ITS STRATEGIC PLAN 2015–2019
CONNECTED VEHICLES

ABOUT CONNECTED VEHICLES

The U.S. Department of Transportation's (USDOT's) Connected Vehicle Program works with state and local transportation agencies, vehicle and device makers, and the public to test and evaluate technology that will enable cars, buses, trucks, trains, roads and other infrastructure, and our smartphones and other devices to "talk" to one another.

Cars on the highway, for example, would use short-range radio signals to communicate with each other, so that every vehicle on the road is aware of where other nearby vehicles are. Drivers would receive notifications and alerts of dangerous situations, such as a potential red-light violations; icy roads ahead; or an oncoming car, out of sight beyond a curve, swerving into their lane to avoid an object on the road.

Learn more about connected vehicles.

WHY CONNECTED VEHICLES ARE INCLUDED IN THE *ITS STRATEGIC PLAN*

Connected vehicle technology has the potential to significantly prevent or reduce the impact of millions of accidents every year. There are several potential benefits of connected vehicles, including:

- Improved safety, mobility, system efficiency, and access to resources for disadvantaged groups, and reduced negative environmental impacts such as vehicle emissions, the need for physical expansion, and noise

- Increased opportunities to partner with non-government groups, such as private industry and universities

- Real-time and real-world data to help with transportation planning and transportation system operations

- Demonstrations of connected vehicle environments that fit into real-world environments of today

- Reduced fatalities through weather-related, safety, infrastructure-based, and other applications.

Discover more benefits of connected vehicles.

ITS Strategic Plan Program Areas:

- Connected Vehicles
- Automated Vehicles
- Emerging Capabilities
- Enterprise Data
- Interoperability
- Accelerating Deployment

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

U.S. Department of Transportation

RESEARCH ACTIVITIES

The USDOT will focus much of its Connected Vehicle Program activities on adoption and eventual deployment of connected vehicle systems. Connected vehicle research, development, "and eventual adoption fall into two areas based on activities in the USDOT:

- Vehicle-to-vehicle (V2V) communications based on dedicated short-range communications (DSRC) technology. DSRC-enabled devices in vehicles that broadcast safety messages may be regulated by the USDOT and thus comprise a certain set of research, development, and adoption questions that are specific to this authority.

- Other connected vehicle technologies and communications that are enabled by either DSRC or other networks, such as cellular, Wi-Fi, or satellite. Although the USDOT is not researching regulatory decisions related to these other communications technologies, they are very much a part of the overall research and development foci. The USDOT's Intelligent Transportation Systems (ITS) Program will consider how various technologies and communications media will interact and operate within the anticipated connected vehicle environment, including safety and other types of applications and messages.

Explore more about ITS research programs.

"The past 50 years have been about surviving vehicle crashes; the next 50 will be about preventing them."
— Greg Winfree, Assistant Secretary for Research and Technology

LOOKING AHEAD:
What's next for connected vehicles?

Safety is the USDOT's top priority. Emerging state-of-the-art technologies and systems, like those being advanced by the ITS Program, will help usher in an era of unprecedented road and highway safety.

What once was considered science fiction—vehicles that communicate and help drivers make life-saving decisions—may be a reality in the coming decades.

Photo Courtesy of USDOT

ABOUT THE *ITS STRATEGIC PLAN*
The USDOT has long been a leader and strong supporter of research, development, adoption, and deployment of ITS around the nation.
Learn more about the *ITS Strategic Plan 2015-2019.*

For questions about the USDOT's Connected Vehicles program, contact:
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