# Governor Walker's Steering Committee on Autonomous and Connected Vehicle Testing and Deployment 

Meeting \#7
April 25, 2018
Wisconsin State Capitol
Room 412 East
Madison, WI

## MINUTES

1. Secretary Ross called the meeting to order at $9: 05$ a.m. Roll was called by Brad Basten, staff to the committee. List of members in attendance is listed at the end of these minutes.
2. Minutes from March 28, 2018 were approved.

## 3. Presentations

Transit partnership opportunities
Sheryl Gross-Glaser
Senior Program Associate,
Community Transportation Association of America
Ms. Gross-Glaser's presentation is available on the committee website at http:// wisconsindot.gov/ Pages/ about-wisdot/ who-we-are/ commcouns/avcommittee.aspx

CTAA works to address mobility management issues. Members of CTAA include transportation providers, transit systems, state DOT's, planning agencies, human service agencies, and other organizations committed to providing transportation access to people of all ages and abilities throughout the United States.

Rideshare companies available: Uber, Lyft, Bikeshare, Scootershare, Skedaddle, Bandwagon, Chariot, Transloc. Olli and Renault in particular are looking to accommodate persons with disabilities.

## QUESTIONS

a. Lewandowski: What do you see as your biggest challenge, even without AV. Sheryl Gross-Glaser: Rural areas due to lack of funding, and especially with wheel chairs, and medical transport. Community transit is frequently the only option and with little funding medical transport is the priority. Transportation to church and social activities are usually not funded.
b. Kuglitsch: Challenges for rural situations including distance and costs are typical to the rural situation. How to come up with solution? Sheryl Gross-Glaser: Issue is that much of the brainpower goes to looking at problems in cities. Challenge is to think about rural. We can look to Japan who is experimenting with small pods

# Governor Walker's Steering Committee on Autonomous and Connected Vehicle Testing and Deployment 

for rural service. Possibly feeder services to get people to common locations, i.e. $1^{\text {st/ last mile challenge. Medical care is difficult due to timing and location. }}$ Colocation of services/activities can help by minimizing the number of destinations.
c. Neylon: How are others doing connectivity in rural areas like fiberoptics? Sheryl Gross-Glaser:Not knowledgable about that topic. Neylon: Connectivity is a challenge to planning CAV. Sheryl Gross-Glaser: Higher level of connectivity needed for CAV makes it more difficult. China has advantage in that they can dictate. We can't do that but states and counties can innovate.
d. Rafferty: Difference between Paratransit and Microtransit and are they separate topics? Sheryl Gross-Glaser: Technically and legally separate. Micro = mostly private solutions. Para is required by law where you have a fixed route bus. ADA requires $3 / 4$ mile radius around that system. There are various pilots mixed in where Uber or Lyft work with Paratransit systems if Para is needed but wheelchairs are not. Rafferty: Do you have experience with levels of partial automation in these services? Sheryl Gross-Glaser: Before recent AV crashes states were not looking closely at partial automated systems. Now, there are more reports of state and federal officials asking more questions about deployment of lower levels of AV. Freight is a question that has not been addressed. Uber is big in Pittsburg. After an Uber crash Pennsylvania has said that they need to come to the table talk to us first before more testing.

Overview of guidance developed for jurisdictions by AAMVA's
Autonomous Vehicles Best Practices Working Group report
(American Association of Motor Vehicle Administrators)
Kristina Boardman
Administrator Division of Motor Vehicles (DMV)
Wisconsin Department of Transportation
Ms. Boardman's presentation can be found on the committee website at http:// wisconsindot.gov/ Pages/ about-wisdot/ who-we-are/ commcouns/ avcommittee.aspx

Ms. Boardman has worked for the state since 1995 and with the DMV in various management positions since 2007. She has been the division administrator for the last couple of years and is on the board of directors of AAMVA.
AAMVA has been working since 1939, for common interests between member states and promotes research and best practices on motor vehicle issues. AAMVA has membership from 69 states and Canadian provinces.
A working group made up of 18 members was formed in 2014 to look at the issue of autonomous vehicles.

## Governor Walker's Steering Committee on Autonomous and Connected Vehicle Testing and Deployment

A handout was distributed showing the outline of the AV report which at this time is still in progress. The report will provide voluntary guidelines on registration, licensing, law enforcement, and safe testing and deployment of automated vehicles.

Rafferty: How is AAMVA defining HAV? Boardman: Need to come back to that question.

ANSWER:
"Highly Automated Vehicle" is defined as SAE Levels 3 and 4 (NHTSA level 3).
A "Fully Automated Vehicle" is a SAE level 5 (NHTSA level 4)

Ross: We will make the AAMVA report available to committee when it is released.

## QUESTIONS

a. Neylon: It looks like we still will need a driver's license. This may create a problem when we want to have blind or disabled to have access to L4 and L5 vehicles. Boardman: To clarify, the recommendation is for testing scenarios that a driver with a license be present that can assume control of the vehicle in L2 or L3 systems. Passenger of driverless vehicles would not need a DL or even be sober. Neylon: If there is no need for a DL for L4 or L5, or if no manual controls, would that require legislation or could that be done through administrative rule? Boardman: I have asked our Office of General Counsel (OGC) for definition and guidance on that question. Our laws define operator and driver, but do not address driverless. We will need to look at those laws more carefully. Neylon: We will continue to talk about changes with state law.
b. Drager: Regarding DL requirements, was that for passenger cars only or does that include Commercial Motor Vehicles and CDLs? Boardman: Federal Motor Carrier Safety Association (FMCSA) will advise on CMV.
c. Fisher: Will the report address flexible situations where common sense is usually applied? i.e. A driver allowed to cross a double yellow line if a car is stopped in the way. Boardman: Our state laws are very specific so we will need to look at the rules of road. The AAMVA report may address that.
d. Kuglitsch: From this report, what do you see are the biggest challenges the DMV needs to address? Boardman: Biggest concern is that we can register these vehicles, determine that they are safe, and when they are moved state to state how they are equipped. We will have a blended fleet forever and staff will need to understand how to deal with both. Would like clarity on laws going forward. There may be some flexibility in the definition of "Operator" whether there are controls or not, but need better guidance on how different level features apply to new or existing laws. Mostly concerned that drivers are licensed and that that license applies to the type of vehicle they are operating. Also that everyone

# Governor Walker's Steering Committee on Autonomous and Connected Vehicle Testing and Deployment 

understands what vehicle license plate and registration mean. Kuglitsch Do you see the report covering everything we need? Boardman: Report will be robust. Cybersecurity is not addressed in report. Specific state laws are not addressed, but reciprocity with other states is important. Any future AAMVA working group will keep all parties involved updated.
e. Risser: Who was this report originally directed towards? Boardman: It is offered to all national (and Canadian) jurisdictions as guidance to coordinated management of AV drivers and vehicles. Risser Not submitted to any particular group? Boardman: NTSA has provided some funding to work on this issue. 18 jurisdictions worked on the report. I am not on this working group.
f. Ross: Has Europe or other countries who are not part of this group provided any similar reports?. Boardman: I will get back to you on what we find.

ANSWER:. I have attached reports from the UK and Australia as examples.
g. Lewandowski: Drivers License examiners are our grass roots contacts on the ground. Are we pondering some outreach on this topic like seatbelt education at these locations? Boardman: Our DL examiners are important to talk to as they interface with all drivers, new and old, in the state. They see all phases of drivers during their life, and can help transition people to other systems. We welcome the opportunity to help with that outreach.
h. Caya: Is there any state that is a leader that we could learn lessons from their experience with CAVs? Boardman: CA has permit process for testing. Some have changed laws. Ml is pretty advanced with their support of the car manufactures. Each state is different and will have our own decisions to make for WI.

Secretary Ross introduced Trooper Tracy Drager. WisDOT has a unique organization in the country which includes State Patrol, DMV and Design and Build in one agency. Only one other state is arranged this way. Trooper Drager is a graduate of the $58{ }^{\text {th }}$ Fort McCoy State Patrol class.

Law enforcement protocol with autonomous vehicle systems and Commercial Motor Vehicle inspections (CMV)

Trooper Tracy Drager,<br>Wisconsin State Patrol

Trooper Drager's presentation can be found on the committee website at http:// wisconsindot.gov/ Pages/ about-wisdot/ who-we-are/ commcouns/avcommittee.aspx

Trooper Drager is assigned to the Technical reconstruction unit. This unit assists with criminal and fatality investigations around state and provides assistance to other law enforcement jurisdictions.

# Governor Walker's Steering Committee on Autonomous and Connected Vehicle Testing and Deployment 

## QUESTIONS

Fisher: When it comes to the operation and safe design of equipment NHTSA is responsible and has recall authority. Regarding privacy, auto manufacturers have adopted privacy principles for infotainment systems that handle consumer information that is in the vehicle, that is enforceable under federal level. There should be a federal standard for data issues.

Kuglitsch: Under determining fault, where have concerns come from, from other WI troopers or from experience? Drager: Most concerns mentioned here have come from our experience in WI and discussions with LE officials here. For reportable crashes, how is the trooper to determine who was in control of vehicle or whether a CAV malfunctioned in some way? We as LE don't determine fault. We determine this is the situation, the conditions, etc. the insurance companies determine fault. We need to list facts including who was in control of vehicle at the time.

Kuglitsch: Re: Weigh in Motion(WIM) challenges for vehicles following too closely to identify. Does every state have same systems? What have others done? Drager: There are other WIM systems. Different states have different pull in systems and sensor placement. Issue is only important at highway speeds. Signage is the common solution.


#### Abstract

Neylon: When determining fault, and the operator doesn't own the vehicle, who needs to consent to hand over the vehicle data? Drager: It must be the registered owner of vehicle to consent. Neylon: When determining fault, where data might not be handed over after a crash, can you require consent before operation of a L4 or L5 system before driving? Drager: That would be similar to our previous implied to consent law where a person agrees they will not drive impaired in order to get a license. Could run a driver through a field sobriety test and with suspicion of impairment, LE could force a blood draw. That is now unconstitutional. A warrant is now required. That idea sounds similar and could be unconstitutional.


## REACTIONS:

Caya: With recent L2 and L3 accidents and Waymo deciding not to launch L3, will there be L2L3 allowed on the road? I have test driven Cadillac CT6 which works well if used correctly. There are issues of drivers being distracted while driving L2 systems. Will need to be sorted out.

Fisher: With L2 a human driver is always responsible for driving the vehicle so that should not be a problem. In the urban vs rural divide, by percentage of population fatalities are higher in rural areas. Most CAV use is going to urban first. How to move CAV use to rural areas faster? You do that with lower levels like L2L3 in rural, because

## Governor Walker's Steering Committee on Autonomous and Connected Vehicle Testing and Deployment

you won't have ride share in rural areas, but L2L3 will help the accident rate in rural area.

Ross: Please get in any further comments to staff to be included in report.
Kuglitsch: Plan is to provide by $5 / 20$ rough draft to members. Then make changes before J une 30th. Need comments for $5 / 23$ meeting discussion.

Neylon. Echoing Rep. Kuglitsch comment. Recurring comment is to have some kind of continuing standing committee to keep abreast of fast moving new developments, to advise legislators and DOT.

## ADJ OURNED

Secretary Ross adjourned the meeting at 11:00 a.m. on Autonomous and Connected Vehicle Testing and Deployment

Members present<br>Steven Caya<br>Trooper Tracy Drager<br>Kathy Heady for Mark Hogan<br>Representative Mike Kuglitsch<br>Jeff Lewandowski<br>Sheriff Steven Michek<br>Will Neitzel<br>Representative Adam Neylon<br>Elizabeth Hizmi for Ted Nickel<br>Josh Fisher for Damon Shelby Porter<br>Peter Rafferty<br>Senator Fred Risser<br>Secretary Dave Ross<br>Senator Patrick Testin<br>Jacob VandeLoo

