INTELLIGENT TRANSPORTATION SYSTEMS (ITS)
PROGRAM OVERVIEW

Photo Source: U.S. DOT

The ITS Joint Program Office (JPO) is responsible for conducting research, development, and demonstration and fostering adoption on behalf of the U.S. Department of Transportation and all major modes to advance transportation safety, mobility, and efficiency through advanced technology applications. For 30 years, the ITS JPO has pioneered research and development in technology and evaluation for generations of ITS research initiatives, exploratory studies, and a deployment support program including technology transfer and training.

Our Vision

The ITS JPO's vision is to accelerate the use of ITS to transform the way society moves. The ITS JPO's purpose is to spur the development and use of ITS to move people and goods more safely and efficiently.

Our Mission

The ITS JPO leads collaborative and innovative research, development, and implementation of intelligent transportation systems to improve the safety and mobility of people and goods.

The Path Forward

The ITS JPO is now looking ahead to the future of transportation and its next 5 years of research, development, and demonstration. The ITS JPO Strategic Plan 2020–2025 describes the vision, mission, and strategies to advance our nation's transportation system and support the Department in achieving its technology research and development priorities.

The ITS JPO's agenda promotes innovation through six strategic research areas and four technology transfer programs, all of which work together to accelerate deployment of ITS.

- Complete Trip – ITS4US research addresses the persistent and serious lack of transportation access and availability for Americans who face economic constraints, live in remote areas, live with disabilities, or are seniors.

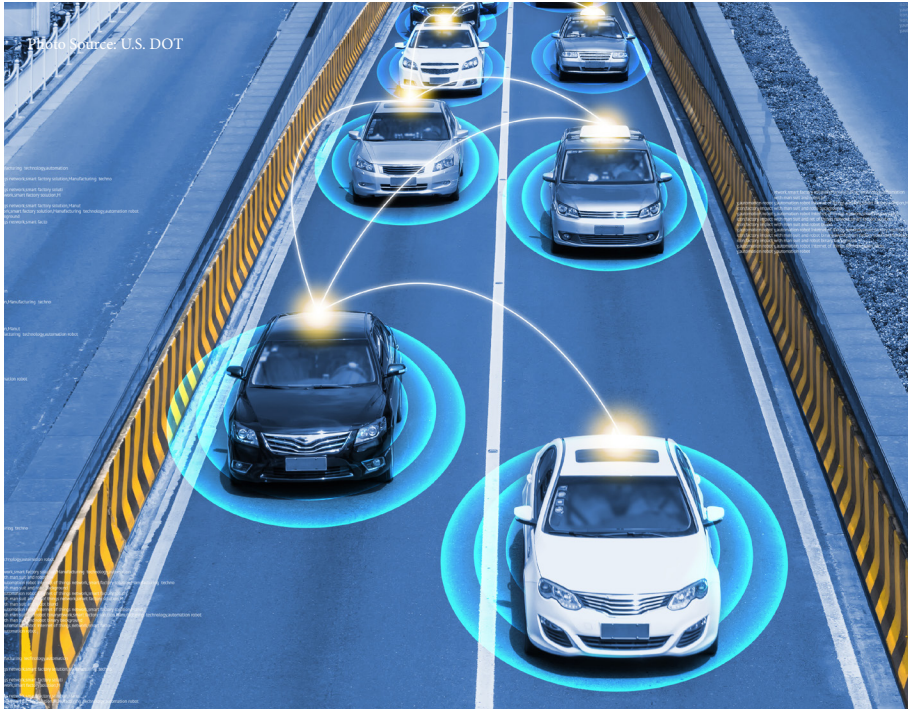## Ensuring Equity in Transportation with the Complete Trip – ITS4US Deployment Program

The Complete Trip – ITS4US Deployment Program identifies ways to provide more efficient, affordable, and accessible transportation options for underserved communities, such as people with disabilities, older adults, low-income individuals, rural residents, veterans, and limited English proficiency travelers.

The concept of a complete trip is that an individual can travel from origin to destination without gaps in the travel chain, including multiple links or trip segments. If one segment of the trip is inaccessible, unreliable, or inefficient, then the trip cannot be completed.

The program awarded $40 million to five sites to participate in Phase 1 of the program to plan and conceptualize their large-scale, replicable, real-world deployments of integrated innovative technologies to address the challenges of planning and executing complete trips.

To learn more, visit: https://www.its.dot.gov/its4us/index.htm.

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- **Automation** research can transform safety, mobility, energy, and environmental efficiency; increase productivity; and enable freight movement in our nation's transportation system.
- **Cybersecurity for ITS** answers the urgent need to protect ITS from cyberattacks. Both public and private sectors share the responsibility of securing transportation's critical assets and infrastructure.
- **Emerging and Enabling Technologies** research focuses on identifying next-generation technologies and defining both opportunities and risks of new, innovative transportation technologies.
- **Data Access and Exchanges** research focuses on enabling critical access to core transportation data across ITS for integrating connected vehicles, automated vehicles, and other emerging ITS areas.
- **Accelerating ITS Deployment** speeds the transformation of ITS research and prototypes into market-ready technologies that are commercially viable. The focus is on transitioning federally funded innovations into adoption and widespread use.

Promoting Innovation with Emerging and Enabling Technologies Research

The Artificial Intelligence (AI) for ITS program outlines real-world scenarios where AI could address specific transportation needs. Its vision is to advance next-generation transportation systems and services by leveraging trustworthy, ethical AI (including machine learning) for safer, more efficient, and accessible movement of people and goods. The goal is to cost effectively build and deploy AI for ITS capabilities in real-world modal use. Potential benefits include safety, mobility, accessibility, sustainability, security, and cost savings.

The U.S. DOT anticipates a future research and development investment for multiple pilot deployments.

To learn more, visit: https://its.dot.gov/research_areas/emerging_tech/htm/resources.htm.

To learn more, visit:
https://www.its.dot.gov/research_current.htm

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