



WHAT ABOUT THE DRIVERS?

An autonomous future doesn't necessarily mean a future without truck drivers

The realization that autonomous trucks would be rolling down highways and delivering goods without humans behind the steering wheel set off societal shockwaves that reverberated far beyond the trucking industry.

And it's not hard to understand why: In the majority of U.S. states today, "truck driver" is the Number One occupation for most workers. In fact, Texas tops the list with 172,000 people employed as truck drivers followed by California and Pennsylvania, according to the Bureau of Labor Statistics and other sources.

And while the slow creep of automation and globalization took many of the higher-paying manufacturing jobs away from many Americans, trucking, as an occupation, seemed safe from any similar threat — until suddenly it wasn't. If computers can drive a truck down a crowded highway, people asked themselves, was there any job that was safe from unending technological assimilation?

According to 2019 statistics from the U.S. Bureau of Labor, there are around 900,000 Class 8 truck drivers working in the United States today. It is a job that is overwhelmingly filled by white males with high school educations. Pay scales for drivers average around \$25 an hour, or about \$45,000 per year. And the 2020 U.S. Census reported that the largest groups of drivers are in the 45 to 65 years old age range.

As noted in a [previous blog in this series](#), truck drivers do far more than simply guide a vehicle down the road. In many companies, they act as a salesperson or human contact between the company shipping goods and the customer who ordered it. They often are called upon to solve problems, or simply maintain good relations with a client. Drivers also serve as security guards, monitoring valuable cargo, as well as performing numerous pre-trip and post-trip inspections and dealing with roadside emergencies or simply being the "face" of large, widely-known shipping companies. And it goes without saying that these are roles that always will have to be filled by humans.

Still, given the likely timeline of autonomous technology and the fact that the largest portion of current truck drivers

will begin retiring in large numbers about the same time the technology comes to market, it seems likely that a high number of those empty driver seats will be filled by autonomous vehicle systems. This is a highly complex issue — and one with very serious aspects that society is soon going to have to grapple with. Robots don't pay taxes or buy groceries, clothes, phones, new television sets or eat in restaurants, etc., for one thing.

But, in the near-term future I don't believe the threat is as severe as some alarmists have made it out to be. In fact, I am of the opinion that there will be a need for human truck drivers for many years to come. And, in fact, that autonomous vehicle systems actually may allow skilled human drivers to demand a premium wage for their skills.

No new technology springs into being fully formed. The first airplanes, for example, did well to fly across a cow pasture. Jetting off to London for a long weekend was decades away when the first rickety flying machines took to the air. And it will likely be much the same for autonomous trucks.

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At the moment, the consensus among industry observers is that autonomous driving — particularly with large trucks — is a very difficult technical problem to master. And so it is likely that autonomous technology will come to us in easily adoptable steps that initially will be laser-focused on driver safety and productivity. And so there will be a settling-in



will be the first to move out from behind the steering wheel to new occupations. And, as they do, increasingly it will be autonomous trucks that fill the occupational void they leave in their wake.

But professional drivers — those little kids who grew up dreaming about driving a tractor-trailer — I think, are a different story. For many years to come, there will be a wide array of specialty hauling applications that will absolutely require having a human onboard and in control of the vehicle at all times. I'm thinking

period that will allow all of us — fleet operators, the driving public and legislators — to get comfortable with autonomous technology and learn how to coexist with it as it increasingly becomes a more commonplace presence in our daily lives.

That said, at some point in the future — most likely within next 10 years — the first fully autonomous trucks will begin real-world fleet operations. And, at that point, driver jobs will begin to be taken over by the robots.

Now, at this point, we should make note of an important distinction about truck drivers: There have always been men and women who, from a young age, see a big rig rolling down the highway and want nothing more than to master that machine and earn a living driving one anywhere the roads take them.

The problem is, there are only so many of those trucking-inclined men and women out there. And there certainly aren't enough of them to fill all the drivers' seats needed to deliver the massive volumes of freight moving today. And so, as manufacturing jobs have vanished, truck driving has become a job of last resort for many. They see truck driving as a job not as a career. They don't really like the job, the rigors of the road, or being away from home for extended periods of time. And, assuming autonomous technologies create new jobs in place of driving jobs, it seems this group of reluctant truckers

about things such as high-value cargos, HAZMAT and tanker applications, wide-load, severe-haul and oversized loads such as power-generating windmill blades. Moreover, as autonomous technology matures, it seems likely that skilled drivers in charge of two-, three- or even four-vehicle truck platoons, with driverless trucks electronically following a lead/command truck with a human driver on board and in control, will be able to demand a premium salary for their skills.

Regardless of how quickly autonomous technology arrives in the trucking industry, it will complement and work with humans and human drivers for many years to come. And there always will be a place in trucking for dedicated, professional drivers with skillsets that it will take a computer many, many years to replicate — much less excel at.

About the Author: Jack Roberts is a transportation journalist who has been covering North American commercial vehicles for 25 years and has developed a reputation as a leading authority/futurist concentrating on new trucking technology, including autonomous vehicles, battery-electric trucks and emerging blockchain technology.



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