

Drivers Wanted

Using data to understand
the commercial truck
driver shortage



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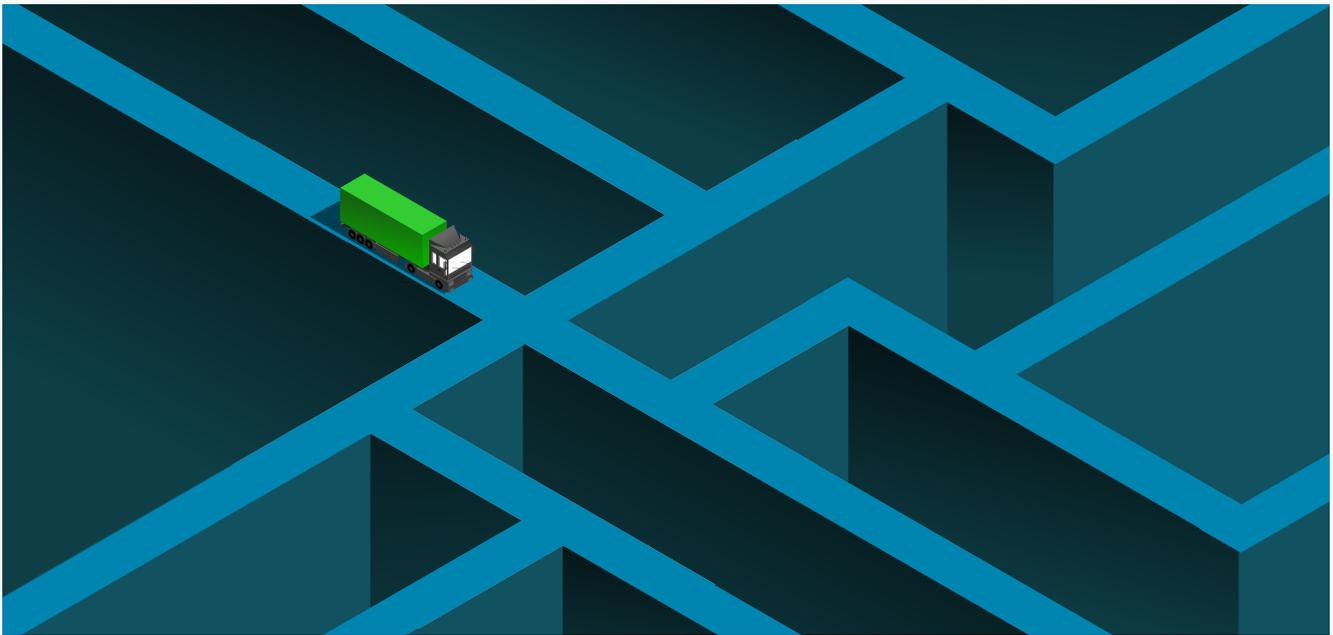
Drivers Wanted

Using data to understand the commercial truck driver shortage

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Design by Daniel Botkin

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The trucking shortage

Is the US logistics industry facing a dire shortage of commercial truck drivers?

Truckload brokerage experts and logistics journalists have been going back and forth on the question for years. The American Trucking Association reports that they have suffered a [shortage of truck drivers](#) for the past 15 years. In 2018, NPR took up the issue (as it has [several times](#) over the last decade), warning that a [pressing need for more commercial truck drivers](#) is causing delays in freight shipping and driving up the price of consumer goods.

But others have remained skeptical. In 2019, Barron's argued that the supposed trucking shortage was largely overblown, citing a [relatively stable producer price index](#) as evidence. The BLS also weighed in, finding high rates of occupational attachment among truck drivers that haul freight and suggesting that, over time, the [labor market would respond](#) to price signals in a roughly normal and predictable way.

It's unsurprising that truckload shipping is the object of so much scrutiny. Drivers are indispensable to our lifestyle. They keep food, clothes, medicine, books, gadgets, and almost anything else you can name, on our shelves. Between 2019 and 2020 alone, there were over 14 million job postings for truck drivers. In other words, they are in extremely high demand, and failure to meet this demand over the long term will have widespread consequences.

This may be a uniquely important moment for investigating and defining the potential trucking shortage. The effects of the unprecedented pandemic and accompanying response have

been massive. Online shopping and the consequent demand for delivery has skyrocketed, while service industry jobs have vanished. Intuition suggests that trucking jobs would grow enormously under these conditions—but to understand what has actually happened, we need to bring data to bear.

In this paper, we combine labor market data and on-the-ground insights of logistics industry leaders. We hope to paint a nuanced picture of the extent and shape of the commercial trucking shortage, the complications introduced by the unique circumstances of the past year, and the possible steps toward solutions that benefit truckers and businesses alike.

The size of the complex prize

Given how seamlessly American logistics function from a consumer standpoint, it can be difficult to fully grasp the size, scale, complexity, and importance of our logistics network and workforce. We press a button and wait for a package, or swing by the grocery store or pharmacy in total confidence that we'll find what we need on the shelves.

But behind that ease and confidence lies an army of workers. There are 6.4 million in the broad transportation and warehousing industry, which amounts to roughly three percent of the total U.S. labor force. As an industry, transportation and warehousing is the 11th largest sector in the labor market, just behind finance and insurance (6.7M employed in 2020) and just ahead of wholesale trade (6M employed in 2020). And that labor market is not only enormous, but growing. Transportation and warehousing grew by 3.2% since 2019, likely in response to the growth and market share consolidation of businesses like Amazon and Walmart.



Obviously, transportation and warehousing includes a broader set of logistics operations than trucking alone. But when we narrow our focus accordingly, we still find growth. Heavy tractor trailer drivers grew by 2.1%, for a total of 1.9 million jobs. In fact, heavy tractor trailer driving makes up nearly 30% of the jobs in transportation and warehousing.

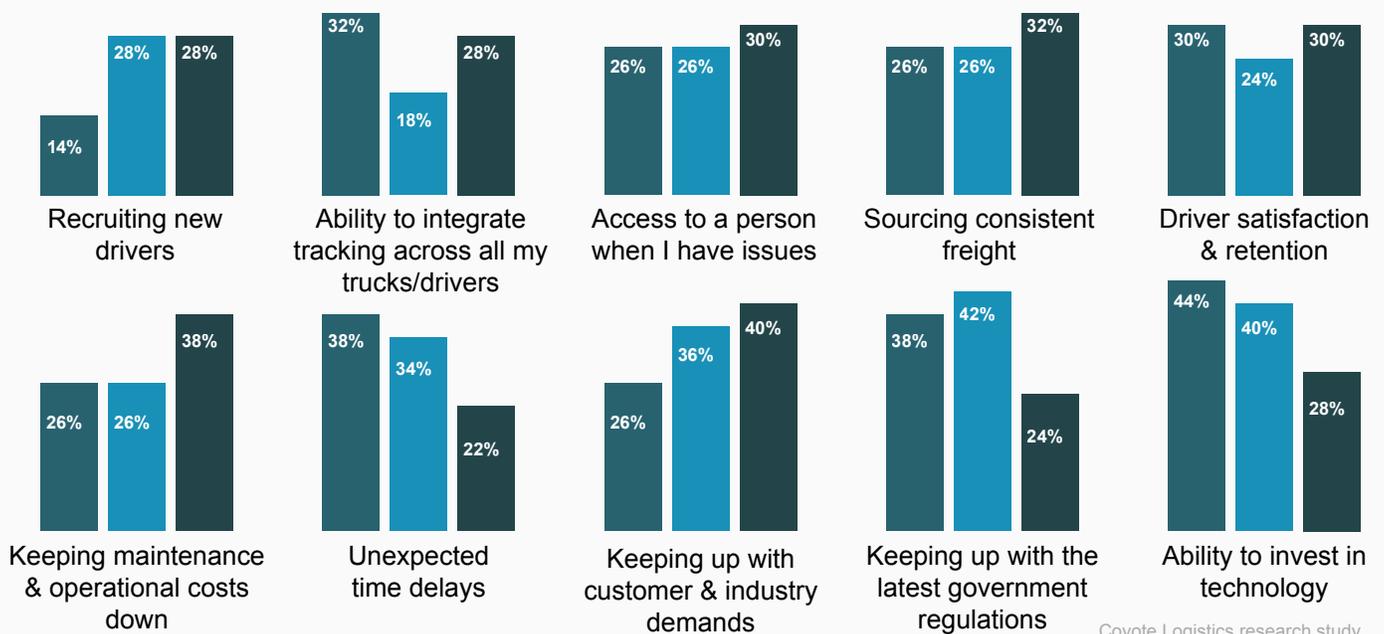
Aside from overall growth and contraction, the crucial question here is, as we emerge from 2020, does the labor market have a real or pronounced shortage of commercial truck drivers?

Anyone want to drive?

Employers in the trucking industry often speak to the difficulty and frustration involved in maintaining a viable workforce. According to a Coyote Logistics research study, 30% of large carriers state that “driver satisfaction and retention” is one of their top three challenges, while another 28% state “recruiting new drivers” is as well. Monica Byers, CEO of Sugar Creek Transportation, stated: “The truckload driver shortage is the biggest challenge I have and it’s much harder to get company drivers than to hire on owner-operators.”

Top carrier challenges by business size

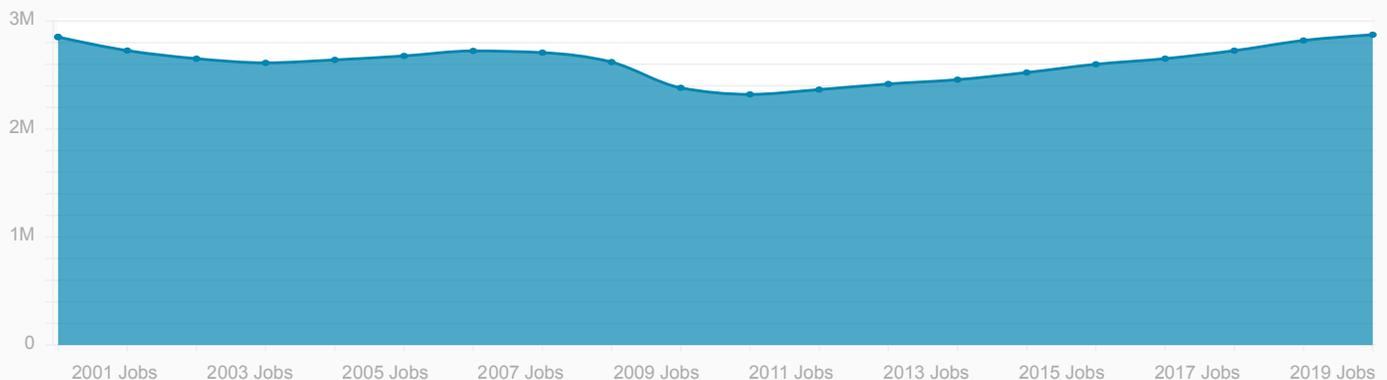
■ < 3 trucks ■ 4-50 trucks ■ 51+ trucks



Coyote Logistics research study

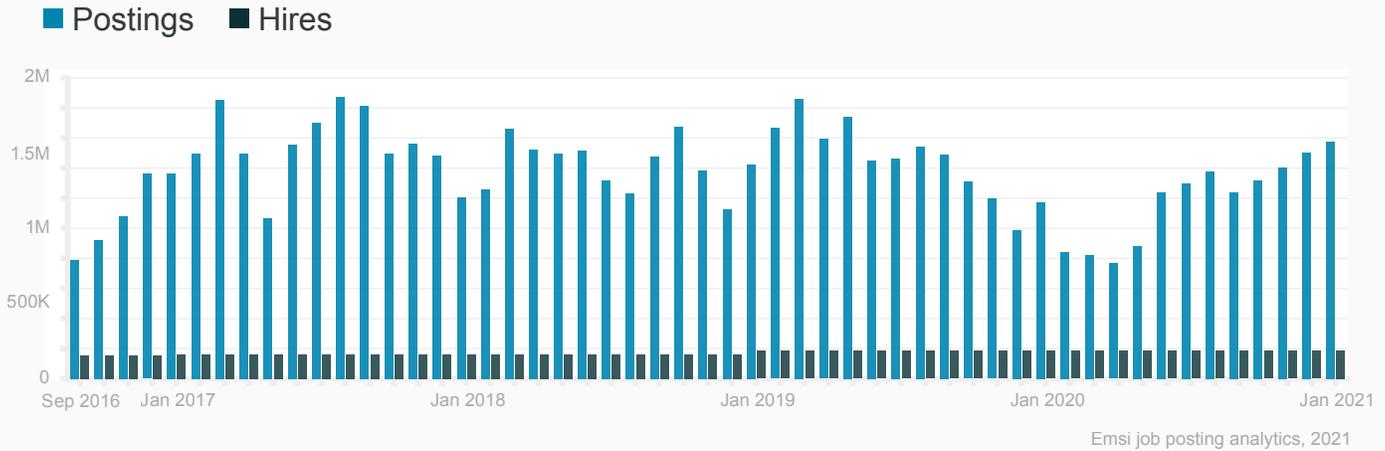
In 2008, there was a noticeable dip in the number of jobs in the two occupations that make up trucking: heavy & tractor trailer truck drivers, and light truck drivers. And while the trend started to reverse itself around 2011, only in 2017 did trucking regain its 2005 peak.

Trucking occupations by year



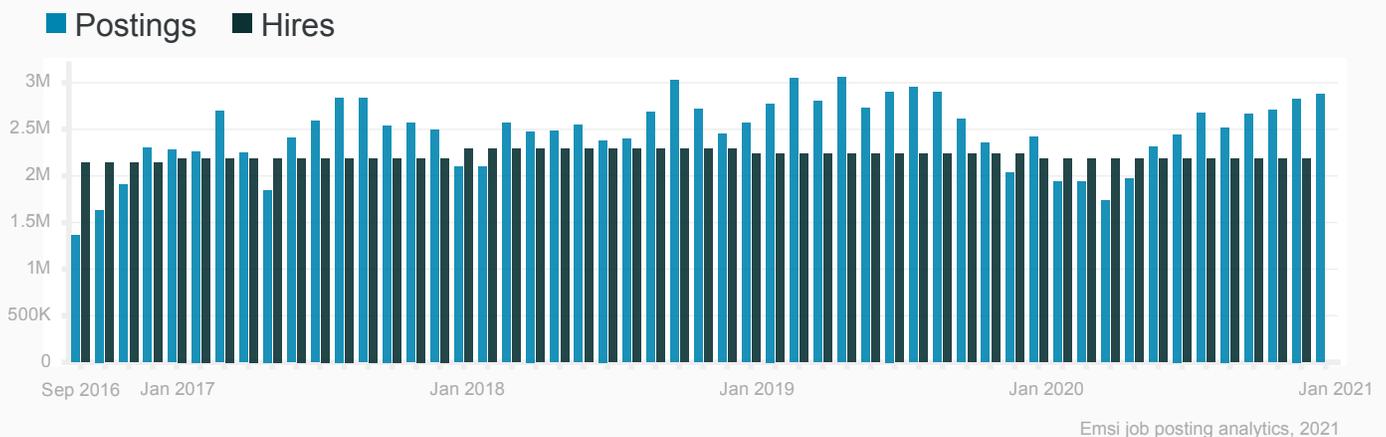
Emsi job posting analytics, 2021

Moreover, over the past several years, there have been about six job postings for every hire.



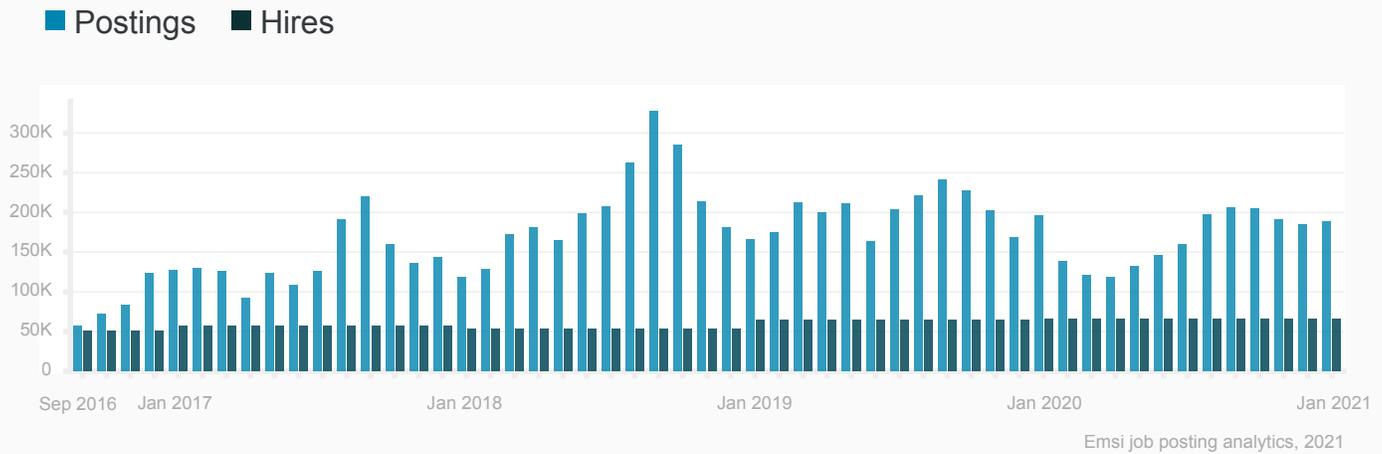
To gauge how normal or abnormal this is, we need a point of comparison. Blue-collar workers in aggregate should provide one: the broad labor pool involved, workers with a high school diploma or less, is the same, and observing them as a group should offset any particular industry’s idiosyncrasies.

When we look at blue-collar occupations as a group over the same period, we see approximately one posting for every hire.



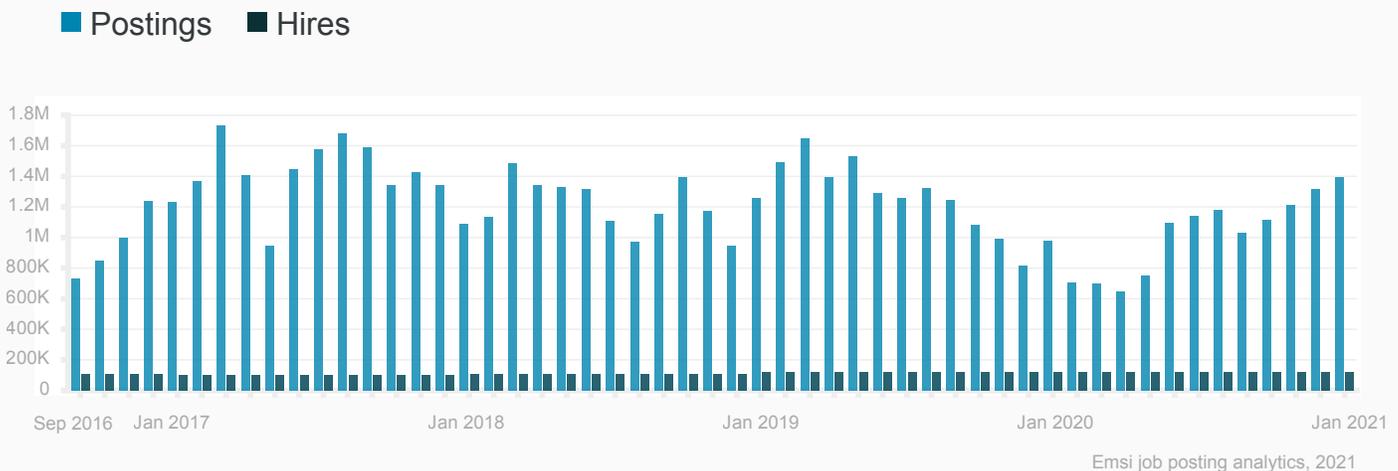
Firms are posting for long-haul drivers significantly more than they’re hiring them, to a degree that’s out of sync with general posting trends for this type of job. Moreover, when we disaggregate those two occupations, we begin to answer our question: is the trucking shortage uniform across various types of trucking, or specific to a particular type of trucking?

For light trucking, the difference between hires and postings is only 1 to 2.



Companies hiring light truck drivers are seeing significantly more success with their efforts to hire than trucking in aggregate.

But for heavy and tractor trailer truck driving, it's actually 1 to 9.

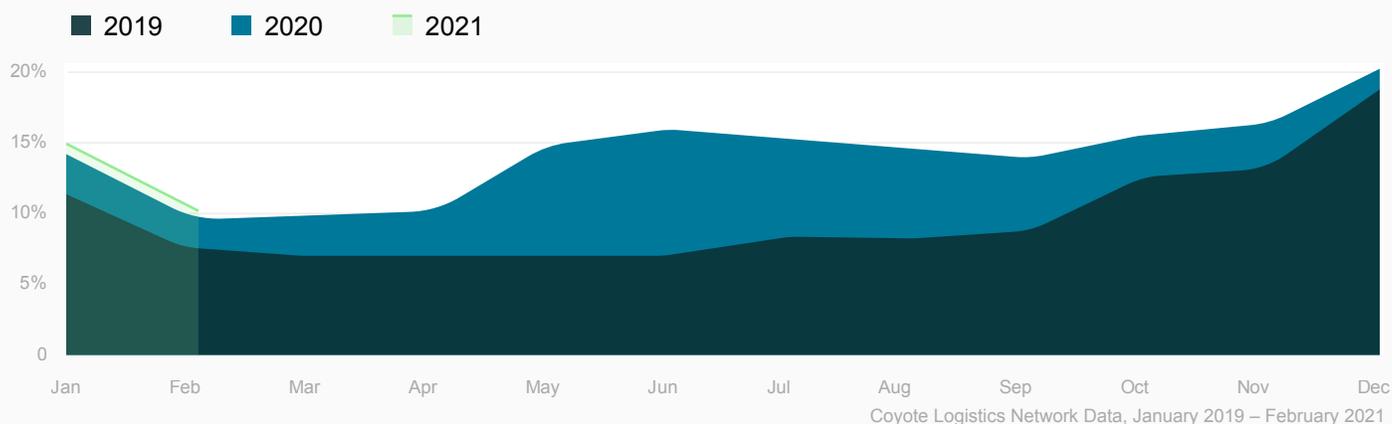


Companies hiring long haul truckers are seeing low success rates when they post jobs, and it's their struggle to hire that largely accounts for trucking's posting dynamics.

When we shift our focus from occupations to the industry, we see a similar pattern. Long-distance trucking of all kinds has declined since 2019: both truckload (-0.2%) and less than truckload (-0.6%). Local truckload has not. Some of these changes may be due to recent changes in supply chain dynamics, which we'll discuss more below.

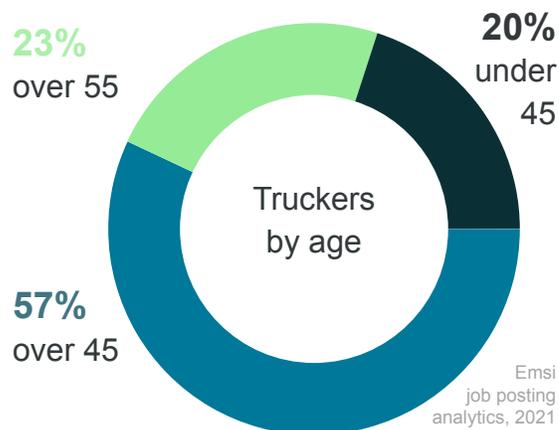
These numbers track with what we're seeing on the ground: not only is there little desire to enter the field of trucking, but drivers vastly prefer to go into short-haul, light truck driving than long-haul freight. According to owner-operator Jimell Johnson of J&S Trucking, "I only want to move freight in Texas now, so finding enough freight to keep moving can be difficult." Mr. Johnson is not alone. According to Coyote Logistics network data, short-haul loads have increased year-over-year by 3% (see the chart below). That may not seem like a drastic change, but in an industry as large as the truckload market, any minor fluctuations can have drastic implications to the larger global supply chain.

Short Hauls



Here's another facet to the trucking shortage to consider.

Nearly 57% of all truckers are over 45, while 23% are over 55. In other words, nearly a quarter of the current trucking workforce will hit retirement age in the next 10 years, not including the nearly 8% of truckers who are currently working above retirement age.



The workforce composition suggests that young workers are not being recruited at rates that will replace current workers as they exit the market due to age or disability. This issue is further compounded by a relative dearth of younger workers overall compared to the abundance of baby boomers.

And while many white collar occupations can perhaps extend working years to compensate for a lack of young workers, with more physically taxing occupations, the strategy becomes increasingly risky. However you parse the debate about a current commercial driver shortage, we are certainly facing a near-term future long-haul driver shortage if current trends continue.

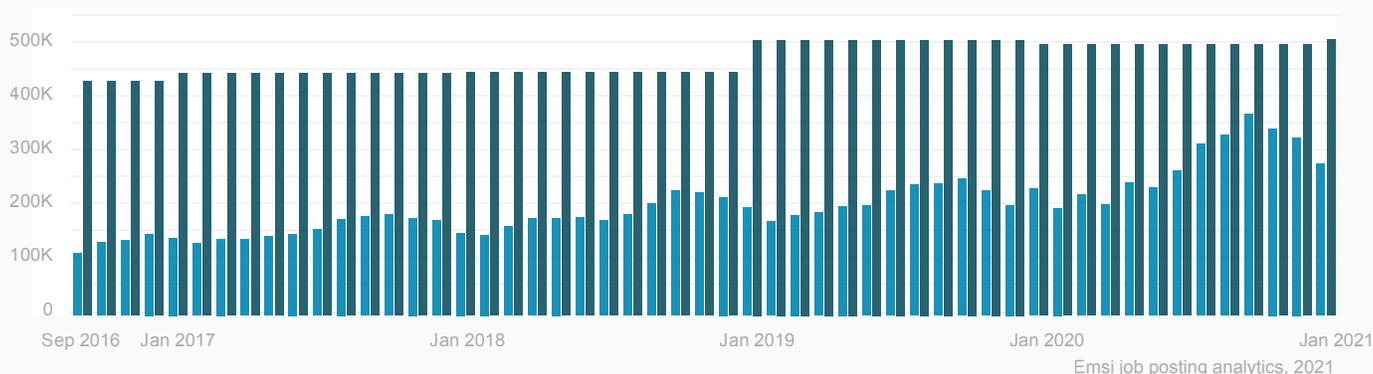
Warehousing: the competition

Warehouse workers, the other side of the logistics equation, tend to be younger. Over 62% of warehousing jobs are filled by workers under 45. Interestingly, all warehousing jobs have grown since 2019. And far from posting more than hiring, warehouse occupations tend to see significantly more hires than postings.

The chart below shows three common warehousing occupations. For most of the last four years, there have been about two hires for every job posting. This indicates that employers are able to fill these jobs via methods such as word-of-mouth referrals and local job boards, and don't rely as much on job postings. Were warehousing jobs particularly difficult to fill, we would probably see much more posting activity.

Warehousing

■ Postings ■ Hires



There are approximately two hires for every warehousing job posting. Trucking jobs, on the other hand, have about six postings for a single hire.

Trucking and warehousing should, in theory, share a similar demographic pool. In other words, both should provide attractive entry-level jobs for the physically capable and non-college educated. But when young people enter transportation and warehousing, they tend to do so on the warehouse side.

The warehousing comparison does not only identify a more successful competitor for young talent. It also suggests trucking's challenges are not a function of the logistics sector as a whole, but specific to trucking.

Trucking vs. the competition: what makes it hard to hire commercial drivers?

The hurdles to becoming a driver

SO, WHAT DYNAMICS ARE CREATING THE LABOR SUPPLY PROBLEM?

1. Wages may be growing too slowly

Wages are a possible culprit for hiring difficulties in the trucking industry. According to a recent Centerline study, 76% of truckers say that competitive pay is the top factor in their decision to take a job, yet 1 in 2 say that current wages are not competitive.

Trucking compensation is not a simple matter of abysmal wages. But the industry is dealing with a perception of slow wage growth for a job that was once a proverbial example of blue-collar work that provided high wages and a comfortable middle-class lifestyle.

2. A difficult life on the road

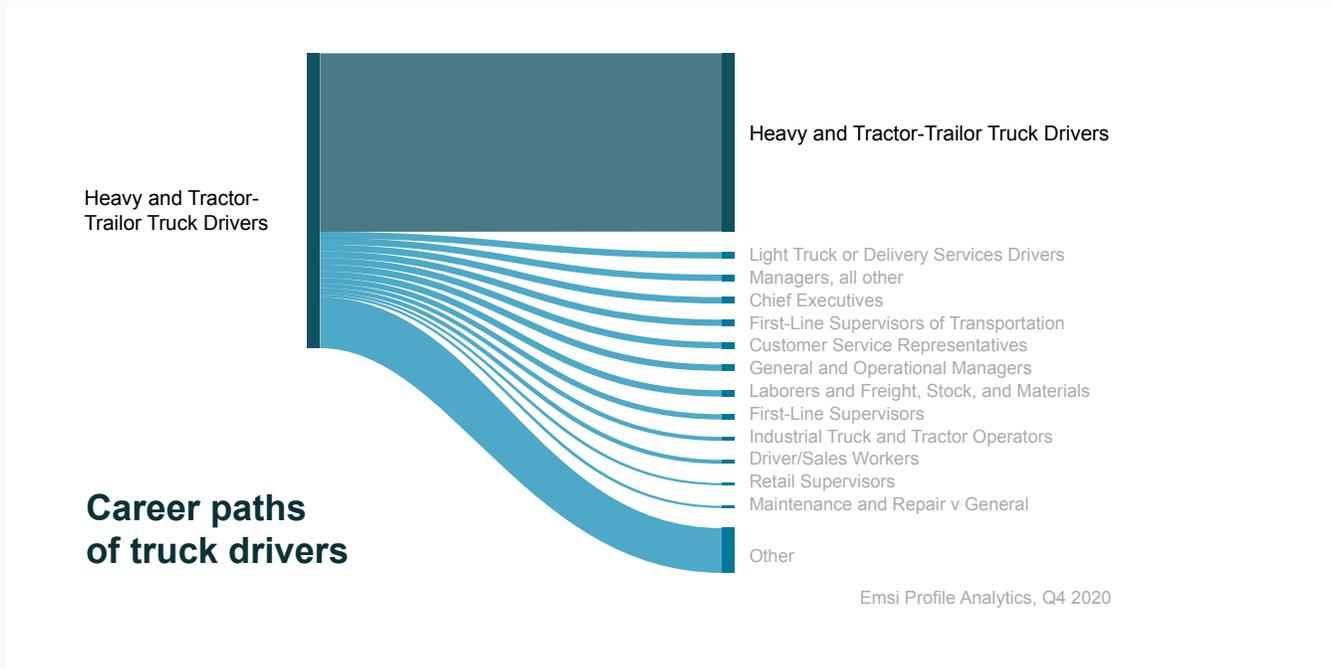
The social contract that undergirds trucking in popular imagination is a hard life for high pay. Thus, the perception of relatively low wages may be exacerbated by the demanding and sometimes dangerous nature of trucking.

According to a Centerline study, 50% of commercial long-haul drivers do not feel safe on the road. Nik Mileusnic, Operations & Dispatch Manager at MDS Trucking reinforced the importance of safety by saying, “We know reliability and safety are key concerns for shippers, so we do everything we can to ensure that we deliver by making sure every driver we hire has a few years of experience and a strong safety record.”

Trucking was the sixth most dangerous occupation group in 2018, according to BLS¹. And the onerous and risky side of trucking may itself be subject to a feedback loop. With an undersupply of drivers, shippers may be tempted to tacitly condone or positively encourage longer routes with fewer breaks, and other risky behaviors, to maintain delivery schedules. This makes the road experience less safe, which in turn makes it difficult to attract enough workers.

Similarly, quality of life issues can make long-distance trucking in particular a hard sell. 76% of truckers prefer local trucking or short haul—an unsurprising finding given the demands that life on the road places on one’s personal life. Nor is personal life the only quality of life issue in play. Obesity and smoking are both twice as prevalent in long-haul truckers as in the general population, and truckers are at an increased risk of chronic diseases such as [heart disease and diabetes](#).

1 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4511102/>



3. Lack of pathways to growth

A path in which a difficult life on the road for a limited number of years leads to upward mobility and career growth may present a more attractive option for potential entry level recruits even without drastic wage increases. But at present, truck drivers mostly tend to stay truck drivers.

4. Barriers to entry

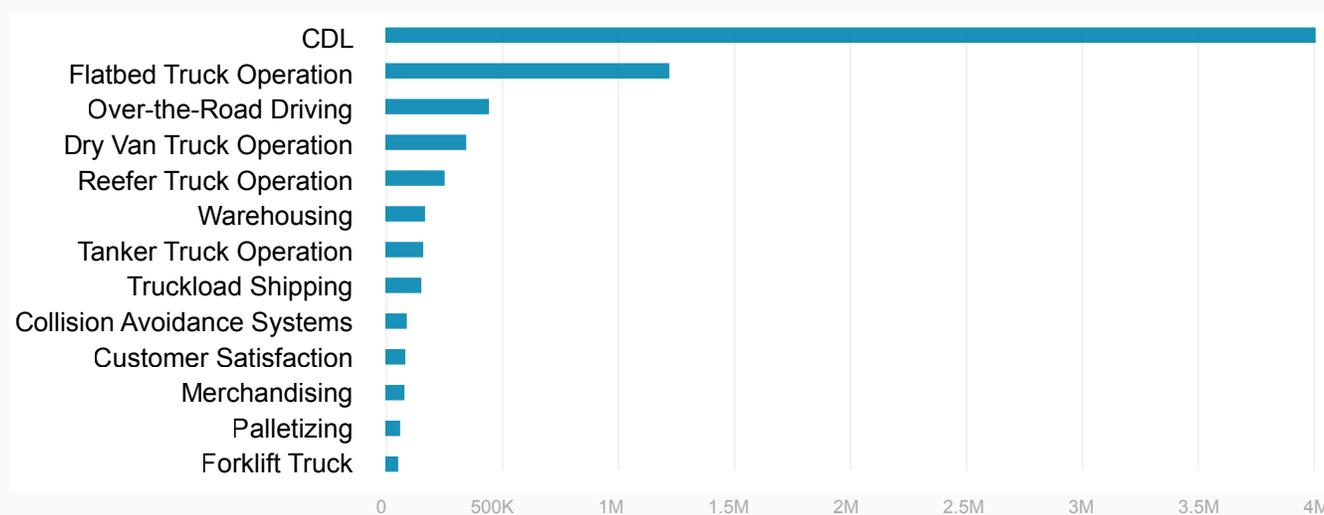
Across local markets, the most consistent and often the largest skill gap was for a CDL license. It's also by far the most posted for skill nationally, appearing in nearly four million posts (the runner-up, flatbed truck operation, appears in just over a million). A commercial driver's license (CDL) for the operation of heavy-duty tractor trailers is not, like a basic driver's license, simply acquired in the normal course of adulthood. In most cases it requires the investment of time and money in a truck-driving school.

The licensing requirement, more than wages, is perhaps the single biggest difference between the warehousing and trucking recruitment process. While you may not be able to operate a forklift on your first day, in most cases, you can walk into a warehouse as a laborer with no baseline technical skills and quickly train on the job. Trucking, by contrast, involves a licensing process before any work can be done. Since that license is legally mandated, it is non-negotiable. The only question is who will assume its cost—the worker or the firm? Based on job posting and profile data, it appears that right now, the cost is falling on the workers.

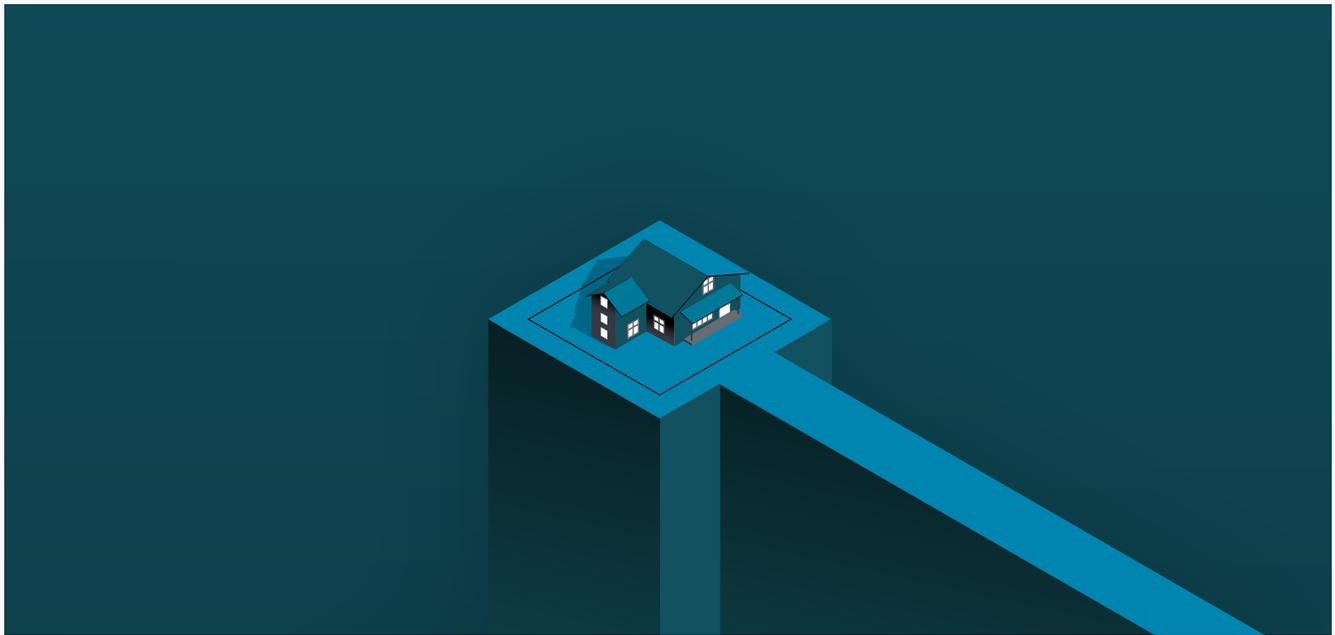
And overwhelmingly, job postings for truck drivers not only call for a Class B CDL license, but experience as well. This perhaps explains why most current truck drivers come from previous truck driving jobs.

Even assuming increased wages, trucking businesses will not be able to grow the labor pool and change the age composition of trucking unless more firms are willing to train new workers. The license and experience requirements, which simply do not exist in warehousing, create a significant barrier to entry that would be relatively simple to remove.

Top skills in job postings for truck drivers



Emsi job posting analytics, 2021



The COVID-19 impact on truckers and logistics

It's impossible to analyze the state of the trucking industry without devoting some attention to the anomalous circumstances of the past year.

SMALL BUSINESSES CLOSING MEANS LESS DEMAND FOR TRUCKING

First, and perhaps counterintuitively, we actually see a decline in job postings for various logistics industries from 2019 to 2020. If we compare job posting activity for many transportation-related industries across 2020, we observe decent growth.

For instance, truck transportation, which had some 4.1 million unique job advertisements in 2019, fell to only 2.5 million postings in 2020. Across 2020, job postings for truck transportation grew by nearly 60% (January and February started pretty slow regardless of the COVID situation). But when we compare 2019 to 2020, we see a very large 38% decrease in posting activity.

Much of this is likely related to the fact that while companies like Amazon and Walmart thrived under COVID conditions, countless small businesses, which generate huge demand for trucking and transport, suffered. Restaurants and local shops on Main Streets across America essentially stopped making purchases for their businesses, either because they were locked down or because they lost their customer base. And like the butterfly effect, the woes of small business owners appear to have thrown quite a wrench in the trucking activity.

LABOR FORCE PARTICIPATION HAS NOSEDIVED

The trucker shortage may also be exacerbated by trends in the broader workforce.

Annual job postings by industry

Industry (NAICS 3)	2019	2020	% Change since 2019	% Change since before COVID (Jan/Feb 2020)
Support Activities for Transportation	1,015,864	536,997	-47%	150%
Transit and Ground Passenger Transportation	170,307	90,894	-47%	93%
Truck Transportation	4,095,027	2,541,093	-38%	59%
Warehousing and Storage	44,105	35,982	-18%	49%
Total job postings	55,348,627	37,767,656	32%	

Emsi job posting analytics, 2021

In late 2020, Emsi [observed that there was a broader shortage of workers](#), especially for more entry level (sub \$20 per hour) roles. Much of this was (and likely is) driven by a combination of four factors.

First, many furloughed workers probably initially believed that they would eventually get their jobs back, although this feeling is likely fading now. Second, government interventions in the labor market have kept people in the lower wage categories from quickly returning to the labor market. Third, many working age people have young children at home—thus preventing them from entering the labor market while schools remain closed. And fourth, many people likely fear contracting the virus, especially as some research suggests that [blue-collar workers may be at higher risk of death](#).

All these factors are likely influencing many people that would or could take trucking jobs. Even though the overall demand for trucking might be down (comparing 2020 to 2019), so also is the requisite interest in these jobs. Labor force participation [continues to nosedive](#), which means there are fewer people to fill the available jobs in any given industry.

The road forward

While current economic conditions present daunting challenges, the data in this report suggests that the trucker shortage is by no means intractable.

Whether you're a carrier hiring, a shipper adding to your private fleet, or any business that has to procure commercial truckload capacity, this is an important issue, and as drivers get older and the demand for them increases, so will the problem. To keep critical supply chains running, ensure a better life for the men and women behind the wheel, and bring stability to shippers, we need to take steps to address the issue.

HERE ARE SEVERAL DIFFERENT OPTIONS FOR ORGANIZATIONS TO CONSIDER:

1. Follow truckload market forecasts and pivot your strategy accordingly

The spot market's volatility has a direct impact on the industry's ability to hire (and retain) good drivers. That's why it's imperative that everyone within the supply chain and logistics community has a [basic understanding of the U.S. truckload market](#) dynamics and keeps up with forecasting models.

If you're a shipper, understand the market dynamics and anticipate its impact on your transportation budget. Find the right balance of spot to contracted freight that sets you up for the most success in the projected market environment. And don't forget to account for seasonality, which can drive spikes in demand for capacity at different times of the year based on the commodity you're moving.

If you're a carrier, leverage inflationary periods (times of high spot rates, like Q4 2020) as an opportunity to reinvest in the business, buy or lease more trucks, hire more drivers to operate them, and invest in retaining your people.

“Market fluctuations are inevitable—it's important to scale up your fleet steadily. For us, the magic number is around 10–15% fleet growth each year. By being strategic, it's possible to achieve consistent growth even when the truckload market is soft.”

— BIK PANNU, AMERICAN DREAM LOGISTICS.

If your organization is able to do so, raise wages and advertise those higher wages in job postings.

2. Develop a long-term business plan

Once you understand market dynamics and have visibility into its future forecast, it's important to develop not just a short-term approach to securing capacity or drivers, but also a longer term business strategy.

If you're a shipper, understand the market dynamics and apply an "always on" [Shipper of Choice strategy](#) by taking care of your primary carrier network. That means tracking performance, applying best practices in relationship management and not nickel-and-diming your best carriers. Reward them for their consistent performance by paying them the rates they deserve. According to Steve Abiadal, a Senior Director of Logistics: "Understanding the truckload market cycle framework helps us anticipate shifts, which in turn helps us to be more strategic in financial planning and setting bid strategy. Specifically, we knew that the market had not yet peaked heading into our bid in January 2018 and instead of adding more capacity in the form of new carriers, we put intense focus on strengthening relationships with core carriers based on market insights."

Similarly, carriers should practice a "carrier of choice" or preferred carrier strategy to make their services more appealing to shippers. This means investing in technology for greater tracking visibility and seeking dedicated or contracted opportunities on preferred lanes to offer more stability to both your business and your drivers.

Also, partnering with a trusted third-party logistics provider can help you not only identify dedicated freight, but also opportunities to dynamically optimize your routes and find backhaul to fill your empty miles.

3. Reduce barriers to entry by conducting more on the job training

At the very least, carriers and private fleets should remove experience and education requirements from their job postings. Ideally, firms would assist new recruits in getting a Class A/B CDL license, and advertise their willingness to do so. Removing barriers to entry may be especially useful in attracting younger workers, and capturing furloughed workers who may be eager for a new job but lack the resources to invest in their own retraining.

Additionally, training and learning opportunities should never stop once employees are hired. Shippers and carriers should stay educated on industry trends and [changes to government regulations](#)—such as the recent U.S. Department of Transportation's Drug and Alcohol Clearinghouse and Hours of Service policies—that can impact driver retention and utilization.

"A core focus for us is providing superior service to the drivers we hire. Training is a critical part of communicating expectations to drivers and making sure they are equipped for success on the road. That starts with our driver orientation that includes in-depth training sessions."

– NIK MILEUSNIC, OPERATIONS AND DISPATCH MANAGER AT MDS.

4. Invest in worker safety and quality of life.

Ensuring that employees—both drivers and warehouse workers—have adequate breaks, safe accommodations, manageable and predictable schedules, paid time off, healthcare, and other perks can help attract fresh candidates while also making these positions more highly desirable.

For fleets, even if it's not possible to fully satisfy driver wishes to stay local with, according to Coyote Logistics network data, a whopping 77% of January 2021 loads still being long hauls, offering a certain amount of local delivery and/or a monthly minimum of consecutive days at home could be an attractive compromise.

Similarly for shippers, working with your providers to optimize your network could help find overall efficiencies as well. This may reduce mileage or moves within your network, which could provide more attractive routes for carriers and save you money in the long run.

5. Offer and communicate pathways to growth

Communication, whether with your prospective and current employees or with your providers, is the key to long term success.

It may be possible to recruit young talent if there is a clearly marked and steady progression towards career development, the work/life balance they desire and even higher wages. The clearer you communicate your benefits and development plans, the more you position the industry as a whole as a competitive and desirable one to start or grow your career in.



Conclusion

The challenges facing the trucking industry have only increased over the course of the past year. But with bold vision and strategic changes, the industry could lie at a point of enormous opportunity. By investing in the workforce, understanding the truckload market dynamics, and setting long-term strategy, firms can not only meet their own current labor and capacity needs, but secure the next generation of supply chain workforce to meet America's growing needs.

If you're looking for more information on how to elevate your talent acquisition strategy for drivers or other positions, Emsi's [labor market data](#) and experts can guide you through the best ways to attract and source talent.

[Coyote Logistics](#) has a global network of over 70,000 carriers and 14,000 shippers with scalable solutions to solve supply chain challenges today. Shippers and carriers of all sizes trust our team of specialists to find the right services and solutions to keep freight moving forward.



ABOUT EMSI

Emsi is an economic data and analytics firm. We provide labor market data and services for employers, higher ed institutions, and economic/workforce development professionals to help them promote economic prosperity in their regions. Emsi is headquartered in Moscow, Idaho, with additional offices throughout the US and in the UK.



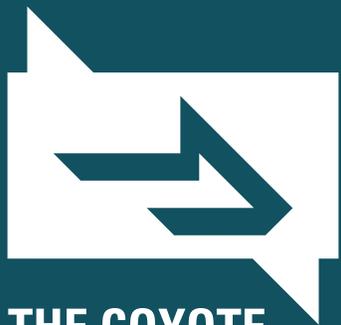
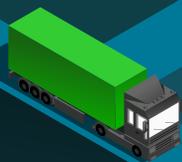
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Coyote Logistics is a leading global third-party logistics provider that combines a diverse, centralized transportation marketplace matching more than 10,000 shipments every day. Coyote offers a comprehensive multi-modal solutions portfolio—including truckload, less than truckload (LTL), intermodal, air and ocean, and cross-border—with data intelligence and market insights to help empower our customers' business growth in a rapidly changing world. Coyote became a UPS company in 2015, adding to our expanding portfolio of global services. Headquartered in Chicago, Coyote has more than 3,000 employees operating in 19 offices worldwide. For more information, please visit coyote.com.



ABOUT THE COYOTE COLLECTIVE

The Coyote Collective is a forum that brings together supply chain experts from around the world to collaboratively solve the industry's most complex challenges. This new industry forum will help facilitate innovation, pilot advanced programs and deliver a wide variety of resources, including: webinars, executive insights, original research studies, industry analyses and other thought leadership content. For more information, visit coyote.com/research/coyote-collective.



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