When your intermodal business stretches terminal capacity and space gets tight, what can be done to accommodate more freight?

To find out, Intermodal Insights asked a cadre of experts about factors and alternatives to consider when more capacity is needed, including at landlocked terminals.

“It’s an exciting and challenging time for those of us in the intermodal business,” said Jeff Heller, vice president of intermodal and automotive at Norfolk Southern. “By combining next-generation technologies with efficient operating practices, we are increasing productivity and capacity without the need to expand a terminal’s footprint or to build new.”

Doug Hoehn, executive vice president at Milestone Equipment Holdings, said the surge of intermodal freight that began late in 2017 is continuing at high levels in early 2018, unlike past years. That growth pace is causing stress on the intermodal infrastructure, he explained, and prompting steps to address terminal operations.

Off-terminal locations to obtain chassis have been set up to aid in equipment supply by Milestone, Hoehn said, with facilities located near intermodal terminals. “The nearby off-terminal depots that we operate could help to relieve congestion caused at intermodal terminals by bare chassis and wheeled containers that are awaiting delivery,” Hoehn said.

Off-terminal depots have value, FlexiVan Executive Vice President Greg Moore told Insights, while highlighting another point. “Shifting all chassis off the terminals will help to establish some consistency in pool operations and enable terminal operators to utilize the space for other operations,” he said. “However, off-terminal land availability is a significant challenge and we need port authorities to take a greater role in facilitating [the availability of] cost-effective land for depot operations.”

Mike Burton, president of C & K Trucking, identified a different set of alternatives to address congestion-related issues. “We live and breathe productivity concerns every day,” Burton said. “We really don’t have a lot of control over what terminals are used or the operations there. It comes down to pricing.”

“We can’t speed up the process,” he explained. “We end up trying to charge more where we have to so we can make up for the driver’s lost time. We are really pushing our customers to not go to the congested rail yards. We are saying we can’t move your freight effectively. You’re creating demurrage and delays if you go through congested rail yards.”

To reduce drivers’ time at the terminals, reservations must be made, a driver needs to quickly grab a good chassis and billing must be correct, he explained. That part of the process is the same whether or not the terminal is congested.

As drivers naturally gravitate to less congested facilities, truckers also are taking steps to avoid peak hour deliveries when possible, or doing nighttime drop and hook moves in order to have more flexibility. “When you push the envelope, people are finding creative solutions like creating drop lots and combining two trips,” Burton said.
Drivers’ Choice

Heller had a similar view. “In this day and age of drayage constraints – fewer drivers and trucks and more regulations – drivers have a choice of where they want to go,” Heller said. “Processing drivers through our terminals faster means they can be more efficient and improve their bottom line.”

Other operating practices can make a positive difference.

Ed DeNike, president of SSA Containers, said appointment systems are working well to spread out pickups, particularly for imports. “Otherwise we would have to accommodate 800 trucks first thing in the morning, and nothing is more frustrating for a trucker than waiting,” he said.

Another SSA initiative is moving container pickups to off-dock locations where import boxes are mounted on chassis. Off-dock locations near marine terminals are open 24-7, enabling a trucker to make a pickup in 15 minutes, he said.

Technology

Norfolk Southern offers ExpressNS, a mobile app for check-in and out of terminals, parking and box location data, billing and electronic gate receipts. It also has a feature for a driver to obtain assistance if there are equipment issues.

At a landlocked NS Chicago facility, the railroad created a box-stacking program to maximize limited ground space by using cranes outfitted with an intelligent inventory management system that includes GPS, scanning sensors and optical character recognition cameras. NS also has implemented an optimized terminal control system, or OTCS.

BNSF has built RailPASS, a mobile application with more than 25,000 users added in just two years. It’s designed to expedite drivers’ terminal experience with an estimated time savings of 15 to 20 minutes when it is used.

At BNSF, 85 percent of the company’s intermodal freight moves through terminals with automated gates.

Rob Nichols, managing director, domestic intermodal sales and marketing at Canadian Pacific Railway, said the company is installing FastPass, an automated gate system. “Where implemented, this has resulted in significantly faster gate times,” he said.

Expansion

“We’ve had success working with state and federal agencies to expand capacity,” Heller added. For example, he cited the inland port at Greer, South Carolina, that is operated in collaboration with the South Carolina Ports Authority. The state built and operates the port, and NS provides rail service. The economics would not have made sense for NS to finance the facility alone, he added.

Where land is scarce and streets are congested, NS and other companies are expanding. In Memphis, Tennessee, its downtown terminal handles international freight while a new terminal was built 40 miles east for domestic traffic, with federal funding assistance.

Heller said that while it may appear the drayage costs would increase, the domestic terminal’s location near the growing warehousing and distribution activity helps to control the trucking expense.

Another region where intermodal facilities are expanding quickly is the Kansas City area.

“Over the last 4 or 5 years, the progress has been significant,” said Chris Gutierrez, president of Kansas City SmartPort, a regional economic development group. Warehousing and distribution square footage has quadrupled in the last 5 years, with a focus on 3 newly developed logistics parks where BNSF and NS have a presence. Other railroads also have distribution facilities in existing logistics locations, he added.

The attraction for locating e-commerce, regional distribution and foreign trade zones in Kansas City, he said, is the ability to reach 85 percent of the U.S. population in 2 days using surface transport, as well as the absence of highway congestion.

“Watching the Kansas City Logistics Park add 4 million square feet is confirmation that there is something positive going on,” said Walter Kemmsies, managing director of Jones Lang LaSalle’s airports and global infrastructure group.

One area for potential improvement, particularly for e-commerce and urgent shipments, is domestic intermodal service that needs to be faster and more reliable to capture that fast-growing freight.

“Importers are perfectly fine with slow but highly reliable service,” he said. “That works really well. What we’d like to do is shift a lot of e-commerce from trucks to trains.”

Volutility

“The problem is that demand on the retail side is cyclical – how do you manage a network system where you are impacted by volatility?” Kemmsies said. “Volatility is the enemy of good performance. The reality is that you need a minimum volume commitment, but no one has specified how much that volume must be. It is not a matter of just reconfiguring trains. You have to add capacity to support that.”

There are other opportunities for addressing operations in congested areas, he said, by focusing more broadly on how goods move so that local officials realize how overall traffic congestion can be reduced by improving highways near intermodal terminals.

Another advancement would be better routing of intermodal truckers’ deliveries so they could be grouped by zip code.

“Drivers would be more than happy to go a little out of [their] way to create overall efficiency,” Kemmsies said. “Truckers need turns to make a living. We don’t want guys playing solitaire on their phones for an hour while they wait somewhere.”

Burton also noted how efforts to reduce congestion such as grounding all shipments doesn’t necessarily work, though it may sound like a good approach. The problem is that chassis providers aren’t open on weekends and chassis supply can be scarce.

Also, just moving to a greenfield site isn’t enough to ensure smooth operations, Burton added. To be most efficient and effective, motor carriers must have locations close to those facilities, perhaps as little as a mile away, to minimize empty miles.

One issue, he said, is that it can be difficult to locate such facilities.

“Some communities want warehouses and trucks, but not truck terminals,” Burton said. “Truck facilities create more traffic and pay less taxes.”

On the other hand, some are creating space for trucking operations, he said, praising Kansas City’s development for allocating needed space. “They know they won’t be successful if they can’t move freight in and out.”