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

Actions
1. All: Provide feedback and suggestions for future webinar topics for this working group.

Attendance
1. Faisal Saleem (Chair) faisalsaleem@mail.maricopa.gov
2. Navin Katta (Co-chair) navin@savarinetworks.com
3. Hossam Abdel-all habdelall@rcmcweb.org
4. Animesh Balse animesh.balse@leidos.com
5. Brian Burkhard brian.burkhard@jacobs.com
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30. Barbara Staples bstaples@noblis.org
31. Mike Stelts q@w.com
32. Peter Thompson pth@sandag.org
33. Tom Timcho tom.timcho@wsp.com
34. Govind Vadakpat g.vadakpat@dot.gov
35. Emil Wolanin emil.wolanin@montgomerycountymd.gov
Meeting Summary

Introduction
Faisal welcomed everyone and led roll call.

Resources Working Group Recap
Faisal presented a brief recap of Resources WG webinar from the previous month, which included:

- **USDOT Updates on:**
  - SCMS, noting that USDOT is not giving up on SCMS and is still exploring how to scale up SCMS to a national level.
  - CV Pilot Interoperability Demonstration
- **Survey of CV Deployments** that will build on other efforts by USDOT CV Pilots and Strategic Initiatives Working Group.
- **Colorado DOT Deployment Update** by Tyler Svitak of CDOT and Chris Armstrong of Panasonic.

Updates on CAT Coalition Activities
Faisal, Jeremy, and Gummada provided a brief update for the CAT Coalition. Jeremy noted that the Strategic Initiatives Working Group is still moving forward with setting the foundation for the Connected Fleet Challenge, and talking about ways to verify and validate SPaT Challenge deployments.

Gummada noted the National Dialogue on Highway Automation has a focus on Operations at the Phoenix meeting in October 24-25. The link is: [https://www.eventbrite.com/e/fhwa-national-dialogue-on-highway-automation-workshop-4-operations-tickets-49472825553](https://www.eventbrite.com/e/fhwa-national-dialogue-on-highway-automation-workshop-4-operations-tickets-49472825553).

This is the beginning of year 2 on the cooperative agreement for the CAT Coalition. He noted that there will be a discussion on the National Dialogue outcomes and how it aligns with the CAT Coalition and Resources Group, specifically.

USDOT Update
Govin noted that the ITS JPO has begun construction of a basic SCMS misbehavior detection system for delivery to the CV Pilots, and should be available soon. Ed Fok will provide an update on the SCMS activities next month. It was noted that the OmniAir Consortium will be testing the SCMS at a Plugfest in late October in Texas.

Upcoming Webinar Topics Discussion
Jeremy discussed possible future webinar topics for the Resources Working Group. One suggested topic to add was about CAV data exchange and governance. The CV Pilots generate a lot of information, and how do we set the governance that goes along with it? Jeremy will add this to future topics by USDOT. Another suggestion was to add the National Dialogue on Highway Automation.

RoadSide Units – Things to consider
Navin presented slides for an interactive discussion on considerations when deploying roadside units (RSUs).

There was a question about complicating the RSU with unnecessary items related to the application. Navin noted requests for transit signal priority (TSP) support on the RSU, and the resulting need to track what transit vehicle is making the request. It all depends on how agency architects their system. As an alternative to complicating the RSU when the signal controller does not have the needed capabilities, you could add a small computer as an outboarded unit to handle those other functions and keep the
RSU at a simple level. This is an architecture and agency decision. Siva noted that a standard for the interface between the controller and RSU is being built; there is a standard for controllers and a spec for RSUs. It is architected to be capable of either / or, and having a “one size fits all” RSU implies you want it to be architected one way or other. There is no concern about a minimum spec but anything over and beyond is left to the agencies, as RSU Spec v4.1 is the minimum requirement.

Navin asked whether agencies or vendors should take a lead on providing applications. Hossam noted that it is incumbent on vendors to develop, commercialize, and provide applications. Chris said it would be valuable to know the highest priority applications that agencies are looking for, to then develop guidance and parameters for the apps (e.g., MAP requirements), and where those apps operate, and the pros/cons of different approaches with deploying apps. Mike of Panasonic agreed that it would be good to hear about apps that DOTs are interested in, and how to turn those apps into standards. Jeremy will add this to the future topics list to have a webinar devoted to apps and how they are being used. Apps need some adaptation and modification for each agency and deployment; for example, MMITSS and other apps are not just plug and play, and need some changes for interoperability.

Navin noted that some challenges are easy to resolve. A lot of challenges tie into the configurations aspect and expectations of what the system should do. Unless the MAP is very well defined and clearly configured, for example, SPaT applications may not show the correct results. An agency is frustrated because they don’t see the results on the app, but usually goes to how it’s configured. This reflects limitations with what is supported and what is not. Pre-deployment is more about placement of RSU for max coverage, certification, and controller integration piece is critical. Savari is in process of getting RSU certified.

**Upcoming Webinar & Close**
The next Resources Working Group meeting will be held on October 10, 2018 at 11am ET.