CAT Coalition
AV Infrastructure-Industry
Working Group Quarterly Meeting

September 12, 2019

3:00-4:30 pm (Eastern)

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Agenda

- Welcome and Introductions
- Ongoing Commitment to Outreach and Knowledge Transfer
- Review of Previous Webinar
- Communications 101 Resource Content and Discussion
- Quick Update from Focus Area WG: IOO/OEM Forum
- Partner Reports: USDOT, ITS America, ITE, Others
- Next WG meetings and Adjourn

Ongoing Commitment to Outreach and Knowledge Transfer

Ongoing Commitment to Outreach and Knowledge Transfer

- Suggestions from WG Members on Ways to Enhance Impact:
  - Proposed new WG Members
  - Communications with or involvement in other initiatives
  - Knowledge Resources to include on the CAT Coalition Website

Topics from Previous Webinar

Tracy Larkin-Thomason, Nevada DOT

Steve Gehring, Global Automakers

Topics from Previous Webinar

- Topic 1: Overview of Phase 2 – Year 2 Work plan
    - Year 2 AV I-I Activities:
        1. Communications 101 – will be discussed today
        2. Primer of Terms
        3. Exercise about bigger picture for CAT infrastructure
        4. Expand membership

Topics from Previous Webinar

- Guest Presentations
  - Keolis AV Shuttle Deployment in Las Vegas
  - CAT Coalition PLR WG Survey on Funding & Organizing CAT/CAV programs
  - Impacts of AVs on Highway Infrastructure

  - Resulting action item to develop survey to gather details about AV deployments will be discussed on next webinar

Topics from Previous Webinar

- https://transportationops.org/CATCoalition/
  infrastructure_industry_WG

Webinar Summaries

Below are brief summaries of webinars and meetings for the Infrastructure/Industry Working Group:

- July 31, 2019: Agenda | Notes | Recording | Slides
  - CAT/CAV Funding Initiative in the States - Survey Responses
  - Impacts of AVs on Highway Infrastructure (from Automated Vehicle Symposium)

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Communications 101 Resource Content and Discussion

Tracy Larkin-Thomason, Nevada DOT

Communications 101 Overview

- A priority effort for this working group

- **Objective and Audience**:
    - Provide IOO executives and decision makers a common understanding about the communications needs, technology options, and terminology for CAT/CAV

- Feedback from WG members is requested now regarding:
    - Proposed resources and approach
    - Organization
    - Recommendations for additional content, terms, or context
    - Balanced presentation of technologies

The following slides intended for collaboration, not to be prescriptive.

Communications 101 Overview

- **Proposed Approach**:
  - Provide resources with small consumable pieces of content on the specific subject that can evolve with the industry as new ideas, technologies, or terminologies emerge, and
  - Host these resources on a website as:
    - One or more videos that can be viewed at an executive's own pace
    - Presentations that can be used for easily sharing this content in a consistent manner for an in-person meeting format.

Communications 101 Overview

- **Resources**:
  - PowerPoint presentation of slides that includes graphics and notes with a possible script for use at in-person meetings.
  - Recorded 3-5 minute webinar that includes a presentation of the developed slides while speakers read the developed script.

- **Schedule**:
  - Complete draft content for entire resource by 12/18/19 webinar
  - Finalize content by 2/2020
  - Record webinar and post to website by 3/2020

Communications 101 Content

- Content intends to answer the following questions:
  - What are the telecommunications methods?
  - What do the terms mean?
  - How does DSRC work?
  - What is the 5.9 GHz spectrum?
  - What are the V2X benefits of the 5.9 GHz spectrum?
  - May discuss how OEMs communicate now, e.g. cellular systems like Sirius XM and OnStar

Any other questions that should be answered?

Communications 101 Content Outline

- Telecommunications methods

- On-Board Units

- Network v. Point-to-Point Communications

- Roadside Units

- Types of Point-to-Point Communications
  - V2I, V2V, V2X

- Cellular (4G, 5G) and DSRC Communications

- 5.9 GHz Spectrum
  - History with FCC, current licensing requirements, security protocols

- Benefits

What other terms or topics should be defined or discussed?

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Communications 101 Next Steps

- Draft content developed to date is sourced from a variety of FCC and USDOT resources

  - Some content may need to be updated to reflect current circumstances and standards

- Will revise draft content based on today's feedback and then share with WG members with a request for additional comments on:

  - Organization

  - Recommendations for additional content, terms, or context

  - Balanced presentation of technologies

Quick Update from Focus Area Working Group: IOO/OEM Forum

Jeremy Schroeder, Athey Creek

IOO/OEM Forum Updates

- SPaT/RLVW
  - USDOT MAP Tool updates and next steps
  - Clarifications for Consistent Implementation (CCI) Document for Signalized Intersections
  - Connected Fleet Challenge Webinars – 10/3 at 2p ET
    https://transportationops.org/event/webinar-series-connected-fleet-challenge-webinar-1

- RSZW
  - Software Toolchain Webinar in early November
  - Work zone infrastructure best practices webinar and resource

Partner Updates

Partner Reports

- ITE

- ITS America

- AASHTO

- FHWA

Action Items & Next Steps

Upcoming AV Infrastructure-Industry WG Meetings

- December 18 at 12:00 pm (Eastern)

- Quarterly meetings in 2020 TBD