JOC Intermodal Savings Index

An Analysis of the Domestic Intermodal and Truckload Markets

3Q 2020

Ari Ashe
Senior Editor, Journal of Commerce

Journal of Commerce | **Insight**

Table of Contents

Executive Summary	3
The Outlook	4
Year to Date	5
Distance Discussion	6-7
The Lane-By-Lane Breakdown	8
Regional Breakddown	8
Quotes from Earnings Calls	9
Methodology and Acknowledgements	9-10

US Intermodal Savings Index

An Analysis of the Domestic Intermodal and Truckload Markets

Ari Ashe, Senior Editor, Journal of Commerce

The Journal of Commerce (JOC) provides an in-depth quarterly report into the US intermodal market to facilitate conversations between shippers and transportation providers about modal decisions.

How to Read Our Index

The *JOC Domestic Spot Intermodal Savings Index* ("Spot Index"/"Spot ISI") and the *Domestic Contract Intermodal Savings Index* ("Contract Index"/"Contract ISI") is measured with **100** as a base.

Index values greater than 100 signify intermodal rates are cheaper. Values less than 100 indicate truckload rates are cheaper. Values are linked to percentages:

- 110 = Intermodal 10% cheaper
- 120 = Intermodal 20% cheaper
- 95 = Truckload 5% cheaper
- 90 = Truckload 10% cheaper

Rule of thumb: High numbers are good for intermodal. Low numbers are good for trucking. For an in-depth review of the Spot and Contract Index, please read our "Methodology" in the back.

Executive Summary

Domestic intermodal volume grew for the first time since 2018, rebounding from a pandemic-related swoon with a 9.8 percent increase year over year in the third quarter, according to the Intermodal Association of North America (IANA). Early signs of the recovery were apparent in June when rail-owned containers were in short supply in Los Angeles.

Cargo in 53-foot containers originating in the Southwest — Arizona, California, and Nevada — surged 15.4 percent year over year in the quarter. Volume terminating in the Midwest rose 21 percent. Volume terminating in the Southcentral — such as Dallas and Houston — grew more than 17 percent year over year in the third quarter, according to IANA.

Union Pacific levied surcharges to curb demand and get equipment to contract customers. Small shippers are subject to a $5,000 surcharge in Southern California, $1,500 in Northern California, and $1,000 in Seattle on excess contract cargo. Spot rates were increased to match the surcharges.

The JOC Spot Intermodal Savings Index didn't decline, though, because truckload rates rose too. In California, for example, outbound shipper rates began the quarter at $2.54 per mile and ended at $3.40 per mile. Outbound California rates were as low as $1.71 in April, according to JOC's Shipper Retail Spot Rate Index, based on data from digital broker Loadsmart.

JOC's Contract ISI was steady because contract rates are not as volatile as spot rates.

Table of ISI values

Contract and Spot ISI: 3 Month, 6 Month, 12 Month Rolling Averages.

	3 Month	6 Month	12 Month
Spot ISI	116.7	113.9	114.5
Contract ISI	124.9	122.0	120.2

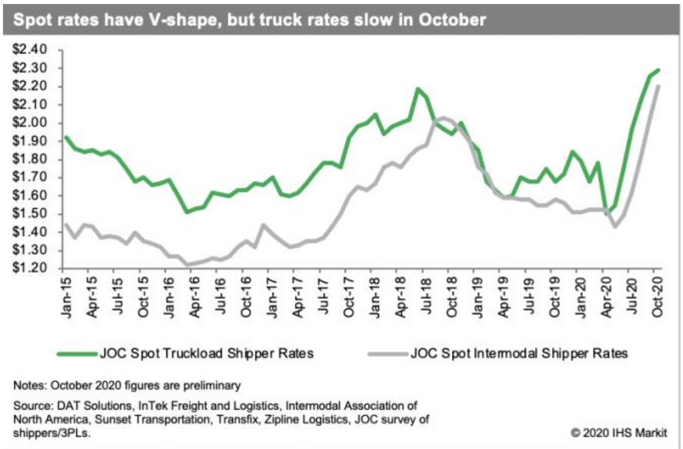
Source: IHS Markit ©2020 IHS Markit

Since 2015, JOC's Contract ISI has averaged 124.0 (24 percent savings), and JOC's Spot ISI has averaged 115.0 (15 percent savings) on a rolling 12-month basis.

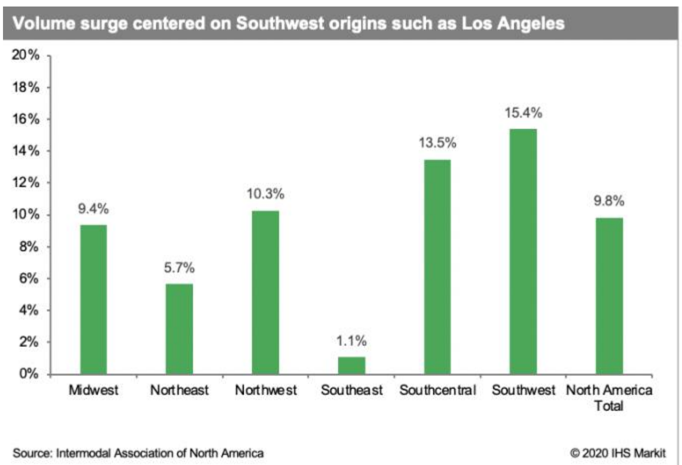
In the fourth quarter, JOC's Contract ISI will likely increase with nervous shippers agreeing to higher contract rates to lock in capacity. JOC's Spot ISI may decline because spot truckload rates are plateauing while spot intermodal rates are not slowing. Truck rates don't show signs of slowing in California, however, so the spot index may not drop much.

The Outlook

The outlook for JOC's Intermodal Savings Index in the fourth quarter depends on whether spot truckload rates flatline or fall in November and December. Truckload spot rates only rose 3 cents sequentially in October.

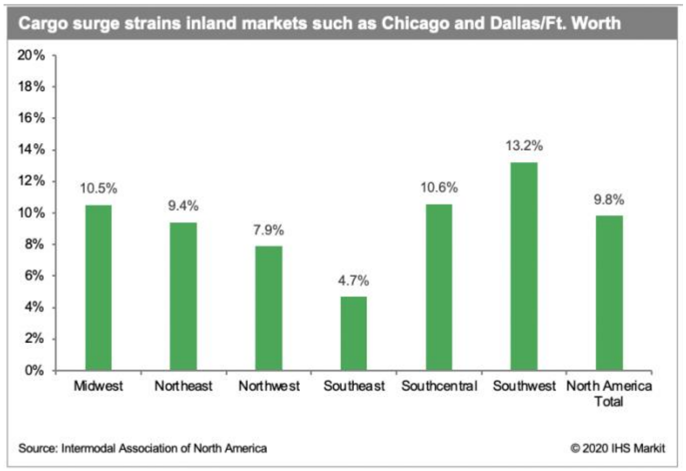


There are three markets to closely watch in the quarter: Los Angeles, Chicago, and Dallas-Fort Worth.

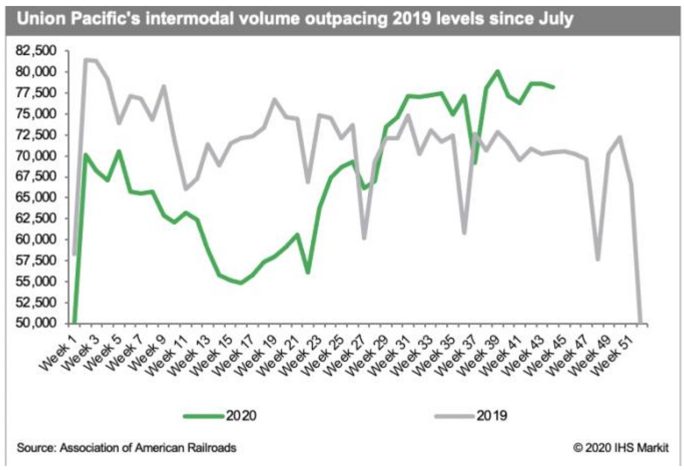


The Midwest, Northwest, Southcentral, and Southwest set new third-quarter records for domestic intermodal volume, both by origin and by destination. Will traffic between the Los Angeles (origin), Dallas-Ft. Worth, and Chicago metropolitan areas increase in the fourth quarter or remain static? What about truck rates?

Truckload rates on freight originating in California rose 14 cents in October compared with 5 cents between in September, according to Loadsmart and DAT Solutions. Rates in all other US regions slowed in October versus September.



UP handled the majority of the volume increase, which is why it levied surcharges on excess cargo exiting California and Washington states.



BNSF Railway didn't surpass 2019 volume until late September (Week 38). J.B. Hunt's head of intermodal explained why.

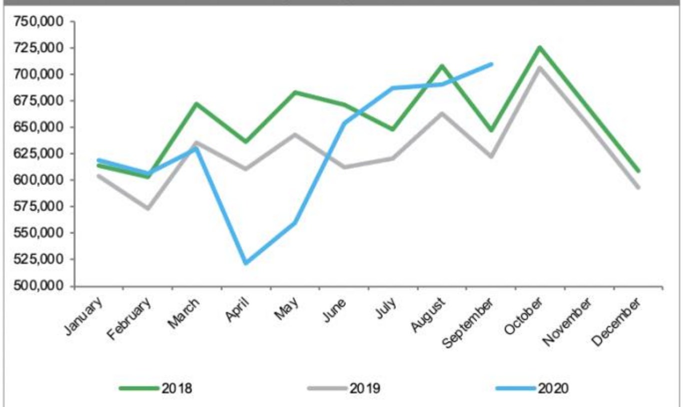
"When the trains get out of the terminals, they're moving, but terminal congestion is not a part of that velocity measure that you see. And that has been a significant impact on our ability to drive a volume growth," said Darren Field, executive vice president of intermodal, on an Oct. 16 earnings call.

The Year to Date

Volume in Q3

After a volatile quarter between April and June, intermodal volume set a third-quarter record with 2.4 million domestic containers and trailers, an increase of 9.8 percent compared with 2019, and 2.3 percent compared with 2018.

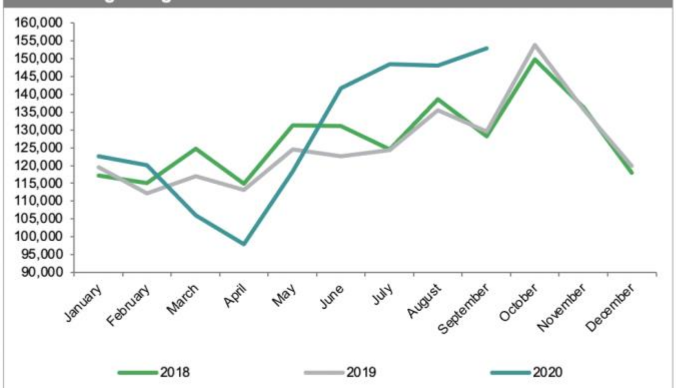
Domestic intermodal volume surpassing 2018, 2019 levels



Source: Intermodal Association of North America © 2020 IHS Markit

The shift was starker on the West Coast. There was a drop off in this spring and a rebound this summer.

Volume originating in Southwest reach record levels



Source: Intermodal Association of North America © 2020 IHS Markit

One asset-based intermodal executive explained that two years ago the volume was up everywhere, today volume is through the roof in California but manageable elsewhere. Volume in Southern California is as chaotic as this executive has seen in more than 20 years, with no signs of abating, he told JOC.com.

Drayage capacity is also a problem. One non-asset intermodal executive said there are many opportunities to convert truckload freight to rail, but there are not enough draymen to quickly serve shippers.

Labor issues are a problem across the entire supply chain.

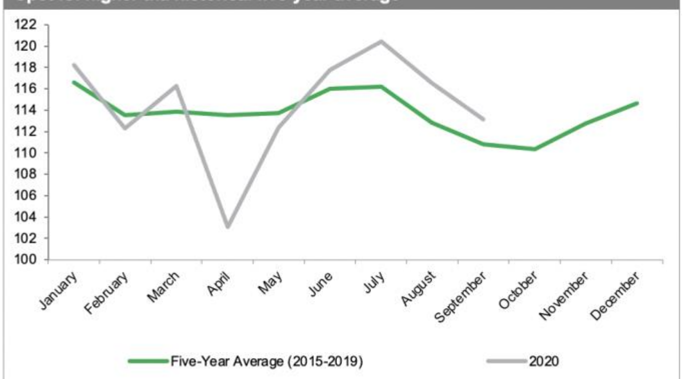
"Rail terminal congestion and a slower pace of unloading at customer destinations have contributed to a meaningful slowdown in the velocity of the supply chain and the productivity of our equipment," Field said. "Our rail providers are working through labor shortages at some key rail terminal operations, while we are confident that they will get back to their productivity targets, it negatively impacted the [third] quarter."

JOC's Spot ISI

In the third quarter, it was a race to the top. The record-high rates out of California were nearly washed away by equally unprecedented truck rates in the state. Small shippers most susceptible to Union Pacific's surcharge, and most likely not to have a deep routing guide of motor carriers, found that they had to pay record rates on excess volume regardless of mode.

The Spot ISI slipped through the quarter but within the historical dip we see in the Index in late summers.

Spot ISI higher tha historical five-year average

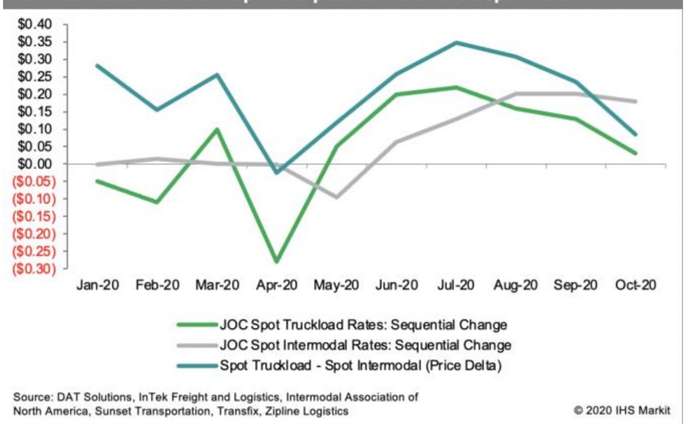


Source: DAT Solutions, InTek Freight and Logistics, Intermodal Association of North America, Sunset Transportation, Transfix, Zipline Logistics © 2020 IHS Markit

The railroads must be careful, however. In July, spot truckload rates on the indexed lanes rose 22 cents sequentially, and the spread between truck and intermodal spot rates was 35 cents per mile. In

October, JOC's preliminary data shows spot truckload rates increased 3 cents sequentially, but spot intermodal rates jumped 18 cents per mile. The spread between the two modes narrowed to only 9 cents.

Will intermodal markets respond to plateau in truckload spot rates?



If truckload spot rates are flattening or plateauing, railroads must choose whether to adjust their rates too.

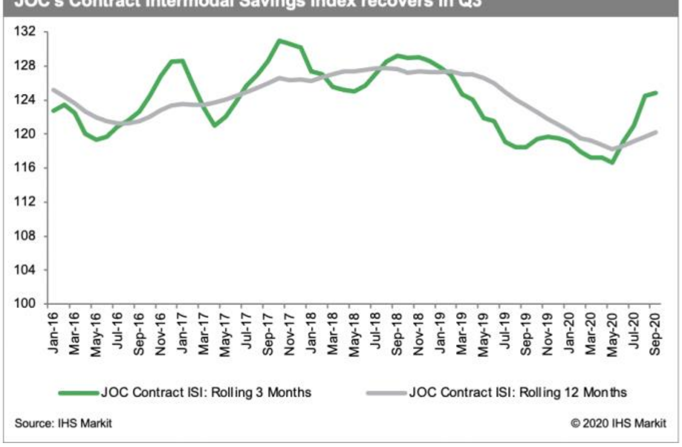
JOC's Contract ISI

Three months ago, we reported how JOC's Contract ISI fell below 120 for the first time in history.

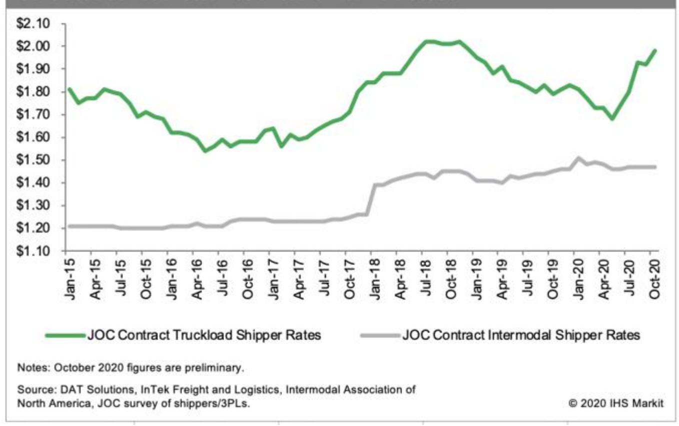
Today, shippers are concerned about the lack of rail and truck capacity and spikes in spot market rates. Shippers have re-negotiated truck contracts to secure trucks for the peak season. To do so, however, shippers had to accept a contract rate increase.

Since intermodal contract rates won't resetting until early 2021, our contract intermodal savings should rise through the end of this year.

JOC's Contract Intermodal Savings Index recovers in Q3



Contract truckload rates rise ahead of 2021 bid season



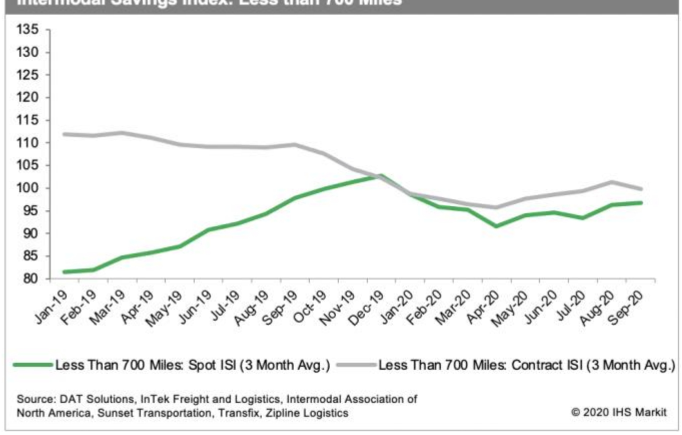
The Distance Discussion

The length of haul is a key factor in modal decisions. Longer distances help railroads to defray their costs.

Less than 700 Miles

We track seven lanes in this distance. Through June, the Contract ISI was 99.9 and the Spot ISI was 96.7 on a rolling 12-month basis. All seven lanes in this short-haul distance are either cheaper on truck, or virtually identical between the modes.

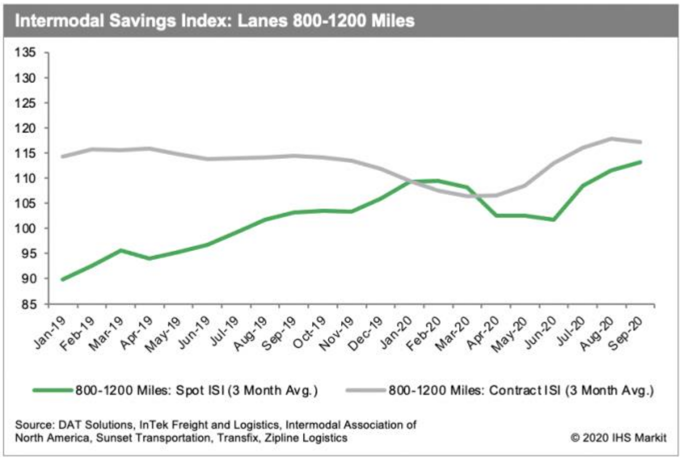
Intermodal Savings Index: Less than 700 Miles



800 to 1,200 Miles

This distance has the most heated competition between trucking and intermodal. Many of these lanes connect the Midwest, Southeast, and Northeast.

JOC's Contract ISI was 117.1 and the Spot ISI was 113.1 on a rolling 12-month basis. If there is a second wave of COVID-19 infections and business closures, expect JOC's Spot ISI to fall once again.



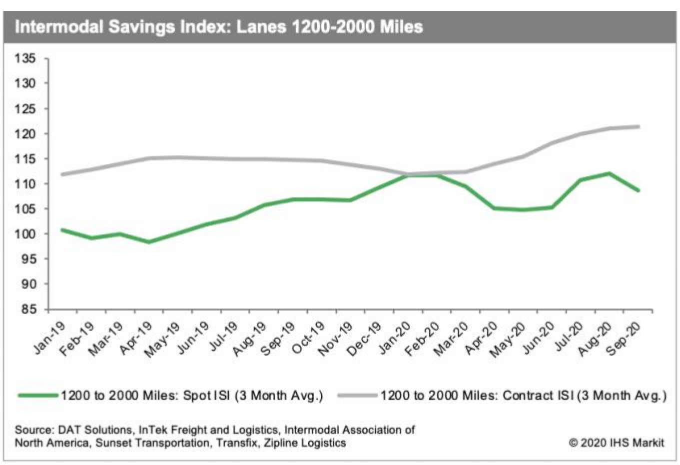
Lanes may not match the national five-year average of 124 on contract rates, or 115 on spot rates, but shippers can value on lanes with index values greater than 110.

Atlanta to Elizabeth, New Jersey, and Jacksonville to Chicago are lanes where shippers can save a lot of money. Jacksonville to Dallas and Houston to Chicago are lanes in this segment where truck rates are cheaper.

1,200 to 2,000 Miles

JOC's Contract ISI was 121.3 and JOC's Spot ISI was 108.7 on a rolling 12-month basis through June.

Lanes on this distance should exceed the national five-year averages when contract and spot truckload rates rise, so the competitiveness going forward will be determined by the overall freight market.

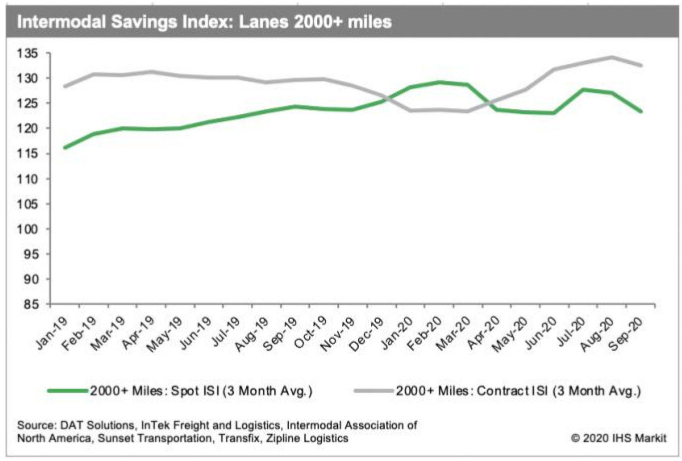


Lanes such as Dallas to Boston, Dallas to Los Angeles, and Dallas to Stockton are firmly pro-intermodal. Boston to Orlando, Miami to Elizabeth, NJ, and Elizabeth, NJ to Houston are pro-trucking lanes.

2,000 Miles+

Long-distance hauls are where the intermodal industry can deliver strong value to shippers.

JOC's Contract ISI average was 132.6 and JOC's Spot ISI was 123.4 on a rolling 12-month basis through June.



Nearly every lane in this segment delivers at least 15 percent savings, and some as much as 50 percent. JOC's Spot ISI in this segment fell sequentially in the third quarter, however, since there are a number of Los Angeles outbound lanes on this list.

The two lanes we track that are the exception are Cincinnati to Los Angeles and Cincinnati to Stockton, CA.

The Lane-by-Lane Breakdown

In this section, we examine which markets are pro-intermodal, pro-trucking, and *up for grabs.*

Please evaluate the next 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 in rail, such as detention, per diem, and block and bracing, a **yellow** lane can easily flip **red** because we exclude this in our calculation.

Source: IHS Markit ©2020 IHS Markit

Out of 16 lanes we studied in this report, 129 (69.4%) were green lanes, 32 (17.2%) were yellow lanes, and 25 (13.4%) were red in 2019.

Historically our data shows between six and seven out of 10 lanes deliver strong intermodal savings.

The other three to four lanes are either *too close to call* or cheaper via truck.

Regional Breakdown

Average of Value	Column Labels		
	ISI		ISI Total
Row Labels	Contract	Spot	
Midwest	**118.75**	**117.53**	**118.27**
Mountain	118.25	101.26	109.18
Northeast	107.45	116.83	112.20
Northwest	135.03	126.09	131.40
Southcentral	104.72	105.12	104.87
Southeast	115.57	123.28	119.43
Southwest	123.41	122.42	123.10
Mountain	**115.15**	**106.92**	**111.35**
Midwest	129.32	117.85	123.20
Northeast	118.44		118.44
Southwest	101.25	95.99	98.62
Northeast	**122.45**	**118.45**	**120.70**
Midwest	119.47	120.46	120.04
Mountain	134.27	107.19	124.98
Northwest	146.77	134.35	140.29
Southcentral	120.00	102.16	117.29
Southeast	106.94	102.43	104.66
Southwest	140.50	138.80	139.65
Northwest	**125.57**	**110.18**	**117.88**
Midwest	139.25	126.06	132.66
Northeast	133.70	122.98	128.34
Southcentral	109.24	98.57	103.90
Southeast	124.87	118.25	121.56
Southwest	119.42	96.52	107.97
Southcentral	**116.06**	**111.15**	**115.03**
Midwest	102.01	103.80	102.63
Mountain	96.65		96.65
Northeast	120.25	111.45	119.39
Northwest	125.68	125.97	125.83
Southeast	87.13	92.87	89.59
Southwest	123.34	123.75	123.40
Southeast	**111.38**	**108.87**	**110.08**
Midwest	123.58	112.37	117.71
Northeast	88.51	99.02	94.46
Northwest	143.44	141.57	142.50
Southcentral	85.19	84.76	84.99
Southeast	83.76	71.94	76.03
Southwest	120.79	125.76	123.14
Southwest	**122.48**	**111.56**	**118.85**
Midwest	126.53	110.36	123.56
Mountain		83.07	83.07
Northeast	126.23	121.25	123.71
Northwest	109.98	97.25	103.62
Southcentral	117.50	105.00	115.72
Southeast	127.62	115.16	122.28
Weighted ISI Value	**120.08**	**114.52**	**117.30**
(blank)	120.08	114.52	117.30
Unweighted ISI Value	**118.93**	**113.52**	**116.79**

Quotes from Earnings Calls

"We will be comfortable growing both the container and the dray fleet to support growth in intermodal [in 2021]" — Mark Rourke, CEO of Schneider National.

"We are anticipating continuing to grow the fleet…The conversion of truckload freight back to intermodal should be very high and sets us up with an opportunity." — David Yeager, CEO of Hub Group.

"Service has been good. I think that the major thing that our clients always want is consistency of service, whether it's a 3-day transit or a 4-day transit, that's the most critical issue for them. And so there is always going to be issues when you have that type of sequential increase, but how quickly you can fact solve them and fix them is the key, and the railroads, our partners, the Union Pacific and Norfolk Southern have been very nimble and able to accomplish those goals very quickly." — David Yeager, CEO of Hub Group.

"All of the railroads want to have ongoing dialog about improving productivity at their terminals. And I think we're engaged in those conversations…As we go into next year, we will be talking about what are the ways that we can expand capacity in the rail system without necessarily investing or just buying new terminals. The long-term value for railroads can't just be that they're going to expand and buy more parking in order to accommodate intermodal growth. We all have to work with our customers, railroads and us together, in order to drive more productivity through those terminals. I am 100% convinced that railroads want to do that, and that's not going to be something that we have to push — they want to do that, but it has been painful in 2020." — Darren Field, EVP of intermodal for J.B. Hunt.

"The railroad is as fluid as it ever has been. We do not have a capacity issue. And in fact, we are spending money to actually make it more efficient," — Jim Vena, COO of Union Pacific.

Methodology

The Journal of Commerce evaluates 193 lanes in our study of intermodal savings. Each month we send estimates on 45 lanes to a group of 3PLs and shippers under non-disclosure agreements.

Our estimates include margins and fuel but exclude accessorial fees such as detention, demurrage, per diem, lumper fees, blocking and bracing. Our contributors review transactions and provide retail invoice rates for the previous month.

Those responses are used to calculate the two indexes.

The base value is 100, which means rates are identical in both modes. If intermodal rates are 20 percent cheaper, then the value is 20 percent higher than 100, or 120. If truck rates are 20 percent cheaper, then the value is 20 percent lower than 100, or 80. The *rule of thumb*: higher numbers are good for intermodal, lower numbers are good for trucking.

JOC calculates regional index values for the Midwest, Mountain, Northeast, Northwest, Southeast, South Central, and Southwest US.

A national number is then calculated on a weighted basis using 53-foot equipment flow data from IANA. The sum of the weighted regional values becomes the national ISI.

Acknowledgements

Although we cannot disclose the identities of most contributors to the Index, we thank them for participating. Your input is critical to provide accurate insights for shippers to make informed modal decisions with logistics partners.

We can identify InTek Freight and Logistics, Sunset Transportation, and Zipline Logistics.

We thank Rick LaGore of InTek Freight and Logistics for providing weekly intermodal spot data on more than 115 lanes. We make slight variations to his data based on asset-owning intermodal marketing companies offering slightly lower rates.

We also thank IANA for tracking the equipment flows of containers and trailers on the rails. Without this key data, our weighted national ISI and market-by-market analysis would be impossible.

We thank Ken Adamo, Dean Croke, and the entire DAT Solutions team, who help us ensure our estimates sent to 3PLs and shippers are as accurate as possible.

We appreciate InTek, IANA, and DAT for the valuable data and analytics they bring to the transportation space.

We thank digital freight brokers Transfix and Loadsmart. Transfix is a partner in the JOC Intermodal Savings Index, and Loadsmart is a partner in the JOC Shipper Retail Spot Rate Index.

We cross reference the two data sets to check the trends in truck rates for our JOC Intermodal Savings Index lanes match trends in the larger truckload market. DAT Solutions also assists in these efforts.

Finally, we thank our parent company, IHS Markit, for their continued support of JOC.

Author

Ari Ashe
Senior Editor, Journal of Commerce
202-548-7895 (work)
LinkedIn: https://www.linkedin.com/in/ariashe/
Twitter: https://twitter.com/arijashe
Email: ari.ashe@ihsmarkit.com