

Using Advanced Technology to Help Ease the Truck Driver Shortage



How advanced technologies like AI and simulation training can help expand and broaden out the pool of job candidates interested in careers as drivers.

Trucking companies and training schools are pulling out all the stops in an effort to attract more drivers. Some are offering more [competitive pay rates and full benefits packages](#); others are working to make the career more appealing to a broader pool of candidates (of the more than 3.5 million people who work as truck drivers, [90% are men](#) and [just 6%](#) are women); and still others are experimenting with advanced technologies as a new way to offset the current shortage.

The truck driver shortage isn't new, but the situation was exacerbated by the global pandemic. For 2018, the American Trucking Association (ATA) reported a total truck driver shortage of 60,800 in the U.S. At the time, that was a record high and up more than 10,000 from the prior year. Projecting out 10 years, the ATA was expecting the shortage to reach 160,000 by 2028.

The situation hasn't eased any since those "record highs" were reached five years ago. According to [JOC](#), 2020 saw an annualized shortage of truck drivers. "Although truck transportation employment through October increased by 63,500 jobs from its April low point," the publication points out, citing BLS data, "the number of for-hire trucking employees was still 65,700 lower than in October 2019."

That shortfall is greater than the 59,000-driver shortage of 2019, but if it persists, 2020 will go down as being the first year since the 2008-09 recession when the number of truck drivers dropped year over year. In 2019, [JOC](#) adds, the BLS data showed a 3% increase in the number of heavy-truck drivers to 1.86 million.

"Everybody is struggling with drivers now, and I think it is going to take a while to work itself out," the American Trucking Association's Chief Economist Bob Costello said in a recent webinar, [ICIS](#) reports. Some drivers are prevented from being employed because of the Drug and Alcohol Clearing House, which has placed about 48,000 drivers in "prohibited status" due to at least one violation. According to [ICIS](#), "about 75% have not even started the process to regain driving privileges."

The Trickle-Down Effect

For electronics buyers, the driver shortage is trickling down into lower trucking capacity and, predictably, higher freight rates. As any company that operates on thin profit margins can attest, even the slightest upward shift in transportation costs multiplied over time can translate into significant negative impacts to the bottom line.

As the transportation industry, driver schools and individual organizations work to come up with solutions to the persistent driver shortage, some of them are turning to technology for help. In [FleetOwner](#), Cristina Commendatore discusses the convergence of AI and driver education, and describes one company's use of simulators to help train the next generation of truck drivers.

"Traditional styles of learning and training—think sitting in a classroom with an instructor leading the discussion—have taken a back seat over the past year, opening the doors for more remote learning and training opportunities" she writes. "While traditional learning and training models will likely

stick around, advancements in AI and machine learning are allowing for a more blended approach to truck driver training.”

At a recent press conference, John Kearney of Advanced Training Systems (ATS) described how simulators can help train the next generation of truck drivers. His company makes simulator technology and advanced training systems for drivers. According to Kearney, younger generation of drivers aren’t interested in classrooms and textbooks, and would rather learn via more “virtual” means.

Luma is another company that’s leveraging technology to help attract more drivers to the transportation industry. According to *FleetOwner*, the instructional design and learning company provides tools that help trucking companies leverage their expertise to create authentic content for drivers. The majority of Luma participants use tablets and mobile devices for their training, and commercial drivers can access training through their electronic logging devices (ELDs).

“As we all know in the trucking industry, recruitment and retention is so important,” Luma’s Gina Anderson told *FleetOwner*. “We see the ability to leverage technology and learning to be able to support and inherently help the retainment of drivers. We look at three things primarily: the content, the tools or the platform, and the delivery.”

New Tools Wanted

As the driver shortage continues, expect to see more carriers, driver schools and related organizations looking to technology to help solve this pressing issue. For example, in “[New tech helping fleets remotely train, coach drivers](#),” Aaron Huff discusses how fleet telematics and camera vision systems are being augmented with sensors and AI that both help train drivers from a safe distance and “move the transportation industry faster toward an autonomous future.”

Some of the newest innovations include AI-enabled face mask detection to support driver health and safety; live-streaming that allows safety managers to do virtual “ride-alongs”; and the sharing of event videos between drivers and safety managers (to enable remote and self-guided driver coaching). These and other advanced tools help to take the guesswork out of driver training and road safety, while also helping to attract younger, tech-savvy job candidates to the field.

