

DID YOU KNOW???

AUTONOMOUS CARS – WHERE DO WE STAND?

We have all read about autonomous vehicles. We have heard all about Google and Tesla and the robot cars that are being tested and that, hopefully, will be much safer than existing vehicles by removing driver error from our highways. But how close are we to giving up control and just letting the computers, radar, and cameras do our driving?

Well, according to a lengthy article in the November issue of Status Report from the Insurance Institute for Highway Safety (IIHS), we have a long way to go. Whether or not automated vehicles will live up to their safety expectations is a question that can't be answered yet. In the meantime, similar game-changing safety gains could be achieved if human drivers obeyed speed limits and other traffic laws, refrained from impaired driving and used safety belts on every trip, says the IIHS.

There are five levels of automation for autonomous vehicles, ranging from none, or Level 0, to fully self-driving, or Level 5. The levels are differentiated by "who" monitors the driving environment and whether or not the human or the automated system is expected to be the safety fallback if things go wrong or the system reaches its limits.

According to the IIHS, the technology to achieve Level 2 automated driving is available to consumers now. Driver assistance features that can control both the longitudinal and lateral position of the vehicle are available on at least 17 vehicle makes for 2016. Automakers say drivers must continue to be fully engaged in the driving task because the systems have limits. Much of this technology is intended for well-maintained, limited-access high-speed roads in good weather.

Furthermore, road conditions and design are important considerations. A vehicle might operate at Level 4 on an interstate but only at Level 2 on other roads or in bad weather. Until fully automated systems are available, human drivers still will need to bridge the gap, explains the IIHS.

Information presented in the Status Report article says it might take a decade until fully automated personal vehicles are available to U.S. consumers, but people who live in certain urban areas can already hail experimental robo-taxis on a limited basis. The ride-sharing service Uber during September launched a pilot project in Pittsburgh that dispatches self-driving cars to transport real clients — with an Uber engineer and a backup driver in the front seat ready to take over the controls.

For the consumer market, projections vary. Some automakers aim to sell vehicles that offer semi-automated driving under limited conditions in the early 2020s, and others promise fully self-driving cars by 2030. Regardless of when the first Level 3 or higher automated vehicle hits the market, vehicles with humans at the wheel still will dominate the fleet for many years. "Even if the U.S. government were to require all new vehicles sold to be autonomous tomorrow, it would take at least 25 years until nearly 95 percent of the vehicles on the road would have the capability," says Matt Moore, HLDI vice president.

So, we are definitely getting closer to fully autonomous vehicles, but we still have a long way to go. Nevertheless, the future looks bright for more technology in our vehicles that will enable us to driver more safely.