

# INTELLIGENT TRANSPORTATION SYSTEMS (ITS) STRATEGIC PLAN 2015-2019







The Intelligent Transportation Systems Joint Program Office (ITS JPO) is responsible for conducting research on behalf of the U.S. Department of Transportation (USDOT) and all major modes to advance transportation safety, mobility, and environmental sustainability through electronic and information technology applications.



investments in major research initiatives, exploratory studies, and a deployment support program including technology transfer and training.

The ITS Strategic Plan 2015-2019 outlines the direction and goals of the USDOT's ITS Program and provides a framework around which the ITS JPO and other Department agencies will conduct research, development, and adoption activities to achieve the program's outcomes and goals.

# **Strategic Plan Development**

The ITS Strategic Plan is the result of the latest review of the federal ITS Program and establishes the USDOT's ITS priorities for the period 2015 through 2019. The plan presents the next set of priorities, strategic themes, and program categories under which ITS research, development, and adoption activities will take place. The plan was developed with significant stakeholder input from all relevant parties, both within and external to the Department. Close collaboration with all surface transportation modes (highways, rail, transit, motor carriers) and other agencies within the USDOT, such as the National Highway Traffic Safety Administration, helped shape the direction of the ITS Strategic Plan 2015–2019.

# **Strategic Plan Priorities**

The ITS Strategic Plan's framework is built around two key ITS Program priorities—realizing connected vehicle implementation and advancing automation. The priorities reflect stakeholder feedback on the need for the ITS Program not only to conduct research, but also to help with deployment and implementation of specific technologies related to connected vehicles and automation.

#### **Vision**

Transform the way society moves.

#### Mission

Conduct research, development, and education activities to facilitate the adoption of information and communication technology to enable society to move more safely and efficiently.



View the ITS Strategic Plan at: www.its.dot.gov/strategicplan



**U.S. Department of Transportation** 

- Realizing Connected Vehicle Implementation: Builds on the substantial progress made in recent years around design, testing, and planning for deployment of connected vehicles across the nation.
- Advancing Automation: Shapes the ITS Program around the research, development, and adoption of automationrelated technologies as they emerge.

The strategic priorities indicate where the bulk of transportation research and innovation is heading. They are not exclusive of other technologies or research areas.

### **Strategic Themes**

The strategic themes establish the direction of the *ITS Strategic Plan* and are meant to focus the attention of the ITS community on intended outcomes of new technologies and systems as they are developed, tested, and eventually adopted. The following themes align with the USDOT's strategic priorities:

- Enable Safer Vehicles and Roadways by developing better crash avoidance, performance measures, and other notification mechanisms; commercial motor vehicle safety considerations; and infrastructure-based and cooperative safety systems.
- Enhance Mobility by exploring methods and management strategies that increase system efficiency and improve individual mobility.
- Limit Environmental Impacts by better managing traffic flow, speeds, and congestion, and using technology to address other vehicle and roadway operational practices.
- Promote Innovation by fostering technological advancement and innovation across the ITS Program; continuously pursuing a visionary/exploratory research agenda; and aligning the pace of technology development, adoption, and deployment to meet future transportation needs.
- Support Transportation Connectivity through the development of standards and systems architectures, and the application of advanced wireless technologies that enable communication among and between vehicles of all types, the infrastructure, and portable devices.



## **Program Categories**

While the priorities and themes provide high-level direction and structure for the ITS Program, individual programs perform the work that produces new systems to advance the goals of the USDOT and the ITS community at large. The ITS Strategic Plan includes program categories to provide the necessary structure for research, development, and adoption of ITS technologies. These categories reflect modal and external stakeholder input about the areas where attention, focus, and resources should be devoted.

- **Connected Vehicles:** Primarily focuses on adoption and eventual deployment of the system.
- Automation: Focuses on topics related to automated roadvehicle systems and related technologies that transfer some amount of vehicle control from the driver to the vehicle.
- **Emerging Capabilities:** Focuses on future generations of transportation systems.
- Enterprise Data: Continues existing efforts in operational data capture from stationary sensors, mobile devices, and connected vehicles and expands into research activities involving the development of mechanisms for housing, sharing, analyzing, transporting, and applying those data for improved safety and mobility across all modes of travel.
- **Interoperability:** Focuses on how to ensure effective connectivity among devices and systems.
- Accelerating Deployment: Advances the work from adoption to wider-scale deployment in coordination with several other DOT agencies.

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