Cooperative Automated Transportation (CAT) Coalition Policy, Legislative, and Regulatory Working Group
October 29, 2019 Webinar
Notes and Summary of Discussions

Summary of Action Items

1. *Action Item: Any PLR WG members wishing to contribute to the Plain Language for ADS effort by participating in some off-line discussions should email Jennifer Toth, Paul Ajegba, or Pat Zelinski.*

Welcome

Jennifer Toth (Maricopa County DOT) opened the webinar. Jennifer reviewed today's agenda. Paul Ajegba also welcomed attendees and thanked them for joining.

A webinar slide deck was used to support the discussions, a copy of the slide deck is being circulated with this summary.

Mobility as a Service

Neal Pedersen presented on the topic of MaaS/MOD. Neal shared a definition of MaaS from the MaaS Alliance, as follows:

- Mobility as a Service brings every kind of transport together into a single intuitive mobile app. It seamlessly combines transport options from different providers, handling everything from travel planning to payments.

- The key concept behind MaaS is to put the users at the core of transport services, offering them tailor made mobility solutions based on their individual needs. This means, for the first time, easy access to the most appropriate transport mode or service will be included in a bundle of flexible travel service options for end users.

Neal reviewed the Federal Transit Administration's grant program that was initiated to help encourage development of elements of a total mobility package. This program is called the Mobility on Demand Sandbox, which funded 11 projects for approximately $8,000,000. The funded applications include activities such as the following examples:

- Integrating ridesharing and carpooling services into a mobile application;
- Creating mobile ticketing and trip planning applications;
- Carpooling applications to receive guaranteed parking spot at transit stations; and
- Incorporating bike sharing into mobile ticketing and trip planning applications.

Neal's slides include summaries of the grants awarded to the 11 projects. Evaluations of the programs are planned and will be published.

Neal described the experiences of three European cities that were visited, and lessons learned shared. Neal noted some key success factors to MaaS deployment in these cities, including:

- MaaS is part of a broader long-term regional vision;
- Enlightened, educated elected leadership;
- MaaS as part of a larger, integrated multi-modal network;
- A robust transit network is the backbone of a MaaS system;
- Transit stations as mobility hubs;
- User-centric approach/customer focus;
- Transit agencies need to rethink their mission to be mobility managers vs. being modal operators;
- Requires partnerships among providers;
- Governance system needs to be agreed upon;
- Roles of public vs. private sector need to be clearly defined;
- Interoperability and data integration;
- Single payment system;
- App is a means, not the end;
- Multiple modal options available for most trips;
- Service is easy to use and intuitive;
- Willingness to experiment, fail, and adapt.

Neal described a series of challenge and obstacles, outlined in the attached presentation.

Outreach and Knowledge Transfer

Pat Zelinski introduced this topic as a recurring agenda item on all CAT Coalition working groups. He noted that we will periodically ask members to identify additional members who should be involved in this group, either individuals or agencies.

Pat also reiterated the CAT Coalition's commitment to sharing knowledge. This is accomplished through the CAT Coalition website. Pat offered that if anyone has any additions they would like to add to the website, to send those to him.

Plain Language ADS Policies

Jennifer Toth reminded members that this working group recently began an effort to review and assemble information about automated driving systems terms used in legislation throughout the United States. Dean Deeter presented a summary of research to date that reviewed legislation in six states.
In summary:
- There is general consistency in the use of key terms defined in the AV 3.0 document (originally defined in SAE J3016), including: Automated Driving Systems, Dynamic Driving Task, Minimal Risk Conditions, and Operational Design Domain; and

- The differences are found in the portions of the legislation that describe the allowed use of Automated Driving Systems, with the following terms being used:
  - "driverless-capable vehicle";
  - "fully autonomous";
  - "Autonomous vehicle"; and
  - "Automated Driving System".

Jennifer Toth shared her vision that this effort is trying to understand the different terms used by states and to understand why some of the terms are selected over others. She added that while this project will not produce guidelines or recommendations for others, it might make decisions about the terms that the CAT Coalition will use.

Members expressed challenges they encountered while working with lawmakers. One example was that the lawmakers had informed them that the terms related to automated driving systems were too complex and there was not enough industry standards. It was expressed that a series of combined AASHTO, ITE, ITS America, SAE, and AAMVA definitions would be beneficial.

Paul Ajegba shared his idea that the eventual goal should be to create uniformity all over the country in the terms and references used for both MaaS and CAT. He described the benefit of a comprehensive manual describing the meaning of the terms used into one package to become a one-stop shop.

Jay Hieptas noted that Minnesota is working to create language for legislation, with feedback that the current terms used are too complex. They would appreciate definitions and national standards.

Paul also noted that we should not reinvent the wheel in this effort but leverage existing products. He noted that Michigan receives requests for examples of the terms/definitions they use, and they are happy to share them.

It was noted that different sectors tend to use different terms. For example, media outlets and travelers will likely use a different set of terms.

There was a suggestion to separate the terms and definitions into two categories:
- High level framing definitions and elements for ADS; and
- Extremely complex technical descriptions – noted that these that might be many hundreds of pages and are still expanding.

Jennifer agreed with this and noted that the elected officials need clear definitions of the common terms, not the complex technical terms.

Ted Bailey noted that WSDOT has been researching this, and they asked the University of Washington Law School to ask states how they identified automated driving terms and what the authoritative source was.

There was also a comment that there is an observed departure in state legislation as the lawmakers take the defined terms and sometimes must adjust them to fit within state statutes and laws, effectively 'operationalizing' the terms for state codes. Therefore, even if a state starts from a common place, there may be a tendency to use alternate terms in the final legislation.

Paul agreed with bringing SAE and AAMVA into the discussion but suggested the state DOTs initially meet and discuss and advance this concept.

Jennifer wrapped up the discussion by asking that if anyone wants to volunteer to work on a task force, they should email her, Paul, or Pat Zelinski. There will be further updates on future webinars.

Strategic Initiatives Working Group Update

Blaine Leonard shared an update on the Strategic Initiatives Working Group – the other CAT Coalition WG within the Programmatic & Strategic Activities Focus Area. The focus of the Strategic Initiatives WG is on encouraging deployment. Blaine's update included the following topic areas:

- The SPaT Challenge originated in this group;
- The follow-on to the SPaT Challenge is the Fleet Challenge – with an emphasis on deploying On-board units (OBUs) on heavy and light fleet vehicles to interface with the SPaT broadcasts as a mechanism to gain operational experience and lessons learned with assembling and installing OBUs in as many different vehicle types as possible;
- Three webinars have been planned on the Fleet Challenge:
  - Initial webinar was conducted on October 3rd;
  - Next webinars will be November 21 and January 9;
- The Fleet Challenge website is up and operational, including:
  - Resources available; and
  - An option to add your fleet activities to the map.
  - Website address is: https://transportationops.org/connected-fleet-challenge

Blaine noted that the next webinar for the Strategic Initiatives Working Group is October 31st, and will include:

- Mn/DOT's presentation on their Connected Corridor; and
- Arizona's Institute of Automated Transportation.

Partner Reports

USDOT:
- Two efforts, the National Roadway Readiness Framework and related Roadway Automation ConOps (the ConOps), have both had their administrative and technical review kickoff in the past weeks. These efforts will coordinate closely with AASHTO, who is convening a workshop in December on a National Strategy for Highway Automation.
- A centerpiece of the FHWA Roadway Automation ConOps is for stakeholder engagement to be foundational to event content development

AASHTO:
- Annual meeting occurred earlier in October. A few resolutions that passed:
  - AASHTO Surface Transportation Reauthorization Package. AASHTO Policy Resolution PR-10-19: AASHTO Reauthorization Policy Theme 7: Harness Innovation and Technology states AASHTO's policy on the 5.9 GHz spectrum, which is listed on page 24 of this document (https://policy.transportation.org/wp-

content/uploads/sites/59/2019/10/2019-10-09_AASHTO-Policy-Resolutions-Since-Oct-2013.pdf). This document also lists all AASHTO policy resolutions that were passed since 2013.

- o Guiding Principles for Connected Infrastructure Supporting CAT, developed with ITE and ITS America. Pat noted that ITE and ITS America have already adopted these. Activities developing these have been outside the CAT Coalition.

ITE:
- Jennifer updated that ITE Guiding Principles went through the International Board of Directors. A conference call soon to discuss the next steps regarding the principles.

Update on the Status of the 5.9 GHz Spectrum

Pat Zelinski facilitated a discussion on the 5.9 GHz spectrum. This is another recurring agenda item for this group and an opportunity to share any updates that members may have.

Ross Froat (ATA) noted that ATA recently had great discussions with the Wyoming DOT pilot and connected vehicle program. The next phase for the Wyoming DOT project is the full implementation phase, and they are looking for carriers to deploy in-vehicle devices. ATA is answering that call and working with members to procure and install devices. ATA is currently writing an announcement and description of how truckers and members of trucking community can benefit from this and educate members and the industry about what is going on for the I-80 project.

Skip Yeakel noted that he is a member of ITS America and was aware that they were having weekly meetings regarding the spectrum and hopes those are still occurring.

Ted Bailey noted that recently there was a letter sent by the state DOTs supporting the preservation of the 5.9 GHz spectrum (https://aashtojournal.org/2019/08/23/state-dots-sign-letter-supporting-preservation-of-5-9-ghz-spectrum/). Ted noted that one element missing in the letter was indications of states' commitments to deploy at least one of the optional approaches within the spectrum. Ted noted that WSDOT is moving forward with including connectivity as they perform traffic signal updates.

Member Updates

Jennifer opened the floor for members to provide updates on their activities.

- No updates were shared during this webinar

Meeting Close and Next Meeting

Jennifer recapped plans for the next webinar. The next webinar of the PLR Working Group will be **December 12, 2019 from 3:00-4:30 ET.**

Following the December webinar, the next two webinars will be:

- February 13, 2020 (2:00-3:30 ET)
- April 2, 2020 (11:00-12:30 ET).

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