WHITE PAPER

Leveling up: Navigating the new trucking landscape

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Table of content

1. The Perfect Storm	03
2. Where it hurts	06
3. Taking the easy way out	07
4. Leveling up	09
5. Ready for the next level?	13

In Brief

Shippers are up against serious challenges. Numerous factors are combining to make it difficult for manufacturers and retailers alike to achieve the increased volume, speed and accuracy demanded by our booming economy.

Put simply, constrained capacity has turned transportation – specifically trucking, which moves about 70 percent of freight – into a pain point for many shippers. It's a story we've heard before, but this time it's worse than ever.

Many of these challenges are systemic, meaning that everyone faces them, and they demand ever more creative solutions to ensure bottom-line success. In this paper we will look at the many factors contributing to the capacity crunch, explore some of the ways shippers try to pretend it's not a problem, and then offer some practical methods for improving the situation.

The goal of this White Paper is to, not only provide a deeper understanding of the causes of the situation, but also outline ideas you can apply to your own logistics operation.

With a fresh perspective and new information, you'll be able to propose and implement solutions that can turn the situation around, and even contribute to supply chain efficiencies in areas beyond transportation alone.

1. The Perfect Storm

'Perfect storm' has been used to describe the trucking capacity shortage before. Most who work in supply chain operations have seen the cycles of capacity constraints come and go.

But this time it's different.

The trucking market in the US is at 100% percent capacity, as tight as it has been since 2004.

[1] And rates are climbing as a result. According to data from load-board operator DAT, rates in January 2018 were up between 25 and 36 percent year over year, while the ratio of loads to capacity was 185 percent higher than it was in January 2017.

[2] By the end of February DAT reported there were almost 10 loads available per truck.

[3] As a result truckers are turning down loads at an alarming rate. One major trucking company that regularly hauls over 6,000 loads a week has been turning down 800 to 1,200 loads each day.

[4] Another reported rejecting loads from major retailers like Walmart and Lowe's at a rate of 10,000 a week [5].

If giants like these can't get loads picked up, what chance do smaller shippers have?

The factors contributing to this capacity crisis include the new electronic logging devices (ELD) mandate in the U.S. and Canada, the shortage of drivers, a booming economy – including e-commerce and (temporarily, at least)

bad weather. Let's take a look at how these affect the industry.

Regulatory woes



Implemented in December 2017, with full enforcement to take effect in the U.S. in April 2018, the ELD mandate has instantly taken capacity off the road.

With the electronic logging devices required in every truck, drivers now face severe penalties if they do not comply with the Hours of Service (HoS) rules, which mandate, among other things, a 14-hour day, of which only 660 minutes can be behind the wheel.

Estimates run from a 15 to 20 percent capacity loss for some trucking companies. Routes that previously required one day of transit time now may require twice that long to accommodate the drivers' hours.[6] For a graphic demonstration of the effects, just take a look at the massive numbers of transports parked in truck stops, and along exit ramps on any freeway at any hour of the day. Every minute they're not driving is capacity lost.

Additional capacity has been sidelined through the introduction period, as companies and small operators who left it to the last minute are having trouble finding ELD system vendors who have the time and capacity themselves to do the installations. [7] This may worsen after April 1st, when full enforcement comes into effect, and non-compliant trucks may be forced to park instead of just paying a fine.

Adding to the regulatory headache, food manufacturers must now comply with new food safety rules that make transportation needs more specific and hard to meet. [8] Effectively this reduces the available pool of trucks that can carry their loads.

Drivers wanted

Exacerbating the HoS issue is the well-known driver shortage.

Exacerbating the HoS issue is the well-known driver shortage. First documented about 2005, with a shortfall in the U.S. of 20,000, the problem intensified to an estimated 50,000 drivers needed at the end of 2017. That will balloon to 174,000 in 2026, says the American Trucking Association. [9] That's bad enough, and other estimates say the ELD rules could bump that number as high as 400,000. [10]

The situation is only getting worse thanks to the advancing age of drivers – at the moment it's 55 – along with competition from other occupations that don't have trucking's drawbacks of being solitary and away from home. The ELD mandate is also reportedly accelerating retirements among older drivers who don't care to learn the new systems.

The industry has also done a poor job of attracting different demographics. The driver population is disproportionately male at 94%. And efforts to attract ethnic minorities into the driver pool has not boosted the supply of drivers sufficiently.



Boom times

Economic growth is making the problem worse. The boom of e-commerce and omni-channel retail is gobbling up capacity as shoppers buy more product that has to be moved multiple times, including unprecedented levels of returns.

Late in 2017 U.S. industrial production reached its highest level since 2010[11], and the 2017 holiday shopping season was one for the record books.

Economic indicators in the United States point to further growth, reflecting strong manufacturing numbers, a surge in home building, record low unemployment and positive financial conditions.[12]

All these net out to more economic activity, meaning continuing increased demand for freight transportation. Shipments have increased by 12.5 percent year over year and expenditures on freight have climbed by 14.5 percent.[13]



2. Where it hurts

No sector is exempt from the capacity crunch. From retail, to food, to primary industry and resource extraction, the pain is widespread and deeply felt.

With shipments increasing, rates are climbing. Truckers ignore undesirable loads, and shippers are being forced to defer deliveries. When delivery deadlines are missed shippers are being dinged with late fees, while truckers penalize them for excessive dwell time at the docks.

The effects are backing up throughout the supply chain. Resource extraction industries are facing revenue losses because they cannot find drivers,[14] inbound import shipments are loitering at the ports because trucks are not available to move them, meaning orders go unfilled at retail DCs and manufacturing plants stand idle waiting for raw materials and manufactured inputs.

Companies are feeling all this where it hurts – on the bottom line. Tyson Foods, for example, a major U.S. meat producer, reported it is facing a US\$200 million decline in profit thanks to transportation costs.[15] Likewise, Campbell Soup Co, jam-maker J.M. Smucker and beer distributor Constellation Brands all report a hit to earnings thanks to the rising cost of freight. [16]

Rate increases

Shippers themselves are expecting to see truckload rate increases in the range of 4.5 percent, while LTL rates are expected to jump 2.7 percent. [17] In reality, some companies are

paying up to twice what they normally do for urgent loads, and trucking executives expect contract rates to increase more on the range to five to seven percent [18].

On top of the generally higher rates, truckers are implementing surcharges in lanes where they are having trouble placing capacity. Certain lanes and regions are most severely affected, with shippers facing charges for excess freight above that which has been regularly tendered. Shippers report fees of between \$150 a \$600 a load in some instances.[19]

When they do defer loads because they cannot get a truck there are new challenges. Grocery retailers have resorted to levying big fines for late loads, making shippers pay for at least part of the revenue that's lost in out-of-stock situations. With penalties ranging from U.S. \$500 per late delivery, to three percent of value[20], these charges can add up quickly if loads are not delivered on time.



3. Taking the easy way out

It's no surprise that some shippers are throwing up their hands in dismay. How can you conjure up truck capacity out of thin air? Yes, it's a difficult challenge and it's sometimes easier to fall back on old ways than to change.

Let's look at a few of the easy – or dare we say, lazy – responses to the capacity crunch and why they won't help.

The claim

Carriers have always moved on price to get my business – why would it change?"

The reality

With 10 loads available for every truck on the road, why would a trucking company bend to your demands? It's a new environment out there, and the only way to get capacity for your loads is to pay and be a good customer (more on this later). The carriers are driving the market.



The claim

It's not really costing that much to live with the status quo. "

The reality

As noted above, price increases are all over the map, ranging from a couple points to double the previous rates, depending on the type of load and lane. That alone can represent a significant increase in the cost of goods sold. But then you have to add in the potential cost of detention charges, late fees and surcharges. And then there is the opportunity cost of lost sales because you cannot even get a load delivered at all. Make no mistake; failing to react to this capacity crunch will cost your business.

The claim

We can just throw more labor at the situation."

The reality

Do you have enough trained staff now? With record low unemployment it's not easy to find new staff. Temporary workers for the peak periods are becoming even scarcer, and come with their own drawbacks. Besides, do you actually know if additional labor for loading and unloading will give you enough of a productivity bump to make a difference to dwell times? This might work sometimes, but it's not a long-term solution.

The claim

I have a solution, but I'm not getting support from the C-Suite."

The reality

If the executives you report to are not on board then they probably don't have the full picture. It's your job to demonstrate the extent of climbing costs and the returns that will be realized from your proposed solution. With a convincing and solid business case supporting your proposal you should be able to counter objections and market your solution all the way to the top. But you have to do the hard work to get there. Look at all the options, crunch the numbers, and figure out the best solution that's right for your

4. Leveling up

In this landscape inaction is not an option. You cannot afford to ignore the reality of the situation: Even with easing in certain areas, the main drivers creating the situation will remain.

Forecasts suggest that capacity will continue to be an issue for shippers for the foreseeable future, or at least the next couple of years.

There's not going to be a magic bullet to solve this capacity crunch. But there are steps shippers can take to alleviate the pain and reduce the cost.

These solutions fall into broad categories: saving time, better planning, and becoming a more desirable business partner.

Alone, none of these ideas will eliminate the effects of reduced capacity. But employed together in a way that suits your business, a combination of these practical suggestions can reduce your bottom line suffering. It will take some serious work to analyze where you can best employ new strategies and techniques, but this process of improvement – leveling up – will net the results you need to not just survive but thrive.

A recent post from Logistics Management magazine sums it up: "Shippers need to get smarter about how they're managing their current carrier relationships; how they're optimizing routes and capacity; and they need to start putting data to work to plan in advance of any predictable disruptions—be it seasonable peaks or inclement weather."[21]

Making time

Time is a finite resource, but it can be stretched. Your objective is to stretch the driver's time on the road by compressing the amount he spends at your facility.

Reduce dwell times will not only speed up your operations, it will make the trucker's life easier and more efficient, and will help you become a shipper of choice as well.

Reducing driver dwell time will have a huge impact on operational productivity. In our recent White Paper on Surviving the Driver
Shortage Crisis we cited a J.B. Hunt study which points out that by reducing pickup and drop-off times by 30 minutes each a driver can save two hours a day in productive time.

In the context of the US HoS regulations, during a 14-hour (840-minute) day, a driver may be behind the wheel a maximum of 660 minutes per day. Then there is a 30-minute break requirement, leaving 150 minutes of on-duty, non-driving time for things like picking up and unloading cargo, doing paperwork and safety inspections." [22]

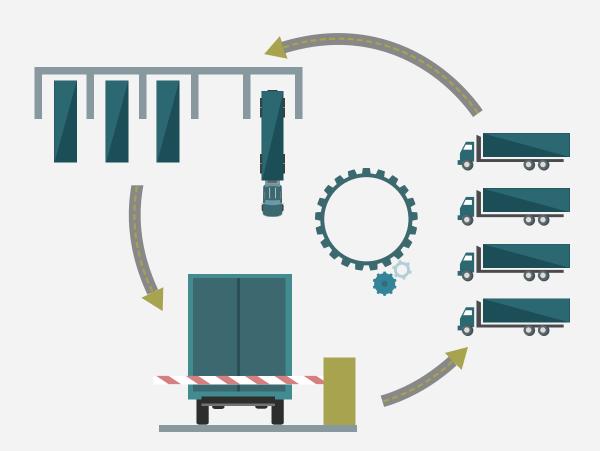
A report by the U.S. Office of the Inspector General (OIG) found that detention is associated with reductions in annual earnings of \$1.1 billion to \$1.3 billion for for-hire commercial motor vehicle drivers in the truckload sector. For motor carriers in that sector, they estimated that detention reduces net income by \$250.6 million to \$302.9 million annually.

Reducing detention time also provides safety benefits, as drivers who experience long delays are prone to driving in an unsafe manner to try to regain lost productivity. The OIG study also found that 15-minute extra dwell time increases the average expected crash rate by 6.2 percent, which would amount to an additional 6,509 crashes a year. [23]

<u>Scheduling dock appointments</u> is one way to save time. Keeping to that schedule is another.

Eliminating haphazard 'first-come, first-served' dock scheduling will make life a lot more pleasant for all involved and will reduce or eliminate waiting. Managing your yard so that drop and hook programs are organized and work properly is another. If the exact location of a trailer is known the time wasted hunting for it can be used by the driver to make deliveries, instead of sitting around getting frustrated.

Fortunately, excellent technology exists to make these operations simple and streamlined for you and the drivers. And it doesn't have to be complicated. Cloud-based yard management and dock scheduling solutions can be implemented quickly, with low up-front costs. As well, the benefits they confer go not only to improving trucker productivity, they also streamline your operations – a double win.



Better planning

With dock scheduling and yard management in play, you have to become a better planner.

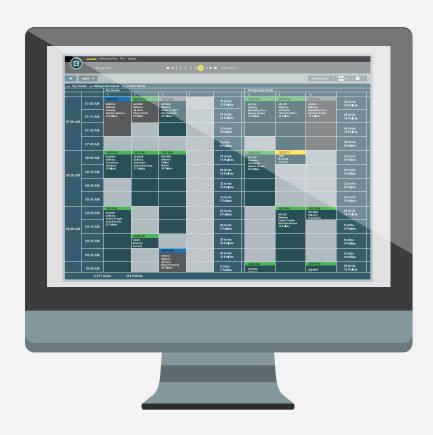
That means better coordination with production, sales and marketing departments in your own operations to allow loads to be built or received on schedule.

With that information in hand you'll be able to plan labor requirements so that the correct number of staff are on hand when they are needed. The days of dock staff waiting around for late loads to arrive should be over, allowing some relief in your labor budgets as well.

Better planning can also help you reduce your total number of outbound loads. Consolidating product into one load that would previously have required two will net big savings, especially if this planning can be made a regular part of your operational schedule not just a one-off solution.

A further benefit of predictability is that allowing your carrier partners to plan according to a set schedule will net you lower freight rates and tick a few more boxes on the shipper of choice checklist. [24]

In the current environment, with certain lanes experiencing more capacity shortfall than others, better planning may also allow the carrier to use alternate routing, and thus cut you a better deal.



Be a better partner

While both planning and scheduling will curry favor with your carrier partners there are numerous other actions, both large and small, that will make you a more favored shipper.

We detailed how to achieve Shipper of Choice status in our <u>White Paper</u>, which you can read <u>here</u>, but here's a quick list of the key takeaways:

- → Maintain good relationships.
 - Complaining about the market,
 hammering on rates, and being
 intermittent and vague are all good ways
 to make carriers bypass your company.
 Be understanding of the market and
 schedule regular meetings to discuss
 how things are going.
- → Be a good corporate citizen. Pay bills on time, or early. It matters when you are competing for carriers.
- → Be predictable. This is where the planning noted above comes in. Smooth out the peaks and valleys in your demand for transportation.

 Plan. Be predictable with loads.

 Schedule dock appointments.
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 Schedule dock appointments.
- → Treat drivers like kings. Don't just make and keep appointments. Give the drivers an inviting and useful place to hang out when they have to. If that means free food, showers or Wi-Fi, do it. Their employers will hear the good feedback and look kindly on you.

- → Respect the driver's time.
- → Be compliant with regulations. From Hours of Service to Chain of Responsibility, to food safety and beyond, you'll get better results from your trucking partners if you are in compliance with regulations that affect everyone on the supply chain.
- → Use technology. From the YMS and dock scheduling apps, to transportation management, inventory control and electronic data interchange software, the range of services available to increase productivity is already vast and growing. The data is there learn how to leverage it.



5. Ready for the next level?

While the capacity crisis may be unprecedented, there are many operational improvements you can make to ease the pain it is causing your business. Making changes to adapt to the new landscape should not be seen as an 'if', but rather a 'when'. And the sooner the better.

Future plays

Not every solution is market-ready yet, but there are a few coming down the pipe that will no doubt change the landscape even further in the next couple of years.

Autonomous or semi-autonomous trucks will change the capacity equation immensely.

Current trials include platooning – where the drivers can rest during the highway leg of the journey as the trucks self-drive in a massive convoy, only taking over the wheel for the 'final mile' off-highway segment of the delivery.

If this comes to fruition as a viable technology it will greatly alleviate the driver shortage issue. But it is still years away, and betting on it won't help you survive this crisis.

At C3 Solutions we've been talking a lot in recent years about various ways for shippers to improve their transportation and distribution productivity. For those who have already implemented solutions, now is the time to go back and revisit where additional efficiencies might be found.

Are your dock schedules respected? Do you need to revisit staffing levels based on new planning? Take a close look at where you are at now versus where you expected to be. Are there places where you can take it to yet another level?

If you are just embarking on the journey to better productivity and the savings it will deliver, take heart.

Although waiting to act may have cost you in the short term, as rates skyrocket and you are forced to defer loads, pay higher rates, and suffer late charges, at least you may benefit from the technology having advanced and improved in the past couple years.

You can learn from those who went before and adapt their lessons to your own operations.

But whichever camp you are in, don't succumb to paralysis. It's time to act. Spend the time, figure out what will work for your operation, build the business case and get ready to level up!

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C3 Solutions is an information technology company specialized in yard management (YMS) and dock scheduling (DSS) systems. Since its founding in 2000, C3 has gained the confidence of clients around the world and across many industries including retail, grocery, distribution, manufacturing and parcel post.

Headquartered in Montreal (QC), Canada and privately owned, C3 is dedicated to developing, implementing and supporting the most complete yard management and dock scheduling products on the market today.

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