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EXECUTIVE SUMMARY

Transportation’s analytics revolution is just getting started

Heading into 2023, the rollercoaster of recent years had transportation and logistics professionals yearning for the days of business as usual. Truckload markets continued to soften during the year, and we also saw the impacts of the pandemic continue. As it turns out, 2023 was a difficult year for many in the industry.

Moreover, it is now clear that the strategies used for transportation procurement for over three decades are undergoing a shake-up.
What’s causing this?

A key reason is the rise and wider adoption of transportation market analytics. As velocity and agility become even more essential to supply chains, advanced analytics allow transportation organizations to ride pricing waves with dynamic strategies that weren’t previously possible. As we look into the future, it’s clear that the informed use of data and strong analytics will be essential for success in our field.

And we’re just getting started. With the rise of artificial intelligence, the analytics revolution is exploding into all corners of the industry.

Here at DAT, we’re not just thinking about how to get from point A to B. Anyone can collect data. The real value is in elevating data into actionable answers. By making the whole process more efficient, we create better supply chains, better opportunities, and better lives.

But let’s not sugarcoat it — the current market conditions have caused many challenges. Fraud and cybercrime exploded in 2023, and DAT has led an industry charge to improve security to help safeguard supply chains.

Then there are the economic conditions that have exerted huge amounts of pressure on transportation providers, from small carriers struggling with low rates and high costs to brokerages seeing margins disappear amid declining demand.

But the transportation marketplace moves in cycles, so today’s down market will be tomorrow’s inflationary one. We’ll dive into these issues in detail in the pages to follow, with insights and analysis to help shippers, carriers, and freight brokers navigate this always-changing landscape.

Thanks for reading, and here’s to a safe and prosperous 2024.

Satish Maripuri
President and CEO
DAT Freight & Analytics
DAT by the Numbers

1M
Daily load posts

258M
Annual load posts

1.6M+
Annual truck posts

1.35B
Rate lookups per year

$869B
Real freight transactions since 2012

95%+
Rate forecast accuracy

110K
Carrier subscribers
Like with any other market, timing is everything in truckload freight. The ups and downs occur regularly, but “When does one cycle end and the next one begin?” is the million-dollar question.

Generally speaking, the cycles follow a familiar pattern. When truckload capacity tightens, rates rise. When rates rise, new carriers enter the marketplace and large fleets add trucks. As truckload capacity increases and demand softens, rates fall. When rates fall, carriers leave the marketplace and capacity once again tightens.

At the moment, we’re in that final phase, waiting for the other shoe to drop.
For the time being, it’s still very much a shipper’s market, and much of that is driven by what happened almost three years ago.

COVID-19 didn’t introduce new problems. Carriers had the pricing power three years ago. The pandemic-fueled disruptions of 2020 and 2021 stretched routing guides beyond their threshold and pushed truckload rates to record highs. The high rates attracted a record number of new carriers, with the number of for-hire interstate carriers nearly doubling.

When pandemic restrictions eased, consumer spending shifted away from goods (the majority of which are moved by trucks) and more to services, which generated less demand for truckload shipping. Eventually, those extra trucks became an oversupply of capacity, leading to the current inverted market in which spot rates sit well below contract rates.

The gap between spot and contract rates is historically wide (currently around 33-38 cents per mile for dry van and temp-controlled reefers), and the duration of the inverted market has been historically long at more than 20 months and counting. The gaps between spot and contract rates have been fairly stable in recent months, however, so the market seems to have found its bottom.

In July 2023, dry van spot and contract YoY% converged for the first time since early 2022.
Continuing struggles

While the inverted market allowed shippers to capture cost savings throughout 2023 – often leading to double-digit percentage rate decreases in new RFPs – it created difficult conditions for transportation providers. Labor struggles both within the trucking industry and at the ports added to the difficulties, bruising the less-than-truckload (LTL) and parcel sectors especially.

Another serious issue is the worldwide surge in fraud. While technology is transforming the transportation industry, it’s also introduced new avenues for criminals. That’s led to a massive surge in fraud in our industry – of all the accounts closed in the past four decades by the DAT Network Governance team, 65% happened in 2023.

The fraud includes familiar scams like double brokering, but businesses have also had to be more vigilant against phishing, identity theft, and other types of cybercrime. Network security has always been a top priority at DAT, but during 2023 the Network Integrity Unit ramped up security within DAT’s network while also providing the industry with real-time updates on known cybercrime campaigns waged against the trucking industry. We also created an exhaustive library of educational resources on cybersecurity available to the public.

DAT’s dedicated team of experts, the Network Integrity Unit (NIU), governs the largest freight marketplace in North America and safeguards DAT systems against attacks. Over the course of four decades, the NIU has put in a lot of miles in fighting fraud. But with fraud on the rise in every industry, those efforts have kicked into overdrive.

40+ years of network governance experience
150% team growth since 2022
100% of “Bad Player” claims resolved
Small carriers feel the squeeze

New carriers that entered the market in 2020 and 2021 did so at a time when trucking company profitability was at its highest since before deregulation in 1980.

In the second half of 2020, national average linehaul spot rates increased by almost $1 per mile. By the end of the year, diesel prices had dropped 23%. Three years later, those trends have reversed.

The average profit for small fleets and owner-operators was around $1 per mile for most of 2021. In the fourth quarter of 2023, those same businesses are barely breaking even, a situation almost identical to the last soft market in 2019.

Any savings carriers generated during the pandemic will eventually run out. That’s already the case for many. The combination of higher costs, lower rates, and softer demand has pushed a large number of carriers out of the industry, a trend that will continue into 2024 until capacity tightens and realigns truckload supply versus demand.

Brokers are also in a bind

While brokers may not be feeling the pain quite as acutely as small carriers, they’ve been burdened by the overall decrease in demand for transportation services.

Declining demand and slim margins led to a large decrease in the number of new brokers entering the market, as well as some high-profile exits. The majority of enterprise brokerages expect net revenue margin declines in 2023 compared to 2022.
What’s in store for 2024?

The truckload market cycle is bottoming out as carriers continue to exit the industry. However, without any significant change in truckload demand expected before the second quarter of 2024, the market may remain in its current state for quite some time – likely until at least midway through 2024.

Of course, a severe shock of some kind could change all of that. That scenario has played out before – examples include the ELD mandate in 2018 and the pandemic lockdowns in 2020. Both were events that changed anticipated market cycles. The results were sudden capacity constraints that sent prices upward, flipping the pricing power from transportation buyers to sellers.

Rising geopolitical risks are one possible catalyst. Just as the Russian invasion of Ukraine led to a global spike in fuel prices; an expansion of the current Middle East crisis would likely have a similar effect.

Those rising costs would drive more carriers out of the industry, but those who remained would see supply and demand finally tilting back in their favor.

DAT’s prediction: Expect current market conditions to continue until late Q2 when the market should finally find equilibrium.

The truckload market should revert with spot rates rising over contract rates sometime in the first half of the year, and demand will normalize as the supply chain disruptions that began during the pandemic work their way out of the system.

Getting a clear signal in the new year will require accurate and timely freight intelligence, plus the tools to execute efficiently.

DAT Freight & Analytics solutions empower carriers, brokers and shippers to turn insights into action and make faster, more confident business decisions.

Visit DAT.com to learn more.
### Top 10 Truckload Markets 2023

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

#### Temp-control
1. Fresno, CA
2. Ontario, CA
3. Chicago, IL
4. Los Angeles, CA
5. San Francisco, CA
6. Fort Worth, TX
7. Dallas, TX
8. Fayetteville, AR
9. Spokane, WA
10. Joilet, IL

#### Flatbed
1. Houston, TX
2. Dallas, TX
3. Birmingham, AL
4. Cleveland, OH
5. Fort Worth, TX
6. South Bend, IN
7. Savannah, GA
8. Atlanta, GA
9. Chicago, IL
10. Los Angeles, CA

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Note: Based on the DAT iQ database of more than $137 billion in invoices for both spot and contract truckload freight.
The traditional approach to procuring transportation services is evolving as shippers find new ways to navigate the dynamic truckload marketplace. Instead of putting volatile lanes out for an annual bid and hoping for the best, many major shippers have expanded their capabilities, which allow them to ride pricing waves in a way that balances flexibility with predictability.

These changes have wide-ranging implications for all players in the trucking industry, as analytics introduce new alternatives to decades-old processes.
But what about all those low-volume lanes? In the past, many shippers just lumped them in with the high-volume lanes in an RFP to secure contracts. However, given the pricing instability of low-volume lanes, this tactic only increases the chances of a primary carrier rejecting the contract rate on that lane, forcing the shipper to look elsewhere to cover the load.

As recommended by DAT Freight & Analytics Chief Scientist Chris Caplice, more and more shippers are approaching those dynamic lanes differently. Instead of crossing their fingers and hoping the contract rate holds up, they’re “riding the wave” – the shipment rate on a dynamic lane is determined at the time of tender based on rules negotiated between the shipper and transportation provider. Essentially, it’s a more structured approach to using the spot market.

There are a couple of ways that shippers approach pricing with this strategy. One is to designate a set of four or five key transportation providers. Those businesses are offered a load and asked to provide a rate. This built-in competition is meant to provide some safeguards for the shipper, using more sophisticated analytics systems to monitor and manage their response rates.

Another approach is to establish a contract with a provider based on a pricing index. For example, a shipper might agree to pay the DAT iQ benchmark rate on a given lane, plus some percentage to the carrier or broker.
Naturally, a change in how shippers procure transportation means changes for motor carriers and freight brokers as well. Success in this more dynamic approach hinges on access to real-time market data to ride the pricing wave without drowning.

These changes have led to three major ripple effects.

1. **A bigger role for brokers**
   
   With shippers taking a more structured approach to the spot market, brokers play a larger role in strategic planning. Lanes that normally would have been assigned to asset-based carriers are now seen as a better fit for brokers.

2. **A better leveraged network**
   
   For shippers, brokers provide access to a broad network of smaller carriers that would normally be a shipper’s last resort. This gives a shipper more flexibility and carriers more opportunity.

3. **A blurring of segments**
   
   There has been a blending of non-asset and asset-based transportation providers. Most large asset-based carriers now have brokerage arms, and most brokers serve almost as asset-light carriers by cultivating “dedicated” carriers in their networks.
How will this evolve?

Sophisticated pricing departments no longer need large teams of data scientists. Access to deep wells of data coupled with sophisticated freight analytics has effectively lowered the barrier to entry as transportation organizations build out their business intelligence capabilities.

Robust analytics – whether used to gain insights into rates, capacity, or performance – have empowered transportation and logistics teams to ride pricing waves like never before. It’s also led to increased transparency across the entire truckload marketplace.

Artificial intelligence and machine learning will play an even larger role going forward.

Initially, it seemed that brokers and carriers would need to build large data science teams to leverage analytics, which would have meant competing with tech giants for talent. However, that’s no longer the case, and the ability to get instant answers on market machinations creates speed and agility the industry has never seen before.

More than ever before, speed and agility will decide winners and losers in the industry going forward. With sophisticated analytics and streamlined operations, transportation and logistics professionals can make sure they aren’t caught flat-footed when the market inevitably flips again.
Keys to Success

**Shippers**
Dynamic pricing in volatile markets

**Brokers**
A balance of spot vs contract business

**Carriers**
Cost control and operational efficiency
Those discounts won’t last forever, and strategies put in place now will fortify transportation networks when the markets finally flip. Implementing systems and practices that handle the most volatile network lanes more efficiently will put shippers in the best position going forward.

Shippers can optimize their transportation network by segmenting it based on lane characteristics, level of service requirements, and other relevant factors. This allows shippers to use a portfolio approach to procurement that includes dedicated, contract, and dynamic relationships. Taking advantage of the full spectrum of truckload transportation adds the flexibility and efficiency needed when markets tighten.

And when markets turn, low-frequency lanes in a shipper's network will be where pricing becomes most unstable. By embracing a dynamic pricing strategy, a shipper can better align costs to the broader market while maintaining high levels of service.

The current soft market is also an ideal time for shippers to deepen their relationships with tier 1 carriers. One approach would be to establish API connectivity to a select group of transportation providers. This technology enables seamless and efficient communication between shippers and carriers, streamlining the booking process. This could prove especially useful when looking for capacity on hard-to-fill lanes.

Laying this groundwork will help shippers fortify their networks regardless of market conditions.
Transportation markets witnessed a significant shift in recent years, with an increasing number of shipments brokered rather than directly handled by carriers. As a result, brokerages are now a much bigger part of a shipper’s strategic transportation plan.

Shippers want brokers to provide cost savings, dependable capacity, and streamlined processes. The challenge for brokers in 2023 was meeting those expectations at the same time that their margins were squeezed. Consumer spending and retail inventory trends softened demand for transportation services, and the inverted market worked against transportation intermediaries.

Heading into 2024, brokerages should seek to balance their ratio of spot and contract business as the market recovers, allowing them to find the optimum mix of volume and margin. Brokers and 3PLs can also expand their operations to provide services that can handle more complex freight movements and multiple modes. From a business profitability perspective, these services tend to yield higher margins and maintain consistent demand.

By placing a greater emphasis on value-added services such as real-time tracking, analytics, and integrated automation, brokers can grow and protect the market share they’ve gained in recent years. It’s critical to leverage data and analytics to accurately time the market since the pricing decisions made at the end of 2023 and the start of 2024 will have major impacts on profitability and volume for the rest of the year.
Unfortunately, the current market is unsustainable for many small carriers, particularly those that entered the market at its peak. Low rates and high costs spell trouble for any business in any industry, but with the traditionally tight margins associated with operating a motor carrier business, the current climate has many trucking companies operating on a razor’s edge.

While it’s likely we’re at or near the bottom of the current freight market cycle, carriers are still operating in survival mode. To get to the light at the end of the tunnel, the focus should be on cost controls and operational efficiency.

The biggest expense is diesel fuel. While larger carriers enjoy some protections thanks to fuel surcharge programs that share some of the cost burden with their shipper customers, small carriers and owner-operators doing business on the spot market negotiate “all-in” rates on a transactional basis. This leaves them more exposed to spikes in diesel prices.

Tackling fuel costs is a two-fold process. The first is to address the expense on the front end, such as enrolling in fuel card programs that provide discounts at the pump. The second is to make those fuel dollars stretch. That includes improving driver habits (maintaining fuel-efficient speeds, eliminating idling, etc.), route optimizations, and reduced deadhead miles.

A deeper understanding of operating costs will prove critical for carriers in 2024. It’ll also provide information regarding where to make strategic investments, such as preventative maintenance and technology that increases efficiency while expanding opportunity. For example, the Profit Estimator tool in DAT One allows carriers to find loads tailored to their businesses based on their operating costs, so they can choose freight loads that yield the best return.

Greater success also requires a broader understanding of the macroeconomic and regulatory factors that drive demand. Tools like the Market Conditions map in DAT One give a quick view of truckload supply and demand, while carriers can educate themselves through information found on the DAT website as well as numerous online outlets.

Armed with information, carriers can also venture into new markets and align with strategic partners to help them come out of the down market with a more resilient business that can thrive in any portion of the freight cycle.
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.

Since 1978, DAT has been the source for market trends and data insight solutions for shippers, brokers, carriers, media, and industry analysts alike.

To learn more, visit DAT.com