

-2017-IBTTA

Smart Belt Coalition (SBC)

A Regional Connected and Automated Vehicle Collaborative

September 12, 2017



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 High-profile, high-impact, and longdistance connected and automated vehicle network

Ohio Department of **Transportation**

- Multi-jurisdictions
- Four distinct seasons
- Urban and rural roadways
- Support the testing and deployment of connected and automated vehicles
- Cooperative deployments
- University research
- Leverage opportunities for Federal grants



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Purpose, Vision and Mission

Ohio Department of **Transportation**

Vision

Mission

• The Smart Belt Coalition will organize for the economic benefit, safety, and welfare of the partner states.

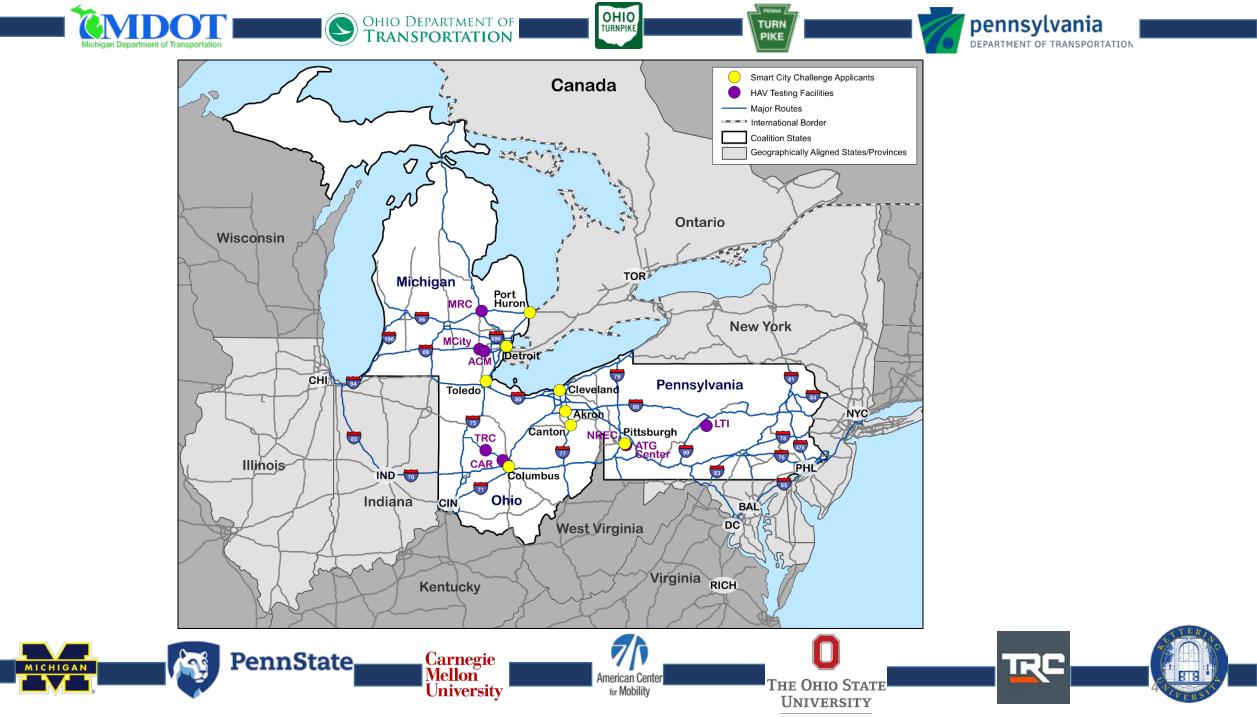
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- The Coalition's **Vision** is to be a multi-jurisdictional network that <u>fosters the advancement of connected and automated</u> <u>vehicle technology</u>.
- The Coalition's Mission is to create a mechanism for transportation agencies, academic institutions, and others to collaborate on connected and automated vehicle initiatives.

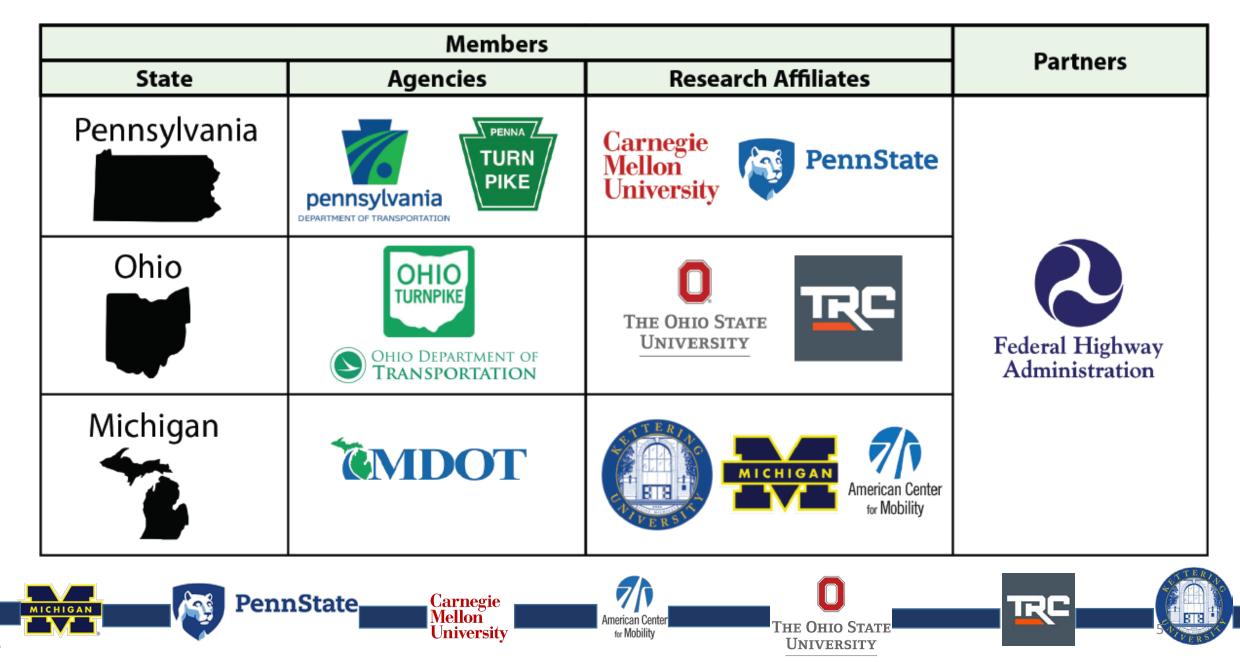








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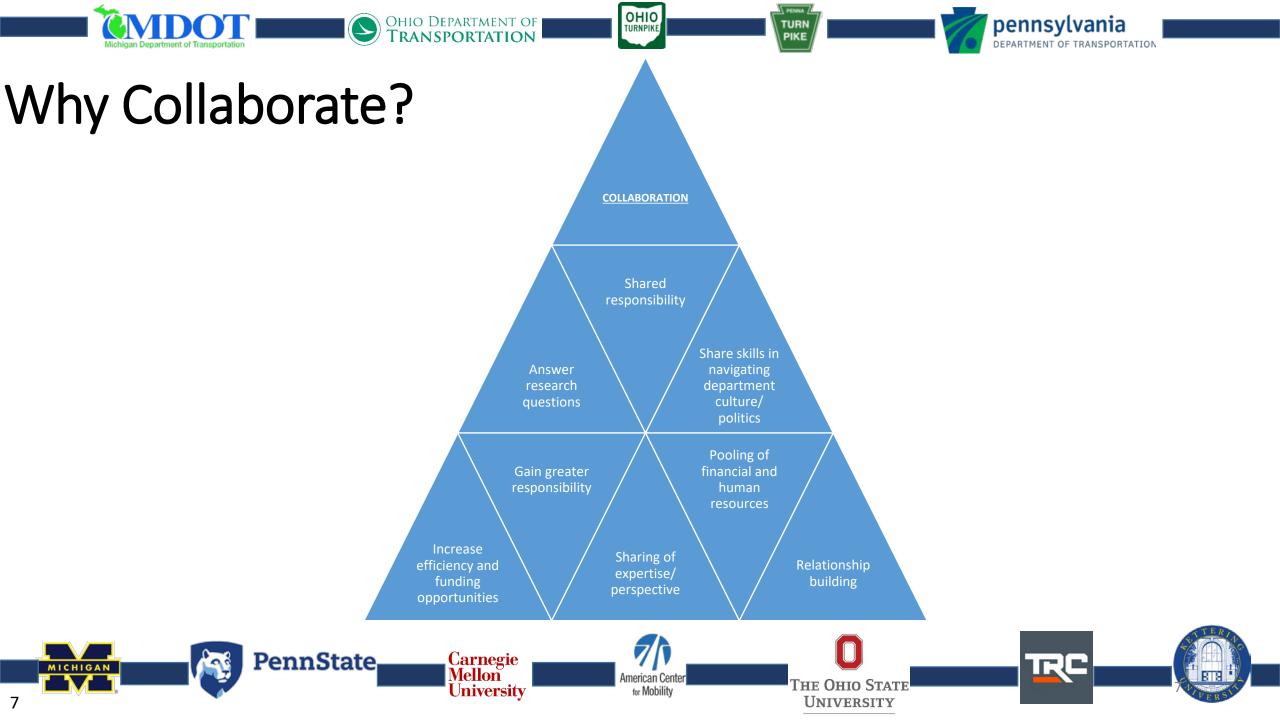




Assets Managed

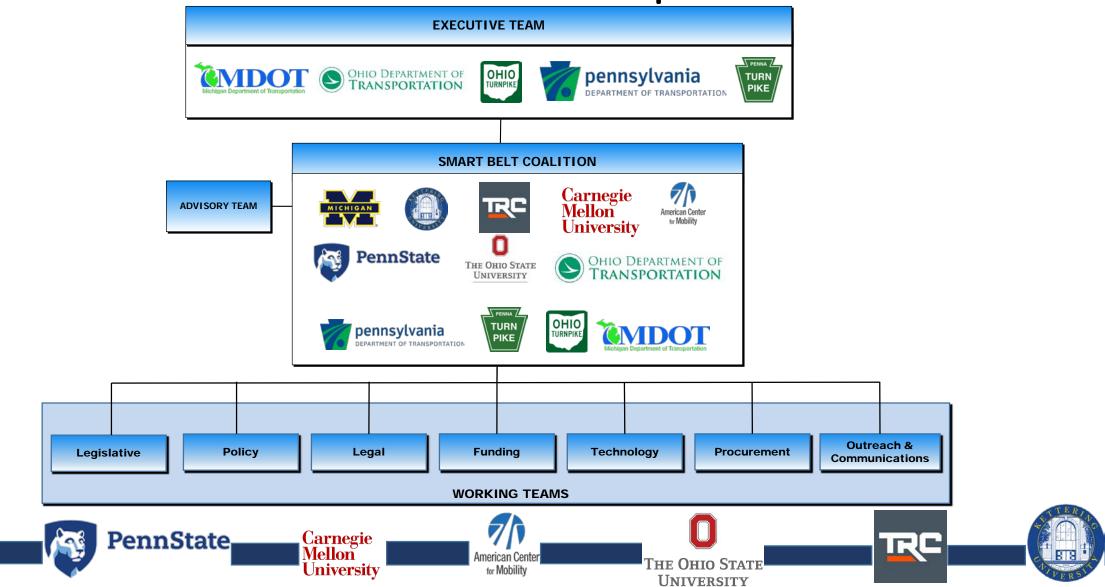
| | MDOT | ODOT | OTIC | PennDOT | PTC | TOTAL |
|---|------------|------------|---------------|------------|-----------------|-----------------|
| Miles of Roadway (agency maintained) | 9,669 | 19,229 | 241 | 39,756 | 554 | 69,449 |
| Miles of Lanes (agency maintained) | 31,940 | 49,419 | 1,395 | 88,309 | 2,800 | 173,863 |
| Annual Vehicle Miles Traveled (millions)(statewide) | 143,800.00 | 117,828.87 | 3,037.65 | 100,945.31 | 6,504.00 | 362,574.18 |
| Toll Revenue (annual) | \$0 | \$0 | \$288,439,000 | \$0 | \$1,031,620,000 | \$1,320,059,000 |







Governance – People



MICHIGAN



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Governance - Documents

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- LOU 3rd Draft Under Review
- Partnership Guidelines Complete
- Project/Deployment Agreements Yet to Be Developed

PennState

Carnegie

University

Mellon

• Strategic Plan







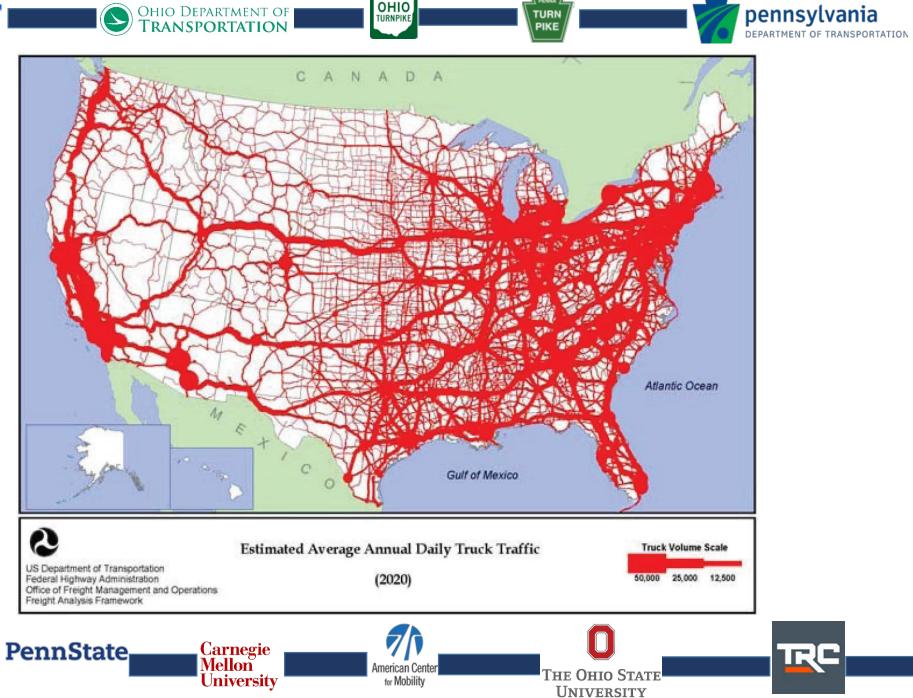


POOLED FUND STUDY Leadership Led by one State DOT and overseen by a Technical Advisory Committee Open to a variety of members—state transportation agencies, federal agencies, municipalities, MPOs, universities, Membership and private companies · Must receive pledge funds from more than one transportation agency/federal agency, plus pledge funds from a municipality/MPO/university/private company Requirements Required match funding of at least 20% non-Federal funds, unless a waiver is submitted to the TPF Program manager through the FHWA Division office Allows joint funding for research/planning by several federal, state, regional, and local transportation agencies, as Benefits well as academic institutions, foundations, or private firms • Receipt of funds from foreign governments or private organizations is limited by the regulations of the lead agency Can receive SP&R funds in addition to state and private funds Grants & Fundraising Pool of annual funds Travel costs can easily be incorporated into each state's commitment





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UNIVERSITY

| | OPERATIONAL AGENCY | | | | | |
|---|-------------------------|-----------------------------|---------------------------------------|---|-----|--|
| SERVICE LAYER | MDOT | ODOT | OTIC | PennDOT | PTC | |
| Work Zones | | | | | | |
| Traffic Incident Management | | | | | | |
| Freight | | | | | | |
| Safety Applications (Curve Warning, Low Vertical Clearance) | | | | | | |
| ntegrated Corridor Management Traffic signals, ramp metering, transit priority) | | | • • • • • • • • • • • • • • • • • • • | | | |
| Weather | | | • • • • • • • • • • • • • | | | |
| Traveler Information | | • • • • • • • • • • • • • | • | | | |
| Customer Service Applications Tolling Points, Service Plazas, Border Crossings) | | • • • • • • • • • • • • • • | • • • • • • • • • • • • • • • | • | | |
| ennState Carnegie Mellon University | American C for Mobil | Center Center | | O HIO STATE | | |



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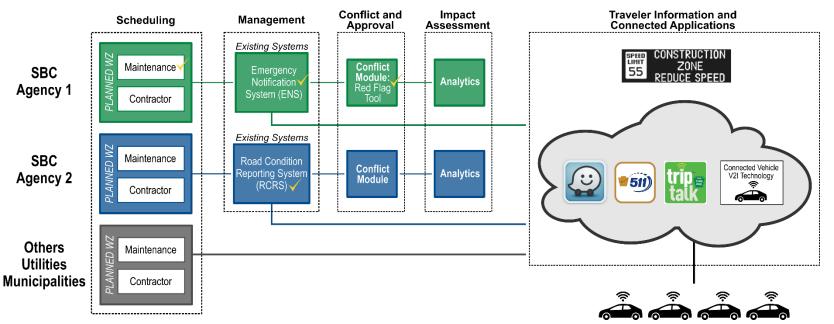
Michigan Department of Transportation



Priority Applications

Near-term:

- Work Zones: **Reservation and Traveler Information** System
- Freight: Truck Platooning
- TIM: CV Applications
- Work Zones: Intelligent/Connected WZ Detection
- Freight: Truck Parking



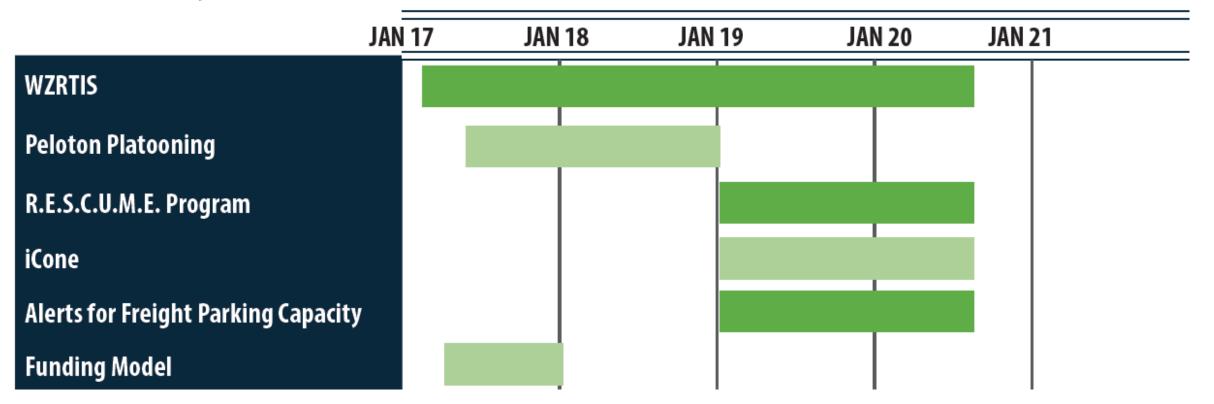
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Preliminary Schedule







In 2022?

- Worldwide Leader in CAV
- Implemented Solutions Proof Collaboration Works
- Original Mission Implemented
- Improvements to Safety, Economic Development, and Mobility





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