Cooperative Automated Transportation (CAT) Coalition Policy, Legislative, and Regulatory Working Group

June 29, 2021 Webinar **Notes and Summary of Discussions**

Welcome

Director Jennifer Toth (who serves as a co-chair of the working group together with Director Paul Ajegba) welcomed attendees. A webinar slide deck was used to support the discussions. A copy of the slide deck and presentations presented were circulated prior to the webinar and are being circulated with this summary.

Current Work Plan and Webinar Schedule

Pat Zelinski provided an update on the research proposal that was submitted to the TRB Highway Legal Panel. This proposal was approved and an RFP to select a contractor was anticipated in June but is delayed. Pat will request an update before the next webinar and anticipates the RFP to go out in July.

Jennifer noted that volunteers or ideas for speakers are needed for a variety of proposed topics for future webinars, which are planned for:

- August 25, 1:30-3:00 PM Eastern
- October 19, 3:30-5:00 PM Eastern
- December 13, 1:30-3:00 PM Eastern

SAE Perspective on Use of the Term "Autonomous" in Legislation

Bill Gouse described the use of appropriate terminology from the SAE perspective. He noted that some terms are discouraged, such as unmanned, robotic, and autonomous, because they are not crisp and can be used in a confusing manner. Preferred language is recommended about vehicles equipped with automated systems. "Automation" is the appropriate term for part or all of what SAE describes as a dynamic driving task. The strictness of this definition is used when writing bills for legislation.

Bill noted that the term autonomous has been used more casually and in marketing, in a way that weakens the term to be synonymous with automated, which is not fully correct. However, this clouds the understanding of whether a vehicle or functionality (e.g. data collection, mapping, incident guidance) is autonomous. Some driver systems may in fact be autonomous if they perform all their functions independently without external communications or cooperative automation with other vehicles and infrastructure. The term "cooperative" is used rather than "autonomous" in this context. SAE 3216 was developed with support from FHWA ITS JPO and Turner-Fairbank to further delineate the use of "autonomous vehicle" for cases that are not really autonomous.

Another challenge Bill noted was the usage of SAE Level 5 as "autonomous", which is not strictly true, depending on the driving task and operational design domain. Autonomy refers to self-governance with independent decision making and self-sufficiency. Automated driving technology and automated driving systems are not inherently autonomous. A lot of automated vehicles rely on control algorithms in a way that removes self-sufficiency and independence.

In summary, Bill said that SAE does not use the term "autonomous" to refer to automated driving systems. Authors of the SAE document continually conduct outreach to remedy the use of term autonomous in conjunction with a reference to SAE. Bill offered support to reach out and identify authors to have discussions with anyone who would like further clarification on the use of "autonomous".

Questions/Comments:

Carole Delion: Maryland conducted a review, which came to the same conclusion that "autonomous" was not a term that should be used.

Jennifer Toth: Noted that defining these terms has been a major emphasis of this group and is very important.

AAMVA White Paper on Automated Delivery Vehicles and Devices

Paul Steier (AAMVA, Director of Vehicle Programs) first noted the recently published second edition of the Safe Testing and Deployment of Vehicles Equipped with Automated Driving Systems document, which is available on the AAMVA website.

Paul provided an overview of the Automated Delivery Vehicles and Devices White Paper which was 2021 published May and can be found at this link: https://www.aamva.org/AutomatedDeliveryVehiclesAndDevicesWhitepaper-May2021. He noted that the document focuses on several questions: how do you manage a program for personal delivery devices (PDDs), how do you control the safety including testing and markings, and what are some benefits and the challenges you may face?

Paul described some top lessons learned in the document. He noted the importance in providing a clear distinction between vehicles: automated delivery vehicles (ADVs), which operate within vehicle infrastructure, are different from PDDs, which operate in pedestrian/bicycle spaces and are the focus of the document. He noted that jurisdictions should develop oversight processes for PDDs involving state, local, and enforcement agencies. Some guidelines are included for agencies that are already deployed, as recommendations for informing enforcement on what these vehicles are.

The AAMVA Autonomous Vehicle Sub-Committee is committed to keeping pace with evolving vehicle technology and has begun working on the third edition of the Safe Testing document. Draft updates are anticipated by November with publication no later than September 30, 2022.

Jennifer Toth noted that a lot of local jurisdictions are looking for and will benefit from the guidance and recommendations from this document.

AASHTO and ITS America Legal Action to Retain 5.9 GHz Band for V2X **Technologies**

King Gee provided an update on the AASHTO and ITS America legal actions. He noted the background of AASHTO's position on the 5.9 GHz band and the resulting FCC decision. Ultimately, AASHTO decided to join ITS America in their lawsuit against the FCC for two main reasons. First, V2X technologies continue to be the best tool to reduce crashes and save lives on America's roadways. The dedicated spectrum is the most developed and the best tool we have. Second, the FCC ruling has undermined state DOT abilities to use the spectrum as it was intended to be used for V2X technology.

The lawsuit includes four arguments: 1) the action goes beyond FCC authority and improperly disregarded safety-related judgements of FCC, 2) there was arbitrary failure to consider safety, 3) reallocation is equivalent to revocation of licenses that have been issued which is in violation of FCC authority, and 4) the report and order (R&O) is capricious by not adequately addressing concerns raised by DOT stakeholders.

The R&O is scheduled to go into effect on July 1, and AASHTO has also responded to the First Notice of Proposed Rulemaking (FNPRM) that was simultaneously issued. AASHTO anticipates the briefing phase of the lawsuit will last several months and the lawsuit will be concluded in about a year. AASHTO is also waiting for responses to the comments provided to the FCC.

Questions:

Bill Gouse asked if King was aware of any other lawsuits; King is not aware of any other lawsuits.

What does the R&O coming into effect on July 1 mean for current users of the spectrum? There is supposed to be further guidance from the FCC on what the current incumbents should be doing after July 1. The expectation is that operators may begin using WiFi in the spectrum as of July 1, which will cause interference.

Partner Reports

USDOT -

John Harding provided an update on several efforts:

- The Roadway Automation Concept of Operations project is currently talking to agency "beta sites" to ensure that the content is useful.
- The Data Framework project had a successful call with stakeholders, and is currently working to get various reports reviewed by agencies to further disseminate them. The Data Framework is a conversation starter to begin discussions.
- Third, the virtual open innovation collaborative environment voices includes a proof of concept for a testing environment on automation and communication. It includes cooperative automation use cases to support the proof of concept.
- Finally, John noted the National Park Service automated vehicle shuttle demonstrations in Yellowstone and Wright Brothers National Memorial. Exit surveys show that the public is getting comfortable with these demonstrations.

AASHTO -

Pat Zelinski said that the lawsuit described by King is the major update from AASHTO. Also, starting in October, AASHTO is returning to in-person meetings with the annual meeting in San Diego.

ITE -

Siva Narla provided a brief update on two major projects. The Roadside Unit (RSU) Standardization effort has created a final draft that is undergoing ballot now, 1.5 years after the effort was initiated. This standard is agnostic for DSRC and C-V2X as it is currently understood, and it is supported by RSU manufacturers. He expects the final standard to be published by mid-September 2021. Second, the Connected Intersections project has resulted in a design for Red Light Violation Warning (RLVW), that includes the TMC vehicle control systems and OEMs coming up with a compromise on how to reliably exchange information. They were looking for four agencies to test the concept, but had applications from 15 agencies to conduct testing. The USDOT provided additional funding to support all of this testing. Siva expects data to be verified by the end of July to issue guidance on Connected Intersections and an understanding of how the validation process went for all of the testing sites by the end of September.

Other Member Updates

There was brief discussion about an announcement from NHTSA about new crash reporting requirements for vehicles equipped with advanced driver assistance systems. Members shared the following links:

- https://www.nhtsa.gov/document/sgo-crash-reporting-adas-ads-sample-form
- https://www.nhtsa.gov/press-releases/nhtsa-orders-crash-reporting-vehicles-equippedadvanced-driver-assistance-systems

Meeting Close and Next Meeting

The next webinars of the PLR Working Group will be:

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Policy, Legislative, and Regulatory WG May 20, 2020 Webinar Participants

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