Largest-Ever Connected Vehicle Project Underway in Ohio State-of-the-art technology to increase safety and mobility

(COLUMBUS) – A project that will leverage technology to make roads safer and smarter is underway in central Ohio. Connecting vehicles to each other and the infrastructure they use could be a "game-changer" when it comes to reducing serious and deadly crashes on our nation's roadways.

"We're able to warn drivers before they enter an intersection if there's a car coming that's going to run the red light, or there's an emergency vehicle approaching, or there's a pedestrian on the sidewalk where you're about to make a right turn," said Jim Barna, executive director of DriveOhio, an initiative of the Ohio Department of Transportation tasked with developing and testing smart mobility innovations. "This technology is going to disrupt transportation for the better like we haven't seen since the creation in the interstate system."

Connecting vehicles to the infrastructure also allows for real-time adjustments of traffic signals, speed limits, or even opening a wide-shoulder of the highway to create an additional lane of travel to meet traffic volume demands.

"It's about feeding you real-time information and have an instantaneous look about what the network looks like so we can make adjustments from our operations center," Barna said.

The after-market on-board units will be installed and connected to a display in either the rear-view mirror, on a tablet, or a heads-up display on the windshield. It will provide GPS, speed, and direction of travel to roadside receivers. Based on the location of the vehicle, the driver will receive important safety messages and alerts about traffic conditions ahead. The plan is to equip up to 1,200 private and public vehicles in the City of Marysville with this technology.

"That's about 10 percent of the traffic here, making it the highest concentration of connected vehicles in the country," said Mike Andrako, Marysville public services director. "That's important because it shows us how the technology will work when it's is rolled out to more cars and larger cities across the U.S."

This massive research project is a collaboration between DriveOhio, local partners and Honda, which has manufacturing and research facilities near Marysville and recently demonstrated their smart intersection technology in the city. It includes a 35-mile stretch of limited-access highway along with all 27 traffic lights in the city of Marysville.

Vehicle data will be anonymously collected and transmitted back to the ODOT Traffic Management Center where real-time decisions can be made about the maintenance and operation of the roadway. For example, if a driver hits a patch of black ice on the roadway, their vehicle will instantly send an alert to the ODOT TMC. A salt-truck crew can then be dispatched to the area to treat the roadway. But the technology doesn't stop there. With vehicles wirelessly connected to each other, that same alert could also go to nearby vehicles so other drivers are also warned of dangerous conditions ahead.

Because Ohio is located within a day's drive of 60 percent of the population of the United States and Canada and experiences a wide range of weather conditions, the state is uniquely positioned to advance this emerging technology.

"There is no better place in the world to test and perfect this technology than Ohio," said Barna.

All 1,200 vehicles are expected to be outfitted with the on-board units within the next two years.

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About Drive Ohio

DriveOhio was created by Governor John R. Kasich on January 18, 2018, as a center within the Ohio Department of Transportation that brings together those who are responsible for building infrastructure in Ohio with those who are developing the advanced mobility technologies needed to allow the state's transportation system to reach its full potential. Current smart mobility initiatives already under construction in Ohio include four smart road projects covering 164 miles of roadway and three smart city projects including Smart Columbus, winner of the U.S. Dept. of Transportation's first "Smart City" challenge in 2016.

For more information, visit the DriveOhio website drive.ohio.gov.