

Driverless Cars Not Proven To Be Safer

There is no proof that driverless cars will be safer than human drivers.

I found myself saying that aloud to a radio ad yesterday. In explaining his support for driverless car experimentation in Michigan, Governor Rick Snyder notes that 94% of accidents are caused by human error. The implied assumption is that driverless cars will be safer.



There's no proof that driverless cars will be safer than mere human beings.

That statistic bandied about by driverless car advocates has nothing to do with automated vehicle safety. It derives 2005 to 2007 data in a study released a decade ago - *before* driverless cars were "a thing."

This is just one of the critical concerning driverless cars I discuss in my most recent article, [Driverless Utopia](#). Besides delving into driverless car safety, the piece also cites new risks driverless cars can introduce, such as vehicular hackability as well as liability issues. As the cover story for the May/June issue of the [Casualty Actuarial Society's Actuarial Review](#), it offers the critical perspective of actuaries. Their rubber-hits-the-road view deserves more attention because actuaries anticipate risk potential when determining insurance rates.

Actuaries who looked into the 93% statistic, which is based on a 2008 National Highway Traffic Safety Administration (NHTSA) study, conclude that 78% of accidents - *not* 93% — are due to human error. The article dives into the actuarial analysis even more.

Driverless Reality

We don't know how safe driverless cars are — for several reasons. These are:

- **There is no national clearinghouse tracking data regarding driverless car safety.** Basic information, such as fatalities and accidents related with automated technology, is not publically available in one place. Actuaries want driverless car manufacturers to share data so insurers can anticipate the risk insurers cover. That is not happening.
- **The lack of apples-to-apples comparisons between driverless cars and human driven conventional vehicles in similar scenarios.** Existing research considers different issues. And the conclusions vary. Further, driverless car experiments are taking place in near perfect driving conditions where accidents are less likely anyway. Also, since automated cars cannot handle inclement weather or a quick Bambi crossing, imperfect humans who take the wheel can still be at fault.
- **The pass off risk between automated systems and human drivers is huge for determining safety and liability.** That point of transition, when automated vehicular technology senses danger and mere humans have to take control is fraught with problems.

The first automated vehicle technology fatality in the United States took place in 2016 when a Tesla hit a truck moving across a highway. It appears the driver did not take control of the vehicle soon enough. Getting to the why not only reveals the complexity of fault but the difficulty in determining it. The National Transportation Safety Board and NHTSA conducted separate investigations. One emphasized that the technology did not alert the driver in time. The other stressed that the driver was not responsive enough. (See [my article](#) for more details.) (A similar fatality took place last month in [California](#).) [A fatality in March](#) reportedly occurred because the Uber-affiliated car did not detect the female pedestrian walking at night in Tempe, Arizona. It also appears the back-up driver was distracted. Still under investigation, the video is available [here](#). (Warning: it's quite graphic.)

- **Driverless cars might decide who dies.** [One study](#) shows the cars favor saving younger people rather than the elderly.

Finally, as [my first driverless car article](#) notes, if driverless cars are safer than human drivers, it is likely because the car will be programmed to follow traffic laws - to the letter. Lower the speed and the accidents decline, even when people are driving.

Parting Thoughts

I'm not against driverless cars. However, I am troubled by rhetoric that presumes driverless cars will be safer without sufficient proof. The logic that driverless cars will be safer because human

error is the primary cause of accidents is faulty and misleading.

The safety issue might not matter anyway. In the next 10 to 15 years, I believe the average consumer will be depending on taxi-like automated vehicles, figuring that cars are risky no matter who - or what - is driving them.

And since the cars will be in a constant state of technological improvement for at least the next couple decades, they will be too costly for average consumers to own, insure, maintain and repair. Already, minor fixes, such as replacing a driver's side mirror, costs more than the typical \$500 insurance deductible due to all the connecting sensors.

My hope is Americans and public policy makers will demand greater transparency from technology companies. Automated vehicle technology is just one more area where consumers should know more.