SMART MOBILITY AND SMART CITIES

Carla J. Bailo
AVP – Mobility Research & Business Development
The Ohio State University
Mobility: The movement of people and goods from place to place, job to job, or one social level to another (across bridges – physical or assumed).
Smart Mobility: The movement of people and goods with…

TRIPLE ZERO

0 Accidents and Fatalities
0 Carbon Footprint
0 Stress
Columbus Smart Mobility

**Vision:** Ohio leads the nation and world in the development of smart mobility and smart city technologies that have major impact on Ohio transportation industry and drives significant job growth.
NW 33 Innovation Corridor

The Ohio State University
College of Engineering
Smart Belt Coalition

Facilities:
- I-76
- City of Ann Arbor
- City of Columbus
- Mcity
- TRC

Smart Roads:
- I-75 Corridor
- I-80/I-90 Turnpike
- I-94 Corridor
- US-33 Corridor
- I-76 Corridor

Stakeholders:
- Columbus 2020
- Carnegie Mellon University
- JobsOhio
- Michigan Dept of Transportation
- Ohio Dept of Transportation
- The Ohio State University
- Ohio Turnpike
- Rev1 Ventures (TechColumbus)
- TRC
- University of Michigan
- Save Lives
- Improve Lives of Older Adults and People with Disabilities
- Transportation in Era of Urbanization
- Environmental Sustainability
- Economic Sustainability
Smart Cities:

The deployment of technology and data... ...to improve people’s lives.
Smart City Goals
Smart Columbus Overview

- **Vision**: Access to Jobs, Smart Logistics, Connected Residents, Connected Visitors, Sustainable Transportation

- **Enabling Technologies**:
  - Columbus Connected Transportation Network (CCTN)
  - Integrated Data Exchange
  - Enhanced Human Services
  - Electric Vehicle Infrastructure

- **Deployment**:
  - Residential District
  - Commercial District
  - Downtown District
  - Logistics District

- **Outcomes**:
  - Safety
  - Mobility
  - Ladders of Opportunity
  - Climate Change
Easton Shuttle

- Moves parking out of high-traffic areas
- Shuttle is wheelchair-accessible
- Mall Expansion can be further from center
- More space for pedestrians
Truck Platooning
Effects

Mobility For All
• Lower barriers to success

Sustainable transportation encouraged
• Greener Transportation Grid

Valuable Data Produced
• Smarter Transportation Solutions
Integrated Data Exchange

- Non-Transportation Data Sources
- Data from Smart COLUMBUS Program
- Transportation Data Sources

Integrated Data Exchange (IDE)

- Private App Developers
- Public Sector
- Private Sector
- Independent Evaluators
Local Engagement

Local Partners

The Ohio State University
College of Engineering
Engaging with USDOT Partners
THANK YOU!!!

Q&A