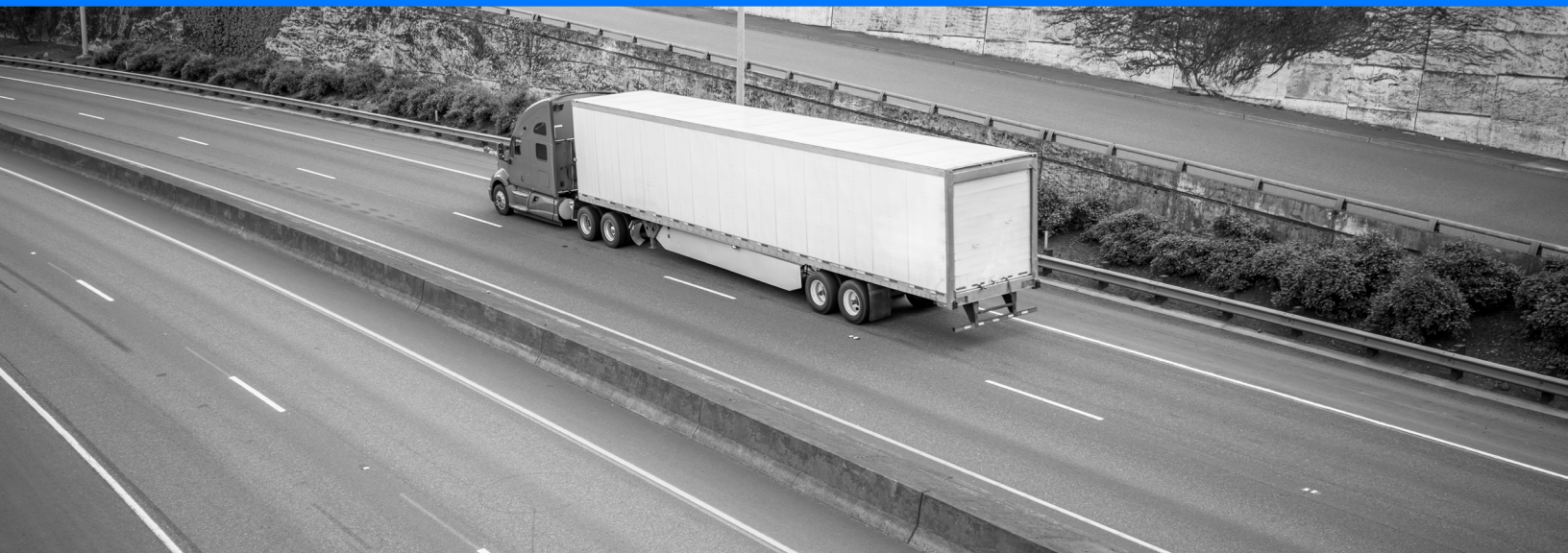


# Improve Asset Utilization

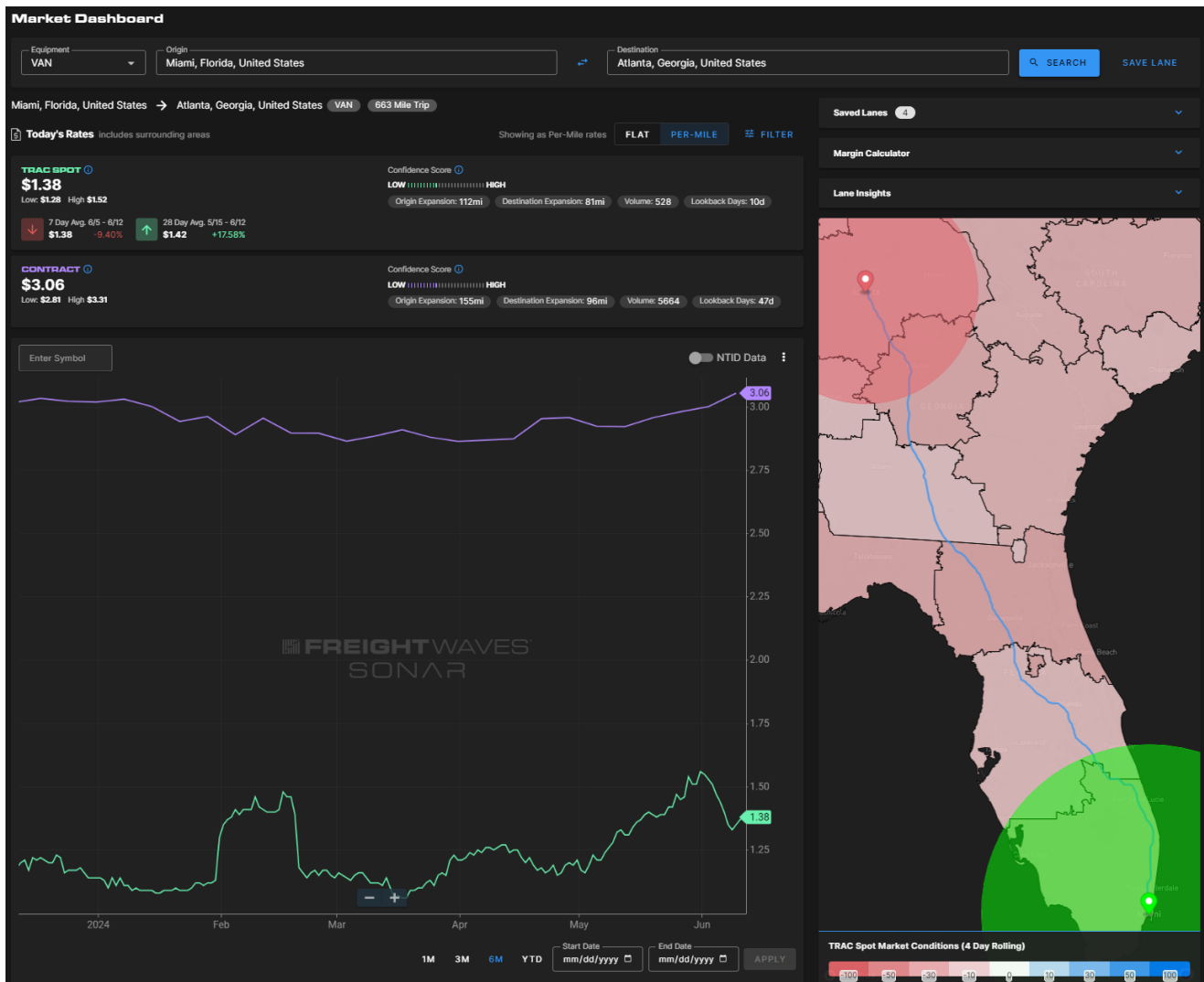


Carriers typically measure utilization in terms of miles per tractor per week and measure productivity in terms of revenue per tractor per week. The goal is to turn the capital-intensive assets (tractors) and the often-scarce resources (quality drivers) into enough revenue to cover expenses while also earning a margin high enough to generate a meaningful return on capital. That's always been challenging and has only gotten harder in today's environment. Tractor prices have increased over the years, largely due to increasingly strict emissions requirements. Expenses for insurance have surged, and the more mileage-variable costs of driver pay and maintenance have risen due to the relative scarcity of quality drivers and skilled diesel mechanics to work on ever more complicated machines.

## Carriers Have to Get Pricing Right

In order to earn a positive return on capital, carriers have to avoid hauling loads for free. That requires pricing their headhaul loads high enough to compensate for the probability of having to accept low-rated brokered loads on backhauls. In some cases, carriers simply need to price their headhaul loads higher to compensate for the market they are entering. In other cases, the prudent action is to reject the load in favor of one to another location or even park the equipment. Of course, carriers need to weigh those actions with a desire to keep their customers happy to win future business.

SONAR Market Dashboard helps carriers price their loads. The rate data comes from a consortium of 3PLs who buy truckload capacity from carriers on the open market. The rates shown in Market Dashboard are "buy rates," or what the 3PLs paid carriers for the capacity. Therefore, those are the same rates that carriers should expect to receive if they need to accept a brokered load to get back to one of their preferred markets.



\$1.38/mile, including fuel, is the market-clearing rate that brokers are paying carriers to get them to Atlanta from the extreme Miami backhaul market.

Market Dashboard can also assist carriers in pricing their headhaul loads when dealing directly with shippers. Since Market Dashboard rates are the rates that 3PLs are paying carriers, the rates that carriers charge shippers directly should be higher than Market Dashboard rates to reflect that there is no 3PL margin earned on the transaction.

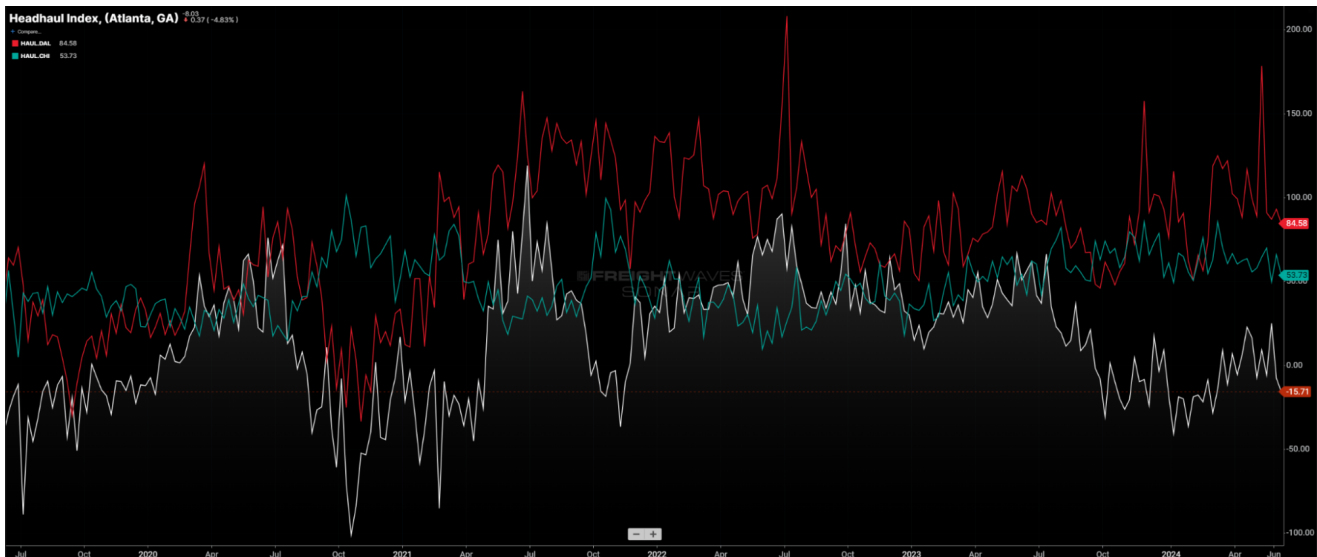
# Load Selection Is Key

Publicly traded carriers often report year-over-year changes in their revenue per loaded mile that differ from what they report for year-over-year changes in pricing. The reason, assuming there is a consistent treatment for fuel, is the mix of loads that the carrier selects, an area that carriers can typically improve upon.

While the use case with Market Dashboard described above highlights rates, other metrics in SONAR are also helpful to carriers, particularly if it's unclear where carriers are headed next after the upcoming load is delivered.

The Headhaul Index, represented by the HAUL tickers in SONAR, is one example. The Headhaul Index is simply the difference between the volume of outbound tenders and the volume of inbound tenders. The more positive the number (or blue on the map), the more of a headhaul market the location is, and the more negative the number (or red on the map), the more of a backhaul market the location is. All else being equal, carriers would rather select loads to headhaul markets than backhaul markets.

For instance, if a carrier is considering accepting a load to Atlanta, the user can input HAUL.ATL for a quick look at how easy it will be to get loaded once they are there. That can be more useful than putting origin-destination pairs in Market Dashboard (Atlanta to XYZ destination) because it's not yet clear where the next destination will be. The Headhaul Index is based on the timing of loads being electronically tendered, typically a few days before loads are picked up. Therefore, the Headhaul Index should reflect market conditions with timing that roughly corresponds to when carriers arrive at the market.

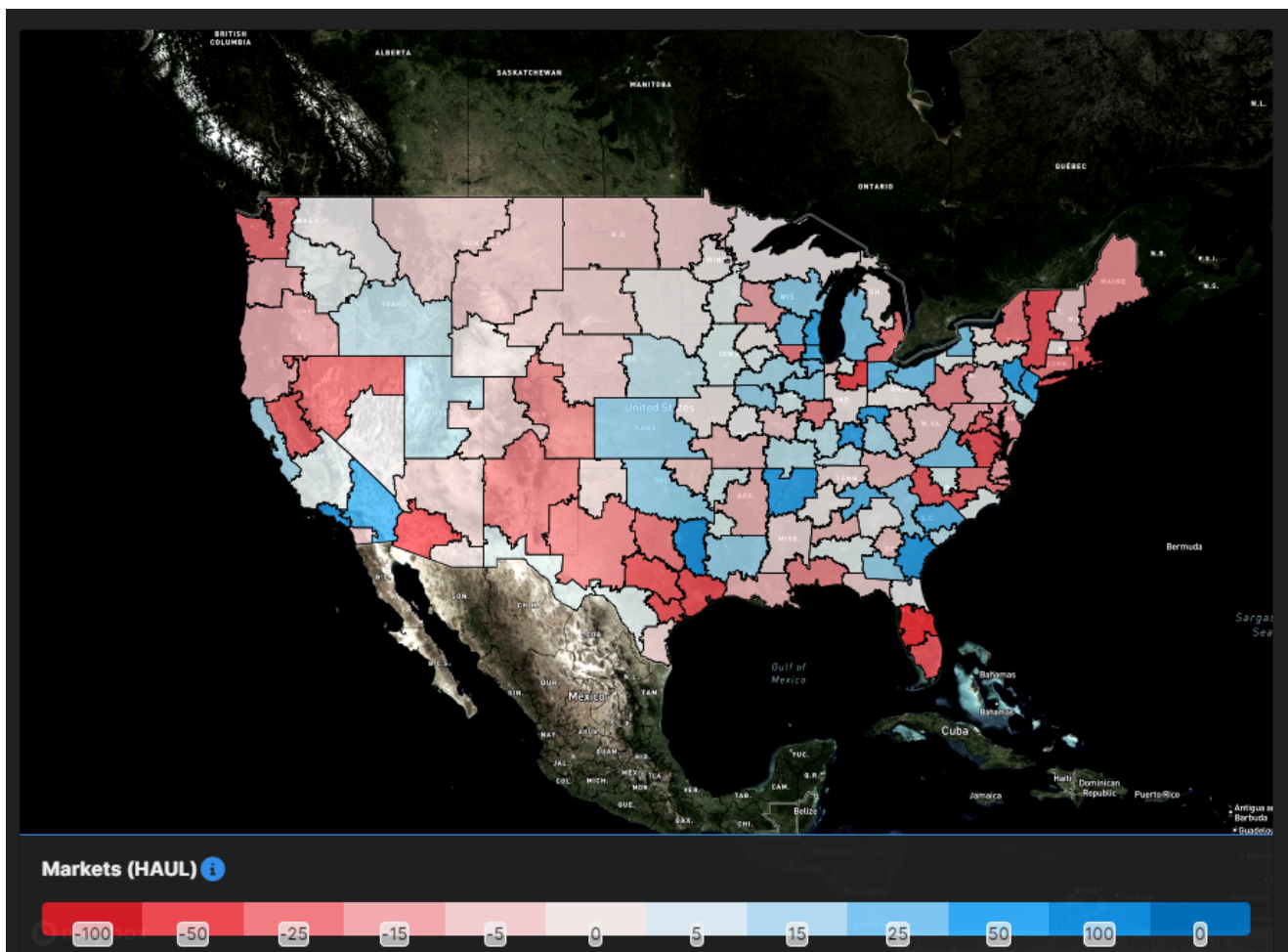


As it is often a headhaul market, inbound Atlanta tenders currently exceed outbound Atlanta tenders, resulting in a negative Headhaul Index (white line). All else equal, heading to Dallas or Chicago, which have positive Headhaul Indexes in red and green, respectively, will result in carriers having an easier time getting reloaded.

When looking at the Headhaul Index on a map, blue markets are outbound heavy (headhaul markets) while red markets are inbound heavy (backhaul markets).

If your goal is to reduce deadhead and have more options to get your driver reloaded immediately, plan to go from blue to blue.

If your goal is to make the most money, plan to go from blue to red, but make sure there is a blue market close by to provide minimal deadhead.

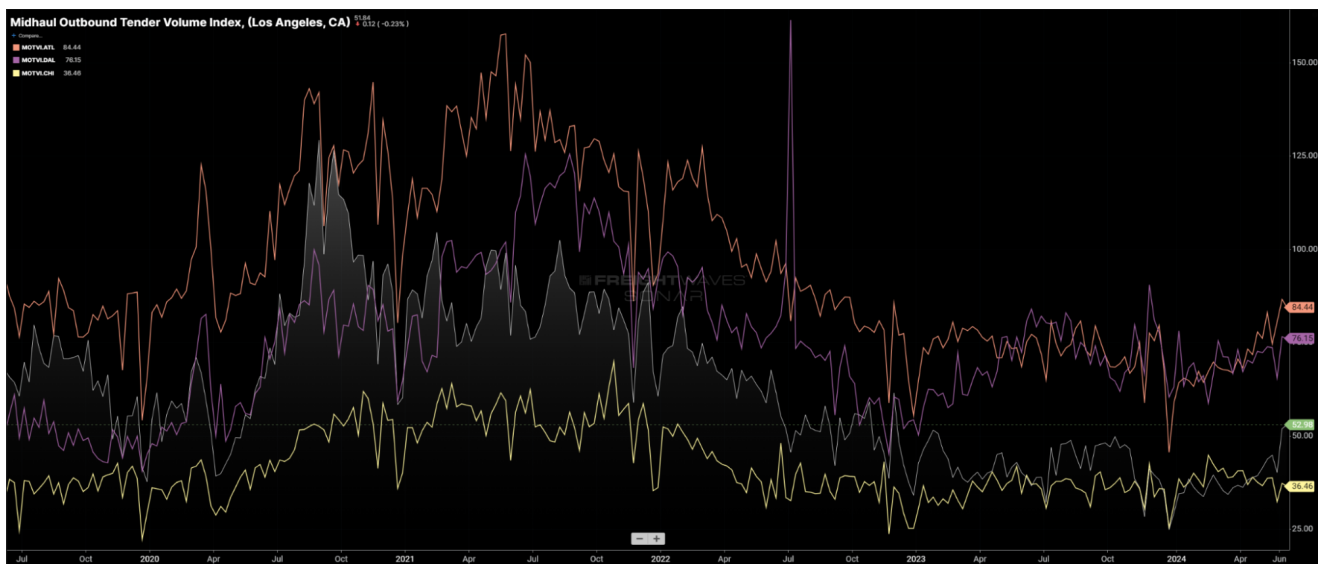


*Looking at the Headhaul Index on a weekly or monthly change will allow you to shift with the markets as they grow and contract.*

# Design a Network for Optimal Efficiency

The use cases above largely pertain to individual loads, but in order for carriers to maximize utilization over an extended period, their networks need to be designed for efficiency. This often means having regular routes where drivers can put in 400–450 daily miles, which represents strong utilization while also complying with hours-of-service regulations. It may also mean regular routes to/from cities where large numbers of carriers reside.

To assist carriers in network optimization, SONAR tender data is broken down by lengths of haul. In general, short- and medium-haul loads are preferable (and thus rejected by carriers at lower rates) than longer-haul loads.



Carriers looking to optimize their networks should seek recurring volume with lengths of haul of 400–450 miles. The MOTVI data set in SONAR shows the relative volume of loads tendered with lengths of haul between 250–450 miles. There are more loads in that range outbound from Atlanta (orange) and Dallas (purple) than there are from Chicago (yellow) and Los Angeles (gray).

The takeaways are as follows:

- Market Dashboard allows you to see current “buy rates” for a lane to help with negotiations.
- The Headhaul Index allows you to track headhaul and backhaul markets to ensure positioning of trucks is the most optimal so that you can:
  - Reduce deadhead
  - Help target higher paying areas
  - Shift when markets grow and contract
- Optimize networks by utilizing tender volumes on a length-of-haul basis.

[Learn more](#) about how SONAR can improve your operations or [request a demo here](#).