Truck Tractor & Trailer Market Update:

Commentary on the Transportation Industry

Q2 2022

Prepared by Rouse Appraisals LLC

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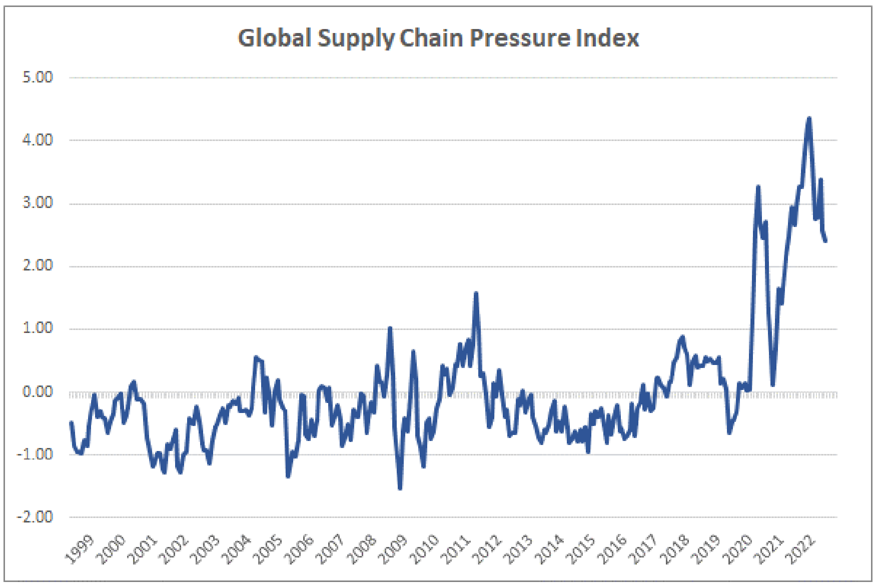
Slowdown or Recession?

The second quarter demonstrated an acceleration of the trends that began to emerge at the end of Q1. Spot rates declined sharply, but leveled off towards the end of June. Fuel costs skyrocketed and, while they appear to have peaked in late June, remain at elevated levels. Shifts in consumer spending patterns and inflation have caused inventory levels to rise at major retailers. All of these factors have caused less optimism for the short and medium term outlook of the trucking industry. Used truck pricing declined meaningfully in Q2 but is still extremely high relative to historical standards.

It is still the relatively early stages of this downcycle and the coming quarter should provide a clearer indication of the severity.

Supply Chain Pressure

The Federal Reserve Bank of New York's recently created Supply Chain Pressure Index showed a continued easing off the all-time high levels of Q4 2021. The index uses twenty-seven different variables including delivery times, backlog, and inventory accumulation to construct the index. Continued easing in backlogs and reductions in delivery times drove the moderation from the all-time high last quarter.

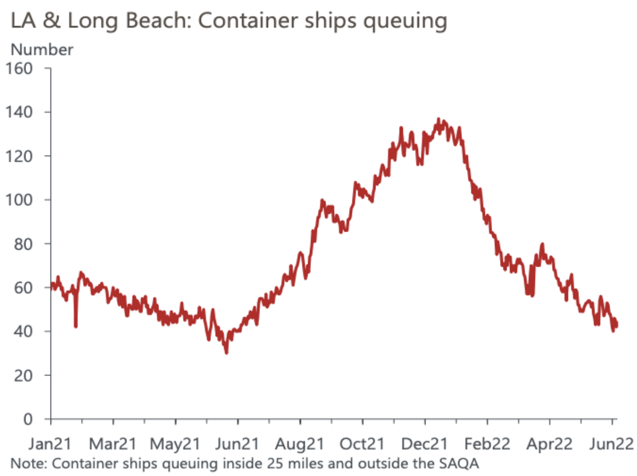


Source: Federal Reserve Bank of New York

A salient example Rouse has used in previous issues of this report is the container ship backlogs off the Southern California coast. Starting in the summer of 2021 the queue of ships began to increase sharply indicating that cargo was coming in faster than it could be offloaded and transported by truck out of the shipyard.

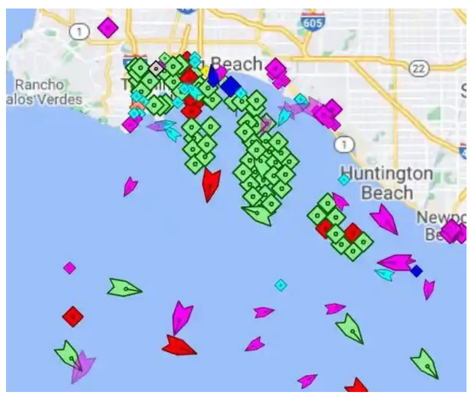
In Q1 2022, this queue reached its peak and began to reduce quickly over the coming months. As of the end of Q2 2022 levels have returned to a more normalized level consistent with the front half of 2021.

Chart 2: Fading ship backlogs off the Southern California coast



Source: Oxford Economics/Haver Analytics

September 2021: Green dots represent over 100 ships in queue



June 2022: Green dots represent approximately 50 ships in queue

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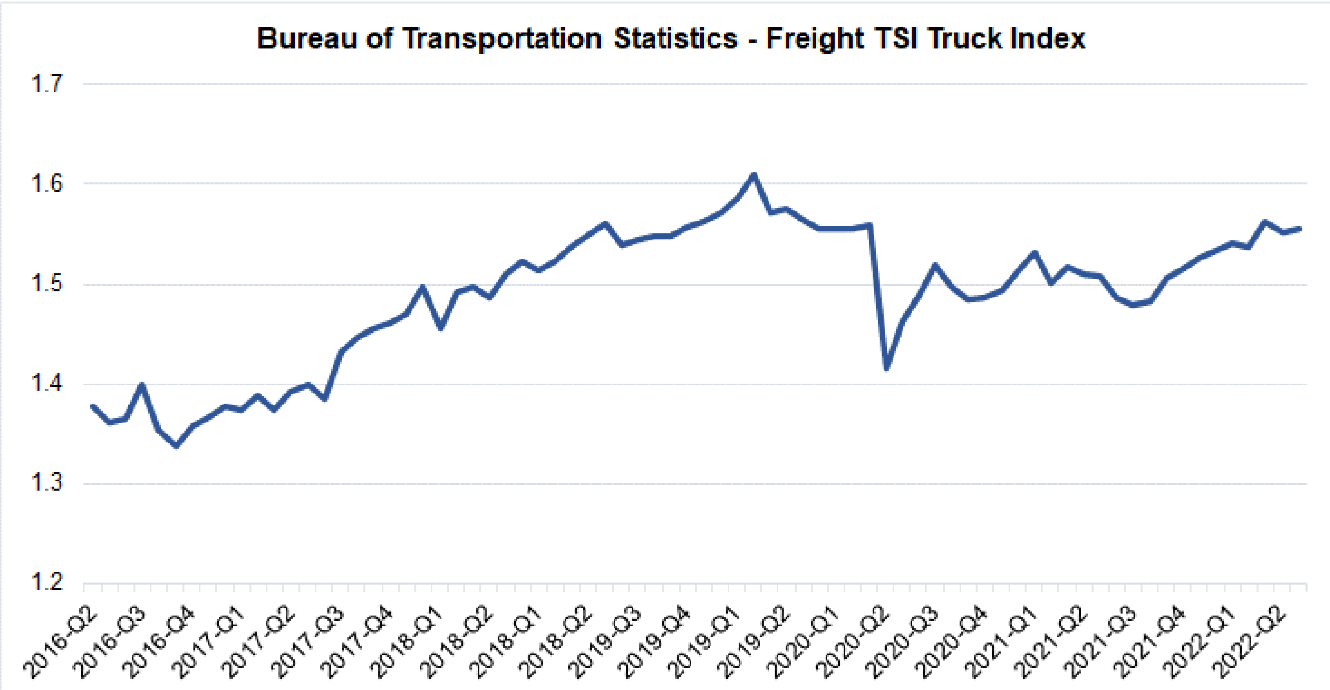
Freight Volume

The Bureau of Transportation Statistics publishes a Freight Transportation Services Index (TSI), intended to measure the volume of services performed by the for-hire transportation sector. After the sharp decline in April 2020, there was a pronounced rebound in the volume of goods being transported heading into the late summer months. The first quarter of 2022 saw a slight continuation of recent uptrends before flattening off in Q2. Volumes have still not yet fully reached pre pandemic levels.

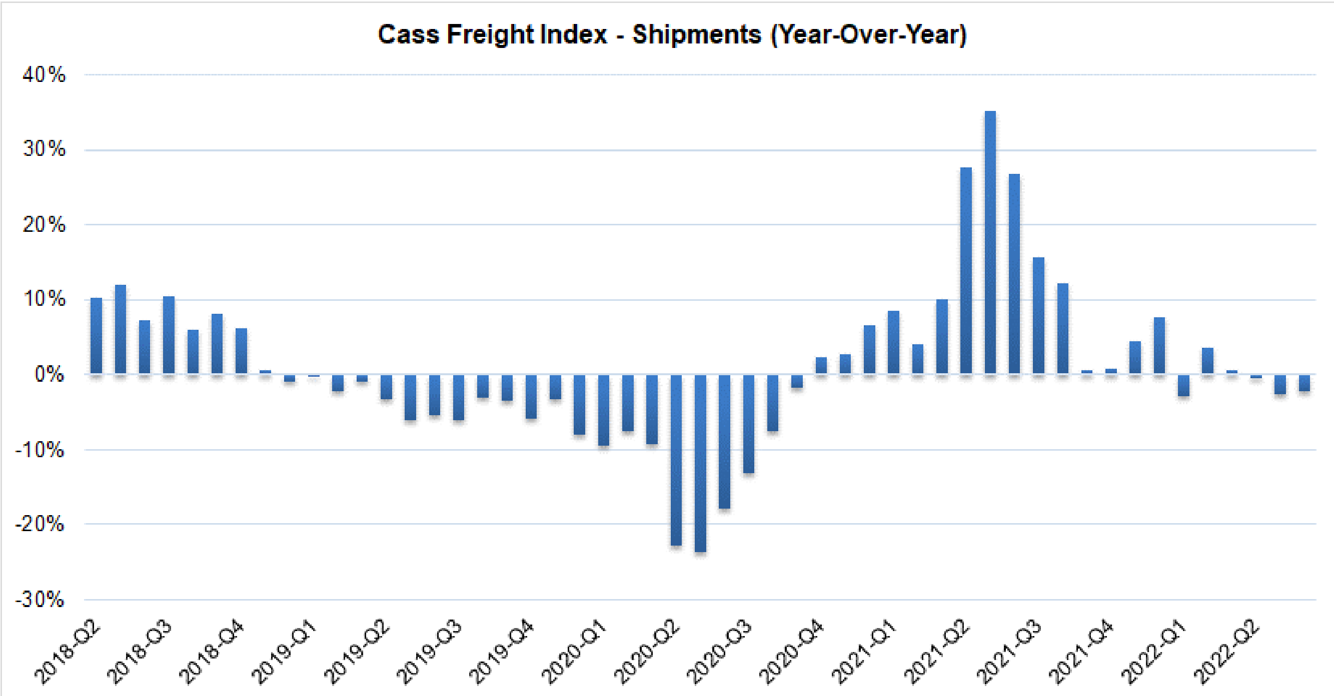


Source: Bureau of Transportation Statistics

The Cass Freight Index tracks shipments of the company's customer base, and this measure also tells a similar story as the BTS's Freight TSI. YTD 2022 saw a dip and recovery towards recent 2021 levels, which is in line with historical patterns observed.

Source: Cass Information Systems

Looking at year-over-year changes, recent months are trending slightly below one year ago indicating a stable, if not slightly contracting, shipping environment.

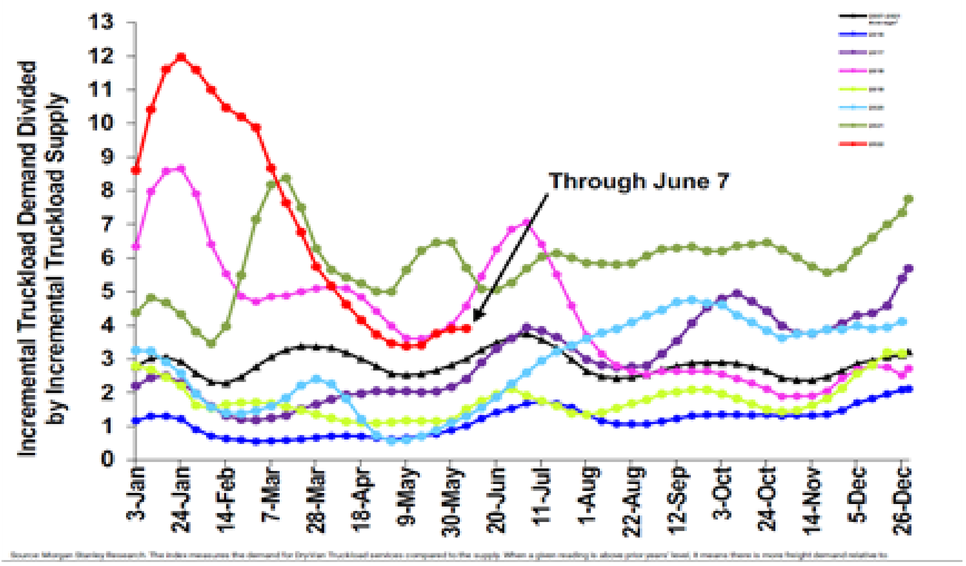


Source: Cass Information Systems

Morgan Stanley's latest quarterly research report highlights the stage of the current cycle compared to previous periods.

The chart below is the Morgan Stanley Dry Van Truckload Freight Index, which a measure of truckload demand relative to supply. The back half 2021 (dark green line) into Q1 2022 (red line) represented historic highs meaningfully above even other strong cycles like 2018 (pink line). While there has been a sharp and meaningful decline in this index in Q2 2022, current levels are still above historical averages.

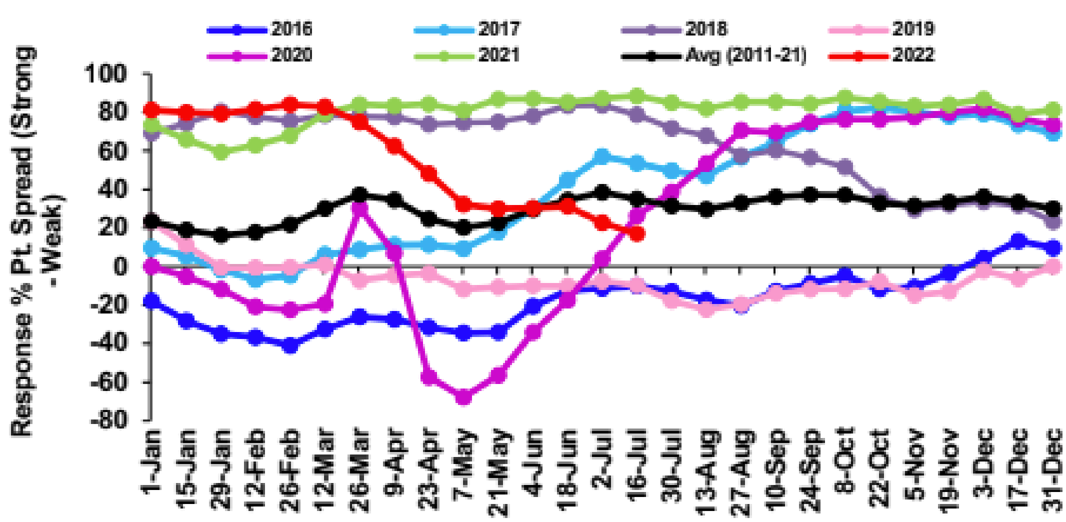
Exhibit 2: Morgan Stanley Dry Van ONLY Truckload Freight Index



This chart below represents the results of a survey of logistics industry participants' perception of current truckload demand. The y-axis represents the difference between the percentage of respondents who characterized current demand as strong minus the percentages of respondents who characterized current demand as weak.

The back half of 2020, all of 2021 and Q1 2022 sat at historically high levels. Similar to the chart above, Q2 2022 saw a sharp and meaningful decline in this metric, but now sits in-line with historical averages.

Exhibit 3: What is your appraisal of current TL demand?



Source: Morgan Stanley Research; Note: Response % Pt. Spread defined as the % of respondents describing current demand as "strong" less the % of respondents describing current demand as "weak".

Freight Market Trends

Once coronavirus reached North America and lockdowns began to be imposed, consumers rushed to purchase large quantities of groceries, toilet paper, hand sanitizer, and other household essentials. The massive influx of demand for these few products caused trucking capacity to become overloaded for the few lanes that handled delivery of these goods. As a result, van rates saw a small spike in March 2020. But once the initial surge in consumer spending for these products stabilized to normal levels, and more local governments restricted business activity and movement, rates took a dive in the months of April and May.

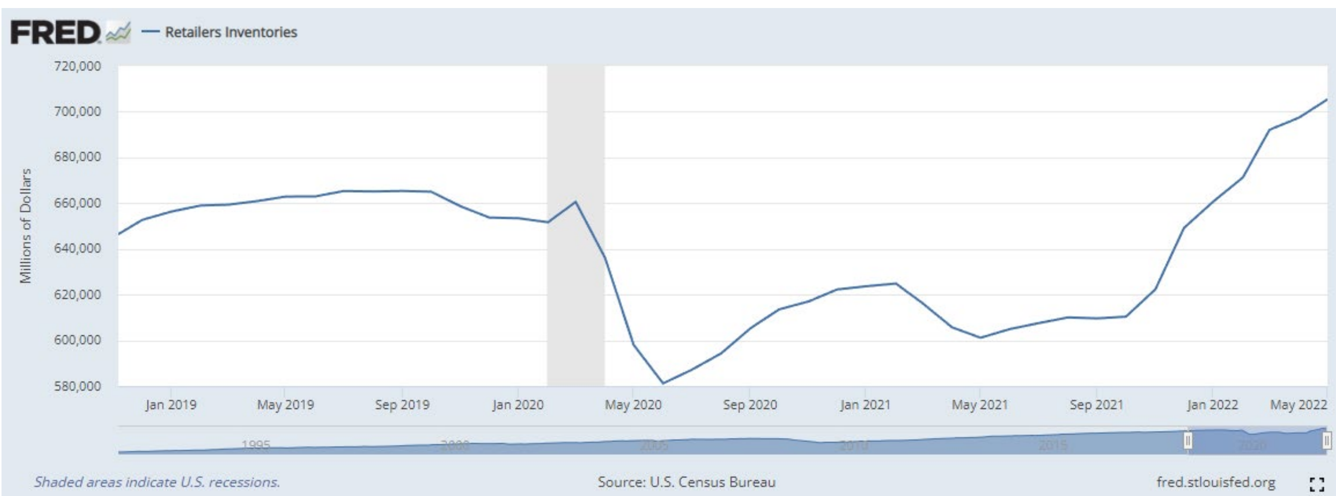
After this bottom, lockdown measures began to be lifted, and a heavy influx of demand for consumer goods took hold. Because most service-related purchases have declined substantially, consumer spending has shifted to physical goods, driving a need for trucking to deliver those goods to households. Lower industry truck supply combined with this increased demand led to a dramatic increase in trucking rates in the latter half of 2020.

In 2021, rates climbed as consumer demand is outstripping the ability of the trucking industry to meet it. There were periods in 2020 in which spot rates have exceeded contract rates due to strained trucking capacity. Contract rates allow shippers to lock in rates for a length of time while the spot market assists shippers when there is additional need beyond what contract carriers can manage. In 2021, spot and contract rates followed each other more tightly.

The easing, if not elimination of, COVID related gathering and travel restrictions throughout the United States has led to decreases in consumer spending on physical goods and increases in spending on services and travel. This is a reversal of the factors at play in the early parts of the pandemic that, in part, led to a dramatic increase in trucking rates.

Additionally, inflation has served as a headwind to the physical amount of goods that are purchased (and therefore required to be moved by truck) within consumer spending.

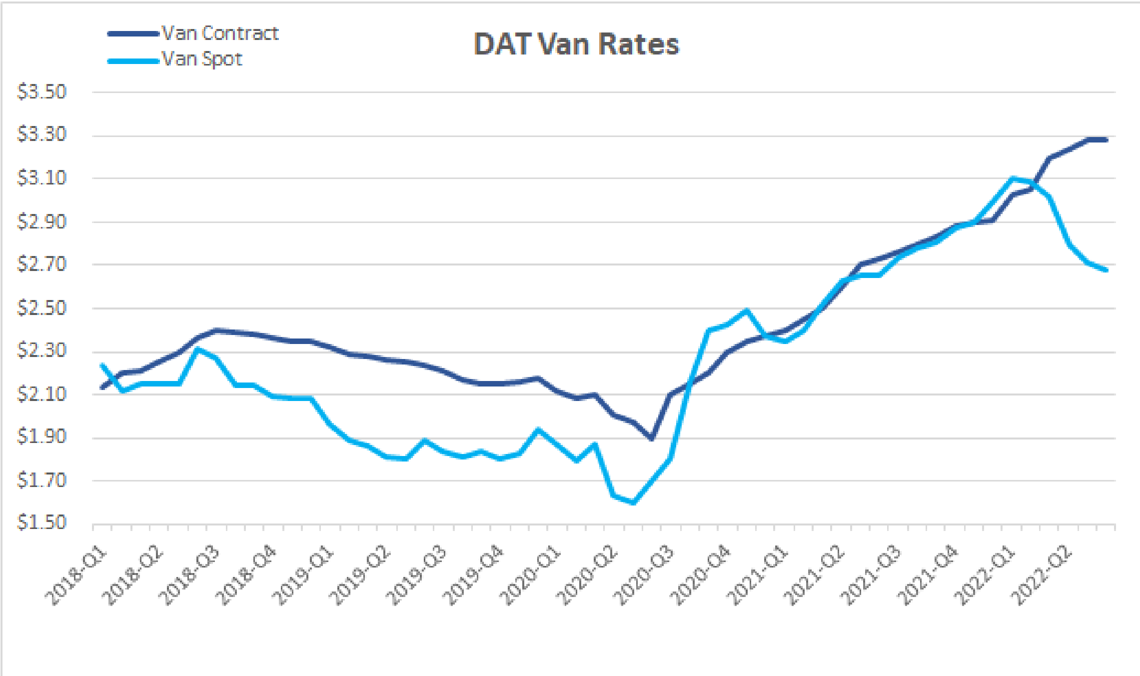
The change in consumer spending patterns, inflationary pressure on purchasing power, and easing of supply chain disruptions have led to large increase in retail inventories throughout the first half of 2022. US retail inventories now sit above pre-COVID levels and represent a significant increase compared to the prior two years.



Relative to sales, these inventory levels have increased rapidly and now sit above the long-term historical average. Many public retailers such as Walmart and Target have mentioned concerns over rising inventory levels and the need to discount in order to move product. High levels of current inventory can serve as a leading indicator of weaker demand for trucking as there is less need to restock shelves.

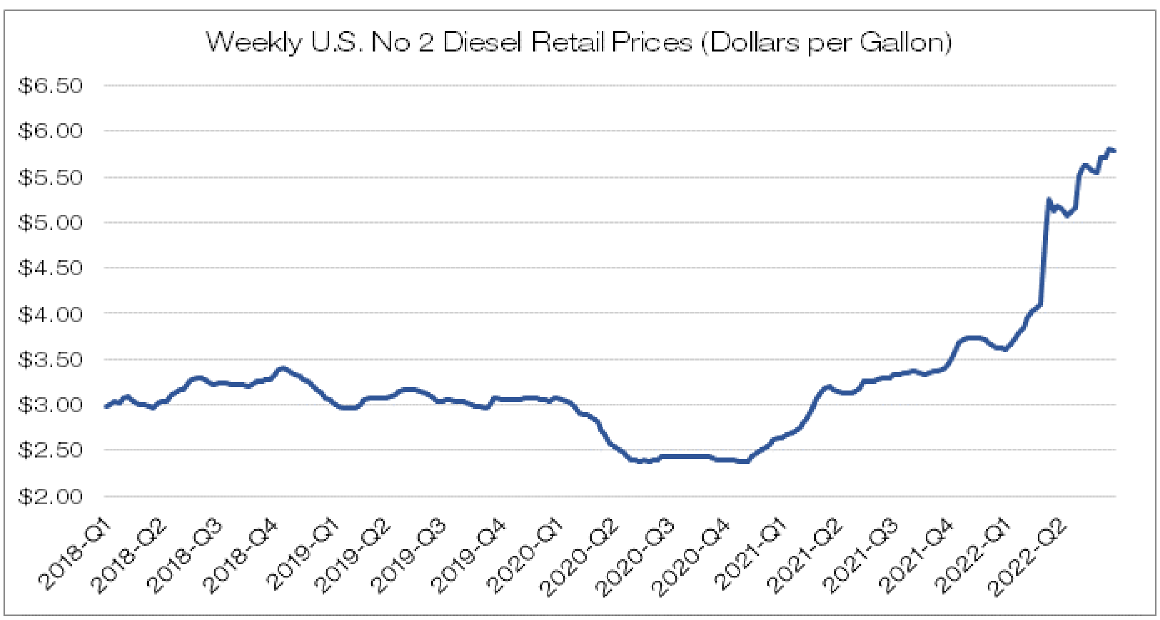
Freight Rates

For the first time since June 2020, Van Spot rates decreased in March 2022, but remained meaningfully elevated relative to historical averages. Spot rates continued to fall at an accelerating rate throughout Q2 before leveling off towards the tail end of the quarter. Spot rates generally serve as a leading indicator of contract rates. As spot rates peaked in February, contract rates continued to rise throughout May before flattening off in June.



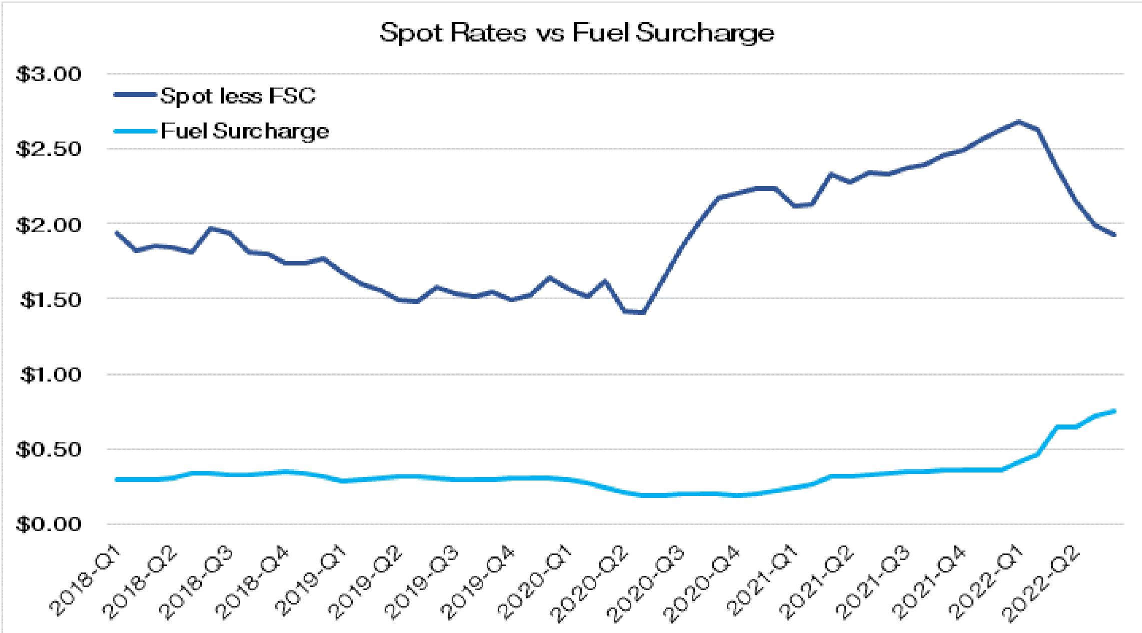
Source: DAT

In early 2022, partially related to global boycotts of Russian oil, diesel prices skyrocketed and sat above $5.00 per gallon for all over Q2. It appears that prices may have peaked in late June, but prices still sit comfortably above $5.00 per gallon as of the release of this report.



Source: US Energy Information Administration

When accounting for the cost of fuel, spot market rates can be adjusted to analyze the prices being charged by transportation companies without the effects of fuel. In the chart below, a baseline peg of $1.25/gallon and 6 miles/gallon were used to calculate the fuel surcharge embedded in the spot rate.



Source: US Energy Information Administration, DAT
Example Fuel Surcharge Calculation: ($2.50/gallon - $1.25 baseline) / 6 miles/gallon ≈ .2083

When fuel surcharge is removed from the quoted spot market rates, one gets a clearer picture of the profitability of the current rate environment. The combination of spot rates falling in nominal terms amidst a rising fuel cost environment has created a compounding negative effect on profitability for trucking companies.

Revenue Trends and Commentary

For-Hire Carriers

Carrier	Transport Topics Rank 2021	Date Reported	Revenue (millions) Recent Period	Revenue (millions) Prior Yr	Y/Y Change	Commentary
UPS	1	3/31/2022	24,378	22,908	6.4%	Q1 operating profit rose 12.1% year over year
Fedex	2	5/31/2022	24,394	22,565	8.1%	Operating income improved due partially to favorable net fuel impact and increased fuel surcharges
XPO	3	3/31/2022	3,473	2,989	16.2%	Record revenue quarter (third successive)
J.B. Hunt	4	3/31/2022	3,489	2,618	33.2%	Marketplace saw 36% YoY increase in total freight transactions; Truckload and Integrated Capacity Solutions business segments grew revenue 77% and 29% year over year, respectively
TFI International (CAD)	5	3/31/2022	2,192	1,149	90.8%	Operating income and diluted EPS both up more than 100% year over year
Knight-Swift	6	3/31/2022	1,827	1,223	49.4%	Continued investment in trailers which now exceed 71,000 units. Acquired 6 new terminals in Texas and Las Vegas
Schneider	7	3/31/2022	1,621	1,229	31.9%	Recent dedicated carrier acquisition Midwest Logistics Systems (MLS) performing well & the new dedicated business is helping mitigate inflationary cost pressures
Yellow Corporation	8	3/31/2022	1,260	1,198	5.2%	Reported best first quarter adjusted EBITDA and operating income in past six years, despite booking a quarterly loss
Landstar System	9	3/31/2022	1,971	1,288	53.1%	Record revenue quarter (second successive)
Old Dominion Freight Line	10	3/31/2022	1,497	1,127	32.9%	Record revenue quarter primarily driven by 17% increase in LTL revenue per hundredweight, and increase in LTL daily volume

These historical results confirm the strength of the trucking market in 2021 and through the majority of Q1 2022. Additionally, large carriers such as these generally operate in the contract market and have commodity hedges in place to safeguard against rising fuel costs. As contracts come to term and are reset, the large downward trend in spot rates will likewise put downward pressure on the new prevailing contract rate. Likewise, while fuel hedges protected against the sudden increase in the cost of diesel, the cost of future hedges has increased meaningfully in the current environment.

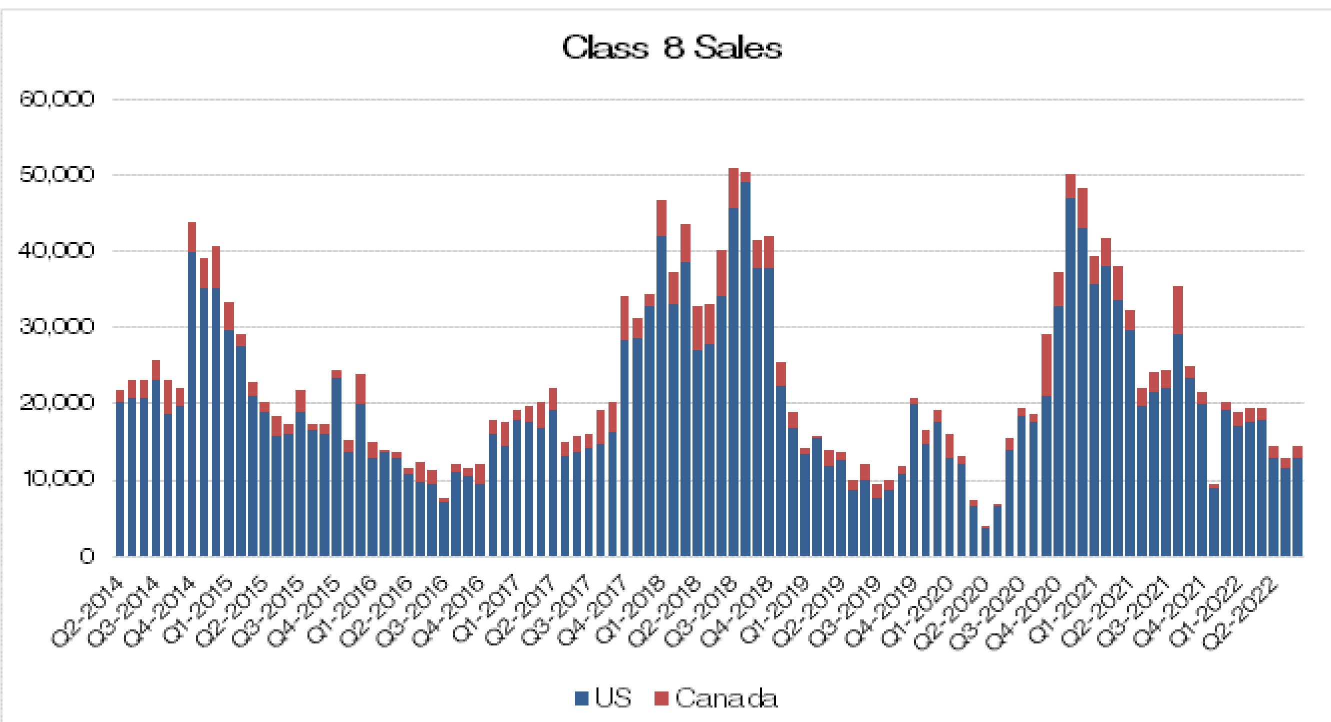
Truck Manufacturers

Manufacturer	Date Reported	Revenue (millions) Recent Period	Revenue (millions) Prior Yr	Y/Y Change	Commentary
Paccar	3/31/2022	6,106 kr	5,414 kr	12.8%	Achieved record quarterly sales as a result of strong new business volume and high used truck prices
Daimler	3/31/2022	10,600 kr	9,000 kr	17.8%	Strong opening quarter order intake figures, feel "fit to stay on course in a more uncertain environment"
Traton Group	3/31/2022	8,525 kr	6,544 kr	30.3%	Demand high in midst of supply chain issues and inflationary pressure; global geopolitical and economic risks remain top of mind
Volvo	3/31/2022	7,200 kr	6,100 kr	18.0%	High demand offsetting continued longer lead times on orders & lower order intake

**Revenues in chart reflect business divisions as outlined below.*
- Daimler – Trucks & Buses
- Volvo – Trucks

Truck manufacturers posted strong results in 2021, particularly relative to 2020. This trend continued in Q1 2022 as demand for trucks remained strong and supply constraints, particularly related to semiconductors, have begun to ease.

Class 8 Sales



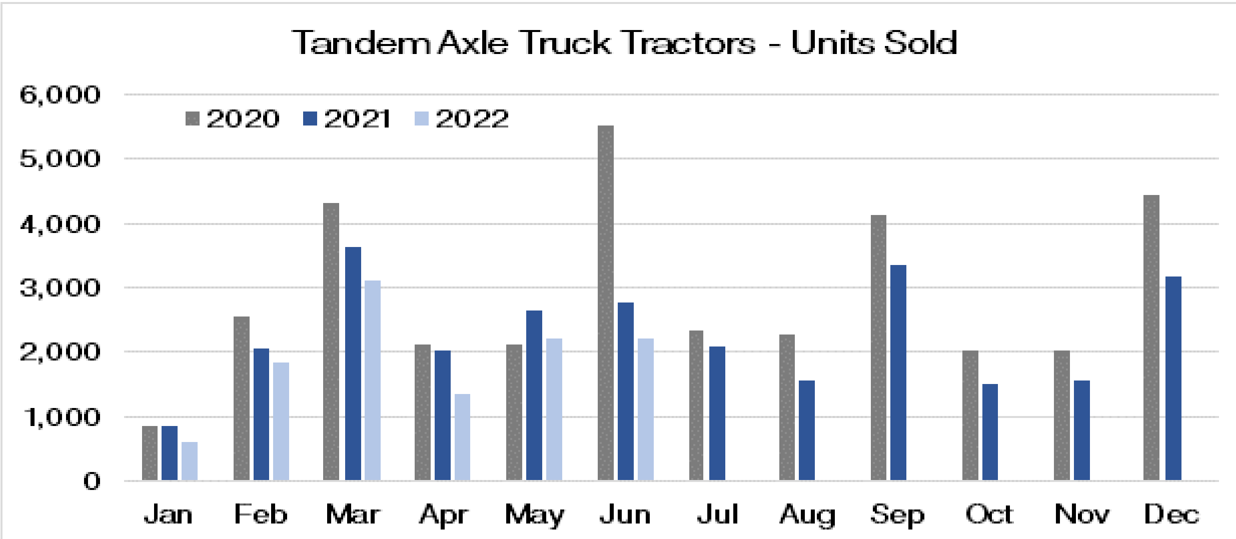
Source: ACT Research

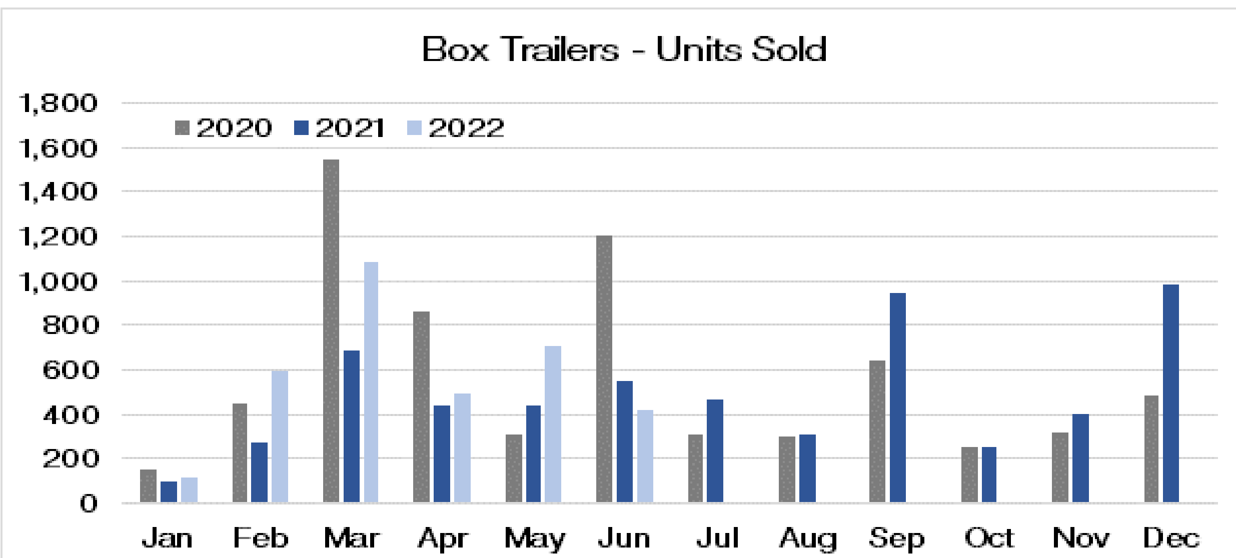
New class 8 sales reported by OEMs was lower than the demand and rate environment might otherwise have suggested in the back half of 2021 and into the early parts of 2022. Global supply chain troubles adversely affected the ability to source raw materials and semiconductor chips. While supply conditions are improving, this shortage continues to be the limiting factor in producing trucks.

Used Truck & Trailer Trends

Auction Volumes

In Q2 2022, truck tractor sales volume remains lower than prior year, but the size of this gap has decreased in the most recent months. In many cases box trailer sales have increased year-over-year. However, both truck tractor and box trailer sales are down relative to Q1 2020, just before the initial economic impact of COVID-19 in the US.





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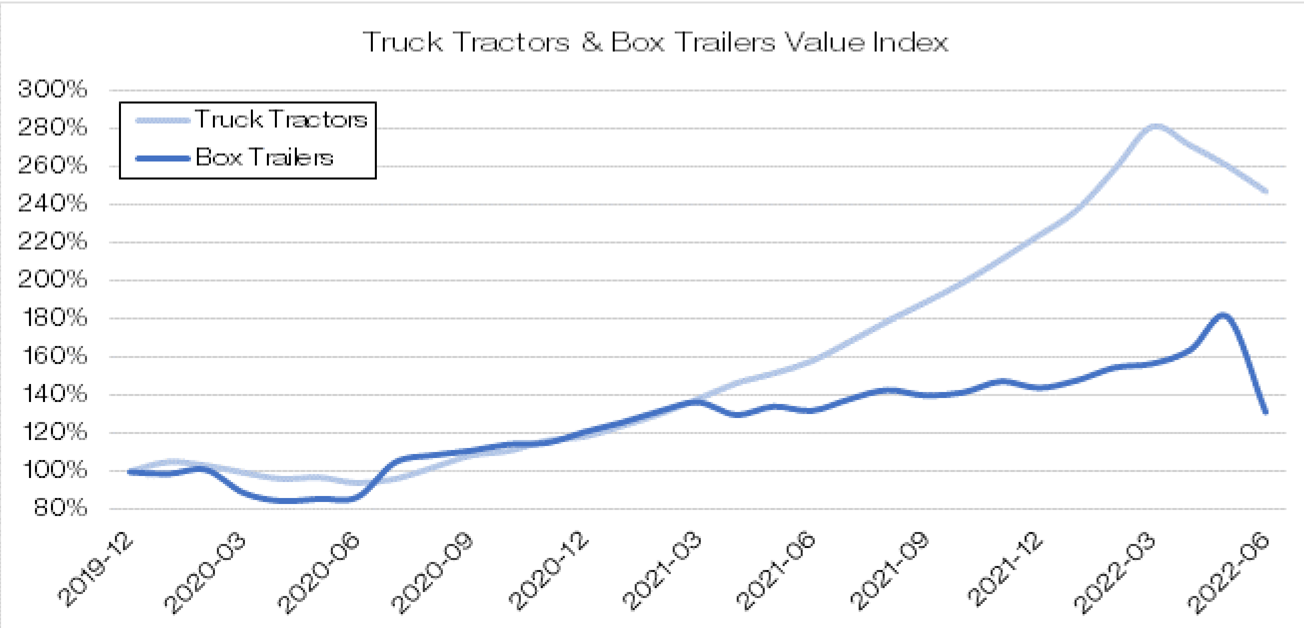
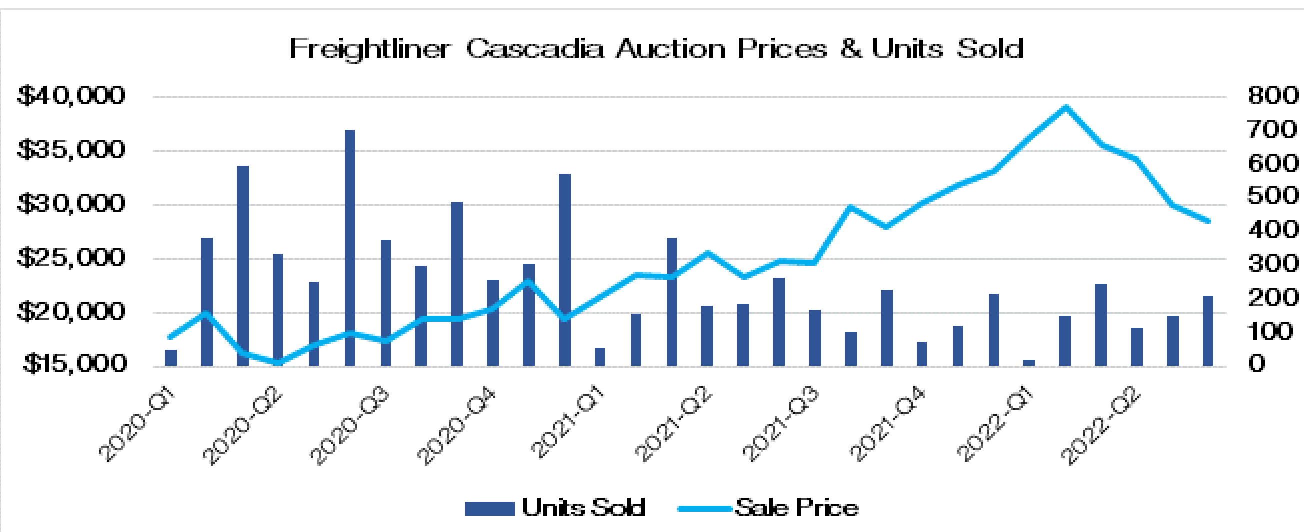
Auction Prices

Below is a chart showing the Rouse value indices for truck tractors and box trailers with values indexed to December 2019. Truck tractor values bottomed in the summer of 2020 as initial lockdown measures were being lifted and consumer-driven spending caused a high demand for trucks. This high demand coupled with lower units coming to auction caused extreme increases in used equipment values.

In recent months Rouse has observed a sharp reversal of pricing trends, but values remain at extremely high levels relative to historical norms.



To illustrate the general value trend with a specific example, below is a chart of volume (dark blue bars) and average sale price (light blue line) of the Freightliner Cascadia, the model that sells most at auction. At the beginning of this period, a 2013 – 2015 model year could be purchased on average for approximately $18k. Despite aging and natural depreciation, that same vintage truck reached peak pricing in February 2022 at nearly $40k. This same truck can be purchased for approximately $30k today.



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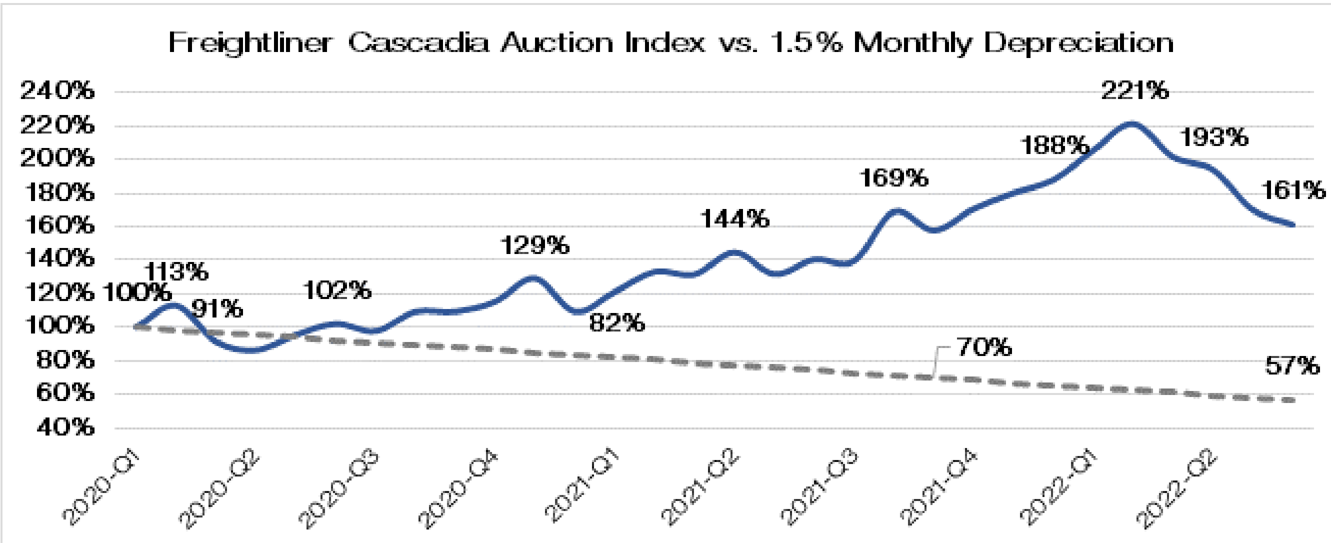
Below is the same Cascadia average price curve (blue curve) indexed to 100% at the beginning of the period. When compared to a straight-line depreciation of 1.5% per month (dotted gray line), truck tractors had roughly followed a normal depreciation rate until the second half of 2020. From there due to market strength and demand for trucks, prices increased sharply through 2021. The first two months of 2022 continued this trend.

However, just as spot rates began to recede from peak levels in March 2022, so did auction prices. While truck tractor values have fallen sharply over the most recent quarter, they are still very high relative to historical averages. In fact, pricing is similar to levels seen in Q3 2021 before considering depreciation.



Conclusions

Almost everything went right for trucking companies from mid 2020 through early 2022. The global pandemic shifted consumer spending away from services and into physical goods causing increased demand for trucking. Additionally, fuel costs remained low and supply chain constraints and semiconductor shortages helped minimize the amount of new entrants into the market. This extended period of prosperity had many metrics such as freight rates and used truck prices sitting at historically high levels in early 2022.

A shift in consumer spending habits away from physical goods and back into services, coupled with high inflation, high fuel costs, and retailers sitting on excess inventory levels has caused the tides to shift throughout Q2 2022. Freight rates and used truck prices have declined sharply in the most recent period but are still at extremely high levels relative to historical standards.

The rate of decrease in spot rates has moderated in recent weeks and fuel prices appear to have peaked. However, major retailers continue to report concerns over elevated inventory levels. It is still the relatively early stages of this downcycle and the coming quarter should provide a clearer indication of the severity.

About Rouse

Rouse Services is the leader in construction equipment appraisals, used equipment sales support and fleet management analytics, specializing in the rental sector. Rouse appraises over $50 billion of fleet and collects nearly $20 billion of equipment transactions annually across North America and the United Kingdom.

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