

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

Wednesday, February 12, 2020 11:00 am - 12:30 pm Eastern Time

Action Items

1. Everyone: Share leads, links, or attachments of resources with Faisal or Jeremy on:
 - Suggestions from WG members on ways to enhance impact, including: 1) proposed new WG Members, 2) communications with/Involvement in other initiatives, and 3) knowledge resources to include on the CAT Coalition Website.
 - Resources or information to support SPaT and Connected Fleet deployments.
2. Everyone: Contact Faisal, Jeremy, or Barbara Staples if your agency is interested in providing feedback in a small group 1-hour walkthrough on a SPaT/MAP Implementation Resource.
3. Everyone: Provide feedback on CV Deployment Resource section on In-Vehicle Systems and Vulnerable Road Users.
4. Everyone: Contact Faisal, Jeremy, or Deb Curtis if interested in providing input and feedback on CV workforce development activities being conducted by USDOT.
5. Everyone: Contact Faisal, Jeremy, or Steve Griffith if interested in receiving a copy of NEMA TS 10 Connected Vehicle Infrastructure Roadside Equipment to provide feedback.

Meeting Summary

Ongoing Commitment to Outreach and Knowledge Transfer

- Resources WG members were reminded to provide suggestions for proposed new WG Members, share new information about communications with/involvement in other initiatives, and any knowledge resources to include on CAT Coalition website.

Resources WG Recap, CAT Coalition Update, and Partner Updates

Jeremy provided a brief recap of the previous Resources WG webinar in November and an update on CAT Coalition activities. Recordings and materials of recently conducted CAT Coalition webinars are available:

- Connected Fleet Challenge Webinar #2: <https://transportationops.org/spatchallenge/webinarseries>
- Connected Fleet Challenge Webinar #3: <https://transportationops.org/spatchallenge/webinarseries>
- Connected Work Zones: Mapping Toolchain Overview Webinar: November 22, 2019 at 1p ET: <https://transportationops.org/ondemand-learning/connected-work-zones-mapping-toolchain-overview>. The Toolchain is available from CAMP: <https://www.campllc.org/software-tools>.

A variety of updates from partners were provided, including the following:

- Deb Curtis provided several updates for USDOT:
 - The USDOT RSU Specification version 4.1 is being updated to become a standard through a process in order to reflect changes in technology and communications media, and be as forward thinking and agnostic as possible. A NTCIP standards development process is being used (note this is not an NTCIP effort). Meetings are open to all who want to join, and select members are voting members. ITE, AASHTO, or NEMA are leading this effort and may reach out to folks directly to participate. Representatives from infrastructure and mobile device perspectives will be involved.

- The Clarifications for Consistent Implementation for SPaT Document developed by the IOO/OEM Forum is being advanced by ITE, NEMA, and AASHTO with a task to make this document comprehensive and uniform. The expected outcome is not a standard, but suggested updates to other standards to make them as comprehensive and consistent as possible.
- Deb has a task order with Leidos for workforce development activities, starting with how to videos. Additional items are being discussed, e.g. resources on testing RSUs, installing RSUs, developing a bench test that includes elements like an RSU and signal controller that would be relevant for a CV implementation so stakeholders can see the relevant devices they will be using. Please let Faisal, Jeremy, or Deb know if you would like to volunteer to provide feedback.
 - This could be a topic on the May Resources WG webinar.
- The next CARMA webinar is on 3/5, 1-2:30 hosted by NOCoE about creating a ConOps for CV freeway applications.
- Two new resources are available from USDOT: a guide to cybersecurity best practices for ITS, and a guide to ensure access to results from federally-funded transportation research.
- Barbara Staples shared that the ITS Joint Program Office has developed a SPaT/MAP Fact Sheet and Implementation Chart that follows the systems engineering life-cycle. These resources were developed for deployers who would like to explore detailed information of the processes, resources and tools, and standards for implementing SPaT/MAP. Let Faisal or Jeremy know if your agency is interested in providing feedback in a small group 1-hour walkthrough. The materials will be updated based on feedback, then presented at the May 13 Technical Resources Working Group.
- ITS America is hosting a series of webinars on behalf of USDOT on complete trip ITS program on addressing mobility challenges. Another webinar is scheduled for 2/13 at 1p ET on deployment partnerships and planning.

Data Hub and Code Hub

Eleanor Berlyn and Adam McCormick of Booz Allen Hamilton presented two USDOT webpages for the Data Hub and Code Hub. Anyone interested can access the available data on the Data Hub at: www.its.dot.gov/data. The website includes featured datasets and broader topic areas of datasets. Contact data.itsjpo@dot.gov about any data you would like to share or feature on the Data Hub. Available resources include guidelines with best practices, policies, and requirements for sharing data; data management plan templates and instructions. The community page includes information by each stage of the project lifecycle.

The Code Hub was also presented. USDOT is always looking for contributors to provide custom-built code, as well as enhancements or suggestions for available code. Contact data.itsjpo@dot.gov to register or share code with USDOT. The website includes CARMA code, as well as resources on how to make your code discoverable. Available code can be filtered by the code language and by user group that provided the code.

CV Deployment Environment Discussion

Jeremy presented an update of this effort to develop a resource for agencies considering a CV deployment to comprehensively understand the bigger picture of considerations, upgrades, and technologies needed to have a fully operational CV environment. He presented the second section on In-Vehicle Systems and Vulnerable Road Users, as well as the feedback received from the volunteers.

Previously, the Roadside CV and ITS Systems section and Executive Summary was sent to WG members for additional review and comments. A new version including the In-Vehicle Systems and Vulnerable Road Users section will be sent to WG members. A third section on TMC-ITS Systems will be available for review and input by volunteer group in the coming weeks and will be shared on the next webinar. The two final sections are being drafted.

NEMA TS 10 Connected Vehicle Infrastructure Roadside Equipment

Steve Griffith and Alan Clelland presented about what is included in the draft standard. Anyone interested can contact Steve (Steve.Griffith@nema.org), Jeremy, or Faisal to receive a copy of the draft standard to review and provide feedback. Regarding security, specifically security aspects between a device and infrastructure or the TMC, the standard points to existing standards on security, and defines how to apply existing standards and identify gaps. Consistent and practical security implementation is needed for interoperability.

Upcoming Webinar & Close

Members should have received a new meeting invite from Jeremy for Resources Working Group meetings in 2020 that will be held on:

- Wednesday, 5/13/2020 at 11am ET
- Wednesday, 8/12/2020 at 11am ET
- Wednesday, 11/11/2020 at 11am ET

Attendance

1.	Faisal Saleem (Chair)	faisal.saleem@maricopa.gov
2.	Aaron Greenwood	aaron.greenwood@leidos.com
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7.	Barbara Staples	barbara.staples@noblis.org
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10.	Carlos Alban	calban@itsa.org
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14.	Deborah Curtis	deborah.curtis@dot.gov
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16.	Doug Hohulin	Doug.Hohulin@nokia.com
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41.	Thomas Timcho	tom.timcho@wsp.com