

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

November 9, 2018 Webinar
Notes and Summary of Discussions

Summary of Action Items

1. **Action Item:** Steve Boyd to draft a one-page summary of the truck platooning regulation challenges for consideration of this working group during the next webinar.
2. **Action Item:** Establish a temporary task force to develop a survey of state and local DOTs to understand how they are
 - a. **funding and financing** CAT related activities (e.g. research funds, grants, operations funds)
 - b. **organizationally structure their respective CAT programs.**
 - c. **review the COP survey results to help inform the survey development**

Members wishing to participate should contact Pat Zelinski by December 15, 2018.

The goal is to update members of this working group on progress of survey development during the next webinar, February 1, 2019

3. **Action Item:** Staff to coordinate with Barbara Wendling to arrange a presentation on the SAE Project on Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles during a future webinar of this working group.
4. **Action Item:** Staff to explore a future agenda topic regarding research conducted in Florida related to truck platooning impacts on the infrastructure.
5. **New Action Item:** Staff to share the results of the AASHTO Community of Practice (COP) for Highway Automation survey with the working group once available
6. **New Action Item:** Staff to put create a brief summary of early work group deliverables and activities.

Welcome

Roger Millar (Secretary of WSDOT and Chair of this working group) opened the webinar. Roger reviewed today's agenda and noted that the action items from the September webinar would be addressed during today's presentations and discussions.

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

Model Regulations for Near-term Pilots (Working Group Activity #3)

Roger recapped the presentation that Steve Boyd presented during the September webinar on Truck Platooning. During the presentation Steve had presented how a primary regulation barrier to platooning

is quantified following distance regulations. Generally, states with specific, quantified following distance legislation (e.g. minimum 500 ft.) are not candidates for platooning. Many states have translated the legislation into qualitative descriptions (e.g. “Reasonable and prudent”) to allow for platooning.

Roger shared today’s recommendation that Steve Boyd prepare a one-page summary describing this regulation related challenge and examples of states that have implemented qualitative regulations. The intent is that this will **not** be a recommendation document, but it will be an informative document to support states in understanding the issues surrounding regulations and truck platooning. This document will be the primary deliverable for Activity #3 during this initial year of this working group. **Action Item: Steve Boyd to draft a one-page summary of the truck platooning regulation challenges for consideration of this working group during the next webinar.**

Funding Opportunities and Finance Models (Working Group Activity #2)

Roger recapped that the goal of Activity #2 for this working group is to understand how state and local DOTs are funding their CAT activities (e.g. research funds, grants, operations funds) and the general scale of funding they are investing.

Roger introduced a related effort and survey that AASHTO has recently initiated and invited Pat Zelinski to describe it.

AASHTO Community of Practices for Highway Automation

Pat Zelinski presented on the AASHTO Community of Practice (COP) for Highway Automation, a group formed to support states with task forces or working groups related to highway automation. The objectives of this COP are as follows:

1. To cross inform each other on efforts
2. To understand the products being generated which may be of interest to other states
3. To discuss critical policy and technical issues, as appropriate

AASHTO staff deployed a survey on regulations, requirements, and organization to create baseline information on states' efforts and help shape the COP work and information needs. The COP will meet quarterly by webinar and may operate an on-line information sharing resource. Pat noted that this COP will help identify insight into the CAT/CAV funding approached within state DOTs. ***Action Item: AASHTO staff will share the results of the COP survey with the working group once available.***

Summary of Members' Approaches to CAT/CAV Funding

Roger then opened the floor for members to share descriptions of how they are currently funding their CAV/CAT activities.

Arizona DOT noted that they have no dedicated funding for CAV/CAT activities. All activities are done with existing resources in agencies within local and state governments. The Governor announced the creation of the Institute of Automated Mobility as a partnership of public, private, and academic institutions. The Institute will allow entities to test complex research scenarios.

MnDOT updated that they created a new office called the CAV-X Office for advancing policy research and planning for CAV. This office has a base budget of \$1.8M and has received additional funding of \$3M this year. MnDOT also has an active CAV Challenge RFP that is posted on their website. The goal of this is to receive proposals and enter into contract agreements for CAV related projects to solve MN challenges (work zones, etc.). MnDOT will evaluate ideas every 2 months.

Washington State DOT updated members on the Governor's cabinet level Task Force on CAT that includes each cabinet agency. In addition, the legislature created the Washington AV Executive Working Group, facilitated by the Washington State Transportation Commission. This Working Group and its respective subcommittees, has a broad private and public sector membership. WSDOT has dedicated a small amount of funds specifically to facilitate input to both groups. They have also created a CAT team within WSDOT with existing funding. They are in the process of putting together a multi-million-dollar budget request to the Governor.

Survey of State and Local Agencies

Roger led a discussion about the idea to conduct a more formal survey of state and local agencies to learn more about their approaches to funding and organizing their CAT programs. Input from members included the following:

- NACO noted that they would like to see the survey include questions about the outreach that agencies are conducting within their jurisdictions about CAT/CAT;
- There was a suggestion to ask about how state and local agencies are contributing to the effort and if they are utilizing public private partnerships to leverage outside resources;
- There was a suggestion to include questions about how the CAT/CAV programs are structured (e.g. who is the champion? Which office is it included?); and
- There was a suggestion that some major cities are very active in this (e.g. New York) and would be good responders for the survey. The suggestion was to consider AMPO and NACTO to help share the survey.

Roger invited any members who are interested in participating in 1-2 calls to work with staff on developing and finalizing the survey to contact Pat Zelinski. **Action Item: Any members wishing to participate in a**

temporary task force to create the survey of state and local DOTs to understand more about how they are funding and structuring their CAT programs to contact Pat Zelinski by December 15, 2018.

CAT Policy Framework (Working Group Activity #1)

Pat Zelinski and Dean Deeter provided an update on the CAT Policy Framework Clearinghouse. Since the last webinar, a website for this working group is now active on the overall CAT Coalition website. This website now contains a table describing resources related to CAT Policy Frameworks from 19 agencies. The website address is as follows:

https://transportationops.org/CATCoalition/policy_legislative_regulatory_WG

Members are encouraged to review the table of resources and are reminded that if they have a CAT Policy Framework they would like to include in this website, to send an email to Pat Zelinski.

Roger introduced the notion that the policy framework resources that have been identified and linked to from this website often include definitions for common CAT related terms, and these definitions are not always the same. He noted that there is an SAE Project on *Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles*. Roger requested a future agenda item for members to be updated on this effort. Barbara Wendling (Daimler) mentioned that she is chairing this SAE effort and could arrange a presentation on a future webinar. **Action Item: Staff to coordinate with Barbara Wendling to arrange a presentation on the SAE Project on Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles during a future webinar of this working group.**

Presentation of Member Summaries of Other CAT Related Committees

- Matt McAnarney, Illinois DOT

Matt McAnarney presented on the Autonomous Illinois Initiative, an initiative involving a number of state agencies, including:

- Illinois Department of Transportation
- Illinois State Police
- Illinois Department of Innovation and Technology
- Illinois Department of Insurance
- Illinois Department of Commerce and Economic Opportunity
- Illinois Toll Highway Authority

Matt described their approach to CAV as a ‘system of systems’, described the Illinois Executive Order for CAV, and outlined additional CAV efforts within Illinois.

A copy of Matt’s slide deck is attached to this meeting summary.

Presentation of Member Summaries of Other CAT Related Activities

- Skip Yeakel, Volvo

Skip Yeakel introduced members to the Volvo Group, and noted it is a separate group from the Volvo Car Group. Skip described their role in manufacturing trucks, buses, and motor carriers. He described a fully autonomous mining truck that is operating underground in Sweden, and a highly automated sugar cane harvester in Brazil. Skip also described the most recent initiative in Europe called VERA that involves a fully autonomous truck with no cab for drivers that connects to trailers and hauls freight in limited automation areas.

Skip also described research activities of Volvo in partnership with Penn State, Cal Berkeley PATH, and Battelle as part of NHTSA study of the safety of Platoons.

Skip encouraged members to email him with requests for additional information at:

skip.yeakel@volvo.com.

Member Summaries of National Dialogue on Highway Automation Sessions

Chicago Dialogue Session

Robert Brown (Tu Simple) attended and offered the following input on the Chicago session:

- The focus was on freight including how AV would affect freight and planning.
- There was good discussion around safety and platooning. The topic of concern about impacts of truck platooning on infrastructure (bridges, overpasses) due to automated trucks' increased lane keeping ability and potentially truck platooning. Steve Boyd noted that if any agency is interested in learning more on the topic of truck platooning and the infrastructure, he worked with Florida to study the impacts of platooning on the Florida infrastructure. He noted that the results showed that less than 1% of bridges in FL might have any negative impacts based on how platoons will work (considering standard loads). Steve offered to present this to the group later, if desired.

Phoenix Dialogue Session

Mike Cammisa attended and reported on the Phoenix USDOT Dialogue Session with the following input:

- Theme was traffic operations, including national consistency for operations, funding for infrastructure investment, and Connectivity.
- There was discussion about the overall challenges we need to address in operations (e.g. Work zones, special events, unusual weather conditions, etc.) and how AVs interact with this.
- Timing of AV deployments and mixed fleets was also discussed.
- New demands or shifting demands of resources and workforce
- Law enforcement and responder needs.

John Harding noted that USDOT is creating a summary of each workshop as well as a summary of the overall series.

Member Updates

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

- Illinois – Matt noted that IDOT has recently heard that OEMs are looking for a clearer path for Level 4 and Level 5 automation deployment. IDOT has recognized the need to continue legislative actions. Currently, IDOT has no dedicated funding for this. They are using existing resources and personnel while they explore dedicated funding for this issue.
- ITS America – Recently circulated a report from USDOT and Crown Castle on automated vehicle connectivity. If people have questions, they can follow up with Scott directly.
- Volvo – The Transportation Safety Advancement Group (TSAG) participated in a presentation on the Smart Columbus project that involved a group of connected emergency responders. It was noted that this is an area where automation can save lives and a great opportunity to deploy DSRC technologies today.

Meeting Close and Next Meeting

Roger recapped plans for the next webinar. Roger identified an additional action item and asked staff to put together a summary of early work group deliverables and activities. The next webinar will be Friday, February 1, 2018 from 8:00 am – 9:30 am Pacific (rescheduled from January 4th).

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