

**Cooperative Automated Transportation Coalition
 Technical Resources Working Group
 Monthly Meeting Summary**

Wednesday April 11, 2018 11:00 am - 12:30 pm Eastern Time

Actions

1. All: Send Faisal, Navin, and Jeremy further thoughts on topics and tasks the Technical Resources Working Group should consider for its Phase 2 work plan.
2. Jeremy: Send DSRC Deployment Summary document to the working group for members to provide feedback.
3. Develop outline for white paper to serve as a synthesized CAV Resource Reference document – identify CAV resources from USDOT, SPaT Challenge, CV Pooled Fund Study, TRB, and other groups.
4. Jeremy: Share the technical assistance information provided through Turner-Fairbank; website: www.cvcs.samanage.com. E-mail: support@cvcs.samanage.com.

Attendance

1.	Faisal	Saleem (co-chair)	faisalsaleem@mail.maricopa.gov
2.	Navin	Katta (co-chair)	navin@savari.net
3.	Brian	Burkhard	brian.burkhard@jacobs.com
4.	Patrick	Chan	patrick.chan@consystec.com
5.	Justin	Chan	justin.chan@transpogroup.com
6.	Alan	Clelland	alan.clelland@intelight-its.com
7.	John	Corbin	john.corbin@dot.gov
8.	Deborah	Curtis	deborah.curtis@dot.gov
9.	Darryl	Dawson	ddawson@itsengineering-ltd.com
10.	Cliff	Heise	cdh@iteris.com
11.	Justin	Johnson	justin@mmm.com
12.	Jim	Katsafanas	jkatsafanas@mbakerintl.com
13.	Joshua	Kolleda	kolleda_joshua@bah.com
14.	Naveen	Lamba	naveen.lamba@us.gt.com
15.	Shel	Leader	shel@sleader.com
16.	Steve	Lockwood	lockwood@slockwood.com
17.	Ali	Lohman	alexandra.lohman@odot.state.or.us
18.	Cheryl	Lowrance	clowrance@vhb.com
19.	Jianming	Ma	jianming.ma@txdot.gov
20.	Donna	Matulac	donna.matulac@iowadot.us
21.	Stephen	Mensah	stepen.mensah@stantec.com
22.	Martha	Morecock Eddy	martha.eddy@kci.com
23.	Siva	Narla	snarla@ite.org
24.	Karen	Nguyen	knguyen@econolite.com
25.	Persephone	Oliver	poliver@econolite.com
26.	Hyungjun	Park	hpark@email.virginia.edu

27.	Barry	Pekilis	barry.pekilis@nrc-cnrc.gc.ca
28.	Gary	Piotrowicz	gpiotrowicz@rcoc.org
29.	Hannah	Rakoff	hannah.rakoff@dot.gov
30.	Bob	Rausch	robert.rausch@transcore.com
31.	Jeremy	Schroeder	schroeder@acconsultants.org
32.	Scott	Shogan	scott.shogan@wsp.com
33.	Suzanne	Sloan	suzanne.sloan@dot.gov
34.	Chris	Stanley	chris.stanley@leidos.com
35.	Purser	Sturgeon	purser.sturgeon@swri.org
36.	Francois	Thibodeau	francoisthibodeau@ville.montreal.qc.ca
37.	Dale	Thompson	dale.thompson@dot.gov
38.	Karen	Timpone	karen.timpone@dot.gov
39.	Matthew	Windholtz	windholtz@battelle.org
40.	Emil	Wolanin	emil.wolanin@montgomerycountymd.gov

Meeting Summary

Introduction

This was the first meeting for the Technical Resources Working Group in Phase 2 of the V2I Deployment Coalition. Faisal welcomed everyone and explained that a goal for this meeting was to help set the tone and direction for this working group and activities moving forward in Phase 2.

Overall V2I DC Phase 2 and CAT Coalition

Gummada Murthy and John Corbin provided a brief summary of the new direction and expanded scope for Phase 2 of the V2I DC to consider the larger context of cooperative automation as the Cooperative Automated Transportation (CAT) Coalition. This includes a broader scope for this Resources Working Group to consider additional documents that may relate to automated vehicles and additional communications technologies other than DSRC.

John noted some areas that this group may be able to focus their efforts in future meetings, including research coordination and providing feedback on the USDOT AV Policy 3.0, as well as future iterations in coming years. Additionally, USDOT will be designating liaisons across the CAT Coalition and this working group to bring consistency and focus to ongoing activities.

Overall Direction of this Working Group

Faisal Saleem reviewed Phase 1 activities of the Guidance TWG. This included the development of summaries and tech memos, and serving as a focus group to provide input and feedback to support development of V2I guidance and resources for efforts led by USDOT, as well as the Connected Vehicle Pooled Fund Study (CV PFS) and the V2I DC TWGs.

The Resources Working Group mission was reviewed for the group: *This working group focuses on the identification of resource needs and institutional challenges, such as workforce development. The working group also provides review and analysis of other products and resources, such as deployment guidance and IOO-OEM Forum outcomes.*

Faisal noted that the Resources Working Group membership includes a good mix of representatives from state DOTs, local DOTs, USDOT and Volpe Center, research and academia, industry representatives, and consultants.

The long-term direction for this group in Phase 2 includes activities similar to those previously performed, including monthly webinars, opportunities to review and provide feedback on resources developed by USDOT and others, serve as a focus group for USDOT, and identify resource gaps and needs. Additionally, this group will likely receive updates and offer feedback on CV pilots; expand from V2I and DSRC to include V2X, AV, and other communications; focus on institutional challenges and expand and broaden membership.

Discussion items included the following:

- Will standards be reviewed by this working group? Standards developed by ITE or SAE may be reviewed by this group from a very high level to identify gaps or other standards that may be needed. This and the need for standards harmonization will be discussed with the Executive Committee to determine where this activity fits best within the CAT Coalition.
- The need to expand membership to include industry representation for aftermarket devices and cellular companies to reflect deployments of on-board units on fleet vehicles and the expanded scope of this group to communications other than DSRC.
- Discussion on expanding the scope to include additional communications included a concern on whether this would add too many items for discussion. Others felt being technology agnostic was important to remain open and be able to respond to other groups that are forming to support specific technologies. Emphasis was made that this broadened focus is not to turn away from DSRC technology, which is available for deployment now, but to acknowledge an evolving environment where other technologies may be coming available.

Activities and Proposed Topics for Future Meetings

Faisal presented some ideas for upcoming webinars based on recently completed or ongoing activities of various groups, including USDOT and the CV PFS.

Discussion included the need to add:

- Activities being conducted by TRB as part of NCHRP efforts, such as the business case for V2I project.
- The FHWA Guidance on DOT Capabilities for V2I, including workforce and collaboration.
- Research coordination and the opportunity for this group to serve as an interface of broader CAV research activities.
- The USDOT AV 3.0 Policy is currently being drafted, and this group can help support and implement this, as well as future iterations of this policy in the coming years.
- A new framework to harmonize resources developed by various agencies, including those from the SPaT Challenge, CV Pilots, and other groups.
- Current CV PFS activities include projects related to the Basic Infrastructure Message (BIM), MMITSS 3, connected traffic signals including ramp meters, V2I queue warning, and a unified framework for IOOs to provide information to third-party providers for a V2I service.
- Perhaps make Turner-Fairbank a separate line item from USDOT given their activities.
- Turner-Fairbank has an early deployment technical research initiative to help agencies with devices and deployments, as well as equipment loans (Website: www.cvcs.samanage.com, E-mail:

support@cvcs.samanage.com), and the ITS JPO has a CV technical deployment assistance program. Contact Deb Curtis for more information.

- Support for agencies to appropriately develop infrastructure that will be needed to support the future CAV environment, regardless of the DSRC, cellular, or other communications solution that is eventually deployed.

SPaT Challenge Update

Jeremy Schroeder provided a brief update of SPaT Challenge activities, including the SPaT Webinar series which is underway. The NOCoE website has recordings of the first two webinars and links for anyone who is interested to register for upcoming webinars:

<https://transportationops.org/spatchallenge/webinarseries>. The next webinars will be on April 17 at 2pm ET regarding MAP Messages and Vehicle Position Correction and April 24 at 1pm ET regarding the MAP Creator Tool. New SPaT Challenge Resources are also available on the SPaT Challenge website, including a Model Concept of Operations and Model Requirements for the infrastructure to support SPaT broadcasts: <https://transportationops.org/spatchallenge/resources>.

V2I / DSRC Deployment Summary

Jeremy Schroeder presented a document that has been developed to try to document all DSRC roadside equipment and on-board units that are currently deployed or being planned across the United States. Members are encouraged to email any information to update this document to Jeremy, Faisal, or Navin.

Upcoming Webinar & Close

The next Resources Working Group meeting will be held on May 9, 2018 at 11am ET.