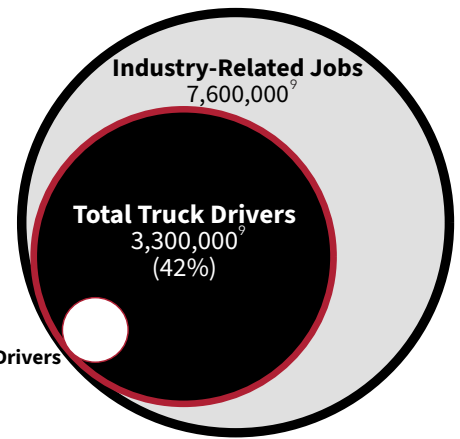


# Potential Workforce Impacts of Autonomous Trucks

As autonomous trucks become a reality on our roads, truck drivers are wondering about the potential impacts this technology could have on their jobs. In the future, automation will augment and improve, not replace, the trucking workforce. Here is why:



## Industry is struggling to recruit and retain drivers

- There is **significant driver turnover in the trucking industry (>70%)** as drivers frequently switch carriers or leave the industry.<sup>1</sup>
- Many current drivers will be at retirement age within the next decade and the American Trucking Associations project that there may be a **driver shortage of 160,000 by 2030.**<sup>2</sup>
- Life on the road is more difficult "because of **irregular schedules; long hours; little physical activity; limited access to healthy foods on interstate highways; and stress.**"<sup>3</sup>
- Inefficiencies, dead-head miles, lack of parking and time wasted waiting for loads mean that drivers "**operate longer, faster, and harder...**to make up for lost compensation."<sup>4</sup>

## Demand for moving freight is increasing

- **Truck tonnage is expected to grow** from 11.27 billion tons in 2024 to 13.99 billion tons in 2035, and revenue is expected to grow from \$906 billion in 2024 to \$1.46 trillion in 2035.<sup>5</sup>
- Demand for truck drivers will increase through 2033, with over **240,000 jobs becoming available each year.**<sup>6</sup>

## Truckers of the future could choose, and be trained for, better jobs in the sector

- With a growing economic demand for freight delivery, USDOT projects that **more truck drivers will be needed each year, even with increasing AV adoption rates.**<sup>8</sup>
- There will be an increased need for local route delivery by human drivers. This will allow drivers to stay closer to home and strike a better work-life balance, **potentially mitigating many of the negative health impacts faced by long-haul truck drivers,** such as stress, and fatigue.<sup>3, 8</sup>
- Autonomous trucking will create **new opportunities in the transportation and logistics field,** such as Autonomous Hub Operators, Mission Managers, Fleet Managers, Remote Assistants, Autonomous Truck Technicians and Inspectors.
- Autonomous trucking companies are **creating workforce development initiatives** to train and prepare the future AV workforce. See more at USAVJobs.com.

### Resources:

1. American Trucking Associations, Truck Driver Shortage Analysis 2019, 2019.
2. American Trucking Associations, Economics Department, Driver Shortage Update 2021, 2021.
3. Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, Motor Vehicle Safety at Work: Long-haul Truck Drivers, 2024.
4. Owner-Operator Independent Drivers Association Foundation (OOIDA), 2023 Detention Time Survey, 2024.
5. American Trucking Associations, Truck Freight to Bounce Back in 2025, ATA Projects, 2025.
6. US Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, Heavy and Tractor-trailer Truck Drivers, 2024.
7. US Department of Transportation, Office of the Assistant Secretary for Research and Technology, Intelligent Transportation Systems Joint Program Office, Macroeconomic Impacts of Automated Driving Systems in Long-Haul Trucking, 2021.
8. US Department of Transportation, Driving Automation Systems in Long-Haul Trucking and Bus Transit: Preliminary Analysis of Potential Workforce Impacts, 2021.
9. American Trucking Associations, Supply Chain Watch, 2021.

# The Path Forward

As industry partners come together to work towards shared policy outcomes, a common sentiment continues to emerge: the things we do to improve the ecosystem to prepare for autonomous trucking are the things needed to improve the ecosystem for human workers and drivers as well.

The technology solutions needed to optimize the supply chain for autonomous trucks will benefit the entire trucking ecosystem, bringing benefits to human drivers (e.g., pre-trip enhanced inspection replacing current time-intensive and unsafe roadside inspections, weigh-station bypass, technology to minimize time waiting for loads, and benefits that come from a hub to hub model such as increased certainty about access to parking spots, bathrooms and the ability to get home).

## Testimonials



"When I learned about autonomous trucking, it seemed like a perfect fit where I could combine my driving experience with the safety expertise I developed in the Army."

-Jorge Baeza,  
Safety Driver, **Kodiak**

"After over 20 years of navigating congested highways, it is thrilling to contribute to developing a safe and reliable solution to alleviate the current driver shortage, which is anticipated to worsen."

-William Sisneros,  
Safety Driver, **Torc**



"As a Class A driver with over forty years experience on the road, I know firsthand the critical need for improved highway safety. Autonomous trucks don't get tired, distracted, or take risks – they're consistent, predictable, and designed with safety at the core. I'm proud to be part of an industry that's prioritizing safer roads and smarter technology at every turn."

-Thomas Randle,  
Senior Autonomous Truck Operations Specialist, **Gatik**

"What it boils down to for me is that we're not just playing with cool tech; we're actually fixing big supply chain issues while creating better driving careers. That's the fuel for my fire – seeing our work directly address the real challenges I faced, and doing it with a level of integrity and forward-thinking that makes me feel great about being part of this team."

-LaQuais Knight,  
Vehicle Operations Compliance & Training Lead, **Waabi**



"I've been driving trucks for 17 years, many of which have been spent on the road and away from my family. Now, I'm proud to work on self-driving technology that will take on exhausting long haul routes and help today's truck drivers enjoy shorter hauls—improving quality of life and allowing them to be home with their families every day."

-Matt Heavin,  
Autonomous Truck Operations Specialist, **Aurora**

"I've been a truck driver for a little over 30 years, and this industry hasn't had many technical improvements that have helped the quality of life for drivers. There aren't a lot of young people entering the long haul market due to the requirements of the job – time away from home, mileage pay, sleeping in a truck, and minimum age of 21. Autonomous trucking can change this by handling the middle-mile portion of the haul. AVs will bring a positive shift in the industry to localized work that will be more desirable for a wider diversity of drivers."

-D.J. Hoff,  
Operations Manager I, **Stack**



**By working together, industry, government, and the workforce can ensure these technologies improve and augment the workforce of the future.**