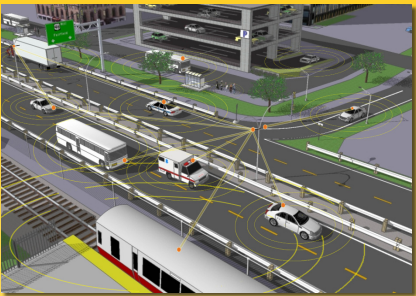


[www.its.dot.gov](http://www.its.dot.gov)



U.S. DOT

*“...Transforming the Nation’s  
Transportation System  
through Connectivity.”*



**Learn more at:**

[www.its.dot.gov/strat\\_plan/index.htm](http://www.its.dot.gov/strat_plan/index.htm)

## Intelligent Transportation Systems (ITS) Program Overview

The Intelligent Transportation Systems Joint Program Office (ITS JPO) within the U.S. Department of Transportation’s (U.S. DOT’s) Research and Innovative Technology Administration (RITA) is responsible for conducting research on behalf of the Department and all major modes to advance transportation safety, mobility, and environmental sustainability through electronic and information technology applications, known as Intelligent Transportation Systems (ITS).

**MISSION** • The U.S. DOT’s ITS program focuses on intelligent vehicles, intelligent infrastructure and the creation of an intelligent transportation system through integration with and between these two components. The Federal ITS program supports the overall advancement of ITS through investments in major research initiatives, exploratory studies and a deployment support program including technology transfer and training.

**ITS STRATEGIC RESEARCH PLAN** • Released in January 2010, the five-year ITS Strategic Research Plan outlines a comprehensive vision focused on the theme of Transforming the Nation’s Transportation System through Connectivity. At the core of the research is a multi-modal initiative to enable vehicles of all types (cars, trucks, buses, trains, etc.) to communicate wirelessly with each other and with transportation infrastructure to alert drivers to potential hazards, helping to prevent potential crashes and provide other safety, mobility, and environmental enhancements.

**CONNECTED VEHICLE RESEARCH** • This is a multimodal initiative to enable safe, interoperable networked wireless communications among vehicles, the infrastructure, and passengers’ personal communications devices. Connected vehicle research is being sponsored by U.S. DOT and others to leverage the potentially transformative capabilities of wireless technology to advance transportation safety, mobility, and environmental sustainability. U.S. DOT research is supporting the development and testing of ITS connected vehicle technologies and applications, to determine their potential benefits and costs. If successfully deployed, it will ultimately enhance the safety, mobility and quality of life of all Americans, while helping to reduce the environmental impact of surface transportation.



## RESEARCH FOCUS AREAS:

**SAFETY** • In 2009, almost 34,000 people died on U.S. roads as the result of vehicle crashes. Hundreds of thousands more suffered life-changing injuries. Vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) wireless communications based safety applications enable vehicles to inform a driver of roadway hazards and dangerous situations that they can't see. These applications have the potential to reduce or eliminate crashes through:

- Driver Advisories
- Driver Warnings
- Vehicle and/or Infrastructure Controls

**MOBILITY** • Wireless mobility applications will provide a connected, data-rich travel environment using information transmitted anonymously from thousands of connected vehicles in the transportation system. This could help transportation managers monitor and manage transportation system performance taking actions like adjusting traffic signals and dispatching emergency services. This information could also help transportation agencies and fleet owners manage crews and use resources more efficiently.

**ENVIRONMENT** • Data from connected vehicle ITS systems can offer traffic management centers with detailed, real-time information on traffic flow, speeds, and other vehicle conditions. This can be used to optimize system operation. On-board equipment also can advise vehicle owners on how to optimize their vehicle's operation and maintenance for maximum fuel efficiency.

**TECHNOLOGY & DISTRACTION** • Safety technologies are designed to bring a driver's attention to the road or other vehicles, rather than provide additional, potentially distracting information. The U.S. DOT's ITS program is engaged in human factors research to ensure that in-vehicle safety technologies and applications do not add to the distracted driving problem.



**ROADMAP FOR CONNECTED VEHICLE SAFETY** • The ITS Joint Program Office has developed a roadmap for connected vehicle safety that seeks to provide the research and data needed for the National Highway Transportation Safety Administration (NHTSA) to issue a regulatory decision on vehicle-to-vehicle safety communications systems by 2013. This includes a safety pilot which will demonstrate these systems in a real-world setting.



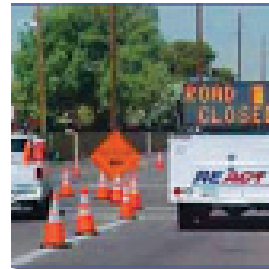
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