

## **DID YOU KNOW???**

### **AUTOMATED SYSTEMS GAINING DRIVER ACCEPTANCE**

More and better automated safety systems are rapidly becoming available on more and more cars, and driver acceptance is growing. A recent survey by researchers at the Insurance Institute for Highway Safety (IIHS) suggests people are most comfortable with systems they believe make smooth, gradual movements but are wary of using the features in the most challenging driving conditions.

Automation has the potential to eliminate many crashes by removing human error from the equation. While fully automated vehicles are a long way off, existing features like adaptive cruise control and active lane keeping automate parts of the driving task. Whether or not those features make roads safer depends in part on driver acceptance.

Adaptive cruise control maintains a set speed and a set following distance from the vehicle in front of it. Active lane keeping provides sustained steering input to keep the vehicle within its lane. Overall, drivers in the new study viewed both adaptive cruise control and active lane keeping somewhat positively.

Drivers in the IIHS study preferred adaptive cruise control systems that they felt made smooth, gradual changes and consistently detected moving vehicles ahead. They also preferred active lane keeping that they thought made infrequent steering corrections.

Drivers said they would be more comfortable using the features in light traffic and on interstates than in stop-and-go traffic and on local roads — conditions under which crashes are more likely. Most current systems aren't designed to be used in those more challenging situations, although IIHS researchers found owners' manuals to be inconsistent and vague on this topic. However, if systems are only used in light traffic and on interstates, that will limit their potential safety benefits.

Unfortunately, pedestrian crashes are increasing and have become deadlier. The increase has been mostly in urban or suburban areas, away from intersections, on busy main roads and in the dark. Crashes are increasingly likely to involve SUVs and high-horsepower vehicles. While front crash prevention systems are known to reduce crashes with other vehicles, at least one system is also preventing vehicles from striking pedestrians, a new Highway Loss Data Institute (HLDI) analysis shows.

Subaru's EyeSight performs several functions, including forward collision warning, automatic emergency braking, adaptive cruise control, lane departure warning and lead vehicle start alert. It also includes pedestrian detection, enabling the system to brake automatically for pedestrians in addition to other vehicles. The system relies on two cameras mounted to the interior roof behind the windshield, a set-up that leads to lower repair costs than other front crash prevention systems that rely on equipment embedded in the vehicle exterior.

The new study found that EyeSight cut the rate of likely pedestrian-related insurance claims by 35 percent. The first generation of EyeSight used black and white cameras; the second generation, introduced on the Legacy and Outback in 2015 and on the Forester in 2017, uses color cameras and has longer and wider detection ranges and other improvements. "The data clearly show that EyeSight is eliminating many crashes, including pedestrian crashes," says HLDI Senior Vice President Matt Moore.