ARTS22 Breakout Session Title:

351-Evaluating First Responder Interactions as the AV Market Expands

Session Contact/Organizers:

Session Contact:

Virginia Lingham, Director - ITS/CAV, WSP USA

Session Organizing Team:

- Virginia Lingham, Director ITS/CAV, WSP USA
- Tammy Trimble, Research Scientist, Virginia Tech Transportation Institute
- Zorica Cvijovic, Ph.D. Candidate, University of Wyoming
- Michael Brown, Institute Engineer, Southwest Research Institute
- Amy Chu, Director, Automated Vehicle Safety Consortium
- Matt Smith

TRB Sponsor/Partner Committees:

- TRB Committee ACP10 Regional Transportation Systems Management and Operations
- TRB Committee AT060 Truck Industry Research
- TRB Section AMR00(1) Subcommittee on First Responders
- American Society of Civil Engineers (ASCE) Connected and Automated Vehicle Impacts Committee
- Automated Vehicle Safety Consortium
- Emergency Responder Safety Institute
- SAFE-D UTC

Session Description

This session will create a unique opportunity for dialog between first responders, vehicle technology providers, and those who have planned or led recent deployments. Our overall objective is to gather candid feedback on how things are going, what has worked well, and what could be improved to better define the needs of each stakeholder group and to identify future research topics. The session will begin with short presentations from industry experts to set the stage for the discussion and will wrap up with a focus on policy perspectives to guide future research and activities.

Goals/Objectives/Outputs

- Hold an open dialog to reveal actual challenges associated with recent experiences with AVs, exploring various vehicle types.
- Advance the state-of-the-practice and awareness of transportation infrastructure protection and emergency management through training, technical assistance, and technology transfer activities.
- Identify opportunities for AVs to improve the safety, effectiveness, and efficiency of emergency response and emergency management scenarios.
- Continue to define research needs to develop connected infrastructure systems for enabling and integrating automated vehicles that are able to help reduce incident response times and improve multimodal safety on the surface transportation network.



Agenda

Welcome (10 min)

Moderator: Virginia Lingham, WSP USA

Description: The welcome will include an overview of the agenda for the session as well as the session objectives. An interactive poll will be conducted to capture the mix of participants in the room.

Policy Perspectives from Industry Groups

(35 min)

Moderator: Tammy Trimble, VTTI

Description: Industry groups help to guide policy around these topics. This panel will highlight each groups' organization and collective perspective, priorities, and needs in order to set the tone and focus for the session. Brief presentations will be followed by a facilitated discussion led by the moderator and then Q&A.

Panelists:

- Dia Gainor, NASEMSO (Confirmed)
- David Yang AAA Foundation (Invited)
- Chauncia Willis Institute for Diversity and Inclusion in Emergency Management (Invited)
- Will Schaefer, Director of Safety Programs, CVSA (Invited)
- David Yang AAA Foundation (Invited)
- Brian Arsino, AAMVA (Invited)

First Responder Interaction and Deployment Experience (90 min) Moderator: Amy Chu, AVSC

Description: First responders who have experience with AVs (pilots/demos/or fully operational) share their experiences with a focus on identifying research needs. Brief presentations will be followed by a facilitated discussion led by the moderator and then Q&A. Conversational (fireside chat) tone to help tell the story.

Panelists:

First Responder / Public Sector

- David McDonald, TxDOT Statewide Traffic Incident Management Coordinator (Confirmed)
- Julia Friedlander, SFMTA (Invited)
- Cynthia Jones, Drive Ohio (Pending)
- Saul Jaeger, Mountain View (Pending)
- Jim Epperson, CHP Retired (Pending) Industry
- Aurora (Confirmed)
- Finch Fulton, Locomation Vice President of Policy and Strategy (Confirmed)
- Greg Rogers, Nuro (Confirmed)
- David Rubin, Cruise (Invited)

Academia

- Dr. Larry Head, Arizona State University (Confirmed)
- Dr. Mohamed Ahmed, Wyoming State University (Confirmed)

15 min BREAK

Vehicle Technology Advances

(30 min)

Moderators: Zorica Cvijovic / Matt Smith

Description: Vehicle Technology deployers who have experience with AVs (pilots/demos/or fully operational) share their experiences with a focus on identifying research needs. The panel could highlight new technology, training, or references that are expected soon. Brief presentations will be followed by a facilitated discussion led by the moderator and then Q&A.

Panelists:

- CARMA (Confirmed)
- PennDOT (Invited)
- Haas Alert (Invited)

What NEXT? / Wrap up

(15 min)

Moderator: Virginia Lingham, WSP USA

Description: Interactive prioritization exercise to define and rank the research needs identified in the session. The wrap up will seek to tie back to research needs, who's working on things and who else might need to be engaged as next steps are defined.