DAT
Freight & Analytics

2023 FREIGHT FOCUS

The Transportation & Logistics Outlook

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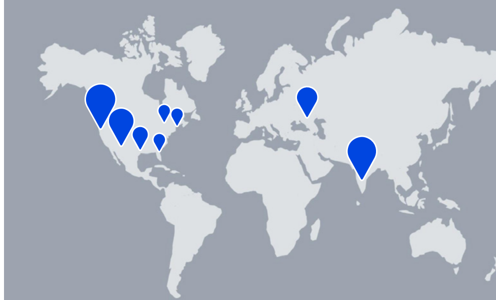
Finding Balance in the New Year

After nearly two years of pandemic-fueled disruption, things felt more familiar in 2022. We were able to eat at restaurants again, work in the office, and enjoy collaborating with our coworkers. We re-entered our children's classrooms, attended concerts, shopped in stores and traveled. Maybe some of those habits weren't exactly as they were before COVID-19, but all in all, it felt as though the world had reopened.

The freight markets settled back into familiar habits as well. As bottlenecks eased, typical seasonal patterns emerged. Carriers, shippers and freight brokers started to find some semblance of balance, as transportation markets fell back into more predictable ebbs and flows.

Given the circumstances, it would be easy to fall back into old habits. But doing that ignores the hard lessons learned from the pandemic, which is why DAT will not return to business as usual. Rather than take a breather after a tumultuous two years, we're taking the opportunity to invest in solutions that will minimize the impact of the next set of disruptions. And then the next.



With our expanding global footprint, we're ready to take on 2023.

COVID-19 didn't introduce new problems in transportation. Instead, it shined a bright spotlight on existing ones. Now is the time to fortify our supply chains, strengthen our transportation networks, and build a more dynamic and proactive way of navigating this volatile marketplace.

For DAT, that means creating cutting-edge technology and analytics that allow transportation professionals to not just regain their balance but keep it – providing flexibility and opportunities so that our customers thrive.

The path ahead

Of course, truckload freight is highly cyclical, and balance means very different things to different people. Not only that, but challenging macroeconomic conditions loom as companies brace for the possibility of recession.

All of this underscores how analytics is about more than just collecting data. Turning those data points into wisdom is where analytics proves its value. As more and more analytical tools enter the transportation marketplace, finding a trusted partner is critical to moving forward in the right way.

For the next several pages, we'll examine the key trends that defined 2022 and analyze the market forces that will shape 2023. We'll pinpoint the different ways these forces impact different players in this industry, because healthy supply chains and transportation networks require all hands on deck.

See you in 2023.

The Return of Seasonality

What a difference a year makes. Twelve months ago, we were talking about constrained truckload capacity and surging demand, as disruptions and bottlenecks piled up to wreak havoc on supply chains. A year later, transportation providers and purchasers have a different cloud of uncertainty hanging over them – the economy.

Is a recession coming (or is it already here)? If so, how deep will it be? The answer to these questions will shape much of 2023. But to understand where we're going, it helps to look at how we got here.

The pandemic kicked off a long chain of disruptions, a domino effect that knocked transportation networks and supply chains out of balance for the better part of two years. This created a historic period of intense inflation for truckload rates. For the spot market – where truckload shipments are handled on a transactional basis – those prices peaked in January 2022 but by April they had fallen below the average contract rates.

This created the first inverted truckload market since the spring of 2019. In previous cycles, the inversion lasted between six and nine months, so this cycle may close soon. However, the gap between the two rates is still exceptionally large at around 46 cents per mile for dry van freight, which translates into a Spot Premium Ratio of -16%, which is a DAT iQ calculation of how much pressure spot rates are placing on contract rates, providing early signs for changes in contract prices. This measurement implies that the market will not revert until Q2 2023 at the earliest. So, we should remain in a shipper's market through most of 2023.

Truckload markets have softened considerably since then. As a measure of supply versus demand, load-to-truck ratios on the DAT One network fell 71% over the year, as much of the freight that spilled over to the spot market during the pandemic slowly returned to its more typical placement on shippers' routing guides. This contributed to an inverted market, where contract rates exceeded spot rates by a record-setting margin.

Meanwhile, Russia invaded Ukraine. This kicked off a conflict that helped send energy costs skyward. While high fuel prices kept transportation costs elevated for shippers, carriers felt their profits squeezed, especially the small fleets that operate primarily in the spot market.

DAT by the numbers

141K
Customers

1.6M+
Trucks

1.2M
Daily load posts

430M
Loads posted in 2022

10.6M
Daily freight rate forecasts

$148B
Invoices analyzed in 2022

95%+
Rate forecast accuracy

The markets reshuffle

Many of the bottlenecks of 2021 eased in 2022. For example, the number of ships waiting to unload off the coast of Los Angeles fell to the single digits by the end of the year, down from over 100 in January.

Much of that freight found its way to East Coast and Gulf Coast ports. In October, port volumes increased by 10% and 28% respectively, compared to 2021, as importers sought to avoid port congestion and labor disputes on West Coast ports. That shift sent West Coast import volumes down 11% year over year as a result. The coastal shift in import volumes put less stress on California transportation networks but created a surge in truckload volumes for containerized and break-bulk freight in Houston; New Orleans; Mobile, AL, and Savannah, GA.

Regardless of the location, the surge in containerized imports over the past two years put stress on many parts of the supply chain. Empty containers backed up at ports, dray carriers couldn't collect loaded containers, chassis trailers were in short supply, and overcrowded warehouses kept receivers from unloading containers.

As imports tailed off toward year's end, container and chassis trailer congestion improved. Meanwhile, warehouse space showed signs of easing during the retail holiday shopping season.

While markets reshuffled, 2022 also saw declines in truckload demand that increased difficulties for small carriers. Ongoing droughts in California led to the state's lowest truckload produce volumes since 2016, while unseasonal cold snaps in Texas led to lower-than-average yields for many crops, capping the typical spike we see during peak produce shipping season in June and July.

As consumers adjusted their spending due to inflation, peak retail shipping season also proved to be more muted in 2022, continuing the difficulties small carriers have faced throughout the year.

What drove 2022?

The service sector found its footing

After months of lockdown and isolation, consumers spent more in restaurants and hospitality after previously spending on durable goods. On average, $1 spent on services generates less truckload demand than $1 spent on durable goods.

Inflation isn't just for consumers

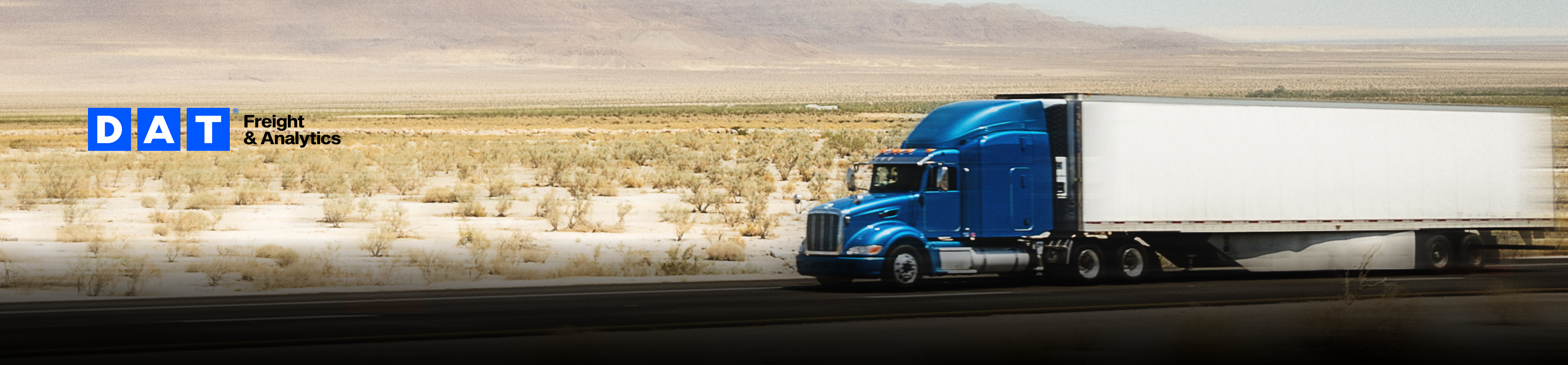
Business expenses rose considerably, from labor to insurance and from fuel to maintenance. Linehaul rates saw significant deflation throughout the year, but fuel costs largely offset that.

Shippers rebalanced their portfolios

During the pandemic, shippers increased the usage of dedicated or private fleets, shortened contracts, and spent more on the spot market to secure capacity. As the pandemic receded, shippers rebalanced that mix with less dedicated and spot.

Supply caught up with demand

Throughout 2021, capacity struggled to keep pace with truckload demand. Early 2022 showed signs of equilibrium, but the record number of new entrants – attracted by high rates during the pandemic peak – created an oversupplied market that pushed spot rates downward.



Top 10 Truckload Markets 2022

Dry Van

1. Atlanta, GA
2. Dallas, TX
3. Chicago, IL
4. Los Angeles, CA
5. Fort Worth, TX
6. Ontario, CA
7. Joilet, IL
8. Houston, TX
9. Columbus, OH
10. Charlotte, NC

Temp-control

1. Atlanta, GA
2. Chicago, IL
3. Dallas, TX
4. Fort Worth, TX
5. Fresno, CA
6. Fayetteville, AR
7. Joilet, IL
8. Los Angeles, CA
9. Lakeland, FL
10. Ontario, CA

Flatbed

1. Houston, TX
2. Dallas, TX
3. Fort Worth, TX
4. Savannah, GA
5. Birmingham, AL
6. Cleveland, OH
7. Atlanta, GA
8. Chicago, IL
9. South Bend, IN
10. N Charleston, SC

Note: Based on the DAT iQ database of more than $137 billion in invoices for both spot and contract truckload freight.

How to Succeed in 2023

Despite the economic headwinds facing many industries, there are strategic opportunities for transportation professionals in the new year. Taking advantage of them will require collaboration with your trusted partners, and those relationships will prove critical in 2023.

Of course, there are the usual suspects when it comes to freight disruptions – hurricanes, snowstorms, etc. – but we can add recession, labor shortages, inflation and international conflict to the list. So, while we expect traditional seasonal patterns to reestablish themselves in the coming year, these key variables could quickly change the market. In other words, the need for flexibility never goes away.

Top trends to watch in 2023

$ Inflation

Diesel Prices

% Interest Rates

Economic storms brewing?

While the US economy appears to be heading to a recession, there is no clear consensus on either the degree or duration.

Inflation remained stubbornly high at 8.2% year-over-year in September, dropping slightly in October. Diesel prices dropped in late summer but stayed above $5 per gallon throughout fall. The Federal Reserve raised interest rates in November. This was the sixth increase of the year and the fourth consecutive time the hike was 0.75% – a dramatic increase. This suggests that there will be a recession of some degree in 2023.

While this is all being covered in great detail in the mainstream press, the question is: How does this affect transportation?

All three of the above trends lead to lower consumer demand for goods, which in turn reduces transportation volumes across essentially all modes. Some of this is welcome news. For example, the number of ships waiting to unload off the coast of Los Angeles is now in single digits, down from over 100 in January. This is due not only to lower overall shipment levels, but also because shippers shifted to East Coast ports.

The dampening of demand for truckload services has been evident for months. The market has been inverted (where average national spot rates are below contract rates) since April. Dry van spot rates have dropped over 30% since peaking in January while contract rates have only dropped about 5% since they peaked in April.

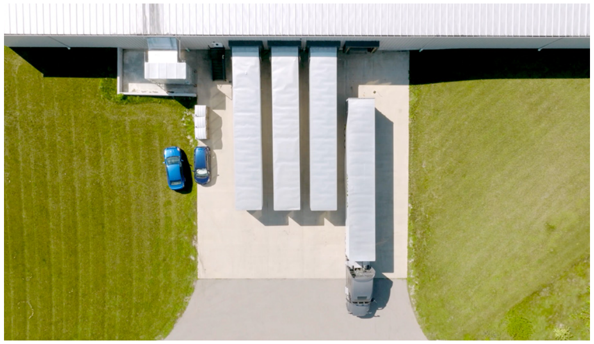
DAT iQ MARKET UPDATE

Join the DAT iQ analytics team live every week as we take a detailed look at market forecasts and react to the current business climate. Join the conversation every Tuesday at 10am Eastern.

How far a dollar goes: Transportation Conversion Factor

Softening consumer demand coupled with bloated inventory for goods (mostly retail) are the primary drivers of lower truckload demand, but another one that deserves mention is the change in the Transportation Conversion Factor, or TCF.

TCF captures the quantity of truckload transportation required for $1 of consumer spending. Essentially, how much truckload input is required to support consumer purchases.



During the chaos of the pandemic, the TCF was high because manufacturers had to ship whatever product they had, wherever it was being requested, and whenever they could to satisfy surging and shifting customer demand. This resulted in low trailer utilization, very short lead times and the introduction of many never-before-served low-volume lanes.

The net effect: TCF increased due to inefficient transportation networks. But one firm's inefficiency is another firm's revenue stream, namely small carriers.

This is changing. Average trailer utilization is much higher now that lead times are not as tight and shippers can afford to hold product longer before filling the trailer.

Networks are more balanced as shipping patterns have stabilized. While spending on services increases versus goods increases, a dollar spent at a restaurant does not nearly generate the trucking requirements that $1 spent on goods does.

The end result: Fewer truckloads are needed to move even the same amount of consumer spending as during the height of the pandemic – but the total demand is also down.

Early promotions by retailers and reduced consumer spending have led to much lower peak season truckload demand. Retailers are overstocked (often with out-of-season products) and will continue to offer reductions to make room for new inventory.

The potential of a railroad strike (and perhaps additional strikes at West Coast ports in 2023) is leading to proactive re-routing and sourcing by shippers. This, combined with falling demand, has reduced or essentially eliminated the number of ships waiting to unload at West Coast ports and shifted some of the queues to the East Coast.

Unfortunately, the infrastructure needed to move freight inland from East Coast ports is not as robust as in the West, so this is causing additional delays.

We expect this push and pull to define much of the first half of 2023. DAT iQ forecasting models point to spot rates hitting the bottom in Q1 2023, with the entire truckload market entering into the next cycle by early Q2.

Key issues for carriers

Higher costs affect all businesses, but motor carriers operating primarily in the spot market have felt the pain more than most, caught between falling linehaul rates and climbing costs. For typical long-haul carriers, diesel prices rose 42% in the first 11 months of this year and the national average was above $5 per gallon for 33 out of 48 weeks.

This has created a higher base operating cost compared to past freight cycles. Currently, those costs for a long-haul small-fleet carrier or owner-operator are between $1.70/mile and $2.05/mile, depending on the length of time in the industry, equity levels and insurance costs.

Carriers that have been in business for a few freight cycles ran at the lower end of the range, since they typically have lower equipment repayments and insurance costs. Newer carriers, however, who paid more than double for a used truck in the last year as a new entrant to the industry, are at the higher end.

There should be some relief on the revenue side of the ledger by mid-year, but the focus will be on the expense side of the books in 2023. With thinner margins, carriers will need maximum asset utilization. That means reducing empty miles, emphasizing fuel economy and coordinating with their customers to reduce dwell times as much as possible.

Larger carriers that are negotiating new contracts can look for opportunities to strengthen the weak spots in their network. Shippers are looking for savings after many months of transportation premiums, so offering discounts on key lanes in exchange for volume on problematic routes could be a worthy compromise.

For small carriers, strong relationships with brokers will prove valuable. A good broker partner can help provide access to freight on lanes where it might be hard to avoid empty miles, helping reposition trucks into markets where demand is higher.

Potential regulations to watch

1. **Speed limiters for commercial trucks**
2. **New financial security / responsibilities for freight brokers and forwarders**
3. **New safety fitness ratings for carriers**

Key issues for shippers

Shippers have enjoyed a buyer's market since the spring of 2022. Many took advantage of the soft market to bring sanity back to their routing guides.

Obviously, this is a welcome relief after the premiums of the past two years. As a measure of changes in the contract truckload market, the New Rate Differential from DAT iQ fell to a near-record of -7% in November. A positive NRD signals a tightening market, while a negative NRD suggests the market is softening. November was the fourth consecutive month of negative NRD.

Despite this, several key limiting factors are still prevalent in the current market that require shippers to be diligent with their operational strategy, forecasting and maintenance of broker and carrier relationships.

Consumer spending remains precarious amid high inflation, with the likelihood of recession potentially threatening the other side of the ledger for many businesses. Labor negotiations at the railroads and the West Coast ports also underscore the need for flexibility, as many shippers prepared contingency plans for at-risk portions of their transportation networks.

Labor shortages on the whole are still an issue across the board, choke points and supply chain snarls still pose a substantive challenge to shippers of all shapes and sizes. Forecasting, visibility and proper planning will continue to be a hot topic for complex supply chain operations.

Finding a balance between cost control and flexibility will remain a focal point for businesses in 2023. Offering full transparency in negotiations with transportation providers will go a long way to achieving these savings while maintaining good relationships with transportation partners, especially if businesses can back their position with data from an independent third party.

Protecting strategic carrier and broker relationships will prove fruitful when the market inevitably turns and capacity tightens.

Potential headwinds for shippers

Economic climate

- Consumer spending
- Interest rates
- Possible recession

Labor challenges

- Negotiations at railroads and ports
- Labor shortages

Key issues for brokers

The current inverted market has presented plenty of opportunities for brokers. The historic gap between contract and spot rates has allowed for larger profit margins than were possible during the height of the pandemic.

That gap will not continue indefinitely, and the shifting markets put a greater emphasis on the need to balance rates, volume and margin. When rates are high, brokers can afford to move fewer shipments since they're making more on a per-load basis. As rates fall, volume becomes more important – but that's compounded by the fact that rates typically fall due to lower spot volume.

Luckily, brokers are also getting invited to bid on more and more contract freight, as the pandemic highlighted for shippers the benefits of having more flexibility in their routing guides. Brokers can utilize numerous partner carriers to provide consistent, cost-effective capacity, making them uniquely qualified to service a shipper's most problematic lanes.

But one of the most difficult challenges for brokers is to provide forward-looking pricing at a time when you expect the market to flip. Anticipating when the market will change is crucial to good pricing decisions. And of course, niche lanes on an RFP require a unique set of insights to price them accordingly.

And just like with shippers, brokers have an opportunity to strengthen relationships with carriers. By providing loads on difficult lanes, brokers can win favor in the next market cycle. Brokers can also gain favorable rates by addressing the carrier's need for efficiency, which can be achieved through automated booking or granting priority access to desirable loads and shipments.

Key supply trends for freight markets

New truck production opening up but likely to slow down through 2023

U.S. heavy-truck manufacturing is gaining momentum as supply constraints ease, so the Class 8 tractor fleet is growing at an accelerating rate heading into 2023, though still slower than past cycles. The acceleration is a headwind for freight rates in the near term, as there's a strong inverse relationship there, but the restrained tractor capacity growth of the past two years supports the case for a shorter spot rate downcycle.

There's still significant pent-up equipment demand from large fleets with recent record order intake for new tractors and a strong industry financial position, but demand is likely to be dynamic in 2023 as the economy faces tougher conditions. Slowing equipment demand in 2023 should set the stage for a tighter truckload market.

Used truck prices returning to earth

Used truck prices are falling back to earth after an astronomic rise over the past two years, and that softening trend should continue in 2023. A 4-year-old Class 8 tractor sleeper with 350k-400k miles is still running over $100k as we near the end of 2022, which is down from $135k in the first half of 2022, but still two-thirds above the long-term average of $60k.

Trailer markets still tight but fleet growth is picking up

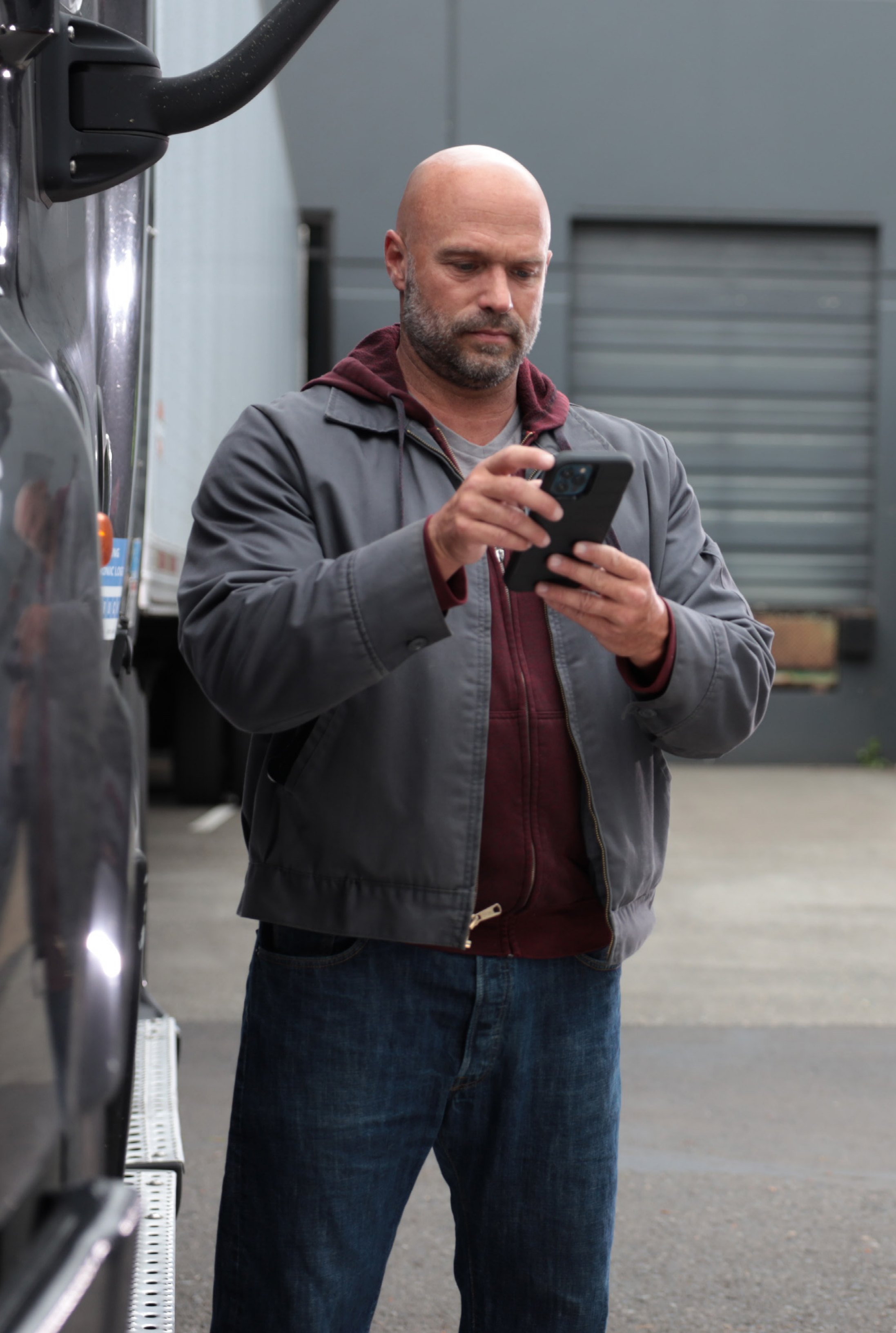
As with the heavy-truck market, trailer orders have begun to surge seasonally as 2023 order slots open. Trailer orderboards are still tight with extraordinary demand from power-only brokerage businesses, but backlog/build ratios have shortened recently on higher build rates, so capacity looks to improve there as well in 2023.

Lots of new chassis coming

For the intermodal market, we see another large year of chassis production in 2023 by historical standards, but down considerably from the record 2022 production of right about 60,000 chassis. This welcome result is 2.5 times the just 24,300 chassis built in 2021, when supply was held back by tariffs and contributed to intermodal network congestion. Equipment is arriving to add capacity and meet demand, but will demand be there?

ACT Research

Analysis provided by ACT Research



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DAT Freight & Analytics delivers solutions that provide the most accurate insights into truckload markets, with the deepest and broadest data in the industry and the largest on-demand freight marketplace in North America.

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