The Journal of Commerce

Intermodal Savings Index

3rd Quarter | October 2022

An Analysis of the Domestic Intermodal and Truckload Markets

IHS Markit®

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S&P Global

Intermodal Savings Index 3Q 2022

Contents

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I. How The Index is Calculated

Calculation: *The Journal of Commerce evaluates 117 lanes in our study of intermodal savings. We send estimates to 3PLs and shippers to review.*

Our estimates include margins and fuel but exclude accessorial charges such as detention, demurrage ("storage fees"), excessive per diem, lumper fees, and other fees. Our contributors review transactions and provide broker-to-shipper invoice rates. Those responses are used to calculate the two indexes.

The base value is 100, which means truck and intermodal rates are identical. If intermodal rates are 20 percent cheaper, then our Index value is 20 percent higher than 100, or a value of 120. If trucking rates are 20 percent cheaper, then the value is 20 percent lower than 100, or a value of 80.

Higher index values indicate greater intermodal savings to the shipper. Lower index values indicate intermodal has limited or no price advantage to trucking, which tends to be quicker, more reliable, and resilient than intermodal rail.

JOC calculates regional index values for the Midwest, Mountain, Northwest, Southeast, South Central, and Southwest US, using the regional map of the Intermodal Association of North America.

A national index value is calculated on a weighted basis using Intermodal Association of North America's 53-foot equipment flow data and is reweighted each month.

In parts of our report, we also break volume and other metrics per workday. We define a "workday" as a weekday that is not a rail recognized federal holiday such as July 4th or Christmas Day. It's important because working days vary by month and year. One month might have 20 workdays while another has 23 workdays, and thus we adjust for these variations using a per weekday calculation. It's not a perfect analysis because intermodal volume moves on Saturdays and Sundays, and certain weekdays are busier than others.

For more details, we encourage readers to read Larry Gross of Gross Transportation Consulting who produces an Intermodal In-Depth monthly report.

II. Executive Summary

The bottom line: Domestic intermodal volume grew year over year in the third quarter, but it was mostly due to a double-digit increase in the number of privately-owned 53-foot containers more than burgeoning demand for rail services.

We start out our report pointing out that numbers can be deceiving. Because you need to know the why behind the news, we recommend IANA's Intermodal Quarterly and the monthly Intermodal In-Depth by intermodal consultant Larry Gross, which are companion research reports.

All North American intermodal volume declined 1 percent year over year in the third quarter, while domestic volume fell 2.2 percent year over year in the same period. When isolated to domestic containers, excluding trailer-on-flatcar, total volume grew 1.5 percentage in the quarter. This is an important metric as more intermodal providers are shedding their trailer programs for containers at the behest of railroads.

As domestic volume improved slightly, so did intermodal service. As we will profile in Section III ("Intermodal Service") and Section IX ("What We Heard"), intermodal shippers and intermodal marketing companies argue that service was "less bad" but still "below par" overall, a sentiment BNSF Railway and Union Pacific Railroad acknowledged at the 2022 JOC Inland Distribution Conference in Chicago. In other words, service is trending in the right direction, but more work is necessary.

Chart 2A

ISI values

Contract and Spot ISI: 3 month. 6 month, 12 month rolling averages.

3 month ISI		6 month ISI		12 month ISI	
Spot	Contract	Spot	Contract	Spot	Contract
112.3	131.0	111 9	131.4	115.4	135.2

Source: IHS Markit

The JOC Contract ISI averaged 131 (31 percent savings) in the second quarter. Intermodal spot savings were dangerously low in the third quarter because railroads were slow to react to sagging truck rates. By mid-September, though, the US Class I railroads and asset-owning intermodal providers lowered their spot rates acknowledging the new trucking market. The JOC Spot ISI averaged 112.3 (12.3 percent savings) in the second quarter (Chart 2A).

Since 2018, the average monthly value is 128.1 for the JOC Contract ISI and 112.5 for the JOC Spot ISI.

III. The Volume Picture

The bottom line: Domestic container volume rose but only because there are more containers available to shippers now compared with a year ago.

AAR Volume Totals: Intermodal volume, across all container types, fell fractionally year over year in the third quarter, according to the Association of American Railroads. Between Weeks 27 and 39, the US railroads handled about 32,000 fewer loads than a year ago, moving 5.1 million loads in the 13-week period (Chart 3A). It's the second consecutive year with a decline in third quarter volume as the North American rails handled 5.2 million loads in the same period of 2020. The AAR data is updated every week, but it does not separate international and domestic intermodal.

IANA Volume Data: The Intermodal Association of North America provides us data which separates by container size. While domestic container volume rose 1.5 percent year over year in the third quarter, it rose 1.2 percent when the number is filtered down to 53-foot containers, excluding 48-foot containers. We have adjusted this number to a per workday number. For example, July 2022 had one fewer workday than July 2021, but August 2022 had one additional workday than August 2021. Larry Gross of Gross Transportation Consulting does a deeper weighting based on differences between days of the week, so July was technically a fraction of a day shorter, and August was a fraction of a day longer than a year ago. By month, workday volume rose 3.6 percent in July, 1.9 percent in August, and fell 1.9 percent in September. The September number was almost certainly the result of the disruption of the averted rail strike (Chart 3B).

Chart 3A

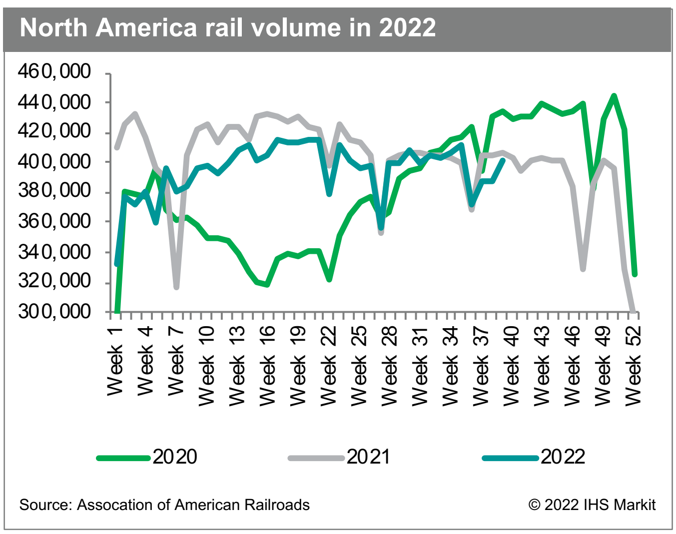


Chart 3B

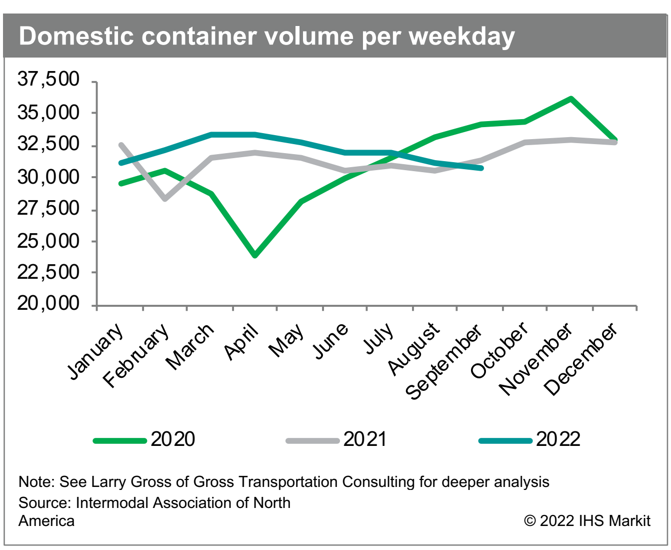


Chart 3C

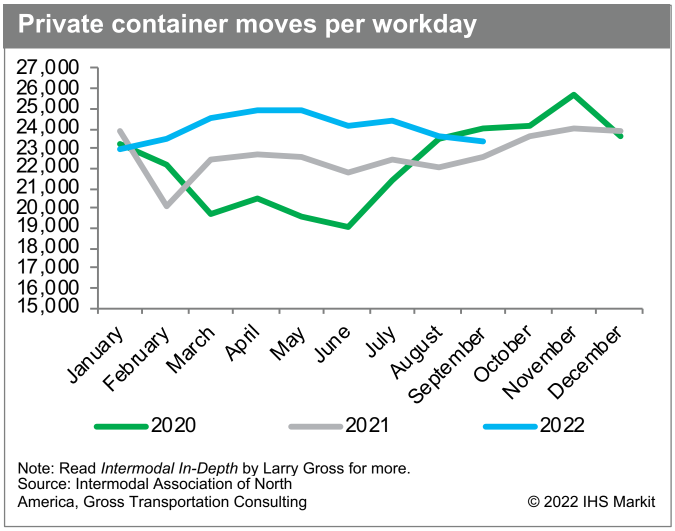


Chart 3D

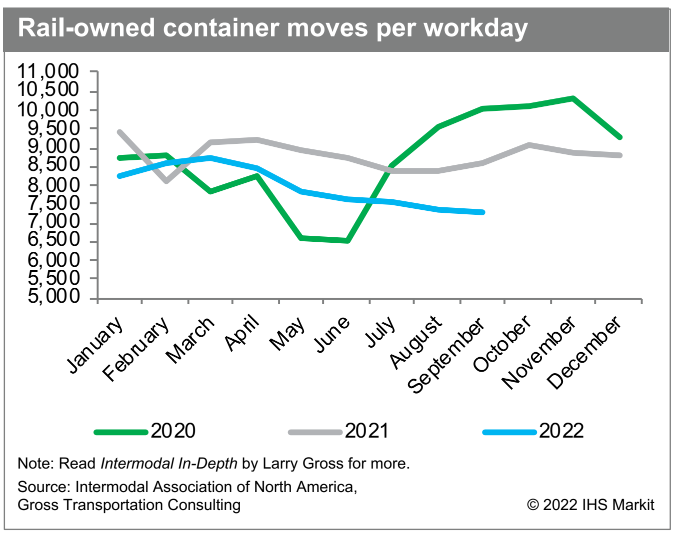
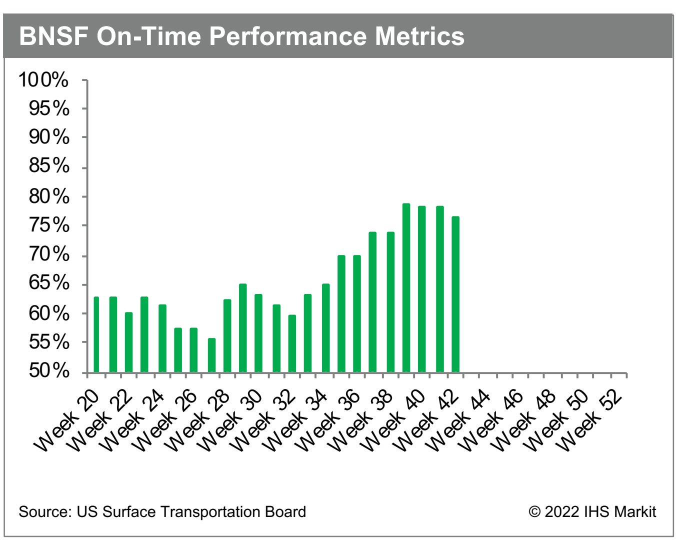


Chart 4A



More containers, not more demand: When we break down the data between rail-owned and privately-owned containers, we see the continuation of a trend over the last five quarters. Volume using rail-owned boxes such as EMPs and UMAXs fell about 19 percent year over year in the third quarter, while volume in privately-owned boxes increased nearly 7 percent (Charts 3C and 3D). However, we must also view this number in a larger context.

We believe the number of 53-foot containers have increased 10.6 percent compared with a year ago, based on data from PIERS, a sister product of JOC within S&P Global, and Jason Hilsenbeck of Loadmatch and Drayage.com. J.B. Hunt grew intermodal volume 3.5 percent in the third quarter but only because its container fleet grew 10.6 percent year over year. The numbers indicate that many new containers are being used to haul old business. More drivers and containers are necessary to move the same number of loads because equipment is turning slowly.

More about this in the next section.

IV. The Service Picture

The bottom line: Intermodal service improved sequentially in the third quarter, but intermodal providers believe BNSF Railway, Norfolk Southern Railway, and Union Pacific Railroad must do more work before shippers trust the service.

BNSF makes progress: BNSF Railway made significant progress toward the end of third quarter. According to US Surface Transportation Board data, and data shared with us, BNSF was on-time about 40 percent to 60 percent of the time in the second quarter, depending how “on time” is calculated, which differs among the railroads. Data from different sources can also be different based on whether it includes both domestic and international intermodal, and whether it includes expedited trains or only regular trains. By the end of the third quarter, BNSF’s data and data shared with us shows between 70 percent and 80 percent of trains arrive on time (Chart 4A).

UP service getting better: Union Pacific Railroad has seen some progress with a rolling four-week average of nearly 71 percent of trains arriving within 24 hours of the scheduled arrival, but it is still short of its stated goal of 80 percent (Chart 4B) before the end of the year. UP’s Kari Kirchhoefer told us at the JOC

Chart 4B

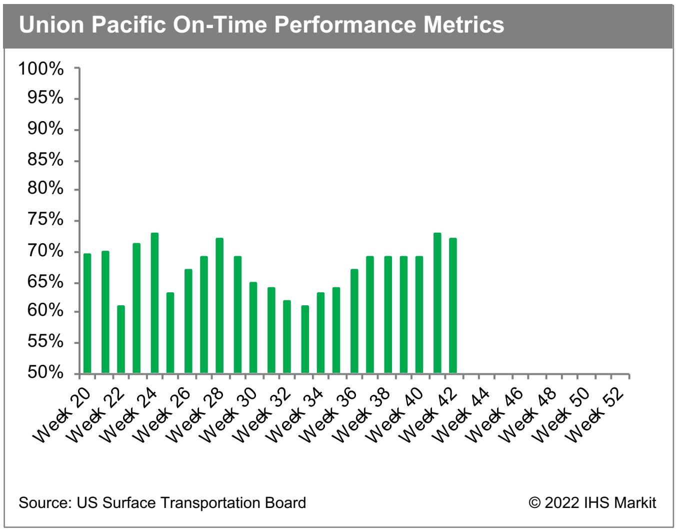
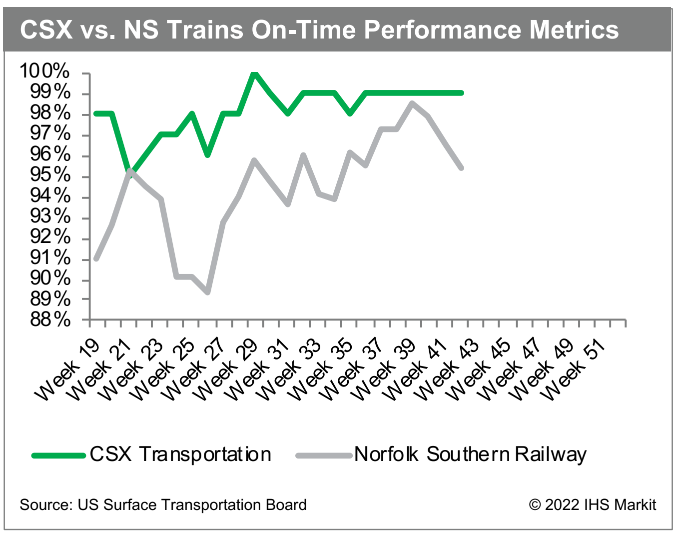


Chart 4C



Inland Distribution 2022 Conference that the long-term goal is 80 to 85 percent. While shippers would like to see that number at 90 percent, IMCs have told us that it can sell the product to shippers if the number is 85 percent. IMCs also say the standard deviation in transit time between trains must be much lower than it is today.

> *"Our service is not where we want it to be. Our goal is to be consistent and reliable. And we have not performed at that level this year. The good news is it is improving. We've been challenged from a crew perspective this year. Our goal is to hire 1400 engineers and trainmen.*
>
> *So far, we brought on 745 who have been hired and trained and they're out in operating for us. We've got 500 more that have been hired, and they're completing their training program right now. And then between now and the end of the year, we'll hire the rest of that to get us right up to 1,400."*
>
> — Kari Kirchhoefer, UP's vice president of premium, marketing, and sales.

Eastern US rails: While CSX Transportation service has been consistently high in 2022, Norfolk Southern Railway has recovered from its subpar service in the first and second quarters and returned to 95 percent (Chart 4C) of trains arriving within 24 hours of the scheduled arrival. It's consistent with commentary that we are hearing from IMCs that locations such as Jacksonville have significantly improved compared with six months ago and the only persistent issues revolve around chassis dislocation in the Northeast. Intermodal shippers also tell us service on Schneider National — which uses BNSF, CSX, and UP — is better today than three months ago after a rough first half.

Box turns down: One way to measure the performance of railroads and shippers is the box turn ratio — how many paying loads an average container handles per month. High box turn ratios require several things to work in sync. First, the train arrives on schedule and containers are wheel-mounted on a predictable schedule. Second, the IMC can reliably book drivers ahead of time to pick up a specific container. Third, the IMC can reliably schedule an appointment to deliver the container to the receiver. Fourth, the receiver has the necessary labor and warehouse space to quickly unload the container and return the

Chart 4D

Container box turns continue to sag

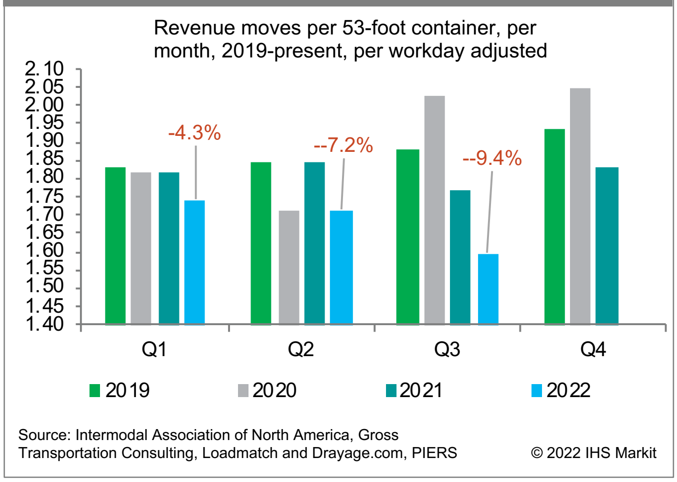


Chart 5A

JOC Spot ISI rebounds without peak season surcharges

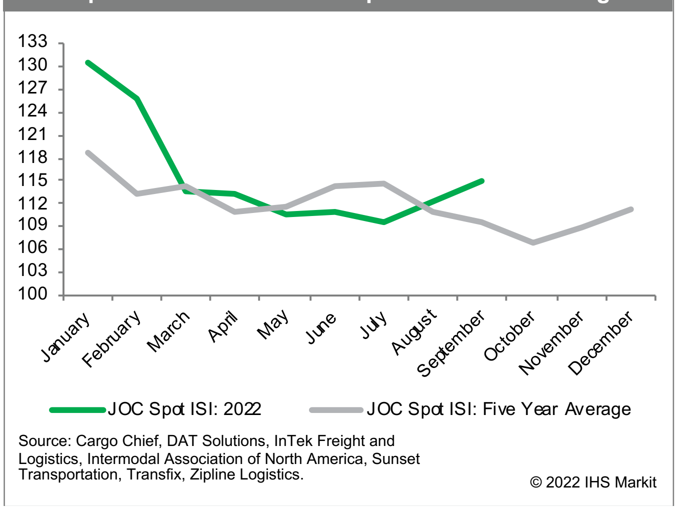
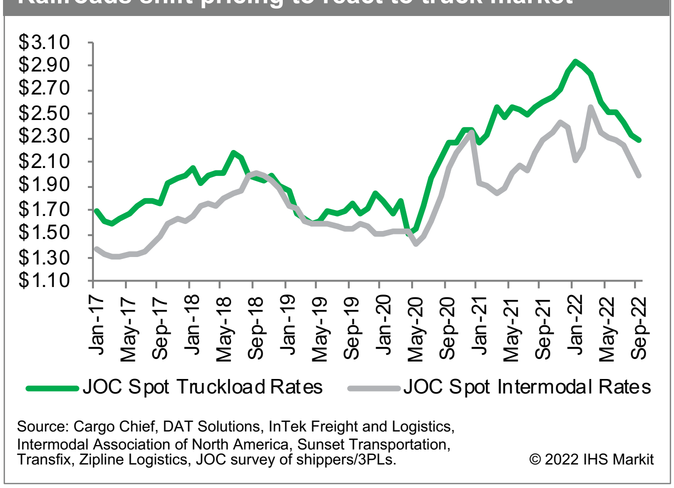


Chart 5B

Railroads shift pricing to react to truck market



empty for the next shipper. Lower ratios indicate a disruption in the cycle. The handoff is important because it's difficult to plan drayage if the IMC doesn't know if the train will arrive on time, a day late, or three days late, and it also leads to missed delivery appointments, further slowing box turns.

Our box turn estimates integrate data from IANA, PIERS, Larry Gross of Gross Transportation Consulting, and Jason Hilsenbeck of Loadmatch.com. It shows the average box turn ratio was 1.60 in the third quarter, down 9.4 percent (Chart 4D) compared with a year ago. J.B. Hunt reported a box turn ratio of 1.52 in the third quarter, down 6.4 percent compared with a year ago.

V. The Rate Discussion

The bottom line: Shippers continue to save a lot of money on intermodal contracts compared with truckload contracts, but spot truckload rates are competitive and are taking loads off the rails.

Spot intermodal savings: The JOC Spot ISI began the third quarter as it ended the second quarter, in dangerous territory with spot truckload rates being extremely competitive to rail. Combined with subpar intermodal service in June and July, the double whammy caused IMCs to lose business to the highways. Our JOC Spot ISI for July was 109.6, and any value under 110 is tight because the JOC ISIs do not account for storage fees (demurrage), detention on the box, or compliance fines such as Walmart's OTIF program. The JOC Spot ISI rose in August and September, to 112.2 and 115.1, respectively, as the railroads and IMCs finally acknowledged the new market reality and lowered spot rates (Chart 5A), but the 112.3 average in the third quarter is lower than 116.9 in the same quarter of 2021. Intermodal spot rates fell $0.25 while truckload spot rates dropped $0.15 per mile (Chart 5B).

It's a signal about how peak season did not happen in domestic intermodal. On Sept. 20, 2022, the UP's ramp-to-ramp rate from Los Angeles to Chicago was $1,725, essentially at or below the contract rate. In September 2020 and September 2021, ramp-to-ramp rates from Los Angeles to Chicago totaled $7,000 to $8,000 after factoring in a $5,000 peak season surcharge.

Contract Intermodal Savings: The JOC Contract ISI finished the third quarter averaging 131.0 which is down from 138.3 a

Chart 5C

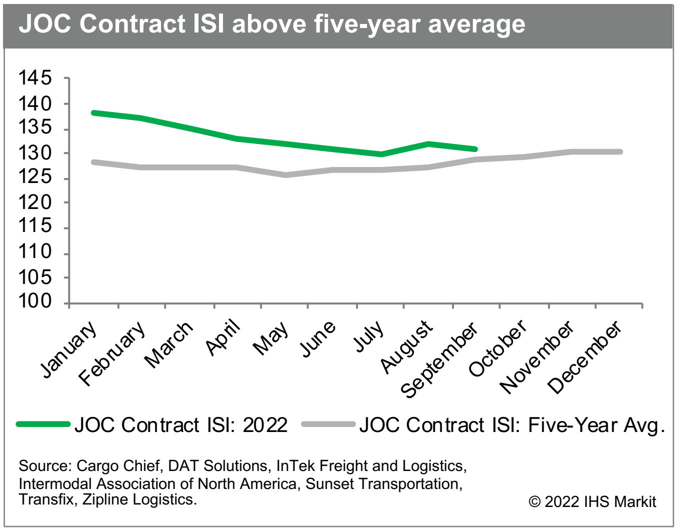
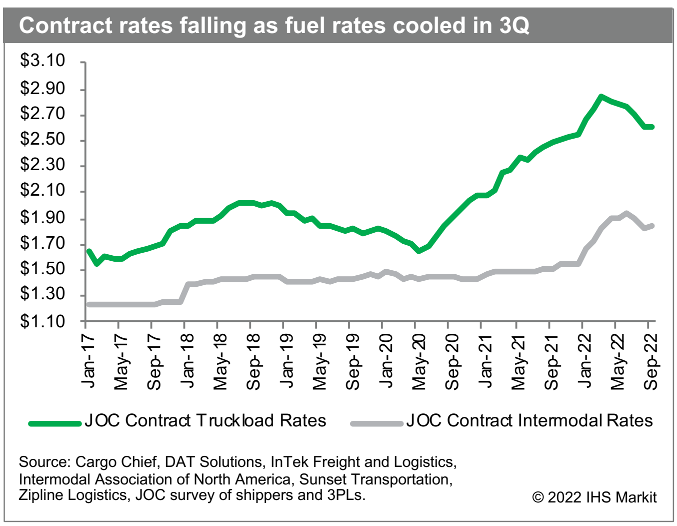


Chart 5D



year ago, but it still is higher than the five-year average of 127.5 (Chart 5C). Rail contracts fell $0.06 in the quarter based on a decline in fuel surcharges while truck contracts fell $0.10 per mile (Chart 5D) as shippers regained leverage in contract negotiations. Our intermodal contract rate was up 23.3 percent year over year, while J.B. Hunt Transportation reported intermodal revenue rose 30 percent year over year in the quarter.

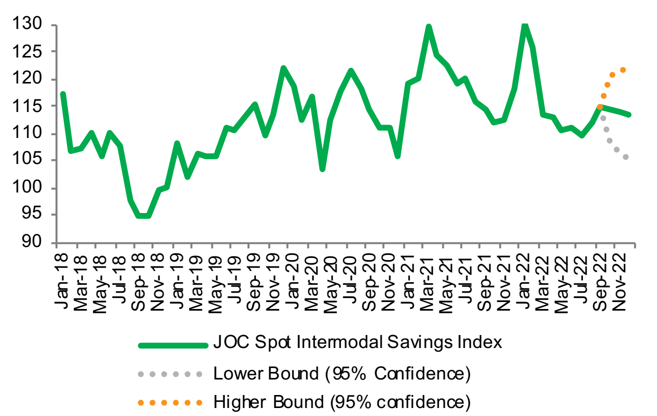
It will be interesting to see the posture of the US railroads going into the 2023 bid season. If truckload contract rates fall, how will the railroads price a lane like Los Angeles to Chicago, which was between $1,725 and $1,875 ramp to ramp for most shippers. Will railroads try to raise contracts in 2023, or hold flat year over year? What will be their posture in Northern California, Portland, Seattle, and backhaul lanes? And what about the East Coast railroads where the length of haul tends to be less than 1,200 and the shipper is not saving on fuel using rail. The Atlanta-Chicago corridor is an example of rail fuel and truck fuel cost roughly the same to shippers.

> *"We are closely monitoring domestic intermodal demand as spot truck rates fall and inventories climb. We expect parcel and truckload demand to remain soft as consumer preferences have shifted more to experiences versus goods… We've seen the spot rates lower, but we haven't seen that in the contract rates. We'll know more about that as we head into a bid season, which is in, call it, December… it's just a little too soon to tell."*
>
> — Kenny Rocker, executive vice president, marketing and sales, Union Pacific Railroad.

Contract-to-Spot Savings: We created this special category to track whether shippers should convert contract intermodal loads to the truckload spot market. Our analysis shows this only make sense on a small number of lanes and is a strategy that won't work for long. Last quarter we found it only made sense on 21 out of 117 lanes to consider the conversion, and now that total has dwindled to 16. Most of these lanes have been truck competitive for many years, such as Atlanta to Philadelphia, Charlotte to Miami, Chicago to Dallas, or Chicago to Denver.

Chart 6A

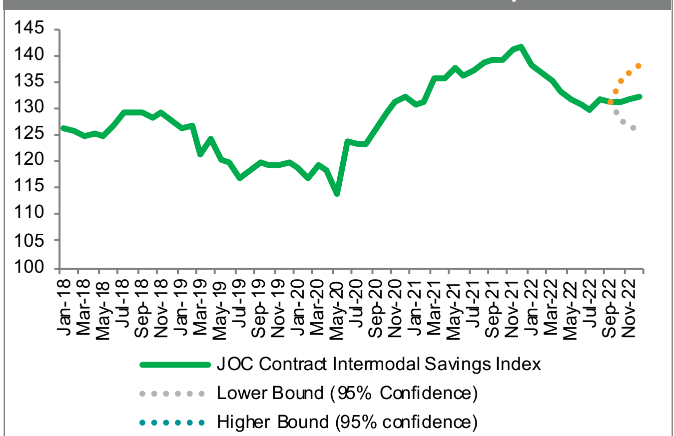
Spot intermodal forecast calls for flat fourth quarter



Source: Cargo Chief, DAT Solutions, InTek Freight and Logistics, Intermodal Association of North America, Michigan State University, Sunset Transportation, Transfix, Zipline Logistics

Chart 6B

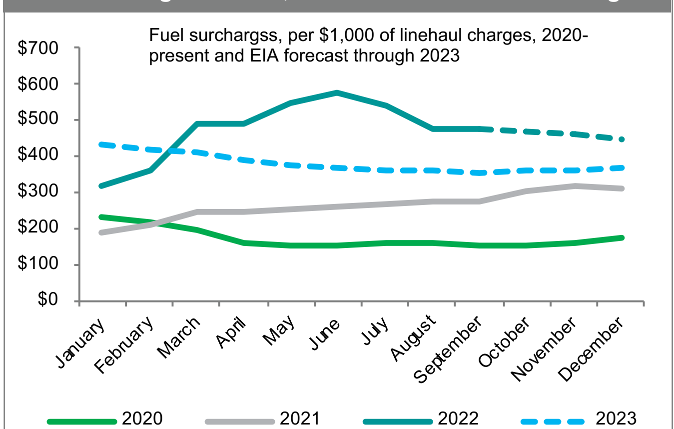
Contract intermodal forecast flat for fourth quarter



Source: Cargo Chief, DAT Solutions, InTek Freight and Logistics, Intermodal Association of North America, Michigan State University, Sunset Transportation, Transfix, Zipline Logistics

Chart 6C

Fuel surcharges will fall, but still remain at historic highs



Source: US Energy Information Administration forecast, JOC analysis

VI. The Forecast Ahead

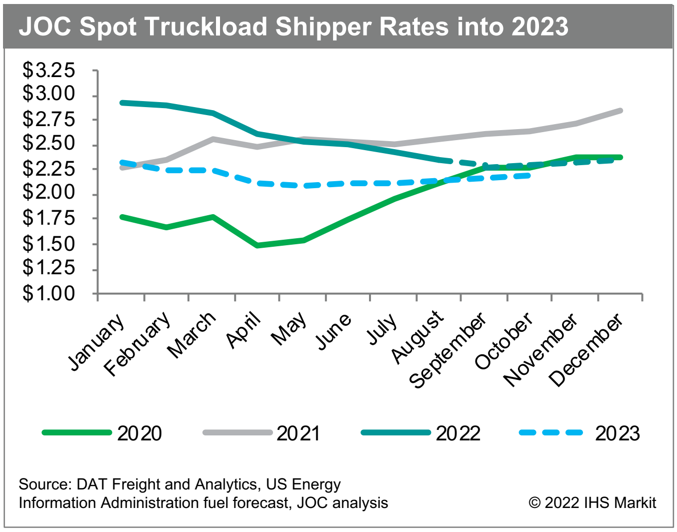
The bottom line: Michigan State University Professor Jason Miller forecasts that both the JOC Contract ISI and JOC Spot ISI will be flat sequentially in the next three months. Professor Miller uses autoregressive integrated moving averages (ARIMA) for his analysis.

Professor Miller's report: The forecast models suggest little change in spot and contract intermodal savings in the fourth quarter (Chart 6A and 6B). The mean absolute percent error for the Q3 forecasted periods were 1.8 percent and 0.7 percent for the JOC Spot ISI and JOC Contract ISI, respectively, suggesting the models continue to perform well. Across all seven North American Class I railroads, there is continued underperformance in intermodal volumes relative to the prior years, especially 2018 and 2020. The latest data from the US Surface Transportation Board available as of Oct. 20 showed the last four-week average intermodal loadings in 2022 were down 7.5 percent and 7.8 percent from their respective 2018 and 2020 levels. Given the historically elevated levels for JOC Contract ISI, this suggests that the railroads may be able to regain some lost market share if railroads can improve their network fluidity over the coming months. — By Professor Jason Miller, Michigan State University.

JOC Contract ISI: We agree that the JOC Contract ISI and JOC Spot ISI will remain relatively flat through the fourth quarter. For the JOC Contract ISI, the monthly values will largely come down to the fuel component of intermodal contract rates. Truckload contract rates will mostly likely fall through the rest of this year and into the first quarter, based on conversations with shippers, and commentary from Knight-Swift Transportation, the largest irregular one-way truckload carrier in the US. Intermodal contract rates won't reset until 2023. Therefore, if diesel prices fall, then the JOC Contract ISI will stay flat, but if diesel prices rise, then the JOC Contract ISI will drop. The US Energy Information Administration (EIA) predicts fuel prices will go down (Chart 6C), although we are skeptical of this forecast because diesel prices have risen $0.45 between Sept. 26 and Oct. 17, which may cause the JOC Contract ISI to fall to 129 or 130.

JOC Spot ISI: For the JOC Spot ISI, the index values will move both on fuel and spot trucking rates. Some trucking companies are concerned about a weak peak season in the fourth quarter.

Chart 6D



But DAT's Ratecast, part of DAT iQ, applied to the JOC ISI lanes indicates truck rates will climb $0.06 between Oct. 1 and Dec. 31 (Chart 6D). If we accept the DAT and EIA forecasts, then the JOC Spot ISI will remain around 115ish. However, given our skepticism of the October EIA forecast, we would not be surprised if the JOC Spot ISI falls to 112 again in October.

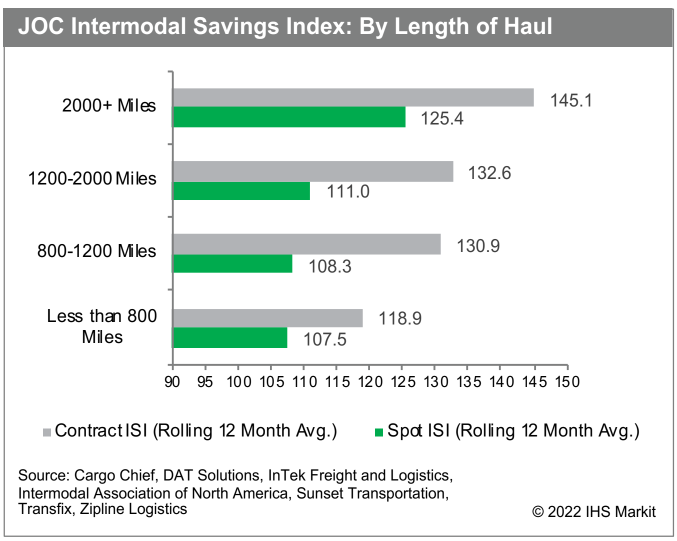
VII. Why Distance Matters

The bottom line: The length of haul is a key factor in modal decisions. Shippers benefit from lower fuel costs on longer lengths of haul, especially with higher diesel prices.

Less than 700 Miles: As our data shows, transcontinental hauls generate more intermodal savings to shippers than shorter hauls (Chart 7A).

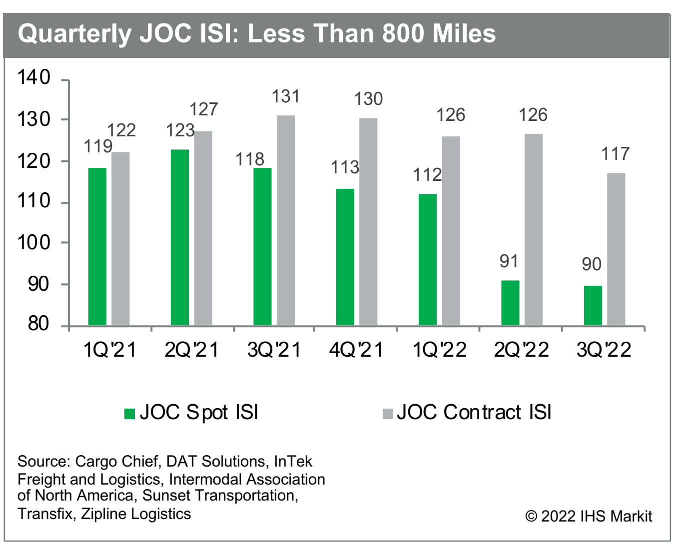
We track seven lanes less than 700 miles. We have minimal contract data, but the JOC Spot ISI was 89.9 in the third quarter (Chart 7B). Lanes such as Atlanta to Orlando, Charlotte to Chicago, or Dallas to Atlanta are too short or complicated to run on intermodal and provide very little intermodal discount. Lanes such as Chambersburg to Chicago, Elizabeth (NJ) to Chicago, and Syracuse to Chicago provide more a discount to make rail an attractive option.

Chart 7A



800 to 1200 Miles: This distance has the most heated competition between trucking and intermodal. On a rolling 12-month basis, the JOC Contract ISI is above the long-term average but the JOC Spot ISI is in highly competitive territory (or less than 110). Intermodal contracts saved more than 10 percent on 29 out of 32 lanes, but intermodal spot rates saved more than 10 percent on only 14 out of 32. In the third quarter, the JOC Contract ISI was 124.9 and the JOC Spot ISI was 104.7 (Chart 7C). Lanes such as Los Angeles to Denver, Chicago to Dallas, and Orlando (Lakeland) to Elizabeth (NJ) don't provide much savings on the rail. Lanes such as Elizabeth (NJ) to St. Louis, Ayer-Springfield-Worcester to Chicago, and Elizabeth (NJ) to Atlanta can provide a steep discount to intermodal shippers.

Chart 7B



1200-2000 Miles: We pay close attention to this length of haul because we know from J.B. Hunt and Schneider that an average intermodal load travels between 1,400 and 1,700 miles. On a rolling 12-month basis, our JOC Contract ISI was 132.6, a strong

Chart 7C

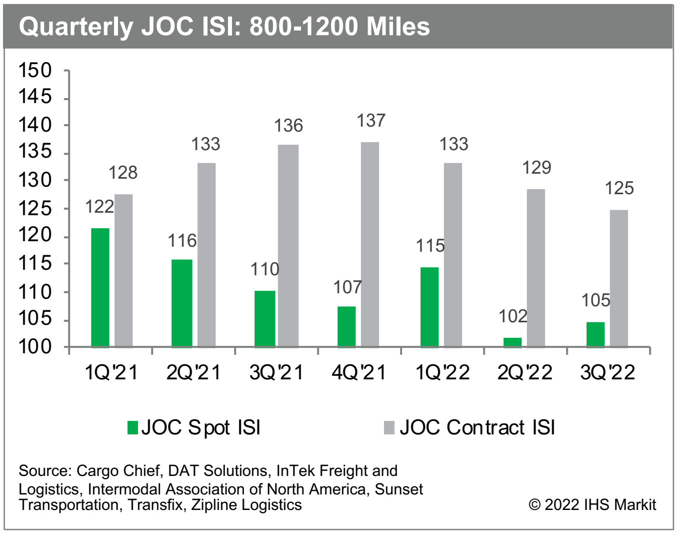


Chart 7D

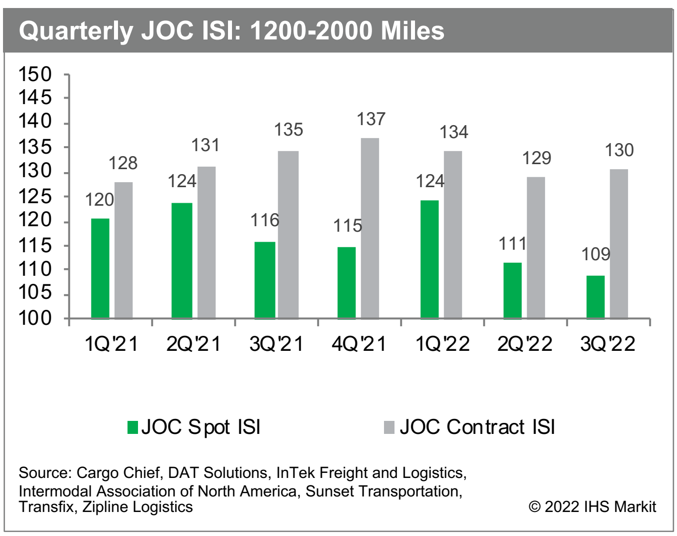
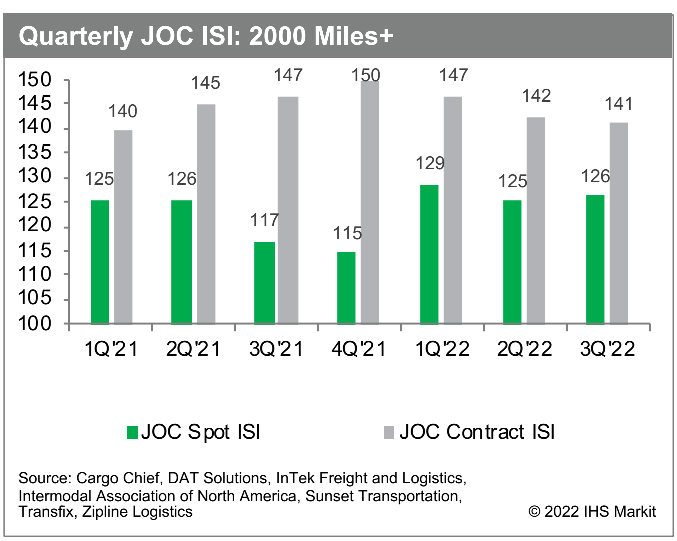


Chart 7E



discount for intermodal shippers, while the JOC Spot ISI was 111.0, slightly higher than our danger territory but not by much. In the third quarter, the JOC Contract ISI was 130.5 and the JOC Spot ISI was in danger territory at 109.0 (Chart 7D). Lanes such as Elizabeth (NJ) to Denver, Elizabeth to Houston, and Los Angeles to Houston are truck competitive routes. Lanes such as Dallas to Los Angeles, Miami to Chicago, Kansas City to Los Angeles, and Salt Lake City to Chicago deliver a strong discount to intermodal shippers.

2000 Miles+: Long-distance hauls are where the railroads deliver the strongest value to shippers. Given the trajectory of truckload contracts, any shipper with an intermodal contract is saving a lot of money in 2022. In the third quarter, intermodal contracts saved 41 percent and intermodal spot rates saved 26.2 percent compared with trucks (Chart 7E), a steep discount for any shipper. There are very few lanes more than 2,000 miles in which intermodal isn't a great value. Out of 42 lanes, intermodal contracts saved more than 20 percent on 41 lanes, and intermodal spot rates saved more than 10 percent on 39 lanes. The only truck competitive lane in this segment was Seattle to Dallas. Lanes such as Elizabeth (NJ) to Los Angeles, and Portland to Chicago, and Seattle to Elizabeth (NJ) are among the 41 lanes in which intermodal provides a steep discount.

VIII. Lane-By-Lane Breakdown

The bottom line: Intermodal contracts save at least 10 percent on the vast majority of lanes greater than 800 miles, but intermodal spot rates have gotten increasingly competitive in 2022.

The Results: We are going to focus on the JOC Spot ISI because intermodal contracts are cheaper than truckload contracts on 97.4 percent of the index lanes. Intermodal contracts are also cheaper than spot truckload rates on 91.5 percent of index lanes. For the JOC Spot ISI, there were 73 (62.4 percent) green lanes, 16 (13.7 percent) yellow lanes, and 28 (23.9 percent) red lanes in Q3.

GREEN

Index value is greater than 110

These are pro-intermodal lanes in which shippers should feel comfortable they are receiving a good value.

Atlanta to Chicago
Atlanta to Los Angeles
Atlanta to Oakland/Lathrop/Stockton
Atlanta to Seattle
Chambersburg to Chicago
Charlotte to Los Angeles
Chicago to Los Angeles
Chicago to Oakland/Lathrop/Stockton
Chicago to Portland
Cincinnati to Los Angeles
Cincinnati to Oakland/Lathrop/Stockton
Dallas to Los Angeles
Denver to Chicago
Elizabeth (NJ) to Atlanta
Elizabeth (NJ) to Chicago
Elizabeth (NJ) to Los Angeles
Los Angeles to Chicago
Los Angeles to Elizabeth (NJ)
Miami to Chicago
Oakland to Elizabeth (NJ)
Orlando to Chicago
Portand to Chicago
Salt Lake City to Chicago
Seattle to Atlanta
Springfield to Chicago
Worcester to Los Angeles

YELLOW

Index value is between 100 and 110

Shippers should have a deeper discussion on these lanes with logistics providers because although they are saving some money, truck rates are competitive.

Atlanta to Dallas
Atlanta to Elizabeth (NJ)
Atlanta to Philadelphia
Baltimore to Chicago
Chicago to Atlanta
Chicago to Chambersburg (Harrisburg)
Chicago to Dallas
Dallas to Chicago
Denver to Los Angeles
Elizabeth (NJ) to Denver
Elizabeth (NJ) to Houston
Elizabeth (NJ) to Orlando
Los Angeles to Atlanta
Los Angeles to Houston
Los Angeles to Jacksonville
Los Angeles to Miami
Oakland to Chicago
Orlando to Los Angeles
Seattle to Dallas
Stockton to Worcester

RED

Index value is less than 100

These are pro-trucking lanes.

Atlanta to Jacksonville
Atlanta to Orlando
Charleston to Chicago
Charlotte to Chicago
Charlotte to Miami
Chicago to Denver
Dallas to Atlanta
Houston to Chicago
Houston to Los Angeles
Jacksonville to Dallas
Los Angeles to Denver
Los Angeles to Seattle
Los Angeles to Tacoma
Orlando to Elizabeth (NJ)
Portland to Los Angeles
Salt Lake City to Los Angeles
Seattle to Los Angeles
Springfield to Orlando
Tacoma to Los Angeles
Worcester to Orlando

How to Read the Chart: *In this section, we examine which markets are pro- intermodal, pro-trucking, and up for grabs. Please evaluate the above infographic like a traffic light. Green means go — strong intermodal savings. Yellow means slow down — truck is competitive. Red means stop — no intermodal savings. Given accessorial fees, such as demurrage, detention, or excessive per diem, a yellow lane can easily flip red since we exclude these one-off fees.*

Source: IHS Markit

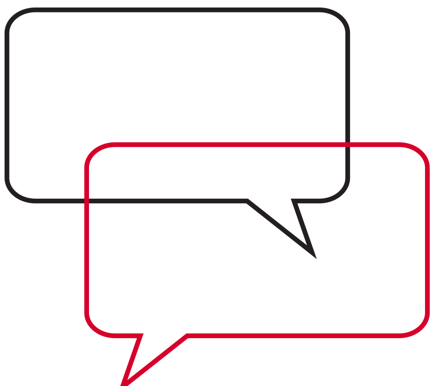
IX. What We Heard

The bottom line: Intermodal service has improved over the last three months but is still not where it needs to be.

Union Pacific Railroad: "Our service is not where we want it to be. Our goal is to be consistent and reliable, and we have not performed at that level this year. The good news is it is improving...I'm happy to report that as we brought these new employees on, we've been able to bring our re-crew rate down to May 2020 levels, and that's allowing us to improve our trip plan compliance, which is what all our BCOs care about. To give you a perspective of how important re-crew rate is: For every one point we re-crew, we use 80 additional people. So it's very important to be able to keep that in in the low single digit numbers as you move forward. Now 69 percent trip-plan compliance is nothing to shake a stick at. But that is a significant improvement from where we were in August. And as more crews come out, I fully expect that our service will back where we want it to be by the end of the year." — Kari Kirchhoefer, vice president of premium, marketing and sales.

Schneider National: "We thought it was important to have that time for planning our transition to UP. We wanted to be very transparent with customers, I think we've been accomplishing all those things. We've been working with the Union Pacific for the last nine months. And I am confident we have got everything wired, whether it's from commercial to technology to operations, and I'm feeling good about it. From the customer conversations and what I'm seeing in the data, I'm overwhelming excited that there's this option in the market that did not previously exist." — Michael Baumgardt, senior vice president of intermodal.

Swift Transportation: "It's become very apparent to the railroads that and us in general that we can't just drop price and assume volume is going to come back. Price is a component of that. But I don't know that it's the most important component because if it was, we probably would have seen significant jumps in rail volume over the last two years, when the gap between intermodal and truck was higher than ever. Customers didn't flock to intermodal not because of price but because of service. It's great that spot prices are going down the railroads are trying to incentivize customers back. But until there's a service component that customers can trust, shippers will remain suspicious." —Dustin Ohlman, senior vice president of intermodal.



Knichel Logistics: "I think the mode is already selected for a lot of freight. But it's maybe like five percent or 10 percent that may be up for grabs. So that's really what we're looking at, how well are we going to be able to compete with truck for that five or 10 percent of freight that may be up to grabs. And again, that is that combination between price and service, and it's going to be a challenge on both fronts in 2023." — Jon Krystek, chief operating officer.

Retail shipper: "There's a lot of inventory out there. We've done a great job keeping our inventory levels down, but I will say there is a delay in our distribution centers and stores taking inventory because we're making sure we have the right labor in place. So, I'm not in a rush to get everything into our DCs and stores. The transit times that we're seeing on the rail are almost helping me deal with the extra time for stores to receive product in inventory."

Apparel and footwear shipper: "I take it as a positive sign that service has improved in the last five to six weeks and some inland congestion is starting to ease, although it's not all the way gone yet. Unfortunately, speed is the last thing I need right now with our inventory situation. We've reduced our transloading to intentionally slow things down. It's a complete 180 if you go back six or 12 months when everybody was in the chase, how quickly can I get it? Flash forward to where we are today, it's how do we slow down the flow of goods?"

Food shipper: "I think that at the end of the day, it is important to have strategic relationships with both your trucking as well as intermodal providers. And just because the market flips in one favor or another, that doesn't necessarily mean we're going to go chase those dollars in the truck market because intermodal does serve a purpose. I think that it'll warrant some crucial conversations with some of the intermodal providers in terms of why some costs would be passed to us and not necessarily absorbed. But I think from an overall strategic standpoint, I see us probably keeping our split of truck versus intermodal pretty status quo give-or-take a couple of percentage points in 2023."

X. Acknowledgements

Although we are prohibited from disclosing the identities of many 3PLs, IMCs, and shippers contributing data to the JOC Intermodal Savings Index, we thank them for participating.

We can identify Cargo Chief, InTek Freight and Logistics, Sunset Transportation, and Zipline Logistics as valued JOC Intermodal Savings Index partners.

Loadsmart provides data for our JOC Shipper Spot Truckload Rate Index, tracking broker-to-shipper rates on more than 4,000 lanes, which we compared with our smaller JOC Intermodal Savings Index sample size.

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We average Rick's numbers with freight all kinds (FAK) transactional rates published by Class I railroads and asset-based IMCs to provide a complete view of the spot market.

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We appreciate all the data that Cargo Chief, DAT, IANA, InTek, Loadsmart, Sunset, and Zipline bring to the industry. Our goal is to build upon their great work and industry expertise. The aggregated data underlying the JOC Intermodal Savings Index is available to JOC members with the proper subscription tier. We encourage our readers to contact us or our data contributors if you have further questions.

Finally, we thank our parent company, IHS Markit, part of S&P Global, for their continued support of the Journal of Commerce.

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