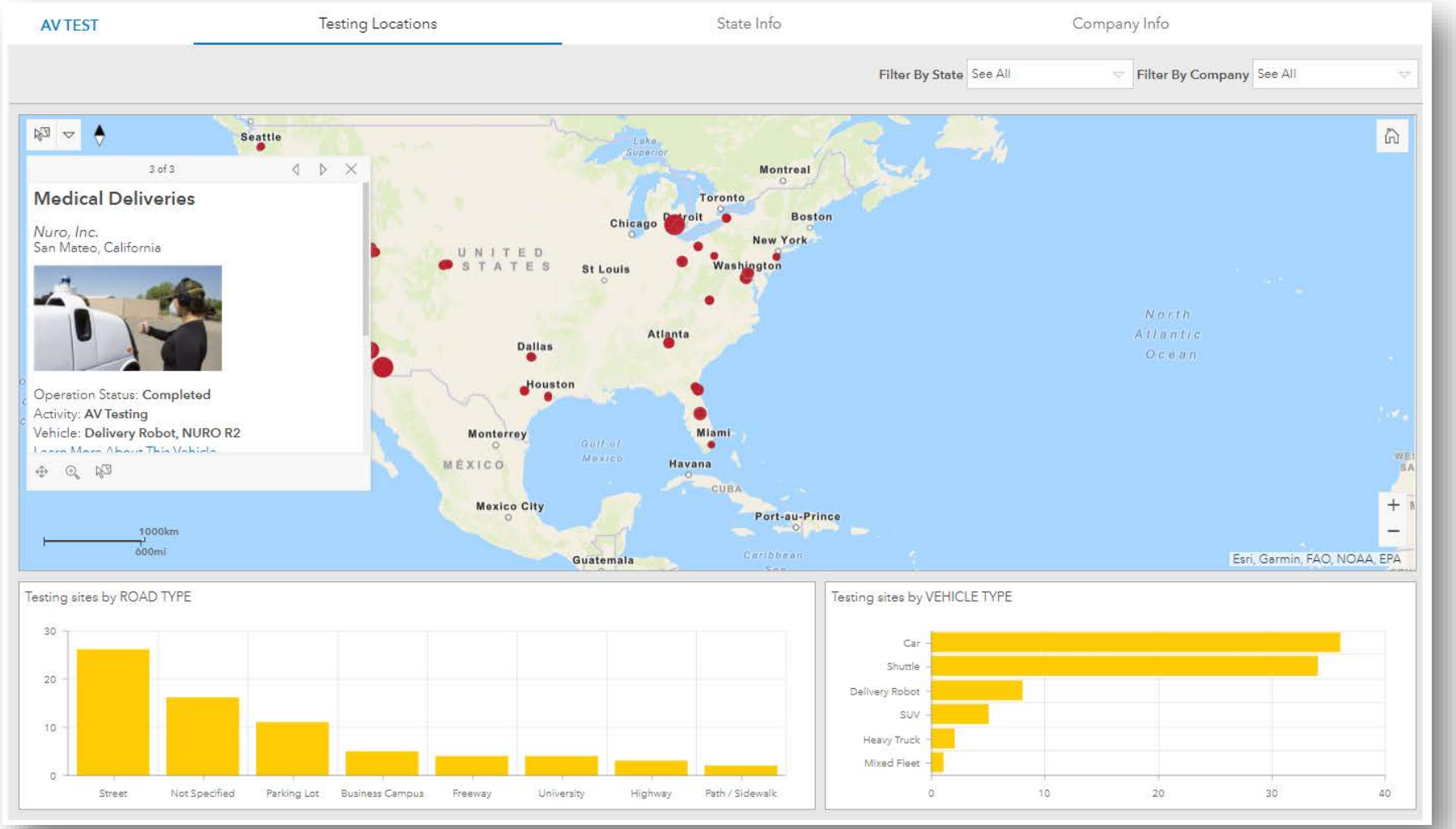
http://nhtsa.gov/avtest





NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

http://nhtsa.gov/avtest



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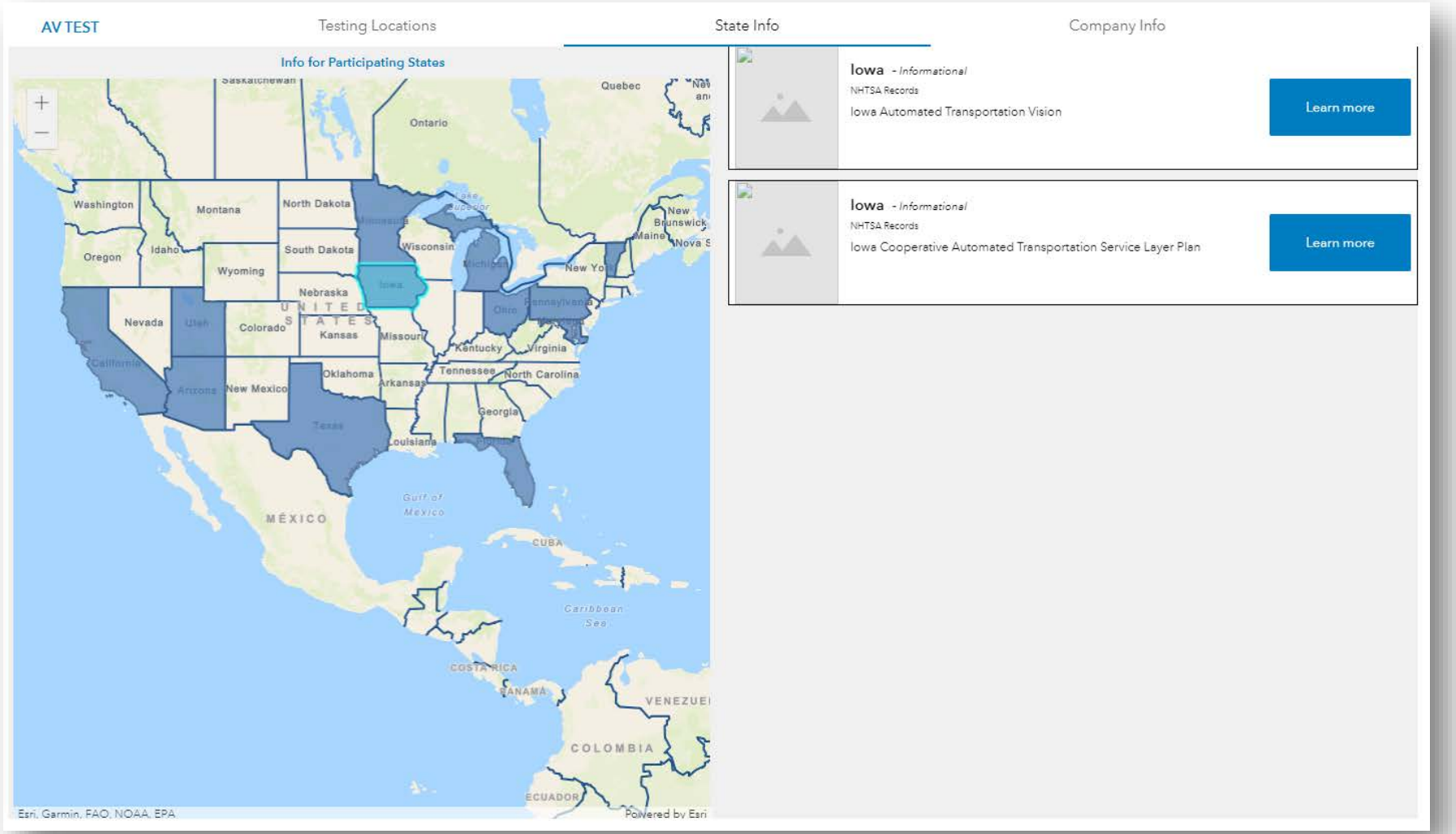

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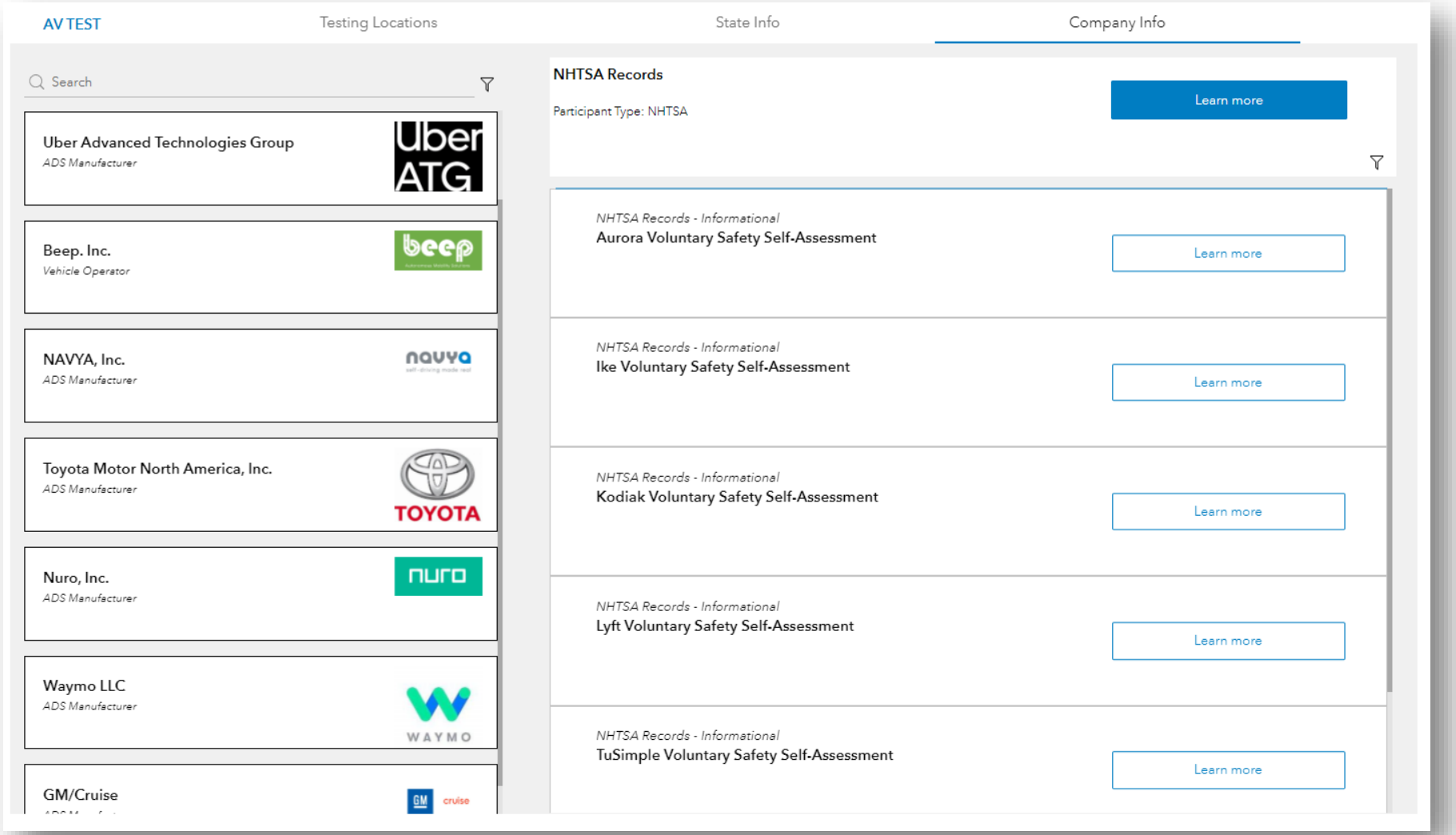

NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

http://nhtsa.gov/avtest

INFORMATION AND KEY UPCOMING DATES

Next ATC Meeting

- Q1 of 2021

THANK YOU