CDTC SMART COMMUNITIES TASK FORCE
KICK-OFF MEETING

March 14, 2018

What one word best describes a "Smart City" for you & your organization?
About CDTC

- Metropolitan Planning Organization (MPO)
- Albany-Schenectady-Troy & Saratoga Springs metro areas
- 3 major tasks:
  - LRTP
  - UPWP
  - TIP

Where are we now?

Identify key issues & topic areas

Discuss roles & responsibilities

What are barriers to:
- adopting new technologies
- AV/CV-Readiness

Identify solutions to barriers & challenges

Create an Action Plan
Technology – We must plan for new, smarter, better, and rapidly-changing transportation technology.

Advancements in technology, such as self-driving cars, self-adjusting traffic signals, smart phone apps, ridesharing, carsharing, and bikesharing will have tremendous and wide-reaching impacts on future transportation. These impacts include, but are not limited to, decreasing congestion, providing transportation to more seniors and people with disabilities, reducing traffic crashes, and more.

Strategies & Programs

• Electrification
• Automated Vehicles
• Traffic Signal Technology
• ITS Technologies
• Travel Demand Management
• Smart Growth & Land Use Planning
• Protecting Environmental Systems
I N T R O D U C T I O N

Smart City Challenge: Capital Region Vision Elements

- Urban Automation
- Connected Vehicles
- Intelligent, Sensor-Based Infrastructure
- Urban Analytics
- User-Focused Mobility Services & Choices
- Urban Delivery & Logistics
- Strategic Business Models & Partnering Opportunities
- Smart Grid, Roadway Electrification, & Electric Vehicles
- Connected Transportation Services
- ITS Architecture & Standards
- Low-Cost, Efficient, Secure, & Resilient Information & Communications Technology
- Smart Land Use
<table>
<thead>
<tr>
<th>Strategies</th>
<th>Austin, TX</th>
<th>Columbus, OH</th>
<th>Denver, CO</th>
<th>Kansas City, MO</th>
<th>Pittsburg, PA</th>
<th>Portland, OR</th>
<th>San Francisco, CA</th>
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<td>Partnership with research institutions/Universities</td>
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<td>Crowdsourcing data from public, managing data by research institutions</td>
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<td>Implementation of electric vehicles and charging stations</td>
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<td>Development of App for easy access to connecting people for car shares</td>
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<td>Hybrid vehicles for smarter, safer and more environmentally friendly</td>
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<td>demand services for real time travel decision making for alternating roads</td>
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<td>Smart Land Use: Reduction of sprawl, or by dynamic pricing of parking</td>
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<td>space and garages, or corridor improvements through road diet, green</td>
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<td>design, walkable, bike-able, transit hub, etc.</td>
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<td>Implementation of Mobileye Shield + to increase safety and reduce</td>
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<td>Strategies focused on improving accessibility to job centers</td>
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DEFINITION

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Identify key issues & topic areas

Discuss roles & responsibilities

What are barriers to:
- adopting new technologies
- AV/CV-Readiness

Identify solutions to barriers & challenges

Create an Action Plan

What are the key issues in the Capital Region?

Top
Planning Principles & Investment Areas

How do we prioritize these principles when adopting & investing in new technologies?

Equity
Economic Development
Mobility
Health
Safety
Energy & Environment
• HOT lanes
• Congestion Pricing
• Variable Speed Limits
• Design for "Uberization of transportation"

• Automation
• GPS fleet management systems
• Platooning
• Drones
• Electrification
• Urban freight delivery
• Container on barge
• Automation
• Electrification
  – Employee charging
  – Multi-family housing charging
  – Highway fast charging
• Telematics
• Other alternative fuels

95% of Capital Region commuters have a round trip commute less than 60 miles, making a switch to electric very feasible. A switch to electric can reduce GHGs by 75% per mile.

• BusPlus expansion
• Electrification of transit
• Integration with other modes
• Multi-modal hubs
• Real-time info
• Signal Prioritization
• Human Services Transport
• Rideshare
• Car sharing
  • P2P
  • One-way
• Bike sharing
  • e-bikes
• Integrated mobility
• TNCs, livery vehicles/services

• Mobility hubs
• Accommodation of all modes
• Greenway & trail connections
• Traffic-calming
• Smart traffic signals
• Smart Enhanced Multi-modal Arterials (SEMAs)
• Smart parking
  • Occupancy sensors
  • Smart meters
  • Parking reservations

• Wayfinding
• EV charging
**Next Steps**

- Where are we now?
- Identify key issues & topic areas
- Discuss roles & responsibilities
- What are barriers to:
  - adopting new technologies
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- Identify solutions to barriers & challenges
- Create an Action Plan
Thank You

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