

Cooperative Automated Transportation (CAT) Coalition Strategic Initiatives Technical Working Group

July 26, 2018 Webinar
Notes and Summary of Discussions

Summary of Action Items

- *Greg to relay input shared on this call regarding the Connected Fleet Challenge to Mark Kopko*
- *Dean to circulate an updated Connected Fleet Challenge Summary to this group before the August webinar*
- *Greg and Dean to relay suggestions for the SPaT Challenge survey to the SPaT Challenge Tactical Working Group, to update this group on survey progress during the August webinar, and request input from members who volunteered, as needed.*

Welcome

Greg Larson (Caltrans and Chair of the Strategic Initiatives Working Group) welcomed everyone to the call.

Approximately 45 members and guests of the Strategic Initiatives WG joined the webinar. A list of those in attendance is provided at the end of these notes. This list may not be comprehensive, as attendees may have joined late and were not identified on the webinar. Please contact Dean Deeter at deeter@acconsultants.org to be added to the list.

Connected Fleet Challenge

Greg provided an update on the development of the Connected Fleet Challenge. Greg noted that the small group of volunteers from this working group met again since the last webinar to further discuss the definition of the challenge. An updated summary document is still being developed and Greg will share this before the August webinar. Greg shared a summary of why the challenge is needed:

- Fleet owners need experience procuring, deploying, and operating On-board units (OBUs) to prepare for future deployments
- Fleet owners and IOOs would benefit from real-world trials of various applications (e.g. RLVW, Eco Glidepath)
- IOOs that have participated in the SPaT Challenge need a mechanism to perform additional verification of their broadcasts

Greg addressed the topic of the scale of the challenge (i.e. how many vehicles are fleet operators challenged to equip). The challenge, as proposed by Mark Kopko, is not about requiring any one fleet operator to equip large numbers of vehicles to meet the challenge, but rather about encouraging as much diversity in the make/model/year of vehicles that OBUs are deployed and sharing of lessons learned. Greg shared the following bullets on the webinar:

- Public sector fleet owners are generally not ready for wide-scale deployment of OBUs, for several reasons:
 - There are limited funds available, and a general ‘wait and see’ approach to observing benefits demonstrated in Pilot Site (and other early) deployments;
 - There is limited (not none) experience with operating OBUs in the various vehicle types owned by fleet operators – resulting in uncertainty regarding operating costs, and institutional challenges.
- There is still a need for an initiative to help fleet operators gain the experience that will position them for future large-scale deployments

Greg concluded by sharing the current definition of target goals for the Connected Fleet Challenge, as follows:

- Fleet operators equip at least 2 of their fleet vehicles, including one heavy duty and one light duty vehicle if their fleet supports it;
- Fleet operators collaborate with other fleet operators to achieve as much diversification in vehicles equipped as possible nationwide and to share lessons learned; and
- Fleet operators are challenged to partner with IOOs that have deployed SPaT/MAP broadcasts to exchange data.

Greg concluded by describing that this challenge is about fleet owners learning lessons about equipping their vehicles with OBUs and configuring them to receive existing broadcasts of SPaT/MAP data (deployed as a result of the SPaT Challenge) and to broadcast the Basic Safety Message (BSM). The lessons learned collectively about installing OBUs on the many vehicle make/model/year will help future deployments of OBUs.

Discussion followed including:

- A member expressed that the name of the challenge is misleading, implying that a larger portion of the fleets are being equipped. Greg acknowledged this and agreed to discuss it with Mark Kopko who initiated the Fleet Challenge and could not make this call.
- A question was raised about whether this challenge was technology neutral, an example was given that some RSUs and OBUs have dual communications capabilities (DSRC and cellular V2X communications). Greg noted there would be no objections to considering the dual communications OBUs as meeting the challenge but reminded members that original objective includes connecting vehicles to send and receive data with the DSRC based RSUs installed as part of the SPaT Challenge.
- A suggestion was made to also consider the number of messages sent/received by those vehicles that are equipped as a measure of the success of the challenge.
- A question was raised about whether specifications would be prepared for the OBU installations. Greg noted that this is a good example of why this challenge is needed, and why the emphasis is not on equipping a large number of vehicles. He noted that there is still uncertainty in the standardization of OBUs and the intent is that this challenge will help resolve some issues in this area.
- A question was asked about whether there is a repository yet for resources and information about equipping fleet vehicles with OBUs. Greg indicated that this working group would work with the

NOCoE to create a web presence for this challenge, either as part of the SPaT Challenge website or as a separate site, and a repository for the sharing of lessons learned would be a key part of this web presence.

Greg concluded the Connected Fleet Challenge discussion by noting that the next step would be circulation of the updated summary document to members of this Working Group before the next webinar.

Update on the SPaT Challenge

Dean Deeter provided an update on the SPaT Challenge webinars. Since the June webinar of this working group, there has been one additional webinar on July 17th, 2018 covering Operational SPaT Deployments. Presenters included Las Vegas DOT and Virginia DOT presenting their operational systems. Dean reminded members that the SPaT webinars are recorded and available for viewing (as individual presentations) on the NOCoE website at <http://transportationops.org/spatchallenge>.

Upcoming webinars planned include a webinar on August 14, 2018 with presentations from agencies that have equipped vehicles to interact with the SPaT broadcasts, as well as an introduction to the Connected Fleet Challenge.

Dean introduced the idea of possibly surveying the IOOs that have self-reported their deployment plans on the SPaT Challenge website. Since sites initially reported their plans to pursue the SPaT Challenge, little information has been provided from many of the sites and perhaps it is time to follow up with sites to ask questions about their progress on deployment, challenges they are facing, or lessons learned. Dean and Greg asked for reactions from this working group.

- There was no opposition to such a survey;
- The Technical Resources WG is developing a white paper on lessons learned and would appreciate a mechanism for gathering any lessons learned (although this is probably more conducive to phone discussions with the SPaT deployment sites);
- There was a question about whether the survey could include a question about whether sites accepting the SPaT Challenge are open to expanding the SPaT Challenge to include new technologies. Dean indicated he would note the request and relay it to Blaine Leonard;
- Rob Dingess and Jason Ellis volunteered to contribute to the survey, if input is needed;
- There was a suggestion to keep the survey very short with a request to ask sites if they are open to a follow-up call to discuss more detailed feedback.

There is a SPaT Challenge Tactical Working Group that has existed and performed a role in developing and executing a communications plan for the SPaT Challenge. Such a survey would most likely be led by this group, but Greg will continue to involve the Strategic Initiatives WG in the survey process.

Upcoming Webinar

The next Strategic Initiatives WG meeting will be held at 2:00 PM Eastern on August 23, 2018.

Strategic Initiatives WG July 26, 2018 Webinar Participants

- Greg Larson (Chair)
- Andrew Woelfling
- Curtis Thompson
- Dave Miller
- Doug Hohulin
- Gary Duncan
- Hideki Hada
- James Chang
- Jason Ellis
- Jeff Stewart
- Jennifer Carter
- Jianming Ma
- John Conrad
- John Lower
- John Roman
- Jon Oberberger
- Jon Riehl
- Jonathan Martinez
- Jose Herrera
- Julius Mueller
- Karne Nguyen
- Ken Moshi
- Matt Weatherford
- Mauricio Guerra
- Michael Stelts
- Mohammed Hadi
- Patrick Chuang
- Peter Thompson
- R Mukai
- Robert Dingess
- Susan Catlett
- Tom Timcho
- Jeff Stewart
- Tom Timcho
- Curtis Thompson
- Peter Thompson
- Hoki Tse
- Matthew Volz
- Matt Weatherford
- Roger Wentz
- Brian Kelley
- Joey Yang