

Letter to the Editor Richmond Times-Dispatch

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Driverless cars: Heading down a dangerous road to crashes, congestion, and chaos

By Kennerly H. Digges and Shaun Kildare

Proponents of autonomous vehicles (AVs) argue that their widespread deployment will eliminate crashes, reduce congestion and emissions, and expand mobility to underserved communities — especially people with disabilities. However, there is presently no objective, reliable research or data that proves any of these goals will be realized.

To the contrary, ample evidence demonstrates serious and dangerous shortcomings with the current state of AV technology. Tesla vehicles operating or suspected of operating on “autopilot” have been involved in at least three crashes, two of which were fatal. These crashes have been or are currently the subject of investigations by the National Transportation Safety Board (NTSB). The NTSB is also investigating the fatal autonomous Uber test vehicle crash in Tempe, Arizona, which claimed the life of a pedestrian. To date, the NTSB has concluded only one of those investigations, and it raised serious concerns about the performance of the technology.

AV manufacturers tout the millions of miles their vehicles have driven to prove their safety; however, these boasts ring hollow. American drivers averaged one fatality every 85 million miles driven in 2016. At the time of the autonomous Uber crash, the company’s vehicles had logged only 2 million miles. Therefore, the autonomous Uber had a crash rate more than 40 times the average human driver. While this is only a single data point and not statistically valid, it should be a stark warning when evaluating claims of the industry that having driven 2 million, or 4 million, or even 10 million miles indicates that their AVs are safe. In 2016, Americans drove more than 3 *trillion* miles. Further, the crashes that have occurred involving AVs are not unique situations but rather involve foreseeable events like stopped firetrucks in roadways, exit ramps, crossing traffic, and pedestrians.

Claims that AVs will solve congestion and protect the environment are similarly suspect. Just this year, studies have concluded that rideshare services like Uber and Lyft (where AVs may likely first be introduced on a large scale) are contributing to congestion in cities and are drawing riders away from mass transit. Anecdotes about hyper-commuters who seek to live far outside of urban centers using their AVs as mobile offices in multi-hour commutes foretell increases in traffic. AVs could enable suburbs of Richmond to become a daily commute to Washington, D.C.

Additionally, concept AVs meant to replace short-haul flights raise the specter of further congesting our nation’s roadways. Instead of one plane carrying more than 100 passengers from New York to Washington, a fleet of AVs could make that same trip adding to the already overcrowded I-95 corridor.

Proponents of the technology have also made predictions that AVs will increase mobility for segments of society that have been traditionally underserved, including persons with disabilities. However, little discussion or consideration has been given to how these passengers will be protected when unproven systems fail and leave them stranded on the side of the road or worse. Furthermore, rideshare services are currently facing multiple lawsuits for allegedly failing to provide enough vehicles that can accommodate wheelchair users.

The testing and eventual deployment of this nascent technology on our nation's roads necessitates commonsense safeguards to protect the public. Yet, legislation currently pending before the U.S. Senate, the AV START Act (S.1885), falls far short in ensuring that AVs are developed in a safe and responsible manner. For instance, the legislation includes no requirements that AVs have the ability to recognize and respond appropriately to signs and other objects in traffic such as pedestrians, first responders, and bicyclists. The bill also includes no minimum standards for electronics or cybersecurity protection to ensure that passengers are safe from hackers attacking the AV.

As safety advocates, we are hopeful that AVs could someday make traffic crashes and the resulting injuries and fatalities relics of the past. However, AVs should not be prematurely deployed and sold before they can be safely operated on public roads and without commonsense government oversight in place. Therefore, before the Senate further considers legislation that will establish AV policy for years to come, the NTSB should complete its investigations and essential improvements must be made to the bill to ensure safe introduction of this potential transportation revolution. If this prudent path is not followed and the unregulated introduction of AVs is allowed, more crashes will undoubtedly occur, the already skeptical public will turn against the technology, and the full safety potential that could be realized will be lost.

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