Cooperative Automated Transportation Coalition
Technical Resources Working Group
Monthly Meeting Summary
Wednesday November 14, 2018 11:00 am - 12:30 pm Eastern Time

Action Items

All: Review and provide any additional comments by 11/30 on the white paper being developed within this group on CAV Resources and Identified Gaps.

Attendance

1. Navin   Katta (Co-chair)   navin@savarinetworks.com
2. Carl   Andersen   carl.andersen@dot.gov
3. Sonya   Badgley   Sonya.S.Badgley@leidos.com
4. Alan   Clelland   aclelland@appinfoinc.com
5. Deborah   Curtis   deborah.curtis@dot.gov
6. Darryl   Dawson   ddawson@itsengineering-ltd.com
7. Ray   Derr   rderr@nas.edu
8. Edward   Fok   edward.fok@dot.gov
9. Cliff   Heise   cdh@iteris.com
10. Shah   Imran   MdShah.Imran@atkinsglobal.com
11. Peter   Jager   pjager@utah.gov
12. Jean   Johnson   jean.johnson@nema.org
13. Jim   Misener   jmisener@qti.qualcomm.com
14. Koorosh   Olyai   koorosh.olyai@stantec.com
15. Gary   Piotrowicz   gpiotrowicz@rcoc.org
16. Eric   Raamot   eraamot@econolite.com
17. Pierre   Rasoldier   pierre.rasoldier@tc.gc.ca
18. Bob   Rausch   robert.rausch@transcore.com
19. John   Roman   john.m.roman@intel.com
20. Nu   Rosenbohm   nu.rosenbohm@kapsch.net
21. Jeremy   Schroeder   schroeder@acconsultants.org
22. Alvin   Stamp   alvin.stamp@state.co.us
23. Barbara   Staples   bstaples@noblis.org
24. Mike   Stelts   michael.stelts@us.panasonic.com
25. Nicola   Tavares   ntavares@ite.org
26. Tom   Timcho   tom.timcho@wsp.com
27. Govind   Vadakpat   G.Vadakpat@dot.gov

Meeting Summary

Introduction

Navin welcomed everyone and led roll call.

Resources Working Group Recap

Navin presented a brief recap of Resources WG webinar from the previous month, which included:

- A USDOT Update, highlighting: AV Guidance 3.0: Preparing for the Future of Transportation; the CV Pooled Fund Study Request for Letters of Intent (RFLI) for Queue Advisory/Warning Application Concept and Development; and the USDOT MAP Tool and Equipment Loan Program.

- Resource Gap Identification as presented in the updated white paper on CAV resources with a table of resources identified for the four priority applications. Some comments have been received and will be incorporated into an updated document. Please submit any remaining comments by 11/30. Identified resource gaps are presented, including some resources developed 6 or more years ago may need updates.

- The Tool for Agency Self-Evaluation of Capabilities to Develop a CAT Program presented by Steve Lockwood. This tool was developed to assess agency capabilities for developing a CAT program

Updates on CAT Coalition Activities

Jeremy presented an update of CAT Coalition Activities, noting that the CAT Coalition Leadership and IOO/OEM Forum Members met last month to discuss the future direction and activities. Working groups are making progress on TOSCo and RSZW-LC documents, which will be brought to this group in coming months after they are reviewed within those working groups.

USDOT Update – AV Guidance 3.0 Request for Comments

Edward Fok provided an update that on USDOT Automated Vehicle Guidance 3.0: Preparing for the Future of Transportation. The document is available here: https://www.transportation.gov/av/3 and the comment period closes on December 3, 2018. Ed spoke from a presentation (distributed to members) to highlight the USDOT objectives to prioritize safety, remain technology neutral, modernize regulations, encourage a consistent regulatory and operational environment, prepare proactively for automation, and protect and enhance freedoms. The document provides multimodal guidance, clarifies policy and roles, and outlines how to work with USDOT as automation technology evolves. Ed noted the importance of reviewing the document as many things would have lasting impacts; for example, changing the definition of driver and operator has major implications. Matt Hardy is assembling comments to submit on behalf of AASHTO; members of this working group can send him comments at: mhardy@aashto.org.

FCC Request for Comments

Jeremy announced an FCC Request for Comments on 5.9 GHz Phase I Testing Data. The comment period closes on December 13, 2018, and the announcement and attachments are available online at: https://www.fcc.gov/document/fcc-requests-comment-59-ghz-phase-i-testing-data

NHTSA Request for Comments

Jeremy announced a NHTSA Advance Notice of Proposed Rulemaking (ANPRM) for Automated Driving Systems (ADS). The comment period closes on November 26, 2018. NHTSA is seeking public comment on matters related to the near-term and long-term challenges of Automated Driving Systems (ADS) testing, development, and eventual deployment. The document is available online at: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/av_pilot_anprm_sept_28_2018-tag.pdf

CARMA Platform

Taylor Lochrane of USDOT presented the CARMA platform (his presentation was distributed to working group members). He provided an overview of the vision and work completed to date, such as the Cooperative Adaptive Cruise Control (CACC) demonstration in CARMA1. CARMA2 looked at the full trip in the Integrated Highway Prototype (IHP), which is an open source platform and includes platooning,

speed harmonization, and cooperative merging. He described the Mobility Messages that were developed based on J2735. CARMA3 kicked off across USDOT to advance research with FHWA and FMCSA fleet and partnerships using both the CARMA and Autoware platforms. The CARMA Cloud is a concept for TSMO network management to facilitate communications from the TMC to the vehicles for a variety of use cases, with a focus on basic travel, work zones, traffic incident management, and weather use cases. The testing process is currently being planned such that new code that is sent via Github will be examined using a variety of tools to check for its integrity, malware, and make sure it fits; once it passes that rigorous check, it would be integrated into the development branch and eventually the master. This uses best practices that are also used by other open source software entities. CARMA will be interoperable such that hardware from any vendor can be added, so no certification is done for this process. There is a desire to test and work with a variety of vendors. Messages to vehicles follow the J2735 standards, although no specific standardization exists yet, so this is being taken to SAE. ITS JPO has a task with SAE to define and standardize cooperative automation nomenclature.

Upcoming Webinar & Close
The next Resources Working Group meeting will be held on December 12, 2018 at 11am ET.