

# Clearing Capacity Hurdles with **Driver and Trailer-Focused Technology**

Leverage simple-to-use technology  
to elevate driver and asset utilization



Motorcity Systems

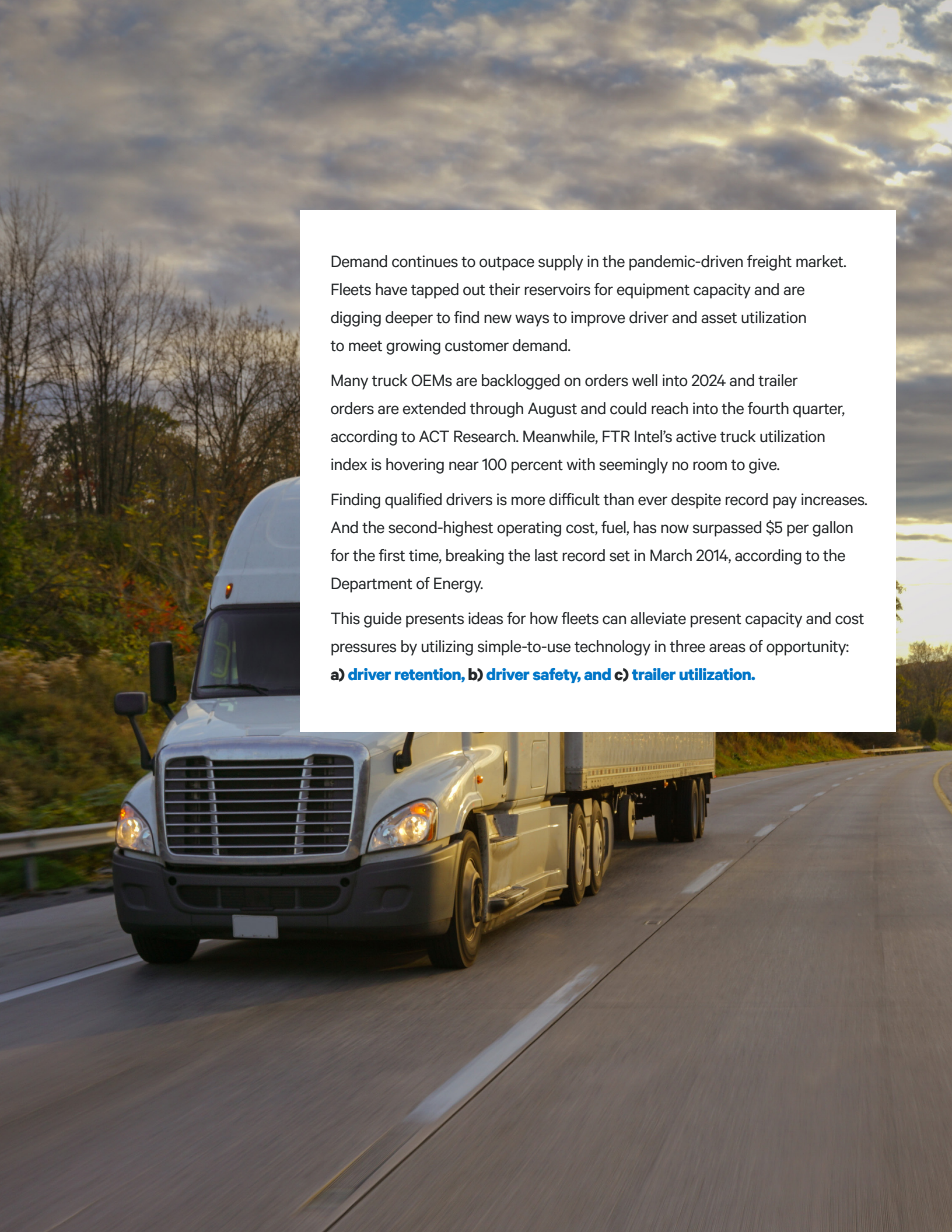
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A white semi-truck is driving on a two-lane road that curves to the right. The sky is filled with dramatic, golden-hued clouds from a setting or rising sun. The truck is in the foreground, moving towards the viewer. The background shows a line of trees with some autumn-colored foliage.

Demand continues to outpace supply in the pandemic-driven freight market. Fleets have tapped out their reservoirs for equipment capacity and are digging deeper to find new ways to improve driver and asset utilization to meet growing customer demand.

Many truck OEMs are backlogged on orders well into 2024 and trailer orders are extended through August and could reach into the fourth quarter, according to ACT Research. Meanwhile, FTR Intel's active truck utilization index is hovering near 100 percent with seemingly no room to give.

Finding qualified drivers is more difficult than ever despite record pay increases. And the second-highest operating cost, fuel, has now surpassed \$5 per gallon for the first time, breaking the last record set in March 2014, according to the Department of Energy.

This guide presents ideas for how fleets can alleviate present capacity and cost pressures by utilizing simple-to-use technology in three areas of opportunity:

**a) driver retention, b) driver safety, and c) trailer utilization.**



# Retain More Drivers

Inefficiency is the root cause of driver turnover. Whenever drivers waste precious time, such as having to search for a trailer or wait on a message from dispatch, it has a negative impact on pay and quickly leads to frustration and distrust in management.

**Starting with the rear of a vehicle and moving forward, trailer tracking systems can be used to eliminate delays and driver frustrations by:**

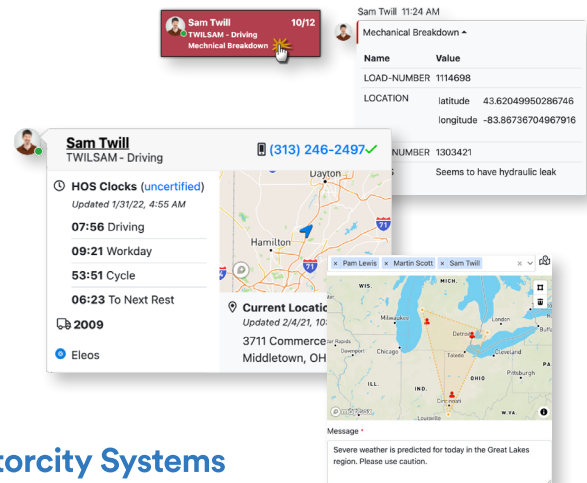
- Adding certainty to dispatch. Fleets can provide drivers with the exact location of trailer assignments and verify the status of cargo and equipment to utilize driver time effectively.
- Using smart sensors to proactively monitor the health of trailer components, such as tire pressures and brakes. With this data, fleets can prevent scenarios where drivers are assigned to trailers that are not road ready, explains Siamak Azmoudeh, Vice President of Product and Business Development at SkyBitz.

Likewise, instant dispatcher-driver messaging can remove uncertainty, drive efficiency, and improve driver job satisfaction by eliminating communication delays.

Drivers already use instant text and chat message features on their smartphones. They can see when messages have been received, and when the other party is in the process of responding. This familiarity adds to the frustration drivers experience when using onboard ELD and telematics devices that lack a real-time communication experience.

Many ELD and telematics devices, particularly legacy systems, cause drivers to wait five minutes or longer for dispatchers to receive messages and respond. The delay is caused by ELD and back-office management systems that use “polling” technology to manage communications in queues, explains Bob Stemple, CEO and co-founder of Motorcity Systems.





Motorcity's communications platform enhances the driver experience with fast, modern messaging capabilities. Fleets use the cloud-based system which integrates with fleet telematics, workflow and transportation management systems, to replace outdated messaging tools in the mobile and office environment and:

- Connect dispatchers with drivers in the same way office workers are connected with tools like Microsoft Teams and Slack, only with specific fleet communication features.
- Add a personal touch by getting reminders to recognize drivers for birthdays, work anniversaries, and by using photos to help personalize the communications.
- Manage drivers in groups and send messages based on geography, such as weather alerts, or driver classifications, among other criteria.
- Have instant visibility of driver status that includes available hours of service and dispatch assignments. This eliminates the need for dispatchers to reference different systems.
- Flag high-priority messages such as breakdowns and other events to get dispatcher's attention and take immediate actions.
- Maintain communications even when on-prem systems are down using Motorcity's robust, cloud hosted system.

Instant dispatcher-driver messaging can remove uncertainty, drive efficiency, and improve driver job satisfaction by eliminating communication delays.

# Engaging Drivers with Safety

Driver retention and fleet safety are intertwined. Safety managers can positively impact retention and productivity by helping drivers improve their professional skills. They can also contribute to turnover — in a good way — by terminating the employment of unsafe drivers before they cause accidents.

Camera-based safety systems give safety personnel critical information to evaluate and coach drivers. Recent technology developments automate the coaching of drivers with real-time in-cab feedback that lightens the management workload and improves driver engagement, safety, and productivity.

## Improving Driver Feedback

Legacy camera systems require safety managers to manually review records of safety events and coach drivers. When safety events are triggered by harsh braking, swerving and other G-forces alone, managers' view of driver performance are limited to only these negative behaviors.

Data shows that drivers are more accepting of computers judging a wide spectrum of their driving performance, more so than human evaluations.

Advanced camera vision systems that use artificial intelligence (AI) can give drivers proactive alerts when they exhibit risky behaviors. Drivers are given enough time to address the problem, such as speeding or following distance, before an alert is tripped and the behavior negatively impacts their driving scores.

By capturing and analyzing the entire driving day, AI-based camera systems provide a complete view of road safety by evaluating drivers' performance at stop signs, traffic signals, and around pedestrians and other objects.

With a complete assessment, managers can view a performance report and confidently recognize positive driving and balance it with constructive feedback.







## Gamifying Work

Collecting an abundance of driver safety data can be a rewarding experience for drivers who work at fleets that use gamification features to increase job satisfaction and improve performance. Studies show that when companies use gamification features they see a 60 percent increase in employee engagement.

Gamification can be as easy as allowing drivers to see how their safety scores rank in a peer comparison and to the fleet average. Beyond giving drivers visibility, fleets can reward positive behavior to motivate and celebrate success.

“When the drivers saw we were using video in a positive manner, they embraced it very quickly.”

—John Elliott, CEO of Load One

“As drivers see the results of their efforts, they will develop a sense of autonomy and control of their career. This leads to higher productivity and saves managers time,” said Adam Kahn, President, Commercial Fleet Team, at Netradyne.

To maximize impact and efficiency, fleets can have drivers monitor their scores and rewards through a mobile app.

Load One, a Detroit-based expedited transportation and freight management provider with more than 400 trucks, has a custom driver app with a single sign-on experience to third-party applications, including driver safety scores and rewards from using the Netradyne camera solution.

“When the drivers saw we were using video in a positive manner, they embraced it very quickly. When they realize what we are doing is trying to enhance them as a driver and protect them and their safety — it is really a little bit of a game changer,” says John Elliott, founder and Chief Executive of Load One.

# Putting Trailers Out in Front

Trucks and drivers have always been the kingpins of fleet management. Trailers have traditionally been a secondary concern since fleets could rent, lease or purchase equipment to meet immediate or seasonal needs.

With the logjam in trailer manufacturing, fleets are focused on ways to get more utilization from their existing trailer assets. By using trailer tracking systems and smart sensors, fleets can:

- Maximize utilization by automating “yard checks” and reporting idle times and other key metrics for each location where fleets have trailer pools. Having visibility of assets and utilization trends at each location helps increase driver productivity and move assets to where they are needed most.
- Use cargo sensors to gain visibility of when assets are loaded and ready for pickup or empty and available for use.

The Bennett Family of Companies, headquartered in McDonough, Ga., uses a trailer tracking solution from SkyBitz on more than 2,100 specialized trailer assets — flatbeds, step decks, dry vans and intermodal chassis.

Tony Eiermann, vice president of fleet management, credits the system for increasing capacity and cost savings by automatically tracking trailer inventory and monitoring asset utilization. He also sees value in monitoring the status of tire pressures, doors, load distribution and other data points to prevent costly incidents related to heavy and specialized cargo.

“The biggest thing we want to do is to build smart trailers,” he said. “The last thing we want is to have a tire blowout while hauling 300,000 pounds going 55 mph.”





## A Picture of Efficiency

Cargo sensors that use ultrasonic technology report binary empty or loaded status by detecting the presence (or absence) of a single pallet of freight. This can result in getting a “false empty,” where a trailer is not actually ready for use by having empty pallets or dunnage inside.

A smart camera solves this problem by accurately detecting and reporting trailer and cargo status. The device is installed at the roadside rear of a trailer to scan the full length of the floor and report trailer fullness in terms of the percentage of cube and floor space utilized.

With this information and supporting images, fleet managers know with certainty the status of trailers at each location — loaded, unloaded and what percentage of capacity is available to optimally match equipment with loads.

A smart camera also mitigates risks of cargo claims by capturing high-definition color images at critical periods of a shipment. Managers can view images of a load before a driver picks it up and at the point of delivery to assess where, when and how damage occurred.

Freight brokers and motor carriers are using trailers equipped with trailer tracking systems to expand capacity on a large scale.

## Sharing Trailer Capacity

Another strategy that can boost trailer utilization for carriers is to rent or “share” equipment with other third-party carriers during certain periods or one-way moves that help to reposition their assets.

Freight brokers and motor carriers are also using trailers equipped with trailer tracking systems to expand capacity on a large scale. Some brokers have purchased or leased trailers to offer shippers more capacity powered by third-party carriers. The brokers can offer third-party carriers the convenience of drop-and-hook operations.

Large carriers with brokerage operations have created freight marketplaces with power-only options for fleets to pull their trailers. As trailer sharing continues to grow, asset owners will benefit from using trailer tracking systems to automatically verify the right tractors are hooking up to correct equipment.





# Lead with Certainty

Capacity and cost issues are not going away anytime soon. Fortunately, recent technology advancements are fast and easy to implement for managers and drivers alike. Fleets can leverage technology to remove uncertainty from drivers' work and respond faster to their needs, and utilize intelligent automation tools to improve driver safety and create more capacity through better trailer asset utilization.

## Solutions included in this guide:



### Motorcity Systems

Motorcity Systems is a team of transportation industry professionals and seasoned technology and integration experts that came together to solve the problems and fill in gaps created by legacy platforms.

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### SkyBitz

SkyBitz is the leader in commercial telematics for transportation and logistics. Its asset tracking and monitoring solutions deliver precise, real-time data and analytics to optimize decision making and automate workflows associated with trailer assets.

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### netradyne

Netradyne is transforming the transportation ecosystem through Computer Vision and in-depth data analysis to protect and empower fleets and drivers to create a safer road for today. Its vision-based Driveri® camera is the most advanced fleet safety system, with Edge Computing to capture and analyze video immediately, creating timely alerts to help drivers avoid risky situations.

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