Ariel Gold
ITS Joint Program Office
U.S. DOT

Connected Vehicle Pilots
October 30, 2017
Imagine a Transportation System in which Vehicles can sense & communicate things that you can’t.
ACCELERATING DEPLOYMENT VIA THE CONNECTED VEHICLE PILOT DEPLOYMENT PROGRAM
THE THREE CONNECTED VEHICLE PILOT SITES

- Reduce the number and severity of adverse weather-related incidents in the I-80 Corridor in order to improve safety and reduce incident-related delays.
- Focused on the needs of commercial vehicle operators in the State of Wyoming.

- Improve safety and mobility of travelers in New York City through connected vehicle technologies.
- Vehicle to vehicle (V2V) technology installed in up to 8,000 vehicles in Midtown Manhattan, and vehicle to infrastructure (V2I) technology installed along high-accident rate arterials in Manhattan and Central Brooklyn.

- Alleviate congestion and improve safety during morning commuting hours.
- Deploy a variety of connected vehicle technologies on and in the vicinity of reversible express lanes and three major arterials in downtown Tampa to solve the transportation challenges.
NYCDOT Pilot Deployment Vision

100 Vulnerable Road User Device
700 MTA Buses
353 RSU
1,050 Sanitation & DOT vehicles
5,850 Taxis
400 UPS Vehicles
11 PED Detection System

Note: The numbers are rough estimates for the concept development phase.
Tampa (THEA) Pilot Deployment Vision

- Mobile Device
- Data Collection
- Advanced Traffic Controller
- Traffic Management Center (TMC)

- 500 equipped pedestrians
- 1,500 vehicles equipped with OBU
- 40 intersections (I-SIG, TSP, PED-SIG)
- 10 equipped buses
- 10 equipped trolleys

Note: The numbers are rough estimates for the concept development phase.

Data exchange will use DSRC (Dedicated Short Range Communications) or other wireless media. SCMS (Security Credential & Management System) will be used where appropriate.
400 Equipped Trucks:
- 100 WYDOT Fleet
- 150-200 Integrated Commercial Trucks
- 20-30 Retrofit Vehicles
- 100-150 Basic Vehicles

Note: The number is a rough estimate for the concept development phase.
MODERNIZING DATA ARCHITECTURES TO SUPPORT SYSTEM INTEGRATION & AGILITY

Most Transportation Projects:
Limited data fluidity and flexibility block innovation

Wyoming Connected Vehicle Pilot:
Programmatic privacy protection and data fluidity enable rapid innovation, now and in the future
WHAT’S NEXT

• Accelerate interoperable deployment
  - Architecture and standards
  - Early deployer cohorts and technical assistance
  - Professional capacity building
  - Cybersecurity
  - Certification
  - Multiple communications technologies

• Connected automation

• Smart cities
THANK YOU!

For more information, visit its.dot.gov