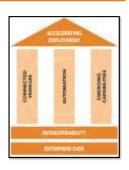


Overview

- •Intro to the USDOT Intelligent Transportation Systems (ITS) Joint **Program Office**
- •Intro to the next generation ITS technologies and data
- Weather-related use cases

Intelligent Transportation Systems Joint Program Office (ITS JPO)

- Vision: Transform the way society moves
- Mission: Conduct research, development and education activates to facilitate the adoption of information and communication technology to enable society to move safely and efficiently
- Strategic Priorities:
- □ Realizing connected vehicle implementation
- Advancing vehicle automation
- *ITS JPO website and strategic plan: www.its.dot.gov



About the ITS JPO Data Program

The ITS JPO Data Program is a multimodal effort to enhance how data is managed and used throughout the transportation ecosystem to support the next generation of ITS technologies.

We aim to establish a foundation for agility, data sharing, and privacy protection in the future transportation system, including connected and automated vehicles and smart communities, to maximize the societal benefits of these technologies.

https://www.its.dot.gov/factsheets/pdf/FactSheet_EnterpriseData.pdf

Today's Transportation Challenges



- 35,092 highway deaths in 2015
- 6.3 million crashes in 2015 Leading cause of death for ages 5-24





- 6.9 billion hours of travel delay \$160 billion cost of urban congestion



- 3.1 billion gallons of wasted fuel 56 billion lbs of additional CO2

Data Sources: 2015 Motor Vehicle Crashes: Overview, National Highway Traffic Safety Adm Transportation Institute (Aug 2015); Centers for Disease Control

Connected Vehicles & Infrastructure

- Vehicle-to-Vehicle (V2V)
- Vehicle-to-Infrastructure (V2I)
- Multiple types of vehicles and use cases



The Bigger Picture of Emerging ITS

- Connected Everything
- Shared Mobility
- Automation & Machine Learning
- Smart Communities

And more...



The Role of Data & Information Technology in Emerging ITS

Emerging ITS technologies are increasingly:

- Data-intensive
- Internet-connected
- Developed iteratively
- Developed collaboratively
- Fundamentally changing consumer/citizen expectations







A Wealth of Data and Code Already Available – With More to Come



Weather Data Environment: https://wxde.fhwa.dot.gov Research Data Exchange: https://www.its-rde.net Situation Data Clearinghouse: https://cycs.samanage.com/

Situation Data Clearinghouse: https://cvcs.samanage.com
Operational Data Environment: https://github.com/usdot-jpo-ode/jpo-ode
Open Source Data Applications Portal: https://www.itsforge.net/about

For More Information

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