# TRAFFIC As supply chain and other challenges persist, the state of transportation remains far from ideal

hallenges within the supply chain remain, and manufacturers and transportation providers alike are facing tight capacity, supply chain disruptions and driver and equipment shortages that are making them rethink their logistics strategies.

"We are experiencing a significant increase in transit times, lost shipments and cost across all modes of transportation," said Ricky Adkins, supply chain logistics senior manager, manufacturing, at Idemitsu Lubricants America Corp.

Before the pandemic, which exposed the delicate balance of transportation networks, the transportation market was relatively stable, meaning everyone could rely on ocean carrier and trucking schedules, said Andrew Bower, director of sales at OEC Liquid Logistics Solutions. However, now there is volatility. "We may, for example, have everything scheduled and the vessel departure date changes with little to no notice, which means each of the other variables above must be changed," he said. "We are seeing many shipments rebooked three to four times before they are actually executed."

Adkins said he has seen an increase in the use of air freight due to emergency orders caused by delays in other shipping modes. "Water shipment [costs] have increased significantly and the most of any sector, basically four times," he said. "This is due to ship capacity and port congestion."

### SECURING FREIGHT CAPACITY

Although U.S. economic activity is beginning to slow, Bob Costello, chief economist and senior vice president of international trade policy and cross-border operations for the American Trucking Associations (ATA), said trucking freight will remain strong throughout the year.

"I am not worried. In fact, I think we're going to struggle as an industry to haul all of the freight we'll be asked to haul next year," he said, adding that capacity will remain strong.

However, large truckload carriers are struggling to expand. Last year, for-hire power units in the truckload sector decreased 5.3%. They increased 3.2% in the less-than-truckload sector. Costello said fleets have been unable to hire

drivers and are selling parked trucks. Additionally, leased-on independent contractors are moving to the spot market.

Sean Hillard, business development manager for BRT Inc., said the transportation industry is still just as volatile as it has been for the past year and half. "It appears capacity, particularly in the tanker industry, is still tight," he said. "We are starting to see some micro time periods where there seems to be little bit of a loose market for a few days or a week, but the capacity crunch rears its head very quickly in the flurry of load requests we will see from all of our customers after three or four days of calm."

Many large shippers are circumventing traditional carrier markets and creating their own shipping consortiums or chartering their own vessels, Bower said.

Hillard believes the single biggest change he has seen over the past year is the number of shippers, manufacturers and brokers that are looking to develop long-term dedicated capacity contracts with carriers. "Developing a certain level of dedicated capacity is an important strategy to assure that a manufacturer will be able to deliver their products to their customers," Hillard said. "Most of these contracts, for us at least, take the form of a truck and driver being assigned a particular customer's business, that customer sends us the loads that they need, and our dispatch lines up what will fit on the driver within the pickup and delivery windows the customer requires and the hours-of-service rules. We then bill the customer a weekly fee per driver that is running their business."

The model looks different based on each organization's individual needs, Hillard said. Some companies might be flexible on inbound and outbound shipments, allowing them to only need dedicated capacity for a small handful of shipments that aren't flexible. "Another company might have tight time constraints on all their shipments and could require nearly all their capacity to come from a dedicated fleet to keep from shutting down their customer's facilities," he explained.

Establishing close relationships with carriers that understand manufacturers' needs is important in procuring the



right amount of dedicated capacity for each organization's specific needs, Hillard said.

However, one of the downsides to this model is that it can take capacity out of the market. "When a truck becomes dedicated to a customer, the next load he picks up might not be the next closest load, but the next closest for the dedicated customer," Hillard explained. "The manufacturers and shippers that develop the relationships and find dedicated capacity sooner than later will end up having an edge over those that waited."

### FINDING DRIVERS

The truck driver shortage remains a challenge within the trucking industry, which moves 70% of all the freight tonnage in the U.S. According to ATA, the driver shortage has risen to 80,000, an all-time high for the industry. Based on driver demographic trends — including gender and age and expected freight growth — the shortage could surpass 160,000 in 2030.

"A thing to note about the shortage is that before the pandemic, we were adding drivers to the industry—even though we had a shortage, more people were entering the industry," Costello said. "The issue is that new entrants into the industry didn't keep up with demand for goods."

Increased demand for freight, pandemic-related challenges from early retirements, closed driving schools and departments

of motor vehicles (DMVs), and other pressures are really pushing up demand for drivers. While all sectors in the industry struggle with finding enough drivers, the driver shortage is most acute in the longer-haul for-hire truckload market.

There is no single cause of the driver shortage, but some of the primary factors include a high average age of current drivers, which leads to an increased number of retirements. ATA also reported that women make up only 7% of all drivers, which is well below their representation in the total workforce.

Drivers under 21 are not allowed to haul interstate loads, but a pilot program included in the Infrastructure Investment and Jobs Act could bring 3,000 younger drivers into the industry. "It won't solve the driver shortage, but it will help," Costello said.

Due to the driver shortage, driver wages have increased. Hillard said that while the industry is still feeling a little upward pressure on driver wages, it seems that after the very large wage increases enacted last year, that pressure has calmed down a little. "We feel there is still more to come on the wage front, but for the moment we might have a few seconds to catch our breath," he said.

Much like drivers, equipment has been in short supply. Lead time for a new tractor or trailer continues to lengthen. "You can expect if you put in an order for five tractors, that you will be quoted, at a minimum, one year," Adkins said. "Out of the five, some of them will be pushed out past the

quoted lead time or even cancelled before the shipment date arrives. This creates multiple problems for transportation companies in regard to capacity, growth, equipment replacement and the ability to catch up."

## **RE-THINKING INVENTORY**

There are several ways manufacturers can work to get ahead of current supply chain challenges. If possible, companies can keep more inventory on hand to produce their final product, but this is extremely difficult because production materials are also in short supply, Adkins said.

Shippers can also plan for the extended transit times by pulling orders ahead and shipping two to four days ahead of the normal shipping day to allow for the delays in transit. He also suggests manufacturers inform customers of the increased transit times and ask them to place orders sooner.

Bower said production delays often happen due to delays in minor components of a finished product. "Take, for example, additives for finished lubricants. By volume the manufacturer could have domestic, reliable supply for 98% of their finished product, but that 2% is coming from Asia-Pacific and is subject to massive delays," he said. "I think over time we'll see some nearshoring, but these days it's difficult to maintain a completely domestic supply chain. Globalization is here to stay."

Hillard said the just-in-time model no longer works. "Finding ways to increase storage space and developing more flexible production models will go a long way in assuring that a customer will get their product and make them more attractive to carriers," he said.

BRT Inc. has had loads cancelled and moved out because inbound raw material never arrived, causing the blend that should have been picked up to not be completed and the carrier's load to be cancelled. The cancellation has ripple effects, causing more loads to be picked up or delivered late. "Carriers will gravitate towards manufacturers and shippers that have adequate tank space and well structured blend schedules that don't cause loads to be pushed out and canceled." Hillard said.

Bower recommends manufacturers secure product availability commitments and communicate that timeline to their logistics partner as far in advance as possible. "If special information is required for pick up (i.e. release numbers from the plant, etc.), that information should be given to your logistics partner ASAP as most truckers will not reserve drivers without all requisite load information," he said.

Manufactures shouldn't be afraid to pick up the phone and talk through alternative solutions with their logistics partners, Bower said. "Generally, the most open-minded clients meet with better outcomes for their clients," he said. Bower also encouraged manufacturers to have patience with their logistics partners. "Carriers are under-staffed and have seen a major increase in volume without a corresponding increase in resources," he said. "If you are a BCO [beneficial cargo owner], treat your carriers like you would a valued client."

# CONNECTING THE LINKS IN THE SUPPLY CHAIN

Several variables must align for a successful international shipment, including the vessel departure date, product availability date, plant loading schedule and trucking availability, and now, the number of variables has increased, Bower explained. "Manufacturers know this as 'critical path analysis' based on limiting factors," he said.

Currently, many hubs and terminals are experiencing major backups and delays. Bower noted that many vessels and shipments from Asia that used to enter the United States via West Coast ports are being rerouted through the Panama Canal to U.S. Gulf Coast and East Coast ports, which is creating unprecedented congestion and delays in Houston and New Orleans.

Apart from the inconvenience the delays cause, there are also financial impacts that change the calculus for shippers, including storage costs until the next vessel arrives, additional trucking, chassis fees, etc.

Bower suggested manufacturers understand the true cost of delays, such as how much market share they lose when their competitor consistently has inventory but they don't, and the financial impact of halting production for a day or week. "We had a client who directed a lot of time and energy into getting the best freight rates and terms, saving \$100 here or \$200 there. But after two plant shutdowns, they quickly realized a higher freight rate, and thus more carrier options, was cheap by comparison," he said.

It is critical for manufacturers to communicate the challenges to the end user, Adkins said. "Constant communication and education to the customer has never been more important. While they most likely will not like what you have to say, they are facing the same challenges on the back end, so in reality, they will understand," he said.

The current market is causing those within the lubricants industry to carefully review their logistic programs, Adkins said. "Unfortunately, until we see some relief in the current market conditions, we don't have many options for change. I believe that diversification will become key in the future, but I wouldn't advise price quotes in today's market if you have rates locked in," he said.

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