

The price you pay: dissecting cost in your routing guide

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WHITE PAPER

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Executive summary

The [waterfall theory of freight](#) highlights the impacts that routing guides have on the relationship between shippers and carriers. In a soft freight environment, much like the current environment, routing guides remain largely intact as carriers accept nearly all of the freight, thus rates remain depressed, freight moves in a more predictable pattern and hitting budget targets is normal.

However, when the market turns, which it can do in a matter of weeks, routing guides fall under pressure and inevitably fail. When routing guides fail, shippers are subject to numerous costs, both direct and indirect, thus mitigating the risk of failure is paramount for when the market inevitably turns around.

Spot rates, which represent a smaller percentage of the overall trucking market, rise when routing guides are under pressure, which as the trends move from short-term disruptions to longer-term trends, contract rates follow suit.

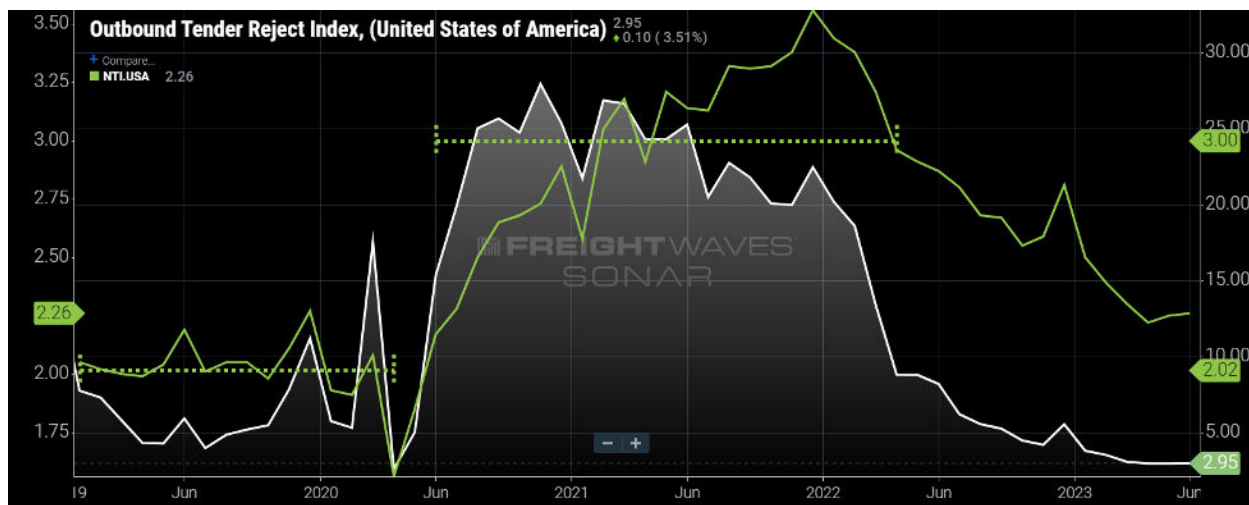
The increases in rates overall when routing guides are under pressure are just one example of direct costs impacting shippers. Rising accessorial costs are another strain on transportation budgets among shippers when routing guides fail.

Routing guide failures also lead to rising inventory costs as delays stack on top of each other and there are missed pickup and delivery windows. Additionally, efficiency within supply chains can help limit routing guide failures, but when routing guides are already under pressure, it is hard to drive those efficiencies.

Ultimately, while current market conditions indicate that routing guides aren't under immense pressure, planning for the next cycle can help limit the costs that arise when routing guides fail.

Direct costs of routing guide failures

The freight market can turn on a dime and though the market currently shows significant signs of softness as there is ample capacity in the market to meet current levels of demand, the market will eventually turn the other direction.



FreightWaves SONAR: Outbound Tender Reject Index (white, right axis) and National Truckload Index (green, left axis).

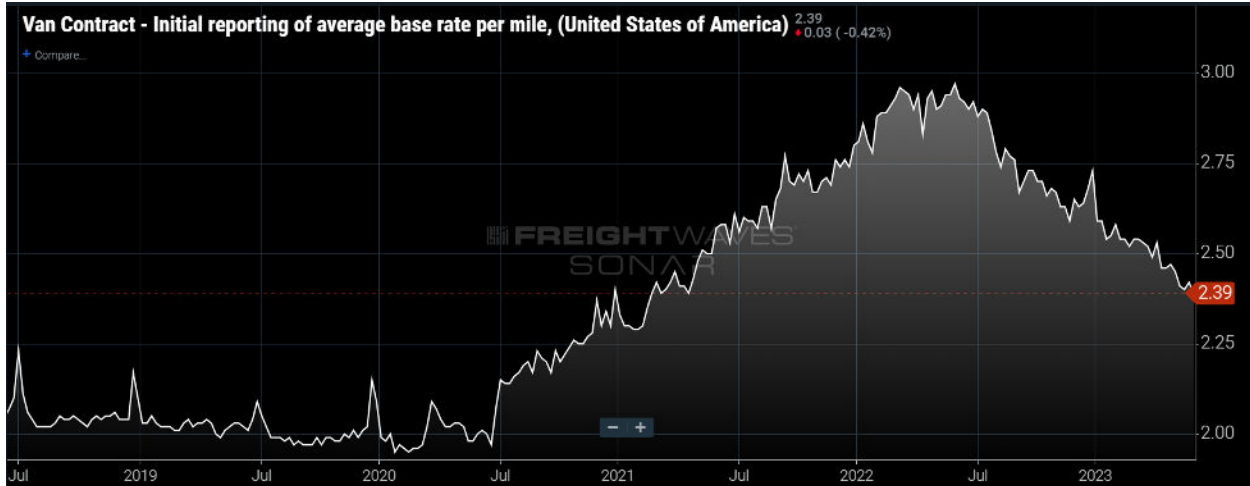
One of the ways to measure how routing guides are holding up is with the Outbound Tender Reject Index (OTRI) as when routing guides aren't under pressure, rejection rates, thus OTRI, will be remarkably low. But when routing guides begin to crack and ultimately fail, rejection rates surge into the double digits.

One of the most direct costs to routing guides failing is a rapid increase in transportation costs. With the waterfall theory of freight, as carriers in the routing guide reject loads for the current contract rate, the load continues to fall down the routing guide. When the routing guide fails completely, shippers are forced to play their hand in the spot market.

The problem with operating in the spot market during a period of transition is that rates can move violently, causing budgets to crumble. 2020 presented one of the most important ways to view the direct costs of routing guides failing.

As the goods economy thrived, thanks to government measures like stay-at-home orders, which effectively shut down the services sector, as well as stimulus that put disposable income into millions of people's pockets, routing guides crumbled under the surge of volume.

The pressure placed significant upward pressure on the National Truckload Index, a spot rate that includes fuel. Prior to the pandemic, the NTI averaged \$2.26 per mile inclusive of fuel. When routing guides broke down and rejection rates were well into the double digits from June 2020 through March 2022, the NTI averaged \$3 per mile, a 32.7% increase from the previous soft market.



FreightWaves SONAR: Initially report dry van contract rate per mile.

The contract market, which represents the vast majority of the freight market overall, isn't as volatile as the spot market, but the changes in the spot market turn to long-term trends, contract rates are pulled in the same direction.

After the initial surge in spot rates throughout the pandemic, contract rates rose as a reaction to increased demand placing pressure on routing guides. Prior to the pandemic, the initially reported contract rate was in a fairly tight range, roughly 10 cents per mile, hovering around the \$2 per mile level.

When routing guides came under pressure, contract rates followed the movement of spot rates, rising by 61 cents per mile from \$1.97 per mile to a peak of \$2.58 per mile within a year.



FreightWaves SONAR: Spot (linehaul) to contract rate spread.

When routing guides were failing in 2020, 2021 and the early months of 2022, spot rates, excluding fuel (NTIL.USA), were at a premium, at times more than 30 cents per mile higher than the initially reported dry van contract rate (VCRPM1.USA).

So while the contract market represents the majority of the freight market, when routing guides fail, the costs of transportation, specifically rates, rise rapidly.

Rates aren't the only thing within the broader transportation costs that rises when routing guides fall under pressure. Accessorials also face upward pressure during the same time and delays start to snowball on each other.



FreightWaves SONAR: Wait time in minutes.

One of the major accessorials that felt pressure, especially during the pandemic era, was detention. Most carriers allow for two hours, or 120 minutes, on average before they begin charging detention. Throughout the pandemic, wait times across the U.S. were well above 120 minutes, which resulted in higher costs for detention as it was getting charged.

The way detention gets charged overall can vary, whether it is included directly in the rate charged to the shipper or if it is a separate invoice, but when routing guides come under pressure, upward pressure on detention presents itself.

Detention and demurrage charges can be an afterthought when the freight market is soft because carriers are more worried about having the volume to ensure capacity is utilized. In a strong market, these accessorials become more important as the opportunity costs for carriers rise and sitting at facilities longer limits carriers' options to find the next high-paying load.

The strong surge in volume that caused routing guides to crumble also forced shippers to hire more at shipping and receiving facilities, which represents yet another increased cost.

Indirect costs of routing guide failures

While the costs of routing guides failing really shows up in transportation costs, there are costs that aren't direct costs but are impacted by routing guides failing.

One of the largest indirect costs is around the inventory costs, as well as the costs associated with having more inventory.



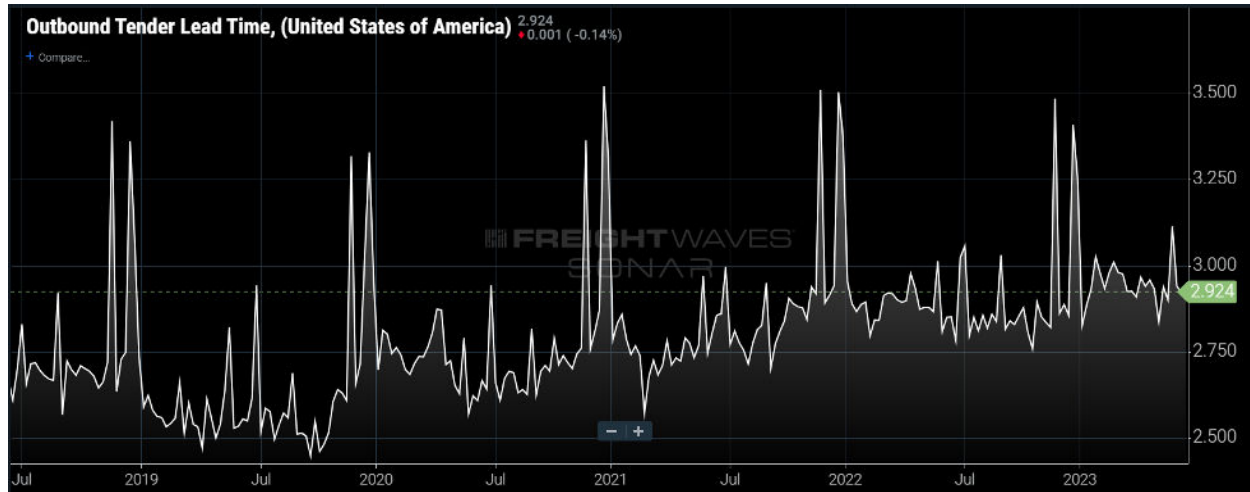
FreightWaves SONAR: Logistics Managers' Index, Inventory Costs.

The Logistics Managers' Index reports a diffusion index on a monthly basis, with one of the subcomponents covering inventory costs. In the chart above, any reading above 50 represents inventory costs rising, while any reading below 50 represents declining inventory costs.

Since the beginning of the data set, inventory costs have steadily increased, but during periods of routing guide disruptions, the costs of inventory rise much faster than that of a soft freight environment.

Throughout the pandemic era, while inventory levels were being built to historical high levels, the costs rose at the fastest rate as well.

2018, which was another year in which routing guides were under pressure, experienced inventory costs rising at a rate not previously seen and well faster than in the soft freight market of 2019.



FreightWaves SONAR: Outbound Tender Lead Times.

Companies are always looking for ways to improve efficiency within their supply chains, but it's much more difficult to create efficiencies when routing guides are under pressure. While lead times remain longer, despite softer freight market conditions, when routing guides came under pressure, lead times had to be extended in an effort to make sure that freight was being picked up on time.

The inability to drive the efficiency during these periods is a cost that is hard to quantify, but improved efficiencies will streamline processes, reducing costs and saving time for more pressing tasks.

How can FreightWaves SONAR prepare you for changes?

The freight market continues to show signs of softening, but there is no time better to prepare for the next freight market cycle than the present. With the rate at which the market can shift, there isn't time to implement new processes while it is happening.

SONAR highlights the directional changes within the freight market with high-frequency data, allowing for actions to be taken proactively as opposed to reacting to the changing market conditions.

Additionally, with the use of the FreightWaves Supply Chain Intelligence (SCI) platform, shippers have the ability to benchmark themselves against the broader market and understand how their costs line up. Combining that with data within SONAR limits the costs associated with routing guide failures, as well as puts them in the driver's seat in negotiations in a softer freight market.