



# Agenda



Introductions

CAV Deployments

Other Partnerships / Cooperative Work

Demand/Need









Investments

Challenges / Opportunities

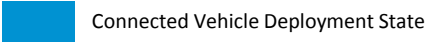
Questions / Discussion







# National AV Development Examples




Company	Project/Demos	Location
	<ul style="list-style-type: none"> <li>Personal Auto Ride Hailing</li> <li>Self Driving Urban Deployment</li> <li>Testing for extreme heat conditions</li> </ul> 	<ul style="list-style-type: none"> <li>ATC = Pittsburgh, PA</li> <li>Pittsburgh, PA</li> <li>Arizona</li> </ul>
	<ul style="list-style-type: none"> <li>Automated Truck Retrofits</li> <li>Partner with Budweiser, I-25</li> <li>Now Uber Freight</li> </ul> 	<ul style="list-style-type: none"> <li>HQ = San Francisco, CA</li> <li>Denver, CO to CO Springs</li> </ul>
	<ul style="list-style-type: none"> <li>Truck Platooning</li> <li>Partner with UDOT, I-80</li> <li>Partner with CalTrans, I-505</li> </ul> 	<ul style="list-style-type: none"> <li>HQ = Mountain View, CA</li> <li>Salt Lake City, UT</li> <li>Sacramento, CA</li> </ul>
	<ul style="list-style-type: none"> <li>Automated Transit</li> <li>Partnering with the Jacksonville Trans. Authority</li> <li>EZ10 – Driverless Shuttle.</li> </ul> 	<ul style="list-style-type: none"> <li>HQ = Denver, CO</li> <li>Jacksonville, FL</li> </ul>

# Operational On-Road Networks



















# Deployment by State

State	Projects
Pennsylvania 	<ul style="list-style-type: none"> <li>Harrisburg DSRC Test Bed</li> <li>Pittsburgh Smart Spine DSRC (ATCMTD Grant)</li> </ul>
Ohio 	<ul style="list-style-type: none"> <li>Smart City – Columbus</li> <li>US 33 DSRC Deployment (ATCMTD Grant)</li> </ul>
Michigan 	<ul style="list-style-type: none"> <li>SE Michigan Deployment</li> <li>Ann Arbor CV Test Environment</li> <li>Road Weather DSRC</li> <li>City of Detroit (ATCMTD Grant)</li> </ul>
Virginia 	<ul style="list-style-type: none"> <li>I-66 DSRC Test Bed</li> </ul>

State	Projects
West Virginia 	<ul style="list-style-type: none"> <li>None</li> </ul>
Delaware 	<ul style="list-style-type: none"> <li>None</li> </ul>
New Jersey 	<ul style="list-style-type: none"> <li>None</li> </ul>

## Smart Belt Coalition

Members			Partners
State	Agencies	Research Affiliates	
Pennsylvania 	 	 	 Federal Highway Administration
Ohio 	 	 	
Michigan 		  	



## Cooperative Work



### Connected Vehicle Pooled Fund Study

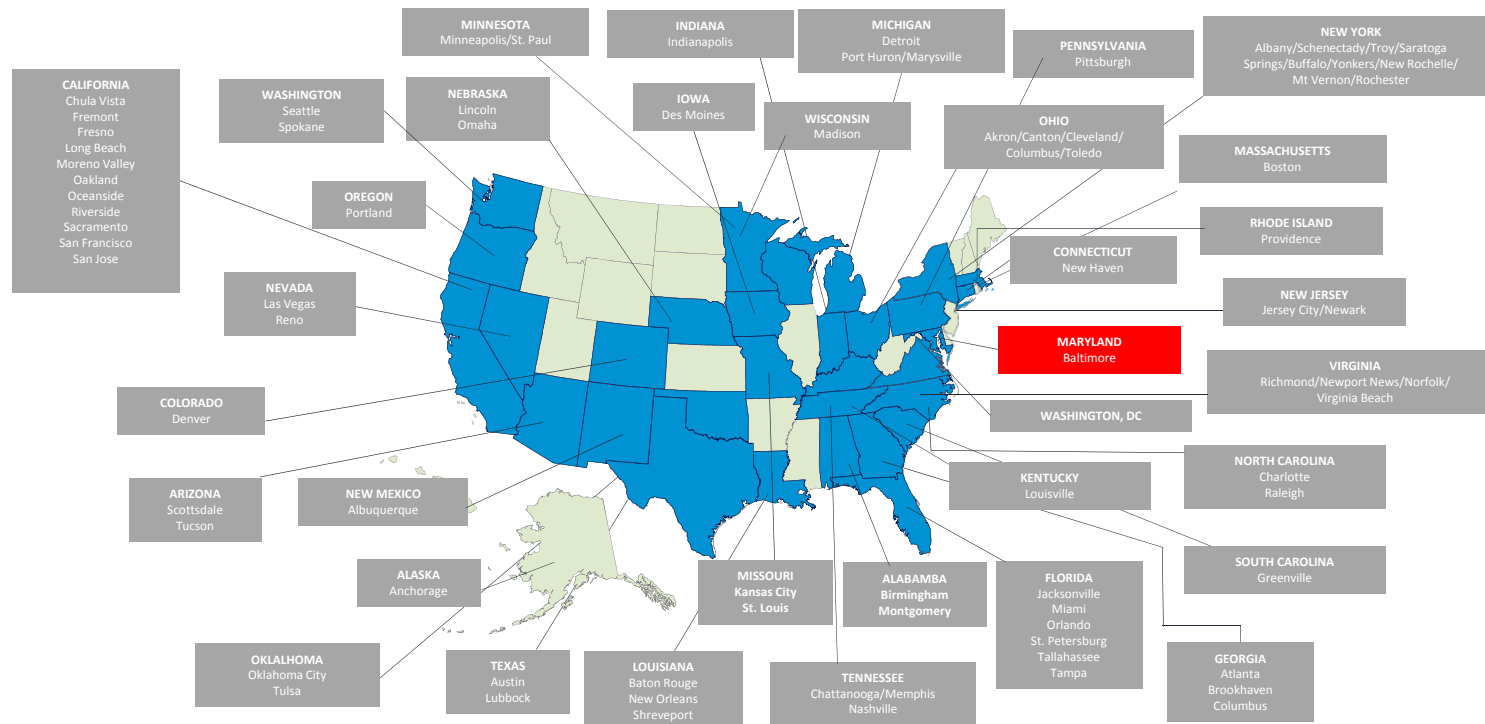
*Program to Support the Development and Deployment of Connected Vehicle Applications*

[CV PFS Charter, September 2014](#)

## VEHICLE TO INFRASTRUCTURE DEPLOYMENT COALITION



# DOT Smart City Challenge



**\$3.9 BILLION in Requests from 69 Smart Cities**

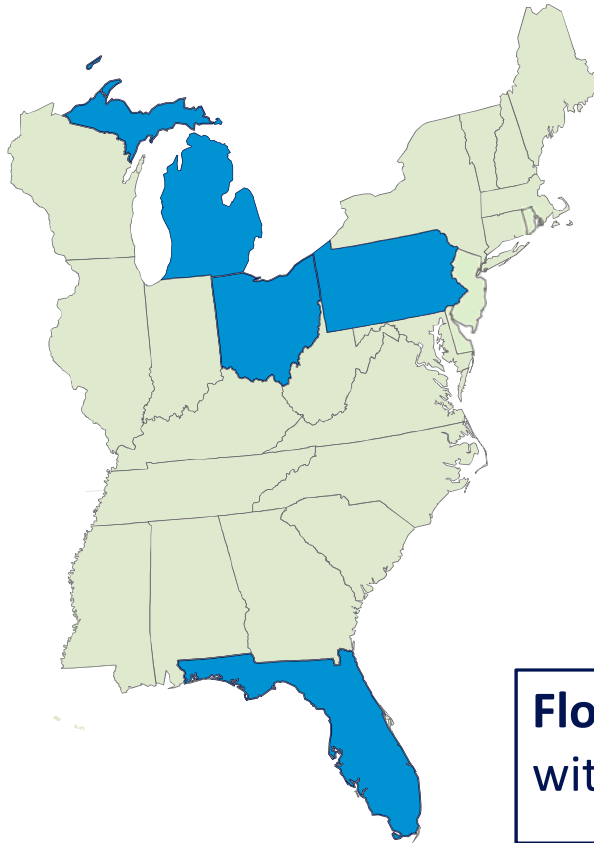


## Investment Examples

**Michigan** has invested over ***\$150 million***, with \$50 million+ more planned for next 5 years

**Ohio** is investing ***\$62 million***

- Smart City Challenge award
- US 33 Smart Corridor



**Pennsylvania** looking to invest ***\$60 million***

- City of Pittsburgh
- CA/AV Open End
- AV Task Force

**Florida** invested ***over \$25 million***, with \$25 million + planned

# Challenges/Opportunities for Public Agencies

- Vehicles
- Communications Networks
- Data Management
- Workforce Development
- Business Processes
- Cybersecurity
- Partnering
- Technology Advancement
- Regulatory Developments
- Financing/Business Model
- DOT Organizational Structure



# Questions?

