Aiming high

NY-NJ trade, logistics fundamentally affect US economy

By Lori Musser

The New York-New Jersey trade and logistics sector dreams big — it must do so in order to serve one of the largest, most concentrated consumer markets in the world.

Its most prominent player, the Port of New York and New Jersey, is the largest container port on the US East Coast, the third largest in the nation and the 23rd largest globally.

The trade, distribution and logistics infrastructure and services of NY-NJ

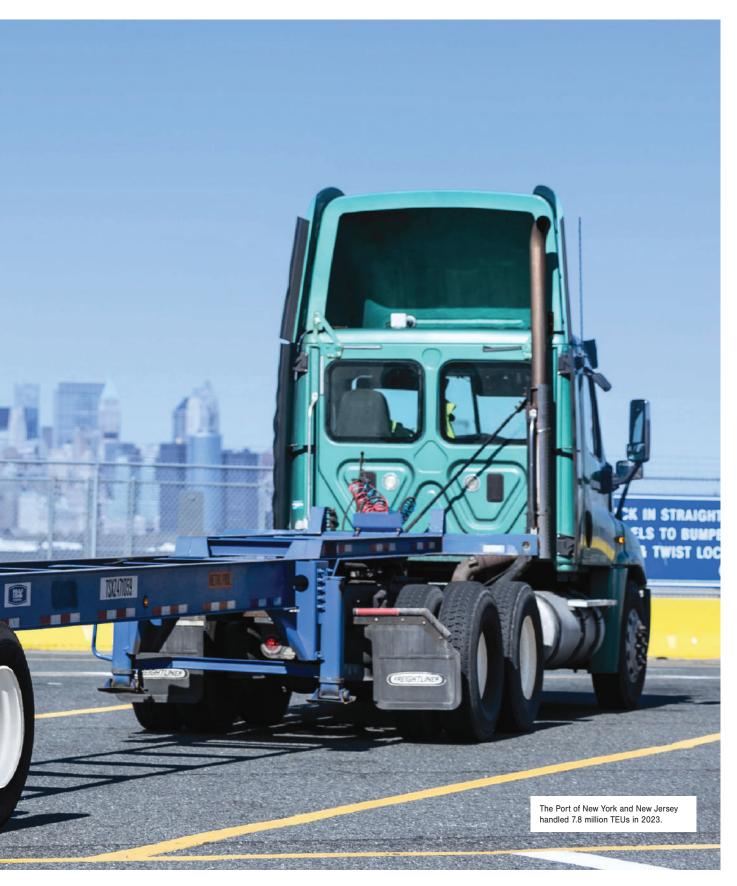
exist on a scale that is foundational to the entire US economy. Together, the freight hubs, modes, warehouses and numerous supply chain partners blanket regional industrial and consumer markets. Some go even farther, with a reach that expands across the country.

Over the last five years, the Port of New York and New Jersey has experienced rapid shifts in global supply chains due to the pandemic and labor unrest on the West Coast. As a result, the port has experienced strong volumes that have continued into this year — 4.2 million TEUs have been handled in the first half of 2024, 13% higher year over year.

In 2023, the port handled 16% of the American market, as measured by loaded import TEUs. This accounted for 7.8 million TEUs, 2,856 vessels of all types and approximately \$238 billion in goods. It is currently the



TRAC Intermodal



second-busiest port in the US for loaded cargo.

To handle these considerable volumes, the entire New York-New Jersey transportation and distribution sector must stay on its toes. Fortunately, "there has been sufficient capacity in the trucking sector, chassis availability, [and] rail and warehouse sectors to support the growth," said Bethann Rooney, port director of the Port Authority of New York and New Jersey (PANYNJ).

Elevated truck visits and cargo volumes do, however, result in periods of traffic congestion on port roadways and create challenges with empty container returns. Yet, "despite the increased volumes, terminals remain fluid with strong truck turn times and terminal dwell times. The port continues to work collaboratively with port stakeholders to understand how challenges may impact all links in the supply chain and then coordinate effective solutions through input received," Rooney added.

For example, the port authority has launched two working groups focused on mitigating traffic impacts related to the Port Street Corridor Improvement Project and exploring appointment system optimization strategies to facilitate future growth and ensure effectiveness. The project, when completed, will upgrade the northern access point into Port Newark and Elizabeth Port Authority Marine Terminal.

Supply chain strength

Fluidity must permeate all activities within supply chain ecosystems. For TRAC Intermodal, leasing intermodal assets and managing chassis pools and related activities contributes to growth in trade and economic development throughout the NY-NJ market and beyond. TRAC currently has 11 pools under management, a marine fleet totaling over 185,000 chassis, and a network of over 650 locations in key markets.

"Given the past four years of

experiencing significant volume swings, TRAC has made it a key point to make sure chassis availability and fluidity are prioritized," said Daniel Walsh, CEO and president of TRAC Intermodal.

To this end, the business has positioned itself with six strategic chassis reserve locations, partnering with Union Pacific Railroad.

"We looked at demand and our positioning needs since COVID and preemptively moved units to these locations to meet demand for volume upswings," Walsh said.

TRAC has been an important member of the NY-NJ distribution and logistics sector for decades. Headquartered in Princeton, NJ, the business aims to "transform the intermodal industry by setting the standard in quality, reliability and innovation; offering high-quality equipment to accommodate a range of ISO containers; as well as triaxles, genset and lightweight chassis," Walsh said.

Expert chassis provisioning, innovative

A gateway for global trade

As the largest port on the US East Coast, the Port of New York and New Jersey is the premier gateway with facilities and options to move your cargo quickly, cost-efficiently and in an environmentally sustainable way. The port enables access to a large and concentrated consumer market, reaching 46.3 million people within a four-hour drive, and many more in key inland markets through direct connections to major interstate highways and two Class I railroads.

A global gateway

From its terminals, rails and roads, the port efficiently delivers goods to local and inland consumers and businesses, reaching 134 million people within 36 hours by rail or truck, as well as USproduced exports to the world's buyers. The Port of New York and New Jersey is the first call for more than 75% of arriving vessels, meaning their cargo is often delivered by rail to inland destinations before the vessels arrive at the next US port.

More than containers

The port's five container terminals welcome the world's biggest ships, and its ExpressRail network's rail lift capacity is the largest on the US East Coast. Port facilities also include three auto terminals, one cruise terminal, cross harbor rail and barges, and access to more than 1 billion square feet of industrial space within 50 miles. The port serves container shipping, automobile processing, bulk and breakbulk cargo, warehousing and distribution, cruise passengers, intermodal, refrigerated cargo, foreign-trade zone activities, and maritime support industries.

Growing and improving

With the support and collaborative efforts of port partners and the Council on Port Performance, the port remains steadfast in its commitment to deliver cargo efficiently and reliably. The port was the second busiest in the nation for the first half of 2024, moving over 2.8 million loaded TEUs. These volumes represent a 13% increase compared with the same period in 2023. With the assistance of federal and state grants, the port is advancing infrastructure projects to create more efficient road and rail networks and collaborating with the US Army Corps of Engineers on plans to deepen its channels to -55 feet mean low water, allowing the port to welcome the industry's largest container vessels.



fleet roadside assistance, nationwide tire supply and maintenance & reconditioning, and depot services are all integral to the company's fluid supply chains and best-in-class customer service. TRAC's customers also benefit from its10-year, \$1 billion investment to upgrade, refurbish and add new assets with a focus on safety and reliability for the industry, Walsh added.

Complacency is not an option for any link in northeastern US supply chains. Businesses focused on simplifying processes, increasing speed and streamlining movements will contribute more value and be more successful. Collaboration is one key step toward that goal.

To foster collaboration, communication and coordination, the Council on Port Performance (CPP) - co-chaired by the Port of New York and New Jersey and the Shipping Association of New York & New Jersey — engages regional partners, local communities, industry providers and associations.

Warehouse and distribution center stakeholders have joined the CPP in helping to foster proactive approaches to challenges, resulting in the connection of available storage capacity with freight. The flow of information also aids confirmation of existing warehousing supply and demand growth in cold storage, 3PL and logistics facilities.

Northeastern US supply chain infrastructure must also be extensive and efficient. The port, along with its terminal operating partners, railroads, departments of transportation and others, continues to position itself for future cargo demand.

In May, PANYNJ was authorized to take full ownership of Staten Island's Howland Hook Marine Terminal. In exchange, the city of New York gained control of the port authority's partial ownership in the Brooklyn-Port Authority Marine Terminal in Red Hook.

The Brooklyn-Port Authority Marine Terminal has seen decreased cargo activity in recent decades due to space and transportation constraints. With full ownership, the city plans to "reimagine the waterfront," transforming the location into a modern port and mixed-use space for maritime logistics and last-mile delivery solutions, housing, community amenities, and open space. At Howland Hook, the deal permits reconstruction and rehabilitation of wharves and ship berths, as well as upgraded cargo-handling

equipment and expanded yard capacity.

Capacity and efficiency

PANYNJ and its partners are investing heavily across infrastructure classes to meet projected demand. Plans for construction on \$375 million of wharf rehabilitation and reconstruction projects are expected to kick off at the end of 2024.

In conjunction with the US Army Corps of Engineers, announcements were made in May outlining investments of \$50 million through the Harbor Maintenance Trust Fund to rebuild piers and maintain berth depths; \$32 million on deepening critical anchorages; and a signed agreement to advance development of the 55-foot

960 older trucks with newer, cleaner models. As of July 2023, drayage trucks equipped with an engine model year 1998 or older may not service the port.

One incentive for clean vessels encourages fuel conservation and voluntary engine, fuel and technology enhancements for oceangoing vessels.

"In 2021, the program took more than 25,000 metric tons of CO2 emissions out of the air, which is equivalent to taking more than 5,000 cars off the road," Rooney said. The program is fully funded until 2028.

PANYNJ's Net Zero Roadmap includes interim goals to reduce carbon emissions by 50% for Scope 1 and 2 activities by 2030. One initiative to help meet this goal

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deepening of NY-NJ shipping channels.

The port also invested \$600 million to build out its on-dock ExpressRail system, which connects every major container terminal with Class I freight railroads -Norfolk Southern and CSX. Using this system, goods can reach the Midwest, New England and eastern Canada quickly, efficiently and more sustainably than via truck, Rooney said.

ExpressRail's speed is one important factor in attracting the beloved "first port of call" designation - NY-NJ receives approximately 75% of ocean carrier first calls among US East Coast ports.

Marine terminal operators in the region are making parallel investments in shipto-shore cranes, modern yard handling equipment and other improvements to enhance operational efficiency and capacity, while also advancing PANYNJ's 2050 net-zero emissions goal.

Sustainability

As a landlord port, the Port of New York and New Jersey is enhancing environmental sustainability and reducing greenhouse gas emissions by working closely with terminal operators, the trucking community and other port partners.

Its Truck Replacement Program has helped remove, scrap and replace over is the installation of fast chargers at Port Newark, enabling battery electric drayage trucks to charge quickly and efficiently. This project will be in service by the end of the year.

In 2022, the port updated material handling equipment (MHE) elements of its Marine Terminal Tariff, phasing in a mandate for NY-NJ terminal operators to transition to zero-emission MHE as equipment becomes commercially available. As a result, all of the port's shipto-shore cranes and rail-mounted gantry cranes are now at zero emissions.

TRAC Intermodal has been recycling its chassis, tires, tire rims, frames and scrap metal parts for decades.

"Sustainability is an integral part of doing business. TRAC was an early adopter for sustainability well before the emergence of ESG programs as standard corporate practice," Walsh said.

"In 2023, TRAC recycled more than 10.8 million pounds of chassis metal, 2.6 million pounds of tire rims and 2.5 million pounds of scrap metal," as well as 70,000 tires and 2.4 million pounds of tire rubber dust, Walsh added. This was in addition to retreading 150,000 tires, which saved 2.1 million gallons of oil and diverted 5.9 million pounds of waste from landfills.

"The energy savings with this retreading process can power nearly four

million homes in one year. Tire retreading uses less than one-third the amount of oil required to manufacture a new tire, which translates to a reduction of 70% in emissions," he added.

TRAC's business model also helps minimize carbon footprints by using ecofriendly chassis pools in which multiple customers share in the use of equipment.

Data, technology and analytics

Initiatives to foster digitalization, increase data visibility and enhance communications are critical to supply chain effectiveness in the northeastern US market.

At the Port of New York and New Jersey, examples of technology and datadriven efforts to streamline operations, improve efficiency, increase visibility and inform decision making include: real-time traffic management systems to monitor truck turn times throughout the port; assessment of new technology to notify staff of traffic congestion, motor vehicle accidents and public berth utilization; and collecting anonymous trucker feedback in real time to analyze customer satisfaction, clarity of information shared and condition of port facilities.

Cargo visibility metrics are available via PortTruckPass, and port-wide performance metrics such as average weekly truck visits, truck turn times, container dwell, import and rail inventory, and ocean carrier rerouting updates are published weekly on the port's Supply Chain Dashboard.

Big data and analytics represent opportunities as well as concern for many private-sector transportation and distribution companies. Issues such as volume fragmentation and data complexity can negatively impact operations.

TRAC addressed these potential problems by implementing a Data Warehouse platform in 2023. Built using the Snowflake solution, the platform has simplified and streamlined the use of analytics and reporting tools across the business.

"We consolidated around 32 TB of our historical data for analytical purposes,"

said Walsh.

The Data Warehouse also provides business users with "the highest performance, scalability and security advantages available on the market," he added. In addition, TRAC started a generative Al initiative utilizing big data to provide real-time answers to the business in ChatGPT-like format and, as a result, enhances efficiency, said Walsh.

"Internally TRAC reviews turn times and on/off terminal dwell to understand how the container and chassis turns are impacting each market. Through collaboration with customers, TRAC also uses their forecasts to predict and reposition assets to markets where volume is headed," Walsh added.

The New York-New Jersey trade and logistics community is critical to key northeastern US markets. Its vision and preparedness continue to unlock capacity, efficiencies and other opportunities for partners, users and consumers alike.

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Setting the standard for chassis fleet excellence

As North America's leading intermodal chassis pool manager and equipment provider, TRAC Intermodal has 11 pools under management, the largest marine fleet totaling over 185,000 chassis and a network of over 650 locations in key markets

For more than 50 years, TRAC Intermodal has set the standard in quality, reliability and innovation, offering highquality equipment to accommodate a range of ISO containers, as well as triaxles, genset and lightweight chassis.

To underscore its commitment to fleet quality and sustainability:

TRAC converted its TRAC Tire Services division to exclusively serve its marine chassis fleet. TRAC Tire Services operates one of the country's largest tire retreading

In 2023, TRAC Tire Services retreaded 150,000 tires, generating nearly 2.5 million pounds of rubber dust from the retreading process, more than 40,000 pounds per week. Retreading uses less than one-third the amount of oil required to manufacture

a new tire, which translates to 70% less emissions.

TRAC Tire Services, in partnership with rubber manufacturer Vipal, uses rigorous quality control and proprietary compounded intermodal rubber to improve performance and minimize tread wear. The division provides close to half of all tire needs for TRAC's fleet.

Beyond tires, TRAC recycled more than 10.8 million pounds of chassis metal, 2.6 million pounds of tire rims and 2.5 million pounds of scrap metal in 2023.

Headquartered in Princeton, NJ, TRAC serves more than 4,000 US customers. Its subsidiaries offer maintenance and repair services as well as storage and parking solutions through TRAC Services. ■

