



Trucker Reality

By OOFI • Feb 09, 2022
Smart Brevity® count: 3 mins... 768 words

Academia and regulators look at the trucking industry from the 30,000 foot level.

- **However**, this bulletin examines the “realities of trucking” through the windshield, six feet up from the pavement, from the driver’s seat.

1 big thing: How close are autonomous trucks to reality?



On December 29, 2021, TuSimple, a global autonomous driving technology company headquartered in San Diego, successfully completed an 80-mile run in Arizona with no human on board.

- TuSimple has conducted six additional driverless runs since then.

What they’re saying: TuSimple claims that their product will be commercially available by the end of 2023.

Reality Check: While AV technology is impressive, it’s far from ready. For starters:

- The trip took place in a controlled environment. Both the Arizona DOT and law enforcement collaborated with TuSimple for the drive.
- TuSimple utilized a survey vehicle “to look for anomalies” 5 miles ahead of the driverless truck.
- “An oversight vehicle capable of putting the autonomous truck in a minimal risk condition” was close behind.
- Law enforcement was about half a mile behind the truck for extra safety measures.
- TuSimple traversed the route thousands of times to collect enough data before they were ready for an autonomous run.

The bottom line: Don’t believe the hype.

At a recent hearing in the U.S. House of Representatives, the International President of the Transport Workers Union stated that we are seeing a “deluge of accidents from these [autonomous] vehicles.”

- **By the numbers:** There are 9.1 self-driving car accidents per million miles traveled verses 4.1 per million miles among regular vehicles.

[Go deeper](#)

Reality check 1: The statistic blaming crashes on human drivers is wrong



NHTSA claims 94 percent of crashes are due to human error.

In 2015, the National Highway Traffic Safety Administration (NHTSA) released a memo stating that the critical reason, meaning the last event leading up to the crash, was assigned to the driver in 94 percent of the crashes they surveyed between 2005 and 2007.

- **However**, they also stated that this is “not intended to be interpreted as the *cause* of the crash.”

- [Find the memo here.](#)

Why it matters: Advocates for autonomous vehicles (AVs) have casted the memo as concluding that 94 percent of all serious crashes occur “due to human error” in order to support their cause. [Read about it here.](#)

- NHTSA’s own website states, “Automated vehicles’ potential to save lives and reduce injuries is rooted in one critical and tragic fact: 94% of serious crashes are due to human error.”

Reality Check: Since humans are driving the vehicle, the last action before a crash is going to be taken by a human.

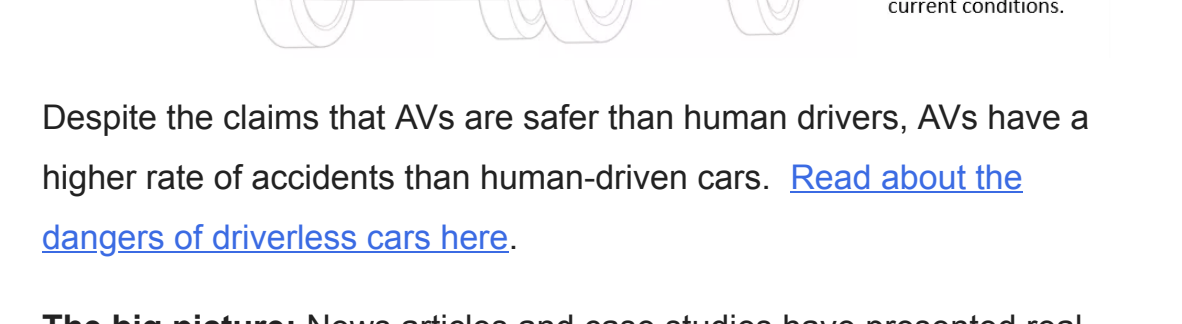
- The “critical reason” has nothing to do with what caused the crash.
- The cause for any one crash is complex. Blaming humans is the easy way out.
- Other factors must be considered, such as road design, speed limits, weather conditions, and mechanical issues to name a few.

The bottom line: This figure is so egregious that Jennifer Homendy, the head of the U.S. National Transportation Safety Board (NTSB), officially requested NHTSA to remove it from their website.

- Homendy wrote, “Stop with the 94%!”
- **“Simply put:** It’s not true. Crashes are more complex than that and we need to understand all those factors to stand a chance at reducing traffic deaths in the United States.”
- “This leads the public to believe there’s nothing anyone can do about it, so who cares?”

Reality Check 2: The challenges of AVs

Figure 1: How a Self-Driving Car Works



Despite the claims that AVs are safer than human drivers, AVs have a higher rate of accidents than human-driven cars. [Read about the dangers of driverless cars here.](#)

The big picture: News articles and case studies have presented real-world situations in which automation has failed thereby requiring human intervention.^[1]

- While automated driving systems (ADS) have the potential to improve safety under certain conditions, they also pose to create new risks.

AAA researchers found in 2020 that vehicles with active driver assistance systems experienced an issue every eight miles. They also found that systems:

- struggled to keep the vehicle in their lane
- came too close to other vehicles or guardrails
- often disengage with little notice - almost instantly giving control back to the driver. [Read about the report here.](#)

The bottom line: Although advancements in autonomous technology are impressive, there’re a number of challenges associated with automated vehicles.

- As the technology becomes increasingly more complex so too will the number of ways in which they can fail.

- [Go deeper.](#)

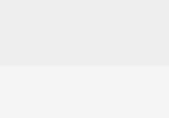
[1] Tomas o. Lackman and Karl Soderlund, “Situations Saved by the Human Operator when Automation Failed,” The Italian Association of Chemical Engineering (2013)

The OOIDA Foundation, the research and educational arm of OOIDA, thanks you for all that you do!

Feedback

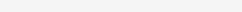
Anonymously tell us what you thought of this newsletter. Your responses will help us create better content for you!

Was this edition useful?



[Click here to unsubscribe.](#)

This newsletter is powered by



Like this email style and format? It's called Smart Brevity®. Over 200 orgs use it — in a tool called [Axios HQ](#) — to drive productivity with clearer workplace communications.