

# Cooperative Automated Transportation (CAT) Coalition

Presented by:

Jennifer Cohan - Secretary, Delaware DOT

AASHTO International Day

ITS World Congress – September, 2018

# Today's Agenda

- Overall CAT Update
- AV Working Groups Update
- V2I Working Groups Update
- Overall Coalition Update

# Cooperative Automated Transportation (CAT) Coalition

**Chair**  
(Kirk Steudle)

w/ ex-officio members  
 FHWA: Martin Knopp  
 ITE: Jeff Paniati  
 ITSA: Shailen Bhatt  
 AASHTO: Bud Wright  
 TRB: Neil Pedersen

## CAT Executive Committee

**AV Working Group Co-Chairs – 6 Total**

Roger Millar, WSDOT & Mike Cammisa, ATA (Policy, Legislative & Regulatory WG Chairs)  
 Ed Seymour, TTI & Tom Clemons, Bentley (Planning WG Chairs)  
 Tracy Larkin-Thomason, NDOT & Jim Zizelman, APTIV (Infrastructure /Industry WG Chairs)

**V2I Chair and Co-Chairs – 3 Total**

Jennifer Cohan, Chair (Del DOT)  
 Jennifer Toth, Co-Chair (MCDOT)  
 Abbas Mohaddes, Co-Chair (Econolite)

**AV Groups**

- Policy, Legislative and Regulatory Working Group**  
 USDOT liaisons: John Harding, Kevin Dopart, Kevin Gay
- Planning Working Group**  
 USDOT liaisons: Jeremy Raw, Gene McHale
- Infrastructure Industry Working Group**  
 USDOT Liaisons: John Corbin, James Gray

**V2I Groups**

- IOO/OEM Forum**  
 USDOT Liaisons: Dale Thompson, Steve Sill
- Strategic Initiatives Working Group**  
 USDOT liaisons: Deb Curtis, Elina Zlotchenko
- Technical Resources Working Group**  
 USDOT liaisons: Govind Vadakpat, Ed Fok
- Peer Exchange & Outreach Working Group**  
 USDOT liaisons: Karen Timpone, Grant Zammit, Michelle Noch

**AV Groups**

**V2I Groups**

# AV Activities Update

# AV Working Group Memberships

- Public Sector: 35 members 22%
- Associations: 27 members 17%
- Private Sector: 96 members 61%
- **Total: 158 members 100%**

*Previously this was the CAV-ELT, at a membership level of 30-40 delegates*

# CAT AV WG Chairs and Co-Chairs

<b>Working Group</b>	<b>Public Sector Co-Chair</b>	<b>Industry Co-Chair</b>
Policy, Regulation and Regulatory	Roger Millar, WSDOT	Michael Cammisa (ATA)
Planning	Ed Seymour, TTI	Tom Clemons (Bentley Systems)
Infrastructure Industry	Tracy Larkin-Thomason, Nevada DOT	Jim Zizelman (APTIV)

# Examples of the AV Working Group Activities

# Policy, Legislative and Regulatory Group Work Plan

## 3 Overall Activities Planned for the initial 12-18 months

### Activity #1:

Create a Clearinghouse of CAT Policy Frameworks with Policy Statements and Potential Actions.

### Activity #2:

Identify Funding Opportunities and Financing Models to Enable Near-term CAT Investments

### Activity #3:

Identify Model Regulations that Enable Near-Term Pilots and Deployments

# Infrastructure Industry Group Work Plan

## 3 Overall Activities Planned for the initial 12-18 months

Activity #1: Develop Primer that defines “infrastructure” and related AV/CV terms

- Define the boundaries of the working group by defining AV/CV terms for infrastructure that will help guide ongoing working group activities.

Activity #2: Develop “101” course on communication networks and data

- Develop and present a webinar on communications as a high-level reference, to raise awareness and assist in decision-making.

Activity #3: Increase interactions with appropriate associations.

- Engage a broad audience to increase awareness of working group activities;
- Develop a roster with an appropriate breadth and depth of knowledge to conduct working group activities

# V2I Activities Update

# V2I Working Groups Membership

## Breakdown of Members by Working Group

- Strategic Initiatives WG - **132 Members**
- Technical Resources WG – **104 Members**
- Peer Exchange & Outreach – **268 Members**

# V2I Working Groups Membership

- Breakdown of membership

	Number	Percent
<b>Total Members</b>	<b>291</b>	<b>100.0%</b>
Public Sector	95	32.6%
Federal	33	11.3%
State	34	11.7%
Local	28	9.6%
Private Sector	158	54.3%
Academia	26	8.9%
Associations	12	4.1%

# V2I Working Groups – Recent Activities

- SPaT Challenge
- Connected Fleet Challenge

# SPaT Challenge

To challenge state and local public sector transportation Infrastructure Owners and Operators (IOOs) to deploy DSRC infrastructure with SPaT (and MAP) broadcasts in at least one corridor or network (approximately 20 signalized intersections) in each state by January 2020

**20 intersections in 50 states by 2020!**



Two years of progress:  
35 Locations  
25 States

500 RSUs Operating

2340 RSUs Planned

# Connected Fleet Challenge

Draft

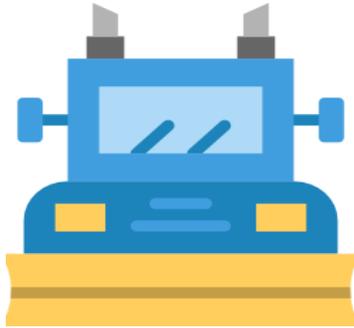


Draft

**Fleet operators equip at least 2 vehicles (one heavy duty and one light duty), with an on-board unit (OBU) that receives SPaT/MAP data and broadcasts the Basic Safety Message (BSM)**

- **Fleet operators will work with the IOOs to test and verify the receipt of SPaT/MAP data**
- **An industry focus will be on diversity in the make, model, year of vehicles to learn as many lessons as possible and to share these lessons across the industry**

# More Than Just DOTs



Maintenance  
Fleets



Taxi Fleets



Transit Fleets



Emergency  
Responders

This challenge will form key partnerships with various fleet operators and help to shape connected vehicle deployments in the future

# IOO/OEM Forum

- Mechanism for Infrastructure Owners & Operators (IOOs) to have detailed discussions with Original Equipment Manufacturers (OEMs)
- Discuss the details about exchanging data from the infrastructure to the vehicle
- Example discussion -- Verification that Roadside Units are broadcasting the data needed (and in the needed formats) for on-board applications to receive them and act accordingly

# CAT Coalition - Update

- CAT Coalition is nearing the completion of year 1
- CAT Coalition will give consideration to the overall structure and realign as needed
- The Goal is to support deployment of Cooperative Automated Transportation in this ever changing industry

# Questions?