

CONVOY

DYNAMIC FREIGHT PRICING

How shippers can get guaranteed coverage
for their primary, backup, and spot freight



The freight market is dynamic. So why does the industry still use static pricing methods?

As the past year has shown, static contract rates are liable to diverge from the market when it's tight and volatile. This can lead to higher rates of tender rejection, sending shippers to their routing guides to secure a backup carrier. Since most routing guides use static rates, backup carriers may reject tenders for the same reason primary carriers do. All of this adds up to lost time, higher prices, and more hassle.

The problem stems from a fundamental conflict in freight: static pricing and dynamic markets.

The market has always been dynamic, and for a long time static pricing was a shipper's only option. But not anymore.

Convoy's digital freight network offers dynamic pricing that's resilient to market volatility. By using machine learning, automation, and an open, fully connected freight marketplace, Convoy enables pricing that's transparent and competitive while providing reliable, flexible capacity.

In this white paper, we'll show how Convoy's dynamic pricing saves time, reduces costs, and provides peace of mind across primary, backup, and spot offerings.

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Dynamic markets require dynamic solutions

Volatility is familiar territory for freight industry veterans. Supply chains adapt to supply and demand shifts as the seasons change. Natural disasters and severe weather events can grind regional transportation to a halt. Large-scale “black swan” events such as 9/11 and the COVID-19 pandemic can disrupt transportation plans and cause soft markets to tighten. In fact, the freight industry experiences boom and bust cycles at three times the frequency of the broader economy.

Even though tight and volatile markets are familiar, that doesn’t make their effects any less frustrating. Truckload rates rise. Contract tenders get rejected. Backup carriers fall through. Transportation teams find coverage on the spot market—with a greater operational burden and at a higher price point. MIT’s school of Supply Chain Management reports that spot

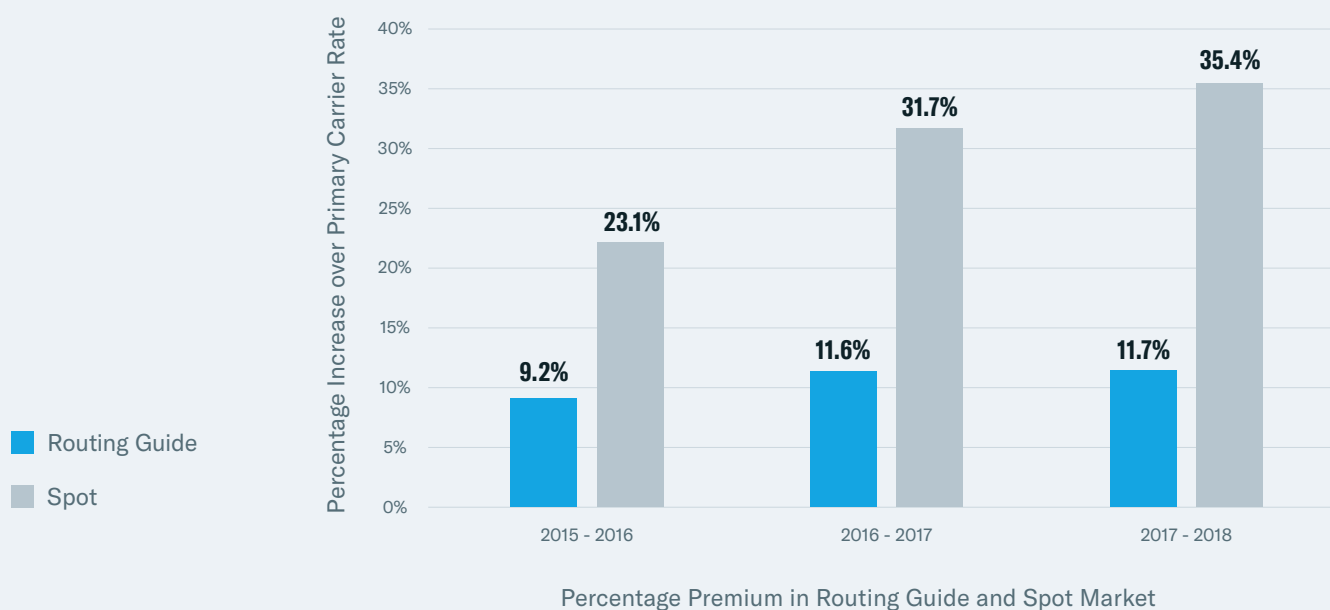
rates can cost shippers an additional 35% relative to contract rates (see chart).

The problem is systemic. Traditional contract, backup, and spot options are based on antiquated pricing models. Contract and backup rates are priced in advance, and fall out of sync with reality as the market fluctuates. When it comes to spot, most freight brokerage prices don’t use tools that reflect real-time market rates. **They are static solutions to a dynamic problem.**

Now is the time to consider alternatives that adapt to market realities. The past 12 months have had record-setting levels of volatility and tightening. Tender rejection levels hit an all-time high, and the tight market shows no signs of softening as of March 2021. To successfully navigate a dynamic freight market, transportation teams require dynamic solutions.

Routing Guide & Spot Percentage Premium

Source: MIT Supply Chain Management, June 2019



Dynamic pricing: guaranteed coverage with real market rates

Solving decades-old problems of inefficiency in freight requires a new approach, one with technology at its core. In 2015, Convoy started the world's first digital freight network. We operate an open, fully connected freight marketplace to efficiently connect shippers with our network of tens of thousands of carriers.

With our massive carrier network, machine learning models, and industry-leading data science capabilities, Convoy can set dynamic prices that reflect real-time market rates.

Dynamic pricing enables a number of benefits that traditional freight providers can't match.



Instant pricing: We confirm coverage and prices, fast. This way you won't need to wait or negotiate.



Guaranteed coverage: Every time we bid, we guarantee that your load will be covered at the price you see.



Competitive rates: Tens of thousands of the nation's highest quality carriers compete to win your freight.

How machine learning generates dynamic prices in an instant

Convoy's machine learning (ML) models analyze more than 50TB of freight data—the equivalent of 304,000,000 pages in Microsoft Word—from our shipment history and characteristics unique to each lane. The models account for the type of goods in the trailer, how our carriers rate the pickup and drop-off facilities, the time of day, freight seasonality, and hundreds of other inputs.

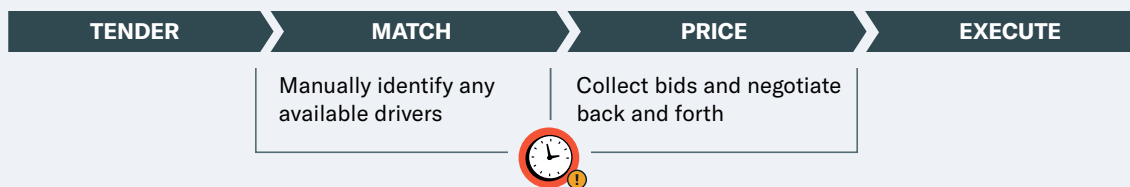
We combine this analysis with models that forecast our carrier availability in the region of the pickup to generate

a quote that reflects real-time market rates. The rates are not only instant, but they also represent a more accurate and fair reflection of the current market.

Our machine learning models run continuously, generating prices before you even submit your tender request. That's why Convoy is able to provide you with a response in a fraction of the time that it takes other providers. This is how we can achieve instant response times for tender requests.

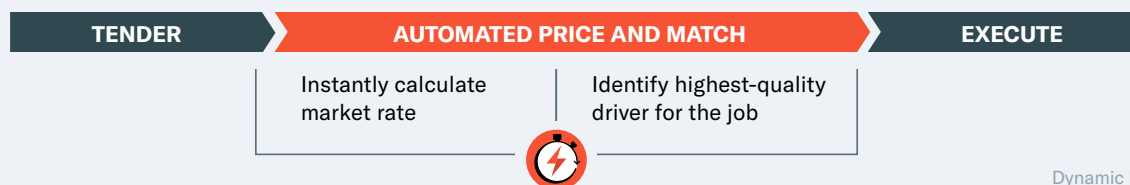
TRADITIONAL APPROACH

Measured in hours



DYNAMIC PRICING

Measured in seconds



Dynamic pricing can help across primary, backup, and spot loads

The technology that enables Convoy's dynamic pricing function helps power our solutions across a range of procurement types.

Guaranteed Primary is Convoy's industry-first pricing program that eliminates the RFP process for primary freight coverage while guaranteeing tender acceptance. We generate dynamic prices when the shipper is ready to tender, hauling at a mutually agreed upon margin with full pricing transparency.

When it comes to backup coverage, Convoy can offer dynamic pricing in your routing guide. This can help you

get better rates in your routing guide and save you the hassle of the spot market.

For spot freight, we eliminate the need for phone calls, rough estimates, or back and forth negotiation. Instead, we generate instant prices based on real-time market data and machine learning models.

Next, we'll dive deeper into each of these solutions to show how dynamic pricing enables reliable coverage that adapts to every market condition.



A new approach to primary freight

The RFP is a cornerstone of the freight procurement process. For high-volume shippers, RFPs are a foundation for annual budgets, with contracts that aim to provide transportation teams with reliable capacity, budget predictability, and operational savings.

Even as the market shifts, contract rates are meant to provide stability over the next year. Of course, this is rarely how things actually play out. In fact, after just six

months, approximately 50% of all negotiated rates no longer apply.

In 2019, Convoy began to pilot a program called Guaranteed Primary. The program set out to deliver on key promises of the RFP without the overhead of running a months-long procurement event. Based on the success of these pilots, we made Guaranteed Primary broadly available at the end of 2020.

HERE'S HOW THE PROGRAM WORKS

1 | No RFP overhead

A shipper can completely eliminate the need for an RFP for lanes using Guaranteed Primary. Instead, the shipper allocates all volume on the lane to Convoy.

3 | Convoy guarantees 100% tender acceptance

As the shipper tenders loads to Convoy, we guarantee acceptance by tapping our nationwide network of hundreds of thousands of trucks at the lowest available rates.

2 | Agree to a low, fixed margin

Dynamic pricing replaces traditional static pricing so that rates reflect the market. Shippers and Convoy agree on a fixed margin—as low as 50% of the industry average—for each shipment load.

4 | Convoy provides unparalleled transparency with dynamic pricing

Customers see tender prices instantly, and Convoy provides monthly reports detailing our truck costs, shipment margin, and estimated savings for the customer.

Guaranteed Primary is based on Convoy's dynamic pricing models. When transportation teams tender their freight, Convoy instantly generates a rate that predicts our costs to source the truck. Our pricing is based on machine learning models that get smarter with every

shipment. We take on the liability of our predictive rates being accurate. When our rate predictions are off, we shoulder the financial burden, eliminating the need for any billing reconciliation.

[Learn more about Guaranteed Primary](#)



CASE STUDY:

Pilot success with Guaranteed Primary

When static rates led to tender rejections, dynamic pricing saved time and money

An international automotive company signed on as a pilot customer for Guaranteed Primary in early 2020. As their annual bid approached, Convoy partnered with them to identify a particular challenge with their supply chain.

Lanes with low or inconsistent volume were notorious for tender rejections; the team was frequently going to the spot market to secure capacity, which often meant paying a premium for lower-quality carriers and high overhead costs.

With Guaranteed Primary, the automaker removed a set of lanes from their RFP and awarded them to Convoy. A predictive, dynamic price was generated on each shipment, allowing the customer to see the rate in advance of tendering.

After three months of substantial cost savings, the successful pilot was officially rolled out to more than 4,000 lanes across their national network.

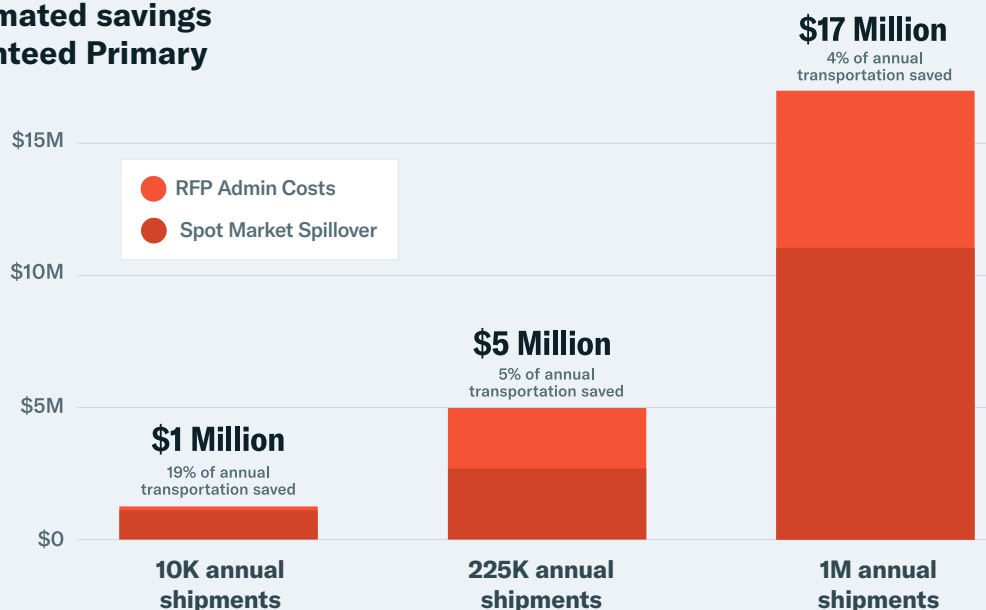
The Home Depot uses Guaranteed Primary for “best-in-class” capacity and performance

In 2017, The Home Depot made a \$1.2B investment in its supply chain, taking steps to embrace its culture of innovation. As part of these new initiatives, The Home Depot partnered with Convoy. They utilized Convoy Go, our drop trailer program, and were among the first to adopt Guaranteed Primary.

“Since we started working together, Convoy has continued to perform at best-in-class capacity levels and on-time performance,” said Ron Guzzi, senior manager of carrier relations and sourcing at The Home Depot. “Convoy’s capacity model is sustainable through the volatility of the trucking industry.”

[Read the full case study in FreightWaves](#)

Annual estimated savings from Guaranteed Primary



Dynamic pricing for backup coverage

When you're working with a contract freight provider, a routing guide can help you secure reliable backup coverage at a known rate when a primary carrier on a lane rejects a load. In practice, backup carriers do not always meet this ideal.

In tight markets, backup carriers often reject tenders for the same reason primary carriers do: truckload rates rise higher than their original bid price. Additionally, backup carriers can take hours to respond to loads. The combination of lost time and rejected coverage adds up to a frustrating experience for transportation planners.

Convoy offers a backup solution that uses dynamic pricing to address these pain points. We provide dynamic prices in your routing guide with instant rates. These rates adjust based on real-time market data.

We guarantee coverage on 100% of the loads we bid on with dynamic pricing, saving time and hassle with every load.

We launched dynamic pricing for backup in 2018, and have already priced nearly one million backup loads using the capability. Our customers cite time savings and cost reduction as the biggest benefits, along with the peace of mind that comes from knowing they have a safety net when their tenders are rejected.

Convoy makes it easy to gain access to dynamic pricing for backup from the convenience of your preferred TMS, with support for more TMS providers than any other similar offering in the industry. We have turnkey integrations with the TMS providers listed below.

Our growing list of TMS partners





CASE STUDY:

Dynamic pricing in action

An estimated \$168k savings in four months thanks to dynamic pricing

Recently, Convoy implemented dynamic pricing for backup with one of our food and beverage customers and measured the initial results over the first four months. This company’s logistics team already had a robust routing guide, and Convoy was among the backup carriers.

Prior to the launch of dynamic pricing for backup, Convoy covered approximately 200 backup loads per week for this company. This volume increased dramatically when we implemented dynamic pricing for backup in their TMS.

Relative to our average shipments per week, Convoy covered 3,000 additional loads in the first four months. When analyzing the price paid per load relative to

the industry benchmark, we saved our customer 6% compared to their backup alternatives and nearly 10% in comparison to the spot market.

This added to significant savings over the four months we studied. When calculating the premiums our customer would have paid by going with higher-priced backup alternatives and shipping on the spot market, we estimate our customer saved \$168,000 by using Convoy’s dynamic pricing for backup offering.

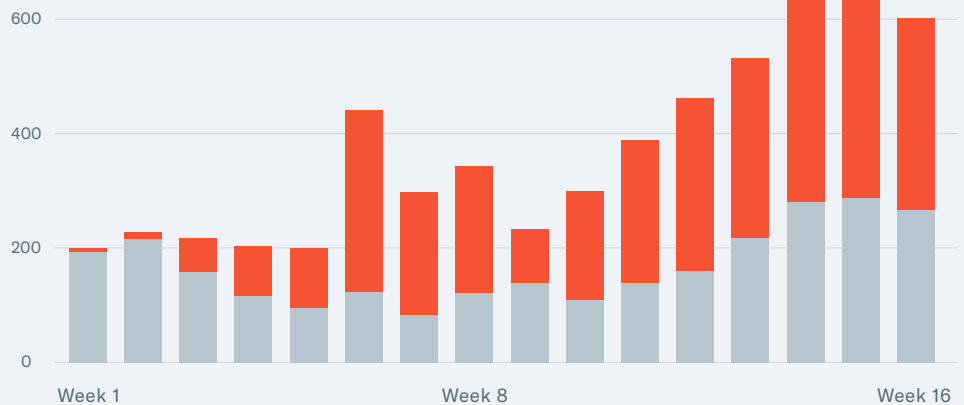
Beyond reducing our customer’s transportation costs, Convoy’s dynamic pricing helped their logistics team avoid the operational burden of dealing with the spot market, saving them thousands of hours over the course of four months.

Volume coverage increase through dynamic pricing

The light gray portion indicates the volume we covered through standard backup rates without dynamic pricing.

The orange shows the additional loads that Convoy covered once we implemented dynamic backup.

Dynamic Pricing Backup



Spot freight at dynamic, competitive market rates

When a tender gets rejected by both primary carriers and backups, the load moves on to the spot market. At this point, every minute matters. Unfortunately, tender response times on the spot market can sometimes take hours.

Sourcing a truck on the spot market is often done through a freight broker. Traditional brokers use manual operations, making phone calls, coordinating via email, and tracking pricing with spreadsheets. Even if they find you a load within an hour, it's hard to know whether your rate really reflects the current market. The average brokerage margin ranges from 15% to 20%, though the spread can go much higher than that, especially in tight markets.

Convoy takes a different approach to deliver instant pricing. We eliminate the need for phone calls, rough estimates, or back-and-forth negotiation. Instead, we generate instant prices based on real-time market data

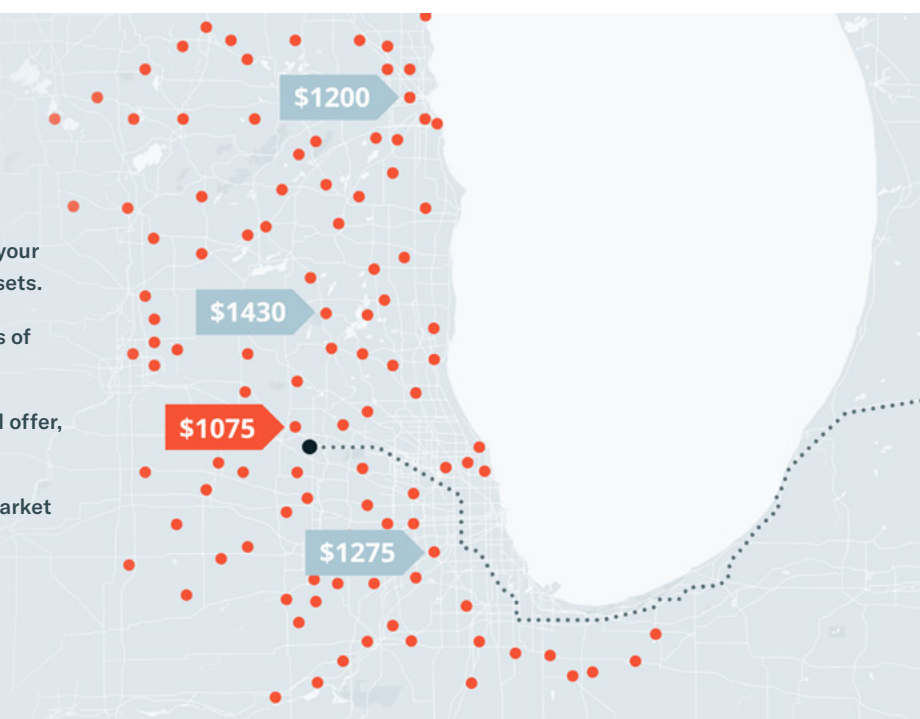
and machine learning models, saving you time and providing peace of mind that your spot loads will get covered. We provide 100% tender acceptance for every load we price.

When Convoy accepts a shipment, we post that load to our network with a suggested price. Hundreds of carriers in the area bid on the load. A machine learning model monitors bids, and then determines when to close the auction and which bid to accept. The bidding quantity and rates improve the machine learning model, informing future auctions. Bids are intelligently selected based not only on price, but also on past carrier performance and the likelihood that this specific shipment will be picked up on time (e.g. based on proximity).

All of this information feeds back to our price for future shipments, so our prices become even more competitive and accurate over time.

How Convoy ensures that your rate is competitive:

1. We generate an instant, guaranteed price to respond to your tender, using machine learning to analyze massive data sets.
2. When you accept our rate, we post the load to thousands of qualified carriers via our smartphone app.
3. Carriers can either accept the load instantly at our initial offer, or they can place their own bid.
4. The carriers' bidding behavior feeds into our real-time market data, informing how we price the next loads we bid on.





CASE STUDY:

Spot coverage during peak COVID-19 volatility

Flexible capacity with dynamic spot pricing during March 2020

Our digital freight network was put to the test in March 2020, one of the most volatile months in modern freight history. Supermarkets and grocers placed a high volume of orders with suppliers to keep their shelves stocked as consumer demand surged.

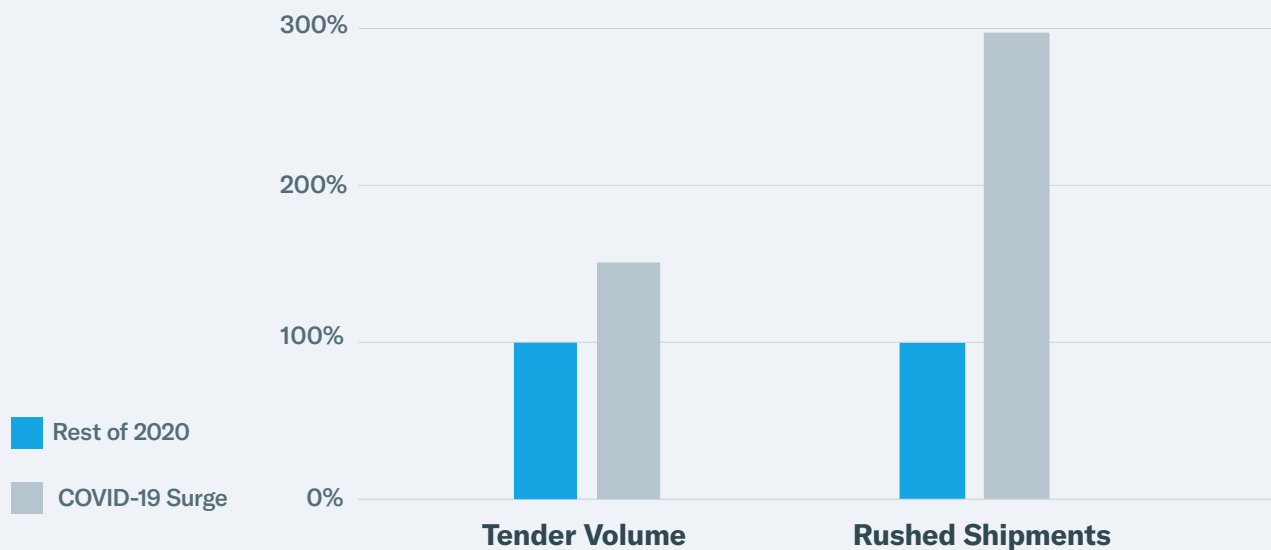
This posed a substantial challenge for one of our top food and beverage shippers. Not only did their customers need much more product, but they also needed it fast. Their tender volume increased by more than 50% overall. Even more critically, their short-notice shipment volume (<24 hour lead time) tripled. Short-notice shipments are a race against the clock.

Convoy’s dynamic pricing models adapted to reflect to-the-minute market rates, helping our customer secure spot capacity in an instant.

Despite the magnitude and urgency of our shipper’s surge, we delivered on our promise of flexible, on-demand capacity. Our dynamic pricing models, combined with our automated freight matching and our large and resilient carrier network, equipped us to help this customer and hit strong performance metrics.

We accepted 20% more loads than our previous volume highs and maintained 98% tender acceptance, achieving 97% true OTD.

COVID-19 Surge Volume





Conclusion

The transportation industry has experienced swings in supply and demand throughout its history. Even though the freight market has always been dynamic, static pricing methods based on predictions and estimates were the only option available. That's no longer the case.

With a technology-based approach, Convoys's digital freight network can generate dynamic prices that

reflect the current market. Machine learning and data science enable accurate price setting. Our massive, connected network of carriers enables us to guarantee that we can cover the load at the price we set.

For shippers, this saves time and money, and provides peace of mind that your logistics operations are running efficiently.

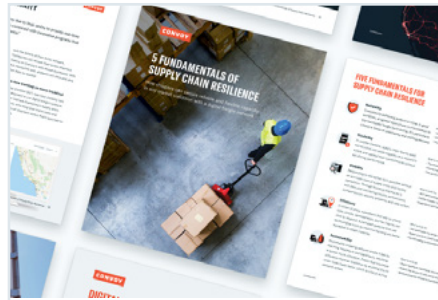
Now is the time to adopt dynamic pricing solutions that are resilient in any market. Whether you're looking to modernize your primary, backup, or spot freight, Convoys can help.

Contact us today to get started at convoys.com/shippers

More White Papers from Convoy



A New Approach to Primary Freight



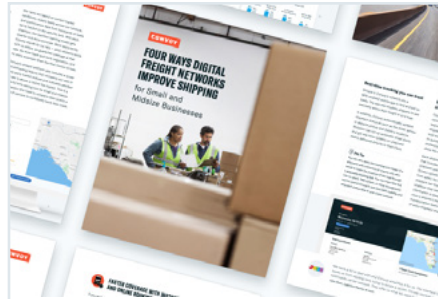
Five Fundamentals of Supply Chain Resilience



A Safety Net for Tender Rejection



Supply Chain Visibility and the Digital Freight Network



Four Ways Digital Freight Networks Improve Shipping



How Every Shipper Can Benefit From Modern Drop-And-Hook

Click above or visit convoy.com/shipper-resource-center to read more.

About Convoy

Convoy is the nation’s most efficient digital freight network. We move thousands of truckloads around the country each day through our optimized, connected network of carriers, saving money for shippers, increasing earnings for drivers, and eliminating carbon waste for our planet. We use technology and data to solve problems of waste and inefficiency in the \$800B trucking industry, which generates over 72 million metric tons of wasted CO2 emissions from empty trucks. Fortune 500 shippers like Procter & Gamble, The Home Depot, and Land O'Lakes trust Convoy to lower costs, increase logistics efficiency, and achieve environmental sustainability targets.

