

Such vehicles could warn of a potential crash or icy roads ahead, an upcoming traffic jam, or even an available parking space.

All of this and more will be possible through the power of connectivity and innovation. Integrating wireless communication into our nation's transportation system will unleash groundbreaking apps that promise to save lives, improve traffic flow, reduce environmental impacts, and make our communities safer and more livable.

The possibilities are boundless.

For more information, visit the U.S. Department of Transportation's web site: www.its.dot.gov/cv_basics.

Learn how you — and your transportation choices — fit into the Connected Vehicle world.

CONNECTED VEHICLES Coming Soon to a Road Near You...



www.its.dot.gov/cv_basics

FHWA-JPO-16-331 | Photos courtesy of USDOT



Become part of this transportation revolution







Connected Vehicles Can...

- Alert drivers when a vehicle several cars ahead brakes suddenly.
- Warn drivers when it's unsafe to enter an intersection.
- Warn drivers of icy conditions on the road ahead.
- Alert drivers to the presence of a pedestrian in the crosswalk.
- Alert drivers to a hazard in the curve ahead.
- Help bus riders make their connections.
- Warn drivers about work zones and first responders working on the side of the road.
- Warn drivers when they are about to run a red light.
- Alert drivers to reduce speed, change lanes, or come to a stop within reduced speed/work zones.
- Warn drivers attempting a lane change when there is a vehicle in their blind spot.
- Find information about the availability and location of nearby travelers hoping to share a ride.
- Receive up-to-the-minute status updates on transit alternatives and connections.
- Recommend adjusting speeds to pass the next traffic signal on green or slowing down to a stop in the most eco-friendly manner—reducing idling and unnecessary stops and saving gas and money.

These are just a few of the potential capabilities and benefits of connected vehicles.

Connected Vehicles Talk About...

Connected vehicles use dedicated short-range communication, GPS, and other wireless technologies to share information about their speed, position, direction, brake status, and more.

The vehicle information shared will not identify the vehicle or the driver, but it will result in the generation of a robust amount of data about how, when, and where our vehicles travel—information that could be used to develop new and innovative apps to make our roads safer and less congested.

Aftermarket devices with many of the same applications as new cars will be available for older vehicles.

When Will We See Connected Vehicles on Our Roads?





Shared Info Non-Shared Info



Join in the Movement toward a Connected Transportation System

Get involved now to help shape the future of transportation. Connected vehicles offer tremendous opportunities for the technology community. The vehicles will need devices and systems that will help prevent cyber-attacks and protect privacy. Moreover, the connected data generated will be fertile ground for the development of exciting, innovative applications. Connected vehicle technology's reach will be felt nationwide, and its promise will be realized for generations to come. Be a part of it all.

- Visit our website for more information (videos, infographics, and presentations, and more about connected vehicles): http://www.its.dot.gov/cv_basics/index.htm.
- Stay connected by signing up to receive updates via email, RSS, Twitter, and Facebook.
- Participate in our various public meetings and webinars.
- Take advantage of free training offered by the USDOT.
- Check out our Research Data Exchange, which provides a platform for sharing data related to connected vehicles and intelligent transportation systems—helping to spur application development and testing. Visit: <u>www.its-rde.net/</u>.
- Learn more about the Connected Vehicle Technical Support Center. This online help desk answers technical questions about connected vehicle technology to help innovators test their connected vehicle devices and applications—bringing the technology and its tremendous benefits to our roads sooner. For more information, visit: www.its.dot.gov/testbed.htm.
- Visit the Deployment section of the ITS JPO website to learn about how connected vehicles are being tested in real-world environments: <u>http://www.its.dot.gov/pilots/index.htm</u>.
- Visit the new Open Source Application Data Portal to collaborate and share insights, methods, and source code on research projects sponsored by the USDOT: <u>http://www.itsforge.net/</u>.



