Arizona launches emergency traffic management prototype

DOT’s Research and Innovative Technology Administration knows that innovation can make our transportation system smarter and greener. And today, Acting Administrator Greg Winfree was in Arizona with Maricopa County Department of Transportation (MCDOT) Intelligent Transportation System engineers and University of Arizona researchers to showcase their latest efforts to make intersections with traffic signals safer for emergency responders and the general public.

When you need fire or emergency medical assistance, precious moments count. Unfortunately, traffic accidents enroute to emergencies pose a serious danger for first responders. Nearly 13 percent of the firefighters and police officers who die in the line of duty are killed in vehicle-related incidents, and fire trucks are involved in ten times as many collisions as other heavy trucks.

We need our first responders--and the traveling public--to stay safe. That’s why I’m so pleased to see this program moving ahead.

MCDOT ITS and its partners have been hard at work developing a prototype that will help vehicles talk to each other and to the traffic signals and other infrastructure around them, to improve safety at intersections. SMARTDrive, a state-of-the-art field lab for testing new transportation technologies systems, includes software that will prioritize emergency vehicles at traffic lights lies along a 2.3-mile stretch of Daisy Mountain Drive in the Anthem community just north of Phoenix.

This means that traffic signals will be able to communicate with emergency vehicles when they are approaching an intersection. The SMARTDrive Multi-modal Intelligent Traffic Signal system will selectively prioritize and notify all approaching emergency vehicles about which vehicle has the right-of-way. This will significantly improve efficiency and safety.

Transit priority systems can also be developed using SMARTDrive technology. Transit and school buses could run more efficiently, stay on schedule, and provide better service if they were given traffic signal priority at smart intersections. “If you have a bus that’s behind schedule, you can have the traffic light hold the green longer or give an early green,” said Dr. Larry Head, of the University of Arizona. “If they’re running on time, they can go with the normal stream of traffic.”

Providing transit vehicles access to SMARTDrive would make public transit more attractive because the vehicles would run on time more reliably.

Sharing innovative ideas and putting them to practice are what keeps America the leader in transportation technology, and work like the prototype Acting Administrator Winfree saw today in Arizona is helping to lay the groundwork for a safer tomorrow.