Whose fault? Self-driving vehicles in crashes studied

October 31 2015, by Nancy Owano

The finalized prototype of Google self-driving car. Credit: Google

If you are still troubled over the thought of driverless cars moving in traffic on our future highways, then you might want to move on over to stories about bats, beetles and bone findings.

For those who are open to digest still more news this week on driverless cars, a university study shows self-driving vehicles as having a higher

crash rate per million miles traveled than conventional vehicles.

Important point: The fault does not rest with the driverless vehicles. All of the crashes were the fault of the driver of the conventional vehicle.

The University of Michigan Transportation Research Institute study authors are Brandon Schoettle, and Michael Sivak, UMTRI's director of Sustainable Worldwide Transportation. The Sustainable Worldwide Transportation (SWT) entity has the participation of UMTRI experts and other research organizations. They address safety, energy and environmental aspects of future transportation.

In the study's abstract, the authors recognized two points, distance accumulations and road conditions, deserving mention as caveats when interpreting the findings.

"First, the distance accumulated by self-driving vehicles is still relatively low (about 1.2 million miles, compared with about 3 trillion annual miles in the U.S. by conventional vehicles). Second, self-driving vehicles were thus far driven only in limited (and generally less demanding) conditions (e.g., avoiding snowy areas). Therefore, their exposure has not yet been representative of the exposure for conventional vehicles."

This study carried a preliminary analysis of the cumulative on-road safety record of self-driving vehicles for three of 10 companies currently approved for such vehicle testing in California. The three companies were Google, Delphi and Audi.

These vehicles' safety records were compared with the records of all conventional vehicles in the United States for 2013. Adjustments were made for the under-reporting of crashes which did not involve any fatality.

But how does one walk away from the study, more convinced than ever that [driverless cars](#) pose no threat, or more convinced than ever to be very wary and braced for what future findings will reveal?

IEEE Spectrum Senior Editor Philip Ross said on Friday: "Remember the kerfuffle over crash rates of Google cars? We told you then not to take it too seriously, and two academics now second the motion."

Ross was not upset over the findings. He said, "Although their study finds that the [accident](#) rate of robocars from Google and two other companies is a bit worse than that for human-driven cars, they add that not a single accident has been blamed on a robocar—and those that did occur tended to be less severe than those of conventional cars. Nobody was killed. "

The authors stated that self-driving vehicles were not at fault in any crashes they were involved in. What is more, the overall severity of crash-related injuries involving [self-driving vehicles](#), they said, has been lower than for conventional vehicles.

More information: [www.umich.edu/~umtriswt/PDF/UM … Abstract_English.pdf](#)

© 2015 Tech Xplore

Citation: Whose fault? Self-driving vehicles in crashes studied (2015, October 31) retrieved 20 April 2024 from https://techxplore.com/news/2015-10-fault-self-driving-vehicles.html