

**NOVEMBER 2017** 







# The road ahead

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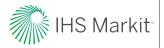


Exhibit 25: Shipper amd LSP Expectations for Technology Spending . . . 26

Exhibit 26: Top Technology Spending Priorities for Shippers and LSPs. . 27

Exhibit 29: Percentage of Shippers Requiring Visibility From LSPs . . . . 29

Exhibit 30: Top Shipper and LSP Concerns With Transportation Partners 30

Exhibit 31: Top Three Challenges Ranked by LSPs and Shippers . . . . . . 31

Exhibit 28: How Satisfied Are You With

#### **TABLE OF CONTENTS**

TABLE OF CONTIENTS	
I. Introduction	IX. Visibility
II. Executive Summary	XI. Transportation Partners
III. Who Did We Survey?4	XII. Top Challenges for 2018
IV. Freight Volumes	XIII. About The Journal of Commerce and JOC.com
VI. Transportation Spending	XIV. About NASSTRAC
VII. Truck Capacity	XV. About TIA
VIII. The ELD Mandate	XVI. About Truckstop.com
VIII. Technology	
TABLE OF FIGURES	
Exhibit 1: Shippers Surveyed by Type	Exhibit 16: How Often Shippers Release Transportation Bids 18
Exhibit 2: Percentage of Survey Respondents by Revenue5	Exhibit 17: How Often LSPs Release Transportation Bids
Exhibit 3: Transportation Spending by Shippers, LSPs 5	Exhibit 18: How Would You Characterize Current Truckload Capacity? 19
Exhibit 4: Modes Used by Shippers 6	Exhibit 19: Expectations for Truckload Capacity (Next 12 Months) 19
Exhibit 5: Carriers Used by LSPs	Exhibit 20: The JOC Truckload Capacity Index
Exhibit 6: Will Freight Volumes Rise, Fall or Stay	Exhibit 21: How Shippers and LSPs See Current LTL Capacity 21
Flat Over the Next 12 Months?8	Exhibit 22: Expected Impact of Electronic Logging Mandate 22
Exhibit 7: Shipper Expectations for Freight Volume by Mode 9	Exhibit 23: Shipper ELD Steps
Exhibit 8: LSP Expectations for Freight Volume by Mode 9	Exhibit 24: LSP ELD Steps

Exhibit 12: Shipper and LSP Ground Parcel Rate Expectations . . . . . . . 14

Exhibit 14: Shipper Expectations for Transportation Budgets/Spending. 16

Exhibit 15: LSP Expectations for Transportation Budgets/Spending . . . 16



#### Top takeaways

- All respondents believe trucking rates will rise, but logistics service providers expect
  higher and broader rate increases than their shipper customers, including higher
  intermodal pricing.
- Truckload capacity has already tightened considerably from 2016, and will only get tighter in 2018. Again, shippers and LSPs differ over just how tight capacity will get in the next year.
- Nearly three-quarters of LSPs plan to increase technology spending, compared with only 37 percent of shippers, suggesting shippers are turning to logistics partners for technology.
- Logistics providers believe shippers are unprepared for changes the electronic logging mandate will bring to supply chains.

### I. Introduction

The US surface transportation market is changing rapidly under the influence of stresses that include a faster-paced US economy, changing consumer expectations, new technology, demographics, and government regulations. Those factors combined in 2017 to tighten available truck capacity and push up rates and pricing as the second half of the year unfolded.

In late September, The Journal of Commerce/IHS Maritime & Trade, NASSTRAC, the Transportation Intermediaries Association, and Truckstop.com took the pulse of a domestic transportation market at a crucial turning point, asking shippers and freight brokers about their expectations for the next six months and year ahead in their second joint survey.

More than 200 US businesses, including large and small manufacturers, retailers, and wholesalers that ship freight, and brokers and logistics service providers that arrange transportation for them, responded to questions ranging from trends in freight volumes, pricing, and services, to the impact of the upcoming electronic logging mandate and new technology on their businesses.

Their answers reveal that businesses moving freight within the US expect significant change in 2018, especially in terms of available truck capacity, and truckload and less-than-truckload pricing. They also reveal potential lines of conflict dividing shippers and their suppliers. Whether they can cross those divides will determine the shape of freight markets in coming years.

Businesses moving freight within the US expect significant change in 2018, especially in terms of available truck capacity.



# II. Executive Summary

The surface transportation market in the US isn't turning, it has turned, with shippers and logistics service providers (LSPs) coming under sudden, intense pressure in late 2017, especially in relation to truckload volumes, capacity, and rates. The coming year will be a year of reckoning for those businesses that aren't prepared to meet the challenges posed by higher freight demand and, in particular, a new US regulation that will further tighten truck capacity.

Trucking executives reported load volumes usually seen in October and November as early as August this year. Two major hurricanes hitting the US mainland snarled supply chains and sent truck capacity tremors throughout the US, as carriers repositioned equipment to fill gaps created when trucks were diverted to the Gulf Coast and Florida with emergency goods and reconstruction supplies in September and October. The impact of the storms is still unfolding.

Capacity — its availability and the ability to source it — topped the list of challenges for both shippers and logistics service providers surveyed for THE ROAD AHEAD. Pricing, service, and the impact of the electronic logging mandate followed. There's little consensus about how much productivity the ELD mandate will sap from the trucking industry, but LSPs, in particular, are concerned that the negative impact of the mandate will be moderate to significant in 2018.

Shippers and their logistics partners are bracing for higher truckload volumes and rates, in particular. With 67 percent of shippers and 86 percent of LSPs expecting a truckload rate hike, there was little division over the direction over-the-road pricing will take in the next 12 months. Both groups expect less-than-truckload rates to climb, too. Logistics providers, however, have greater expectations for significant rate increases than the shippers surveyed.

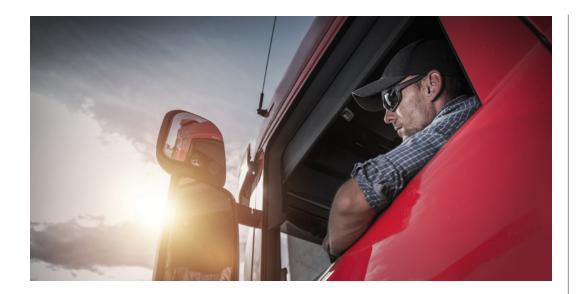
Shippers and LSPs divided along several lines, starting with expectations about freight volumes that will be handled by certain modes and how significant price increases next year might be. Their views of the market diverged in other areas as well, from the amount of transportation spending they anticipate to how the electronic logging mandate will affect truck capacity and rates. In all cases, LSP expectations were set at a higher level than their customers.

Outside of the truckload sector, for example, most shippers expect freight volumes to be essentially flat over the next 12 months, despite solid year-over-year growth in load volumes in the US in 2017. A majority of LSPs expect not just higher truckload but LTL and intermodal rail volumes. Most LSPs surveyed — but not shippers — also expect intermodal pricing to climb. This may reflect the nature of the shippers surveyed, or a broader LSP vision of the market, or both.

The percentage of third-party logistics providers expecting rates to drop by any amount in the next year registered in the low single digits for most modes, while more than 10 percent of the shippers surveyed hope to see lower truckload, LTL, and intermodal rates. That's still a small minority, but the gap between LSP and shipper expectations is substantial. Of greatest concern to LSPs surveyed is shipper readiness — or the lack of such — for the ELD mandate.

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"Shippers are in for a rude awakening" when that mandate takes effect on Dec. 18, one logistics provider said, and that statement echoed across the LSP sector in the survey results. "Shippers seem to be unconvinced of the impact," another LSP said. The shippers surveyed did not increase confidence that a majority of businesses buying transportation services will be ready when the rule becomes law and when US regulators and police begin enforcement.

Only 29 percent of the shippers surveyed had reviewed their freight lanes, shipping schedules, and driver detention practices to ensure they won't fall foul of any reduction in transit times after ELDs are installed and more accurate management of hours cuts the number of miles truckers may drive and the number of turns they may complete in a weekly cycle. And 20 percent of shippers said they have taken no steps to prepare for the ELD mandate.

Shippers also expect technology spending to stay flat in 2018, while LSPs, which see technology investment as critical to their business, plan to spend more. That result indicates that shippers will continue to rely on LSPs to deliver technology, but also suggests shippers may be having trouble getting their organizations to dedicate capital investment to logistics, despite the growing importance of supply chain management in an age of faster e-commerce fulfillment.

The comments of LSPs surveyed also suggest some shippers need to develop a better and broader understanding of how the transportation market works if they want to avoid the worst of the price increases anticipated over the next 12 months. Shippers, however, have outsourced much of their logistics and expertise to those very LSPs over the past two decades, leaving some to decry a "brain drain" within the ranks of transportation and logistics managers.

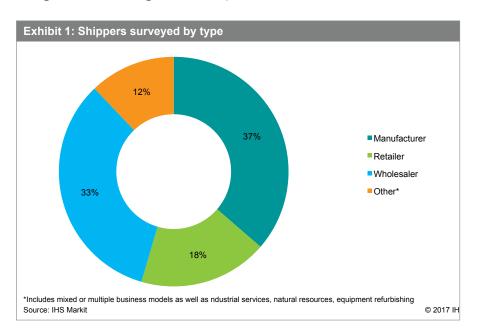
The need for collaboration, data-sharing, and innovation to solve transportation problems is clear. What's not clear is whether all parties in the supply chain will be agile enough or willing to identify opportunities, implement new technologies, and execute new strategies.

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# III. Who Did We Survey?

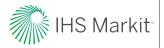
More than 200 US businesses purchasing domestic surface transportation services, including shippers and truck freight brokers, participated in the survey. The businesses included readers of The Journal of Commerce, customers of Truckstop.com, members of NASSTRAC — a US shippers association — and Transportation Intermediaries Association members, who include freight brokers and logistics service providers.

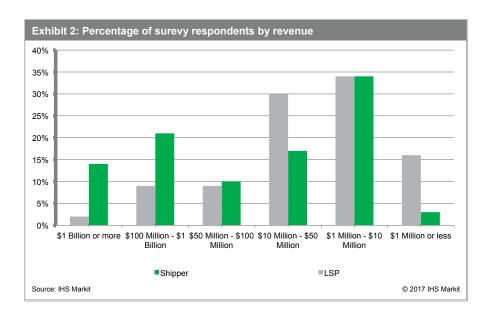


The vast majority of the shippers surveyed use logistics service providers, with 47 percent using one to five LSPs and 28 percent using 11 or more intermediaries.

### a. Shippers and Logistics Service Providers

A clear majority of respondents, 80 percent, identify as third-party intermediaries, and 19 percent as shippers. Among the shippers, 36 percent were manufacturers, 33 percent wholesalers, and 18 percent were retailers. The remaining 12 percent that identified as shippers included businesses providing industrial services, companies dealing with natural resource extraction and equipment refurbishing, and businesses with mixed wholesale and retail operations. Nearly a third of the logistics service providers had at least some assets, with 31 percent owning trucks and trailers, while 24 percent owned and operated warehouses. Forty percent of those asset-based or asset-light LSPs operated 10 to 74 trucks, while 20 percent had 75 to 349 trucks. Another 16 percent owned 350 to 850 trucks, and 4 percent had even more than that. Fewer shipper respondents, 24 and 19 percent, respectively, owned trucks and trailers, though 44 percent had warehouses. The vast majority of the shippers surveyed use logistics service providers, with 47 percent using one to five LSPs and 28 percent using 11 or more intermediaries. Only 9 percent of shipper respondents said they do not use LSPs. How much do they outsource? A quarter of the shippers outsourced 5 to 25 percent of their logistics operations, with 29 percent outsourcing 50 to 80 percent. Another 21 percent of the shippers outsourced all of their logistics business to LSPs.



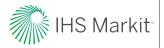


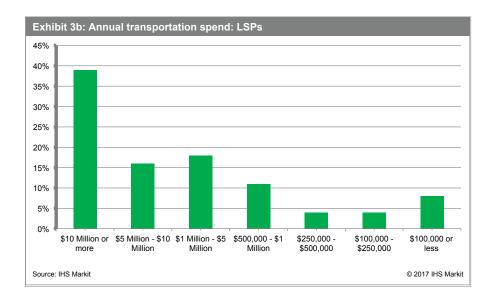
#### b. Company Size, in Revenue

The companies ranged in size from small to large, with more large shippers than LSPs among respondents. Eighty percent of the LSPs had less than \$50 million in annual revenue, compared with 54 percent of the shippers. Only 2 percent of the LSPs had \$1 billion or more in annual revenue, compared with 14 percent of the shippers. However, the largest share of shippers — 34 percent — had between \$1 million and \$10 million in annual revenue, and the same percentage was true of LSPs. There were more LSPs with less than \$1 million in revenue a year, 16 percent of the total, than shippers, only 3 percent of whom were that small in terms of revenue.



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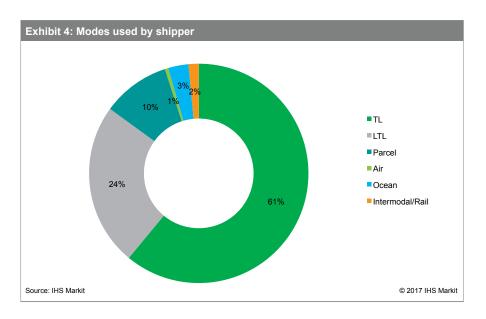


#### c. Transportation Spend

In terms of transportation spend, a clear majority of the shippers — 77 percent — had budgets of less than \$10 million a year, and 44 percent of the shippers spend less than \$1 million a year on freight. The largest stand-alone percentage, 33 percent, spend between \$1 million and \$10 million a year. Another 27 percent of the shippers spend less than \$500,000 a year on transportation, while 17 percent spend between \$500,000 and \$1 million. A small but significant portion of the shippers, 10 percent, budget \$100 million to \$500 million a year for freight. Transportation spending by the logistics providers ranged from \$100,000 or less up to \$10 million or more, with 39 percent spending more than \$10 million a year to move freight for customers. Another 34 percent spend between \$1 million and \$10 million, while 27 percent spend \$1 million or less. Out of that latter group, 8 percent spend less than \$100,000 a year. How does that spending affect the rates they pay and capacity they receive from carriers? LSPs and shippers diverge on that question. Among shippers, 36 percent believe their spending has some or a strong influence on rates and capacity, while 51 percent of the LSPs believe so. Very similar percentages, 18 and 19 percent, of shippers and LSPs were neutral on this question. A high percentage of shippers — 45 percent — thought their spend had little to no influence on rates and capacity, compared with 30 percent of LSPs.

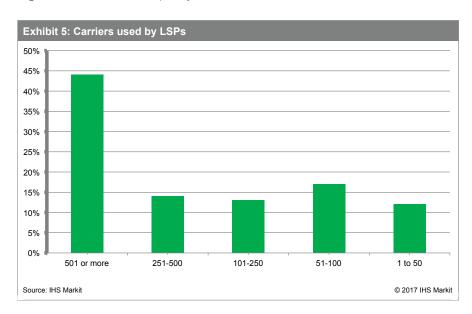
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#### d. Modes Used

Truckload was the primary mode of transportation for a clear majority of shippers and LSPs surveyed, 61 and 71 percent, respectively. Twenty-four percent of shippers surveyed and 21 percent of the logistics providers ship via less-than-truckload carrier, while 10 percent of the shippers were parcel shippers. Very few of the shipper respondents use ocean or air transport, and few of the LSPs use ocean, air, or parcel. Surprisingly, few of the shipper respondents use intermodal rail, only 2 percent, while 6 percent of the intermediaries move domestic freight in intermodal containers. The good news for intermodal operators is that 30 percent of shipper respondents said they plan to increase use of intermodal in 2018, while 60 percent plan to spend more on dedicated trucking — a clear signal that shippers are searching for lower rates and capacity.



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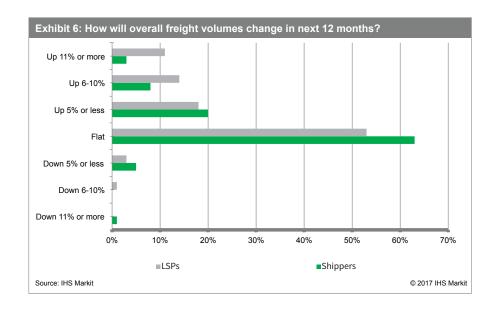


#### e. Number of Carriers, LSPs

The shippers surveyed use large numbers of trucking companies, with 53 percent of respondents using 21 or more motor carriers. Another 35 percent of the shippers use one to 10 carriers, while 9 percent use 11 to 20. Only 3 percent said all their freight was moved through LSPs. Nearly half, 47 percent, of the shippers use one to five third-party intermediaries, whether logistics providers or freight brokers. Twenty-eight percent, however, said they use 11 or more third-party LSPs. Only 9 percent of shippers said they do not use a logistics provider.

Logistics providers, not surprisingly, use far larger numbers of carriers to provide service and capacity to shippers. Among LSP respondents, 44 percent said they use 501 or more carriers, with 27 percent using 101 to 500 carriers. Of the remaining LSPs, 17 percent have 51 to 100 carriers, and 12 percent fewer than 50.

# IV. Freight Volumes



Most shippers expect the freight they move by various modes to remain flat over the next 12 months, with one exception: 63 percent of shippers said they expect full truckload volume to rise.

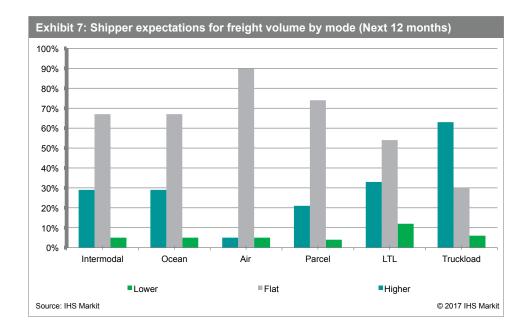
Despite an overall increase in freight volumes in 2017, most shippers expect the freight they move by various modes to remain flat over the next 12 months, with one exception: 63 percent of shippers said they expect full truckload volume to rise.

On average, 63 percent of shippers expect freight volumes across all modes to stay flat, while 30 percent expect volumes to rise. Only 6 percent of the shipper respondents expect decline. That's a big change from a year ago when 28.5 percent of shipper respondents to a JOC/NASSTRAC/Truckstop.com joint survey expected volumes to drop in 2017.

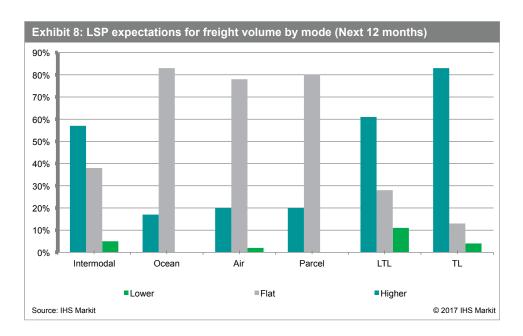


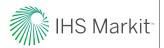
Over-the-road truckload is the dominant US freight mode, and the survey results reflect that and suggest growth over the next 12 months.

Thirty-seven percent of shippers this year said they anticipate an increase of up to 5 percent in truckload shipments, and 23 percent expect a 6 to 10 percent gain. Another 30 percent of the shippers said they expect truckload volumes to remain flat, while only 6 percent expect a drop in truckload volumes, with 3 percent expecting double-digit declines, possibly because of changes to their business, not general economic conditions or freight demand.



Thirty-seven percent of shippers this year said they anticipate an increase of up to 5 percent in truckload shipments, and 23 percent expect a 6 to 10 percent gain.







In comparison, 83 percent of the logistics service providers expect truckload volumes to grow, with only 13 percent expecting flat volumes and 4 percent anticipating a decrease.

Among shippers, 54 percent expect LTL volumes to stay flat over the next year, while 33 percent expect an increase, with 25 percent expecting LTL freight to grow 5 percent or less. Another 12 percent of shipper respondents believe their LTL volume will decline.

In contrast, 61 percent of the LSPs surveyed expect to increase LTL volumes, with 19 percent anticipating an increase of 11 percent or greater. Only 28 percent of the LSPs expect LTL shipping to be flat over the next 12 months. Those figures underscore the strong push into the LTL marketplace by many third-party intermediaries, including C.H. Robinson Worldwide.

The divergent survey results also may indicate LSPs with a broader view into multiple markets may have greater expectations than their shippers for volume gains in 2018. Overall, 43 percent of LSP respondents expect freight volumes to climb; 53 percent foresee flat volumes.

Despite the rapid growth of e-commerce, 74 percent of shippers and 80 percent of LSPs surveyed expect parcel volumes to remain flat over the next 12 months, with 21 percent of shippers and 19 percent of LSPs expecting some growth in parcel.

Among shippers, 29 percent expected some growth in intermodal volumes, with 5 percent calling for an uptick of 11 percent or more. Sixty-seven percent of shippers said they think intermodal volumes will be flat with the last 12 months.

Logistics providers, again, are more optimistic. A majority, 57 percent, expect intermodal volume to rise, with 29 percent looking for growth of up to 5 percent, 17 percent expecting a 6 to 10 percent gain, and 11 percent anticipating even higher growth in containerized rail shipments.

61 percent of the LSPs surveyed expect to increase LTL volumes, with 19 percent anticipating an increase of 11 percent or greater.



With truckload capacity tightening and truckload rates rising, those LSPs are likely shifting freight to reduce costs, and broadening the services they offer to customers.

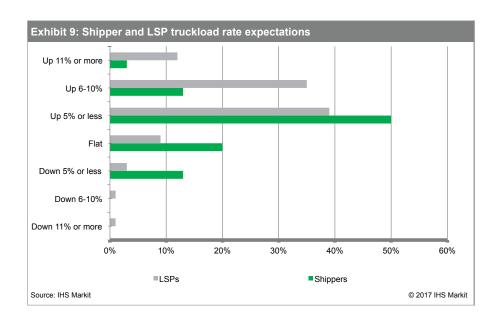
While relatively few of the survey respondents use air and ocean carriers, 29 percent of the shippers did expect ocean freight volumes to grow over the next 12 months, compared with 17 percent of the LSP respondents. Only 5 percent of shippers look for air freight volumes to increase, while 20 percent of the LSPs expect to fly more freight over the next 12 months.

# V. Freight Rates

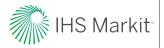
With expectations of higher volumes limited to trucking, shippers were evenly divided about the overall prospect of rate increases, with 46 percent expecting some increase and 46 percent expecting rates to stay flat with the last 12 months. Very few respondents, 8 percent, expect transportation pricing to go down, and most of them expect a decline of less than 5 percent.

Expectations diverged according to mode, however, and between shippers and logistics service providers surveyed. For most modes, the percentage of LSPs expecting high-single-digit rate increases was higher than that of shippers, except for ocean freight. More LSPs than shippers said they anticipate higher intermodal rail and air cargo costs over the next 12 months.

a. Truckload and LTL



Shippers were evenly divided about the overall prospect of rate increases, with 46 percent expecting some increase and 46 percent expecting rates to stay flat.





A clear majority of shippers and LSPs expect contract trucking rates to rise over the next 12 months, with 86 percent of LSPs and 66 percent of shippers anticipating higher truckload rates, as over-the-road freight volume expands. Majorities also expect less-than-truckload rates to move upward, with 75 percent of LSPs and 58 percent of shippers looking for higher LTL rates.

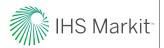
Last year, only 39 percent of the shippers surveyed expected truckload rates to rise, and 25 percent expected rates to drop. A faster-growing US economy, rising fuel costs and tough rate talk from truckload carriers facing higher driver wage and benefit, fuel, and equipment costs changed that.

However, logistics providers expect a bigger price hike from long-haul truckers than their shipper customers. Half of the shippers respondents said they expect truckload rates to rise 5 percent or less, with 13 percent planning for a 6 to 10 percent rate increase. Only 3 percent think truckload rates will rise more than 11 percent. In contrast, 12 percent of the LSPs surveyed expect double-digit truckload rate hikes. Thirty-five percent of the LSPs surveyed expect truckload pricing to jump 6 to 10 percent, and 39 percent are bracing for price hikes of 5 percent or less on average.

Twenty percent of shipper respondents believe truckload rates will stay flat, compared with 9 percent of LSPs; while 13 percent of shippers said they expect truckload rates to drop 5 percent or less, only 5 percent of the logistics providers surveyed said they think truckload rates will drop.

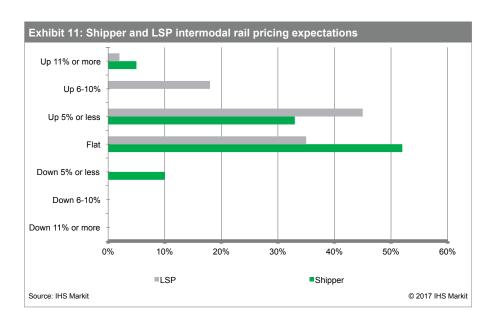
Fifty percent of shipper respondents expect LTL rates to rise 5 percent or less, while 8 percent expect a 6 to 10 percent price hike. Only 12 percent of the shippers surveyed expect LTL rates to fall, while 29 percent look for rates to remain flat. As with truckload pricing, LSPs foresee bigger increases: 47 percent expect LTL rates to rise 5 percent or less, but 17 percent expect a 6 to 10 percent bump, and 11 percent of the LSPs surveyed are preparing for a double-digit jump.

Shippers and LSPs expect contract trucking rates to rise over the next 12 months, with 86 percent of LSPs and 66 percent of shippers anticipating higher truckload rates.





#### b. Intermodal Rail: Back on Track



Intermodal rail pricing has recovered some lost ground in 2017, as truck rates began to rise and overall rail service improved. Last year, a plurality of shippers, 28 percent, expected intermodal rates to fall, and only 22 percent thought they would rise. Although most shippers — 52 percent — expect intermodal rates to remain flat over the next 12 months, 38 percent expect them to rise, and only 10 percent think they will fall. Thirty-three percent of shipper

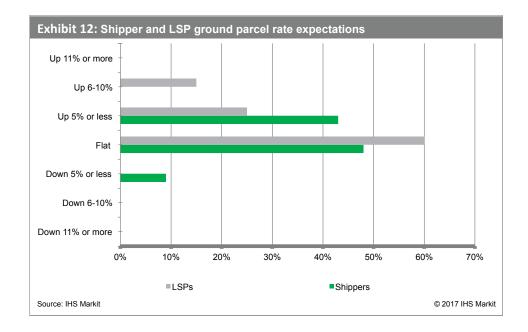
Among the LSPs surveyed, 65 percent expect intermodal rates to rise.



respondents believe intermodal rates will rise 5 percent or less, with 5 percent expecting double-digit rate hikes. Ten percent of shippers said they expect intermodal rates to decline 5 percent or less.

Logistics providers, again, have a different view, perhaps because many LSPs are expanding services to embrace additional modes and sectors, including intermodal and LTL. Among the LSPs surveyed, 65 percent expect intermodal rates to rise, and 35 percent think they will stay flat. No LSP surveyed thought intermodal rates would drop over the next 12 months.

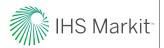
#### c. Ground Parcel



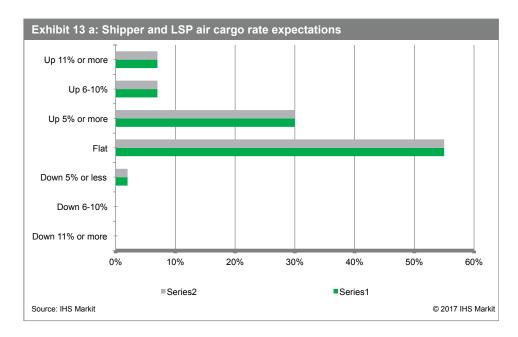
Shippers aren't buying an increase in ground parcel rates. Nearly half, 48 percent, expect parcel rates to remain flat.

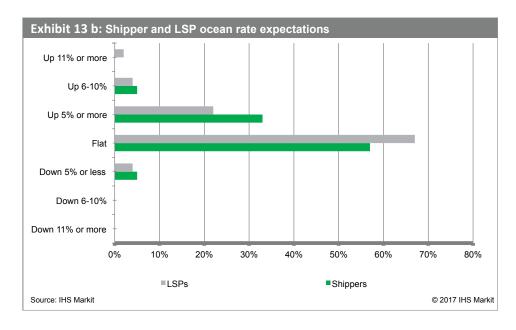
Despite the seemingly inexorable growth of e-commerce demand, shippers aren't buying an increase in ground parcel rates. Nearly half, 48 percent, expect parcel rates to remain flat, with 43 percent of the shippers surveyed expecting parcel costs to increase 5 percent or less. Nine percent of the shippers said they expect ground parcel pricing to drop 5 percent or less. Last year, 45 percent of shippers surveyed thought rates would rise, with 42 percent expecting a slight increase. Half of the shippers surveyed last year thought their rates would remain flat.

Among the LSPs surveyed, 60 percent expect parcel rates stay flat, while 40 percent expect an increase. One quarter of the LSP respondents expect parcel pricing to rise 5 percent at most, and 15 percent are counting on parcel rate hikes in the 6 to 10 percent range.



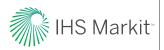
#### d. Air and Ocean





Air cargo and ocean transport are two modes where shippers and LSPs, by wide margins, don't expect price hikes. Among shippers, 71 percent said they expect air cargo pricing to stay flat over the next 12 months, with the remainder expecting increases of 5 percent or less. Fifty-five percent of LSPs look for air cargo rates to stay grounded, with 44 percent expecting those rates to gain altitude. Thirty percent of LSPs expect air cargo rates to rise up to 5 percent.

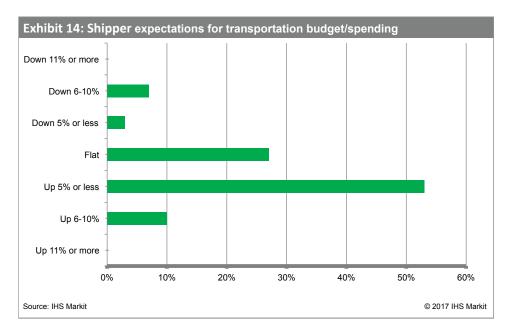
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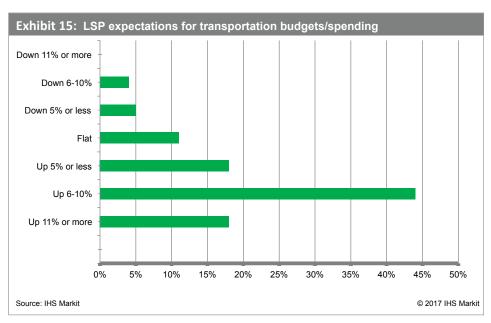


Among shippers, 57 percent expect ocean rates for containerized cargo to stay flat, and 5 percent expect a drop in pricing. Another 38 percent expect rates to rise, with 33 percent believing those rate increases will be limited to 5 percent or less.

# VI. Transportation Spending

### a. Transportation Budgets





Ten percent of the shippers surveyed are budgeting for a 6 to 10 percent increase in spending, while 53 percent expect a more modest increase, reaching 5 percent at most.



Shippers may have limited expectations when it comes to volumes and rates, but a significant majority, 63 percent, do expect to increase transportation spending over the next 12 months. Ten percent of the shippers surveyed are budgeting for a 6 to 10 percent increase in spending, while 53 percent expect a more modest increase, reaching 5 percent at most.

Another 27 percent expect their budgets to remain flat with the past 12 months, while 10 percent expect their transportation spend to decrease between 1 and 10 percent. Shippers gave varied reasons for the change, but tightening capacity was cited by many as a leading factor. Others said they plan to increase production and ship more products as the US economy grows.

"Carrier costs are also increasing," one shipper said. "We want our carriers to stay in business and provide us the capacity needed. We need to support their business needs."

Eighty percent of the logistics providers surveyed expect transportation spending to climb, with 44 percent eyeing a 6 to 10 percent increase. Eighteen percent of the LSPs expect transportation spending to shoot up by more than 11 percent, while another 18 percent see spending moving up 5 percent or less by next fall. Only 11 percent of LSP respondents think their budgets would stay flat, while 9 percent anticipate a decrease of up to 10 percent.

Those LSPs expecting transportation spending to drop cited efficiency gains through technology, and "slightly lower volumes." Most, however, expect to increase spending by adding new services, such as LTL trucking, and to pay more to move goods. "Market demand for various commodities shipped by our clients is increasing," one LSP said. "We anticipate GDP increasing and pushing rates up," another said. "The market is changing, and it's becoming more of a trucker's world," a third LSP said. "They are changing our rates, which is changing our customer rates and margins."

### b. Spot Market vs. Contract

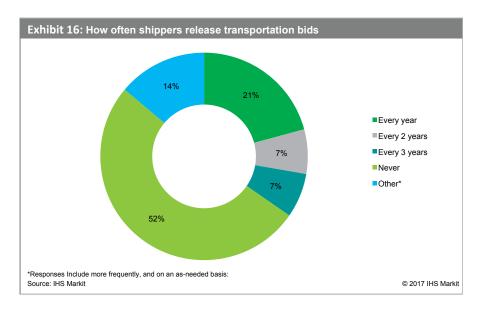
Both the shippers and LSPs surveyed move more freight in the spot market than under contract, with shippers putting 57 percent of their freight on the spot market and LSPs, 56 percent. Among shippers, 37 percent expect that amount to increase in the next 12 months, with 10 percent foreseeing a significant increase. Fifty percent of shipper respondents expect no change, while 13 percent say their use of the spot market will decrease somewhat within the next year.

LSPs, naturally, are more bullish on the spot market, with 73 percent expecting to increase the amount of freight they move on a transactional basis. Only 18 percent expect no change, while 44 percent say their use of the spot market will increase somewhat. Nine percent of LSPs expect to rely less on the spot market, with 3 percent expecting a significant decrease.

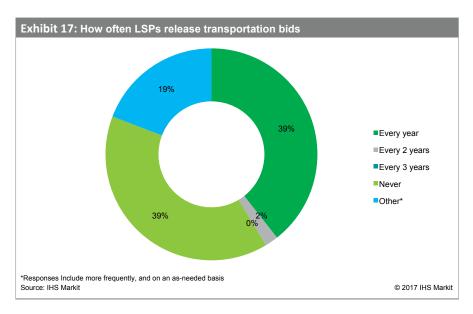
"We want our carriers to stay in business and provide us the capacity needed. We need to support their business needs."



## c. Freight Contracts and Bids



Little more than half, 52 percent, of shipper respondents say they never release transportation bids.



In 2017, many shippers reportedly moved freight bids and carrier contract negotiations scheduled for late 2017 up to the first quarter in order to avoid rate increases they expected in the second half of the year. We decided to ask shippers and logistics providers when they negotiate with their carriers or put freight out for bid, and how often they do it.

The largest concentration of shippers and LSPs surveyed, 38 and 37 percent, respectively, say they negotiate annual freight contracts in the first quarter. For shippers, the second quarter and fourth quarter ranked second and third, at 24 and 22 percent. For LSPs, the fourth quarter ranked second, followed by the third and second quarter.



Little more than half, 52 percent, of shipper respondents say they never release transportation bids. Another 21 percent do so every year, and 7 percent do so every two or every three years. Some shippers say release bids on an ad-hoc basis. Most shippers, 71 percent of those surveyed, say they handle the process in-house. Fewer LSPs, 39 percent, said they never release freight bids, with 39 percent also saying they put out bids once a year.

Fifty-seven percent of shippers say they use bidding tactically, targeting specific lanes. Only 24 percent said they put their entire freight business up for bid at one time.

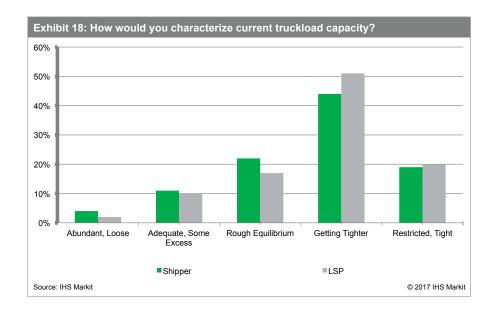
# VII. Truck Capacity

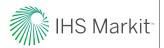
Projections of a trucking capacity shortfall next year abound as the economy grows more rapidly, motor carriers struggle to hire drivers, and the Dec. 18 deadline for compliance with a US electronic logging mandate for recording driver work hours looms.

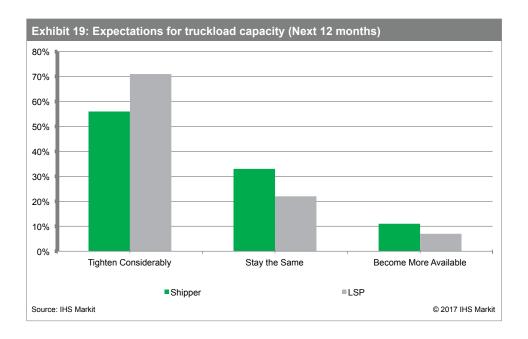
The third quarter and fourth quarter of 2017 saw available capacity tighten and spot market rates soar. The shippers and logistics providers surveyed for this report certainly share concerns that truckload capacity, in particular, will be harder to find, just as truckload freight demand is set to rise. That feeds shipper and LSP expectations for higher trucking costs in 2018.

The third quarter and fourth quarter of 2017 saw available capacity tighten and spot market rates soar.

### a. Truckload Capacity







Truckload capacity is expected to tighten "considerably" over the next year, according to 57 percent of the shippers surveyed and 71 percent of LSPs. Capacity already is getting tighter, 44 percent of shippers and 51 percent of logistics companies say, with about one-fifth of both groups characterizing capacity as tight or restricted. Only 22 percent of shippers and 17 percent of LSPs think truckload supply and demand are still in a rough equilibrium. Eleven percent of shippers and 10 percent of LSPs think truckload capacity currently is adequate — a year ago, more than 40 percent of shippers thought so.

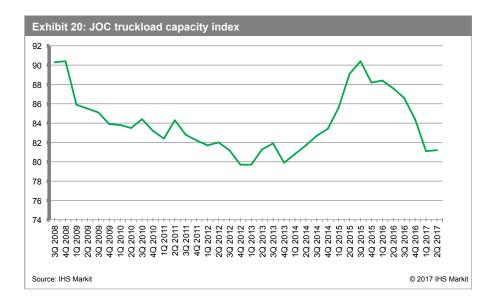
Even in the third quarter of 2016, when freight demand was much lower than this year, only 9 percent of shippers surveyed thought truckload capacity was abundant or loose. This year, 4 percent of shipper respondents and 2 percent of LSPs called truckload capacity abundant.

Expectations clearly are for a tighter truckload market, with shippers vying for capacity and LSPs digging deeper into their carrier base for space. Only 33 percent of shippers and 22 percent of LSPs surveyed expect available capacity to stay about the same over the next 12 months. Eleven percent of shippers and 7 percent of LSPs expect to find more capacity in the market over the next 12 months.

Some of those shippers and LSPs may be counting on the development of new technology that will help them dig deeper into the growing ranks of small trucking companies in their search for available capacity. Larger truckload carriers cut capacity or shifted trucks to specialized dedicated trucking or last-mile logistics divisions.

Capacity is already getting tighter,
44 percent of shippers and 51 percent of logistics companies say, with about one-fifth of both groups characterizing capacity as "tight" or restricted.

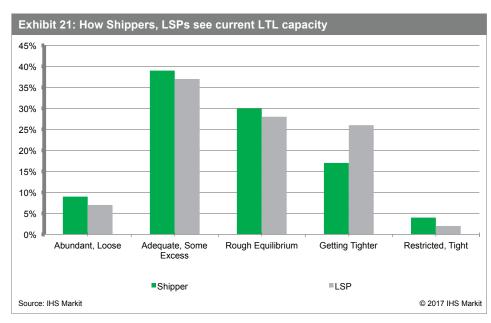




In the first half of 2017, the JOC Truckload Capacity Index, which measures capacity in terms of truck counts at a group of large publicly owned carriers, dropped from its third-quarter 2015 peak to its lowest point since the first quarter of 2014, with readings of 81.1 and 81.2 for the first two quarters. That indicates the capacity of the group measured by the index is still about 19 percent below pre-recession levels in the fourth quarter of 2006.

Smaller trucking companies, however, appear to be adding more vehicles. QualifiedCarriers, a risk management company, reported a 4.4 percent increase in the number of active, for-hire trucking companies with one to six trucks during the first six months of 2017. For shippers and their logistics partners, the challenge will be tapping that new capacity in 2018.

### b. LTL Capacity



In the first half of 2017, the JOC Truckload Capacity Index, which measures capacity in terms of truck counts at a group of large publicly owned carriers, dropped from its thirdquarter 2015 peak to its lowest point since the first quarter of 2014.

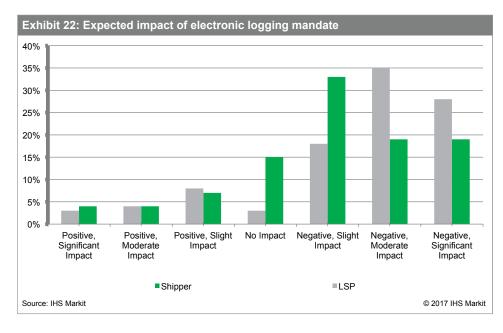


Shippers and logistics providers aren't as worried about LTL capacity as they are about over-the-road truckload availability. The majority of shippers and LSPs surveyed believe the LTL capacity levels will stay the same over the next 12 months, 65 percent and 56 percent, respectively. More shippers, 22 percent, think LTL capacity will become more available; 13 percent of shippers believe it will tighten considerably. A larger number of LSPs, 33 percent, foresee LTL capacity getting tighter, while 11 percent say it will become more available.

Although LTL carriers face some of the same concerns as their truckload counterparts — difficulty finding qualified drivers, for example, and rising fuel costs — they're not necessarily as acute as on the truckload side of the ledger. LTL capacity is more complex, and is often measured in terminal doors and freight flow or throughput, rather than truck and trailer counts.

In 2017, LTL carriers launched a mini-construction boom, knocking down walls to expand facilities and adding new terminals as manufacturing growth and inventory drawdowns spurred demand for palletized freight service. At the same time, demand for more services and faster service encouraged increases in LTL pricing, both contractual and general tariff rates.

### VIII. The ELD Mandate



Seventy percent of shippers and 82 percent of LSPs believe the ELD mandate will have a negative impact on truck capacity, ranging from slight to heavy.

### a. Impact of the Electronic Logging Mandate

Starting Dec. 18, the US will require truck drivers to use electronic logging devices instead of paper logbooks to record their working and off-duty hours. The impact on the freight business will not be good, at least over the next year, according to the shippers and logistics providers surveyed.

Seventy percent of shippers and 82 percent of LSPs believe the ELD mandate will have a negative impact on truck capacity, ranging from slight to heavy. Both shippers and LSPs lean



more toward a moderate to heavy impact on capacity from the regulatory mandate, but LSPs showed more concern, with 35 percent expecting a moderate and 28 percent a heavy impact.

Among shippers, 19 percent expect a heavy and 19 percent a moderate impact, with 33 percent anticipating a slight negative impact on their ability to source capacity. While 15 percent of shippers say there will be no impact, that confidence is shared by just 3 percent of LSPs. Fifteen percent of both groups hope for a positive impact, perhaps with an eye on longer-term benefits.

#### Some comments from shippers:

- "Like any change, capacity will tighten and then grow again as opportunities for jobs and new business open up."
- "I think it is necessary, but it will definitely increase my costs over the next few years."
- "With the update that trucks will not be put out of service for ELD violations until April 2018, I believe this will reduce the (negative) impact from moderate to slight."
- "This will slow down the drivers which will decrease their revenue. In a good way, it might save lives as drivers get more sleep. There are pros and cons to this whole matter."

Third-party intermediaries were less sanguine. Some comments from LSPs:

- "ELDs are still not implemented in a significant portion of the carrier market. There is going to be a truck capacity shortage of significance in the first and second quarter."
- "Midsize and large carriers will probably be ready. Smaller carriers seem to be waiting until the last hour, which could affect the impact."
- "This could force some small trucking operators of the market because of cost.

  Those who comply will see diminished utilization of their fleets."
- "Good in theory, but it's going to cut capacity and will drive freight rates higher.

  The end-result will be higher retail prices."

Many LSPs stressed the mandate will have a big impact, perhaps an unexpected one, on shippers.

- "Shippers are in for a rude awakening as they never considered the carriers' time as a cost to them. That will change once ... once it can be directly attributed to their shipping/receiving procedures that use carriers' time to increase their own efficiencies."
- "Shippers (say they) are ready for it when you talk to them, but as you get down into
  details, they are counting on more of the same. I don't think they've taken a look at
  the the detention and multidrop enough, which will increase the need for capacity."
- "Shippers seem to be unconvinced of the impact. I expect capacity leaving the

"Shippers are in for a rude awakening."



market, slower transit times, and rate increases. Shippers will have to remodel their supply chains and become very driver-friendly."

- "It's bad for the smaller carriers but good because it will stop shippers and receivers from holding drivers and asking them to run illegally."
- "Shippers will be hurt the most. A major adjustment will have to come in service expectations."

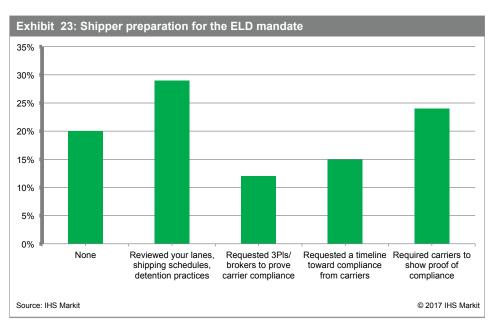
Looking beyond the immediate impact, many respondents, especially LSPs, did see long-term benefits. Improvements in safety, the potential for reduced operating costs (based on the elimination of paperwork), and access to more and better data for business intelligence analysis were all positive impacts cited by respondents.

- "This is an opportunity for transparency and visibility. I think we'll actually get true data to better determine rates."
- "This will level the playing field and improve safety. There will be a one-time 'transit adjustment' period for carriers and shippers."
- "ELDs will provide a missing level of visibility that most brokers do not have today.
   It will squeeze capacity somewhat, but not the levels that are being bantered about"

The level common in industry "banter" is a 2 to 8 percent decrease in tractor-trailer and driver utilization. Just how big a hit will really materialize will be known within six months.

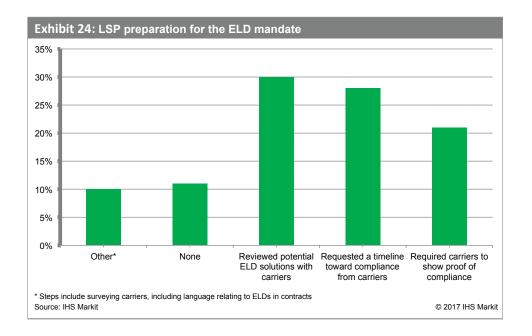
"I think it will be a rough transition for customers," one LSP said, referring to shippers. "But after some time, they will learn to deal with the time in which their freight will be delivered."

### b. Preparing for the Electronic Logging Mandate



"Shippers will have to remodel their supply chains and become very driver-friendly."





The effective date of the ELD mandate is Dec. 18. At that point, regulators and police will begin issuing citations to drivers and carriers without ELDs, which will affect their CSA, or Compliance, Safety, Accountability program, percentile scores. Drivers without ELDs will be placed out-of-service starting April 1. But shippers and LSPs aren't waiting for US regulators to "throw the switch."

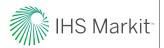
Twenty-four percent of the shippers surveyed and 21 percent of LSPs say they require motor carriers to show proof they will be in compliance Dec. 18. An additional 28 percent of LSPs and 15 percent of shippers say they have requested a timeline toward compliance from their carriers. Among shippers using third-party intermediaries to source capacity, 12 percent have asked logistics partners and brokers to demonstrate carrier compliance. Thirty percent of LSPs say they have reviewed potential ELD solutions with their trucking partners.

Only 29 percent of the shippers surveyed, however, say they have reviewed lanes, shipping schedules, and detention practices to ensure they won't fall foul of potential reduction in transit times once ELDs are installed and more accurate management of hours cuts the number of miles truckers may drive and the number of turns they may complete in a weekly cycle. And 20 percent of shippers say they have taken no steps to prepare for the ELD mandate.

Only 11 percent of the LSPs surveyed haven't started to prepare for the ELD era. Those companies may be putting their businesses at risk. Other LSPs detailed some of the steps they're taking to prepare their carrier partners, shipper customers and personnel:

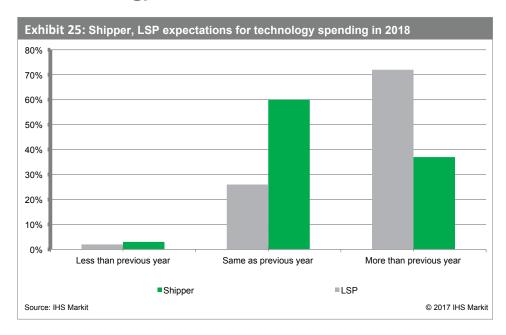
- "We're working on a system to track who has ELDs, and training employees on the importance of confirming the carrier has the hours required to make on-time delivery."
- "We contractually require carriers to be compliant (with US regulations). We're surveying carriers to see who is compliant. We will require carriers to show proof."

Shippers and LSPs aren't waiting for US regulators to "throw the switch."



A few other respondents say they will leave it to a carrier's insurance provider to ensure the carrier is complying with the mandate. The argument that the insurance provider is responsible for checking a carrier's ELD compliance, however, isn't likely to do much for a broker facing a jury in a "negligent hiring" lawsuit following a fatal truck crash..

# VIII. Technology



The transportation business is on the cusp of significant technological change, as developing digital technologies improve efficiencies and enable the faster order fulfillment cycle that is reshaping distribution networks in the Amazon era. The goal of end-to-end supply chain automation may be years away, but the rapid development of mobility technology, the cloud, and real-time communications and freight tracking is making the next steps possible.

Shippers turn to logistics providers for technology, and LSPs see information technology as key to their ability to remain competitive in a crowded market. That's clearly reflected in the survey, which found 72 percent of LSPs planning to spend more on technology over the next year. Another 26 percent of LSPs expect to spend about the same amount as in the past year, while only 2 percent foresee a decrease in their IT investment. A similar number of shippers, 3 percent, expect their technology spend to drop, but the majority, 60 percent, expect their IT budget to remain level with the past year, with just 37 percent expecting to spend more.

There are several reasons for the divergence between the two groups surveyed.

LSPs today are as much in the technology business as in the business of moving freight. Services such as real-time shipment tracking and business intelligence analyses are becoming "table stakes" when seeking business from shippers, who look to LSPs to deliver

72 percent of LSPs are planning to spend more on technology over the next year.



the latest technology. Shippers, however, are not in the technology business. Arguably, they're not actually in the freight business — they manage supply chains to support their company's mission, whether that is manufacturing sophisticated aerospace components or selling shoes.

Supply chain and logistics departments within larger corporations often are not first in line when capital for investment in new technology is meted out — even in a time when expedited fulfillment cycles and just-in-time consumer satisfaction are raising to new heights the importance of supply chain efficiency within enterprises. Also, shippers that have invested in technology over the years often have legacy systems that are costly to abandon and replace.

#### **Exhibit 26: Top technology spending priorities for Shippers, LSPs**

Shippers		LS	LSPs	
1	TMS/WMS/ERP	1	TMS	
2	Business Intelligence	2	Visibility-Tracking	
2	Visibility-Tracking	3	Other Software	
3	Hardware	4	APIs/EDI	

Equal numbers of shipper respondents chose Business Intelligence and Visibility.

Source: IHS Markit ©2017 IHS Markit

The top technologies targeted for investment by shippers and LSPs were similar. Both groups put transportation management systems at the top of their lists of IT priorities, with 52 percent of shippers and 21 percent of logistics providers ranking TMS spending highest. Although most large companies have a TMS, many smaller shippers do not, and cloud-based software is making TMS available to many businesses that couldn't afford a system a few years ago. Transportation management software forms a base for the next two technology priorities identified by shippers surveyed: business intelligence and shipment tracking, or visibility.

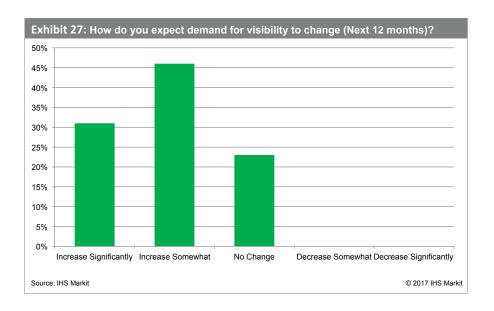
Business intelligence ranked second among shippers and fifth among LSPs when queried about technology investments. For LSPs, tracking or visibility ranked second, followed by various types of software and application programming interfaces and electronic data interchange — communications building blocks for connected enterprises and supply chains.

Clearly, shippers want the ability to collect and analyze increasing amounts of data to drive supply chain efficiency, and their logistics partners want to enable that.

Transportation
management systems
topped lists of IT
priorities, with
52 percent of shippers
and 21 percent of
logistics providers
ranking TMS spending
highest.



# IX. Visibility



The need for visibility is widely recognized, but the adoption rate and use of technology required to provide that view of inventory in motion lags.

The top priority of shippers in the Amazon era is increasingly clear: better supply chain visibility. The need to know where inventory is in the supply chain, not once or twice a day but in near real-time, has never been greater, driven by fulfillment cycles as tight as two hours, let alone two days. The definition of visibility, however, is changing as quickly as the speed with which goods are ordered and delivered online. Supply chain visibility is not limited to tracking trucks, or freight, and gaining a clearer view of the supply chain is just a first step, not an end in itself.

Survey results indicate the picture is muddier at many companies than one might think. The need for visibility is widely recognized, but the adoption rate and use of technology required to provide that view of inventory in motion lags. That could be an issue for shippers, and LSPs, trying to catch up to market leaders if e-commerce and the US economy keep growing.

Among logistics providers surveyed, 77 percent say they expect requests for greater supply chain visibility from shippers to increase over the next year, with 31 percent expecting those requests to increase significantly. Only 23 percent expect no change in the next 12 months.

At the same time, the clear majority of shippers and LSPs surveyed, 65 and 71 percent, respectively, said they were "somewhat" satisfied with their current level of supply chain visibility. Only 15 percent of shippers were very satisfied, and 19 percents were dissatisfied. LSP results were largely similar. It's hard to reconcile the strong expectation that demand for visibility will increase with the level of satisfaction expressed with current visibility or tracking capabilities. Perhaps respondents recognize "somewhat satisfied" simply will not be good enough in 2018.

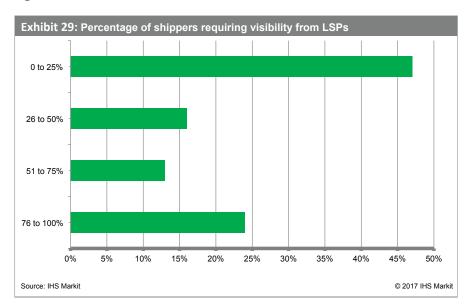
Among logistics providers surveyed, 77 percent say they expect requests for greater supply chain visibility from shippers to increase over the next year.





The answer may lie in another response: Nearly half of shippers surveyed, 48 percent, said they currently don't use shipment tracking technology at all, compared with only 7 percent of the LSPs. Although third-party logistics providers often say visibility is "table stakes" when trying to land a shipper's business today, 47 percent of the LSPs surveyed said 25 percent or fewer of their shipper customers currently demand shipment tracking. However, nearly another quarter of the LSPs said 76 to 100 percent of their shippers make supply chain visibility a requirement.

Forty percent of shippers said they use technology to track all shipments, with 8 percent tracking shipments with new or high-risk carriers only, and 4 percent tracking only high-value freight. LSPs, with a broad base of shipper customers, are more likely to use visibility technology to track high-value freight, as 28 percent said they do. LSPs also say they use tracking technology to monitor time-sensitive shipments, multistop loads, and shipments with longer transit times.



Nearly half of shippers surveyed, 48 percent, said they currently don't use shipment tracking technology at all.



There are more visibility tools and options for shippers than ever. The rapid growth of mobile technology, propelled by the smartphone, has made SKU-level tracking a reality in less than a decade. This year's survey points to a market in transition toward greater visibility.

# XI. Transportation Partners

	Exhibit 30: Top Shipper, LSP concerns with transportation partners					
Sh	ippers	LS	iPs .			
1	Rates/Pricing	1	Understanding ELD impact			
2	Communication	2	Loyalty			
3	Timeliness	3	Rates/Pricing			
Sou	ırce: IHS Markit			©2017 IHS Markit		

Rates and pricing, by far, topped the list of shipper concerns with transportation partners — carriers and third-party logistics companies — into 2018. Communication and timeliness came in second and third, however, pointing to underlying service-related issues.

The shippers surveyed weren't just worried about rising truck rates, but accessorial charges as well. But their responses underscored a lack of communication and visibility. "Pricing, availability, dependability" was how one shipper framed the concerns. "Availability" denotes capacity, and one shipper expressed greater need for "short-notice, on-time trucks."

That shipper may find availability even more constricted in the year to come. But beyond capacity, some respondents complained of difficulty getting current information from carriers.

Frequent carrier turnover of sales representatives frustrated one shipper. "We're a difficult customer to learn, and getting a new national account executive up to speed is a lot of work. I'm concerned that carriers are assigning an unrealistic number of accounts to their national account executives, making it harder to work effectively with the carrier."

The picture was different at LSPs, who had similar concerns about carrier rates, which are squeezing third-party logistics margins, but also worried about capacity and ELD compliance. "We need to identify the carriers that can work with us more frequently," one LSP said. "Increasing our load-to-carrier ratio via contract pricing will drive efficiency and service for our clients and our company." Logistics providers also worried about how to ensure trucking companies see them as strategic partners, "rather than focusing on Amazon."

When it comes to shippers, third-party intermediaries are most concerned about a lack of understanding of the impact ELDs will have on capacity and rates. They rate shipper loyalty as their second-biggest concern, followed by rates and pricing. In many cases, the LSPs say, their customers are "too focused on price" and "have limited understanding of freight market cost drivers and transportation law." Ironically, that may be a result of the very outsourcing of transportation and logistics that led to the boom in third-party logistics starting in the 1990s.

Shippers surveyed weren't just worried about rising truck rates, but accessorial charges as well.



#### Other LSP comments of note:

- "Shippers need to understand how dramatically the market has changed in trucking in the past few months. Tighter capacity means higher rates."
- "There's an unhealthy focus on the lowest-cost providers."
- "Shippers don't understand how detention loading and unloading is going to remove capacity from the marketplace."

"Shippers need to understand how dramatically the market has changed in trucking in the past few months. Tighter capacity means higher rates."

# XII. Top Challenges for 2018

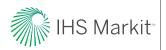
Exhibit 31: Top three challenges ranked by LSPs, 5	Shippers
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Sh	ippers	LSPs		
1	Capacity	1	Capacity	
2	Rates, Costs	2	ELDs	
3	Service Expectations	3	Service Expectations	
Sou	urce: IHS Markit			©2017 IHS Markit

There is no shortage of challenges facing shippers and their transportation partners in 2018, but the potential shortage of truck capacity by far tops the list. Nearly 30 percent of all respondents identified "capacity" as their biggest issue among a long and varied list of challenges.

Shippers and LSPs agreed closely on the pre-eminence of capacity as a challenge. After that, however, shippers placed rates and costs second, and service and expectations, third. LSPs placed service second, but ranked the ELD mandate as the third major challenge of 2018.

Nearly 30 percent of all respondents identified "capacity" as their biggest issue.



### XIII. About The Journal of Commerce and JOC.com

The leading information and marketing services provider for the domestic and international containerized cargo community, the JOC delivers high-quality intelligence and expertise to help customers make better business decisions — in print, online and face-to-face at leading industry events. In addition, the JOC provides best-in-breed marketing channels to help companies reach their target audience. JOC.com is the foremost industry website covering international and domestic logistics issues on a daily basis, and The Journal of Commerce is, and has been since 1827, the source for authoritative editorial content relied on by international logistics executives around the world. The JOC organizes several leading industry events each year, including the flagship conference, TPM, in Long Beach, California, and the JOC Inland Distribution Conference, in Memphis, Tennessee.

Both are divisions of IHS Markit, a world leader in critical information, analytics and expertise to forge solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. Based in London, IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions.

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### XIV. About NASSTRAC

Short for the National Shippers Strategic Transportation Council, NASSTRAC is a shippers association for transportation and logistics professionals who manage freight across all modes. Launched in 1952, NASSTRAC today represents mid- to upper-level freight decision-makers across a range of industries, from manufacturers and retailers to wholesalers and distributors throughout the US. Many industries are represented, including food and beverage, consumer goods, retail, manufacturing, pharmaceutical, and industrial products.

NASSTRAC's mission is to be the leading provider of advocacy, education, connections, and solutions to transportation and logistics management professionals who manage freight across all modes. For more information about NASSTRAC's education, advocacy, and provider relations initiatives, see www.nasstrac.org.





## XV. About TIA

The Transportation Intermediaries Association (TIA) is the professional organization of the \$166 billion third-party logistics industry. Transportation intermediaries, or third-party logistics companies (3PLs), act as the facilitators to arrange the efficient and economical movement of goods between cargo ships, airplanes, trucks, rails, warehouses, and store shelves. TIA member companies serve tens of thousands of shippers and play a key role in domestic and international commerce.

The TIA represents more than 1,700 member companies. More than 70 percent of these member companies are small, family owned businesses. The TIA is the only organization representing transportation intermediaries to shippers, carriers, government officials, and international organizations, and is the US member of the International Federation of Freight Forwarders Associations (FIATA).



# XVI. About Truckstop.com

Truckstop.com is a one-stop connection between North America's commercial transportation professionals. Founded in 1995 as the first freight-matching marketplace to hit the web, Truckstop.com has grown to provide load planning, transportation management, telematics, route optimization, real-time rates, powerful negotiation tools, and other logistics solutions. Truckstop.com is recognized as the leading resource for transportation data and trends, including the weekly Trans4Cast, which informs outlets such as BB&T and Bloomberg Financial. Truckstop.com also serves as the largest credit reporting entity in the transportation industry, helping companies guard against fraud and choose the right partners for their business. Visit www.truckstop.com.



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