Meeting #2 October 18, 2017

MINUTES

- 1. Secretary Ross called the meeting to order. Those members present introduced themselves and their involvement in autonomous and connected vehicles. Daniel Yeh, staff to the committee, called the roll (attendance list is provided at the end of these minutes).
- 2. Commissioner Nickels moved to approve the meeting minutes from September 13, seconded by Mr. Mellon. Mr. Rafferty noted that he had sent some minor comments to Mr. Yeh previously; those changes will be incorporated. The committee approved the meeting minutes.
 - Secretary Ross noted the list of potential speakers suggested by committee members and indicated that a further discussion would take place under agenda item #6.
- 3. Robert Kovach of Senator Lasee's office discussed a memo provided by David Moore of the Wisconsin Legislative Council (who was also present) providing a summary of existing Wisconsin legislation that may relate to autonomous or connected vehicles. He highlighted specific points relating to the definition of the operator and/or driver, clarification of owner vs. operator, following distance between vehicles (for truck platooning) and inattentive driving. The full memo is posted to the committee web page. There were several follow-up questions and discussion points:
 - a. Commissioner Nickel noted issues about whether an autonomous vehicle could carry an intoxicated owner. He also indicated clarification would be needed on crash liability and product liability and the role of the owner vs. the manufacturer. Mr. Kovach indicated that motor vehicle liability would probably be the first step, followed by product liability claims.
 - b. Representative Kuglitsch asked how the memo related to the issue at hand, namely the testing of AV / CV technology in Wisconsin. Mr. Moore said the memo was meant as a starting point review of incompatible laws, advisable changes and policy choices that the Legislature would need to made. The memo is not exhaustive; for example, Chapter 347 on vehicle equipment was not reviewed. Based on the analysis, few laws are logically incompatible with AV operation depending on level of autonomy. Commissioner Nickel pointed out the example that California allows AV testing but still requires mirrors and a steering wheel.
 - c. Mr. Caya noted that the recently-released US DOT guidelines includes best practices for states and stressed the need to review state laws for automated driving systems, and not necessarily just for higher levels of automation. The best reviews are technology-neutral.

- d. Trooper Drager expressed that while certain vehicle parameters governing behavior in traffic could be addressed in programming or engineering they should still be addressed in statute since owners might try to modify original programming. Kovach suggested such a scenario could be an issue of personal liability similar to other vehicle modifications.
- e. Mr. Rafferty noted the reference to "physical control" in Chapter 340 and how this would apply to a remote operator starting the vehicle in motion. Kovach suggested the Attorney General may need to be consulted for interpretation of such issues.
- f. Mr. Rafferty also asked whether the reviewed statutes applied to connected vehicles. Kovach indicated that rules of the road would apply. Moore suggested this might be an area for the Legislature to provide definitions and clarification, although it would be difficult to anticipate all circumstances or scenarios.
- g. Mr. Cyra suggested it would be useful for the Committee to spell out a limited number of connected vehicle scenarios, similar to the US DOT funded pilot in Florida. Senator Lasee agreed, noting he was interested in seeing how truck platooning impacts surrounding traffic.
- h. Mr. Mellon raised the issue of motorcyclists, pedestrians and bicyclists and their awareness of whether a vehicle is automated or note. He raised the idea of a special class for autonomous vehicles with specifications for insurance, liability and regulations.
- i. Attorney Ben Griffiths of UW-Madison was present and allowed to speak. He indicated that to move quickly on autonomous vehicle testing the committee could look to the example of aerial drone testing. This is based on an ethics, oversight and application process that includes consideration of liability, risk management and data privacy.
- j. Trooper Drager asked about the concept of multiple connected vehicles with a primary operator followed by autonomous vehicles. Mr. Griffith didn't indicate whether this would be an option but agreed with the approach of carefully defining test scenarios, to which Mr. Caya noted the purpose of the US DOT-designated testing grounds is to consider and test such scenarios.
- k. Mr. Still expressed a desire for Wisconsin to move ahead on the issues and noted the possible need for the UW testing grounds to acquire funding. He noted it would be best to pick some scenarios to start and that the legislative process would not be surpassed by technology.
- 4. Ben Husch of the National Conference of State Legislators provided a presentation focusing on the US DOT guidance, pending federal legislation and highlights from state legislation and programs. His slides are posted to the committee Web page.

Mr. Husch also suggested the committee reach out to the American Association of Motor Vehicle Administrators (AAMVA) for potential speakers.

- a. Representative Fields asked for Mr. Husch's opinion on which states to emulate for AV legislation. Mr. Husch stated that technology is still moving at a rapid pace making it hard to judge states' efforts. Legislation in California, Colorado, Florida, Michigan, Nevada and Tennessee could provide examples but still vary widely.
- b. Representative Fields asked about funding needed by UW-Madison for AV testing. Mr. Rafferty noted that the US DOT designation did not provide funding but the university is focusing on private investment (although some centers have received state funding). Mr. Husch noted that the focus should include CV technology, including infrastructure.
- c. Representative Kuglitsch asked whether states are looking at truck platooning. Mr. Husch noted that at least eight states are formally testing truck platooning but testing may be happening even without laws being changed. Testing is happening in a variety of settings closed, designated and public and sometimes with pre-qualification.
- d. Representative Kuglitsch also talked about where the committee should focus testing, vehicles, public streets, platooning. Mr. Husch indicated that states must answer certain questions up front for requirements concerning vehicles, testing parameters and insurance.
- e. Mr. Neitzel asked if some states have moved ahead with guidance instead of formal legislation. Mr. Husch states that some states have passed resolutions and set up standing committees; some have utilized Governorissued executive orders.
- f. Senator Risser raised the issue of whether states are designing highways specifically for AV, and also whether cybersecurity is being addressed on the state, private or federal levels. Husch responded that cybersecurity is being examined in certain states and both S1885 and HR3388 at the federal level mention the issue.
- g. Mr. Rafferty commented that federal and state bills appear to be silent on data sharing and trucks. Mr. Husch confirmed that neither S1885 nor HR3388 address vehicles over 10,000 pounds. Data sharing between the vehicle owner, manufacturer, operator and public entities is also an issue that remains largely unaddressed.
- h. Mr. Caya remarked that OEMs in the industry desire consistency and clarity. Husch noted that states recognize the economic development potential but are seeking to ensure safety and security.

- 5. The committee provided general reaction to the issues presented.
 - a. Representative Kuglitsch indicated the committee would need to focus on the questions to ask about testing. Senator Risser concurred and indicated that getting an opinion from the Attorney General on certain issues may help move the process.
 - b. Trooper Drager asked whether UW or the state has designated any specific corridors for testing. Mr. Rafferty said the center has simulation labs and private test tracks but are also looking at an AV/CV option for Park Street in the City of Madison.
 - c. Mr. Cyra talked to the need to establish use cases and deploy on public roads, perhaps collaborating with other states. Mr. Caya noted that his firm is examining Interstate corridors, including in Illinois.
 - d. Mr. Rafferty posited that Wisconsin could examine unique scenarios for AV technology reacting to deer and wildlife, snow and inclement weather and pedestrian / bicycle interaction. Mr. Neitzel asked what the was limiting the Park Street testing; Mr. Rafferty indicated a need for funds to install equipment in and around the infrastructure. Mr. Cyra noted the US DOT-funded pilot in Tampa is similar in scope.
 - e. Trooper Drager asked whether WisDOT has implemented anything in its infrastructure plans to support AV; WisDOT staff will follow-up and report to the committee.
 - f. Mr. Lewandowski noted that grass roots involvement is needed to keep the public and law enforcement aware of issues. He suggested reaching out to county highway safety commissions. Mr. Cyra noted that law enforcement coordination was lacking when intelligent transportation systems were initially deployed.
 - 6. Representative Neylon (serving as Chair after Secretary Ross' needed to leave the meeting) asked for additional reaction to the list of suggested speakers previously submitted by members; the committee added these names / contacts:
 - a. A speaker from AAMVA
 - b. Dave Cieslewicz or another representative of the bike/ped community
 - c. Truck platooning representative, such as Peloton
 - d. Geospatial Transportation Mapping Association
 - e. Speakers from the ITS World Congress

Representative Neylon noted that staff would examine future topics on truck platooning; designation of corridors and testing area; funding resources; and clarification on operations in Wisconsin. He would also seek a Legislative Council memo about adding statutory language referring to a "person who commands a vehicle."

The next meeting scheduled for November 15.

Representative Neylon adjourned the meeting.

Members attending:

Secretary Ross

Steven Caya

Steven Cyra

Trooper Tracy Drager

Representative Fields

Representative Kuglitsch

Senator Lasee

Jeff Lewandowski

Ric Mellon

Sheriff Steven Michek

Will Neitzel

Representative Neylon

Commissioner Nickel (later represented by Elizabeth Hizmi)

Peter Rafferty

Senator Risser

Chris Snyder

Tom Still

Jason Tolleson

Jacob VandeLoo