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

Meeting #3 November 15, 2017

MINUTES

- 1. Secretary Ross called the meeting to order at 9:00 am. Daniel Yeh, staff to the committee, called the roll (attendance list is provided at the end of these minutes).
- 2. Dr. Noyce moved to approve the meeting minutes from October 18, seconded by Mr. Mellon. The committee approved the motion.
- 3. Steven Cyra made a presentation on the US DOT-funded connected vehicle pilot projects in Tampa, Florida. His discussion included project goals, contract specifics, traffic and safety challenges, key enabling activities and initial lessons learned. His slides will be posted to the Committee web page. He also mentioned pilot projects in New York and Wyoming and noted two Web links for reference:

Tampa project - www.tampacvpilot.com
US DOT - www.its.dot.gov/pilots/

- a. Representative Neylon asked whether any pilots examined dedicated lanes and whether they were necessary for autonomous vehicles. Mr. Cyra indicated this feature was not in the current US DOT-funded pilots. Use of dedicated lanes might facilitate testing but ultimately AV would be integrated with other traffic.
- b. Representative Neylon mentioned that WisDOT may examine special lanes for the Foxconn development; Secretary Ross indicated the impetus was from US DOT and was only a research concept.
- c. Representative Neylon asked whether the Tampa project addressed traffic following distances. Mr. Cyra indicated that Tampa is not but mentioned an ITS World Congress session where states discussed truck following distance laws or exempting properly equipped truck platoons.
- d. Senator Risser asked about CV installations in other countries and what could be learned. Mr. Cyra noted there is some examination of international standards for equipment when such a standard is not set yet in the US. Canada is working with Michigan on a testing corridor.
- e. Mr. Mellon asked about distracted driving concerns due to the in-vehicle displays. Mr. Cyra agreed there are concerns and there is a training element for the Tampa participants. Other options considered included heads-up and on-phone, but the mirror application worked best.
- f. Mr. Mellon noted the absence of bicycles and mopeds in the pilot. Mr. Cyra indicated that the pedestrian elements are transferable to bicycles and the New York pilot project considers bicycles and motorcycles.

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- g. Mr. Lewandowski asked about compatibility of the mirror installation with all vehicles. Mr. Cyra confirmed that compatibility is part of the volunteer screening process and certain vehicles are not compatible. Most vehicles have a relatively clean installation.
- h. Mr. Rafferty remarked that the presentation provided by Mr. Cyra was comprehensive and the Florida experience offers a lot of insight for Wisconsin. Mr. Rafferty asked what could work for places like Wisconsin to embark on CV initiatives with limited resources. Mr. Cyra responded it is important not to discount inherent challenges with hardware and software integration, bearing in mind security, and that Wisconsin could focus on a few CV applications (of the hundreds) to pursue, e.g., SPaTenabled red light violation warnings, smart truck parking, queue warnings, etc.
- i. Mr. Neitzel asked how the pilot projects are set up for rural areas. Mr. Cyra noted that the range of DSRC radios at 1000 meters is the main limiting factor; the pilots needed to design and outfit systems to work within the ranges.
- j. Mr. Neitzel also asked about handling of the vast amount of data for moving beyond a pilot project. The Tampa initiative involves about 1,600 vehicles. Mr. Cyra confirmed that server capability is a major issue which is why AV opportunities are looking at cloud-based solutions.
- k. Secretary Ross asked if the Tampa pilot incorporated weather warnings and speed warnings / dangerous driving. Mr. Cyra noted that CV applications still involve the human element. The driver is provided information but remains in control, in contrast to AV applications that can take over for the driver.
- Secretary Ross reiterated the enormity of the distracted driving issue even going back to the introduction of radio in vehicles. Mr. Cyra shared the example of the technology he has experienced on a rental car. CV projects are examining less distracting options such as audible warnings and heads-up displays.
- m. Mr. Caya noted the success of the coalition of partners and asked about lessons learned. Mr. Cyra cited the necessary interagency collaboration and indicated this was highlighted in the initial application to US DOT. The other pilots in New York and Wyoming are also multi-agency and multi-discipline.
- n. Mr. Lewandowski reiterated the lessons learned from the presentation for real world applications and common goals.
- 4. Mr. Rafferty presented on a display of a Navya driverless transit shuttle that was planned for November 15 at the Capitol and November 17 & 18 at the UW-Madison

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Engineering Campus. He discussed the recent incident in Las Vegas when a backing truck scraped a similar Navya vehicle that had stopped. As a result of the incident, NTSB is investigating and NHTSA did not allow UW to hold live demonstrations.

The display vehicle is low-speed operating at up to 25 MPH with a target speed of 12 MPH. It is unclear whether this vehicle can operate on public roads. It is ideally suited for private enclosed campuses – corporate, university. It differs from traditional transit as it is a smaller vehicle and can address first-mile / last-mile issues. It could be operated by a transit agency or private entity. There are two current manufacturers - Navya and EasyMile, both of which have developed a domestic presence.

- 5. Secretary Ross announced that the Committee would not hold a meeting in December due to scheduling difficulties. The next meeting will be in January and staff will notify committee members. He reminded members that the State Legislature will be looking for guidance from the committee in early 2018.
- 6. Secretary Ross adjourned the meeting at 10:26 am.

Members attending:

Secretary Ross Steven Caya Steven Cyra **Trooper Tracy Drager** Kathy Heady (for Director Hogan) Elizabeth Hizmi (for Commissioner Nickel) Jeff Lewandowski Ric Mellon Sheriff Steven Michek Will Neitzel Representative Neylon David Noyce **Peter Rafferty** Senator Risser **Senator Testin**

Participating by conference call:

Senator Lasee Anne Marie Lewis Lisa Schrader Jacob Vandeloo