

Case Study

TRAC ZIM EXPEDITED CHASSIS POOL (TZEP)

Meeting the E-Commerce Wave with Expedited Solutions

TABLE OF CONTENTS

Introduction

E-Commerce Impact on Intermodal Supply Chain	3
Covid-19 and the E-Commerce Surge	4
E-Commerce Fuels the Expedited Ocean Freight Services	6

Challenges & Solutions

ZIM + TRAC: Expedited Shipping Solution7	
TRAC's Private Chassis Pool	

Results

Neeting the e-Commerce Wave with Dedicated Chassis Pool Solutions	13
Re-Thinking Supply Chain	14



E-COMMERCE IMPACT ON THE INTERMODAL SUPPLY CHAIN

E-commerce has come a long way since some of its earliest examples like Electronic Data Interchange (EDI) and tele-shopping emerged back in the late 1970s. Since that time, opening the Internet to the public and the development of popular marketplaces such as Amazon and eBay have been instrumental in popularizing the buying and selling of goods online.

The rise of e-commerce has been shaping the intermodal supply chain for some time. Online shopping has transformed the role of retail stores, distribution centers and transportation providers. Consumer expectations for fast, reliable delivery have been forcing companies to rethink warehouse locations, distribution networks and fulfillment capabilities. At the same time, technology has made it easier for consumers to compare prices on their devices and has reinforced their expectations of prompt, timely deliveries. Intermodal has become an appealing option for ecommerce companies to reduce costs and increase velocity in their supply chains. Many need to move products faster end-to-end which is driving demand for affordable time-sensitive transportation solutions and propelling growth in expedited ocean shipping services.



COVID-19 AND THE E-COMMERCE SURGE

Since the advent of COVID-19 in March of 2020, the volume of e-commerce spending has surged dramatically. Many brick and mortar stores closed, offices shut down and many people found themselves working from home for extended periods. These developments created an immediate shift in consumer buying patterns. Suddenly, e-commerce moved to the forefront of retail. Online shopping through Amazon, Target, Walmart and many other sites for home goods, appliances, electronics and other products became the preferred purchase option.

Following the COVID-19 lockdown, inventories reached record lows while disposable income increased due to travel bans. These conditions resulted in a spectacular intermodal industry recovery in the second half of 2020. Trans-Pacific container volume grew by double digits in the second half of 2020, propelled by surging imports from Asia.

As a result, during the course of 2020, consumers spent \$861 billion online with U.S. retailers, up 44% from \$598 billion in 2019. Online spending accounted for more than one-fifth of total retail sales in 2020, up from nearly 16% a year earlier.*



* Source: DigitalCommerce 360, 2/21/2021





US E-COMMERCE PENETRATION

Online and in-store sales as a % of total retail spend, 2010-2020



US E-COMMERCE SALES GROWTH

Year-over-year growth, 2010-2020



* Source: DigitalCommerce 360, 2/21/2021

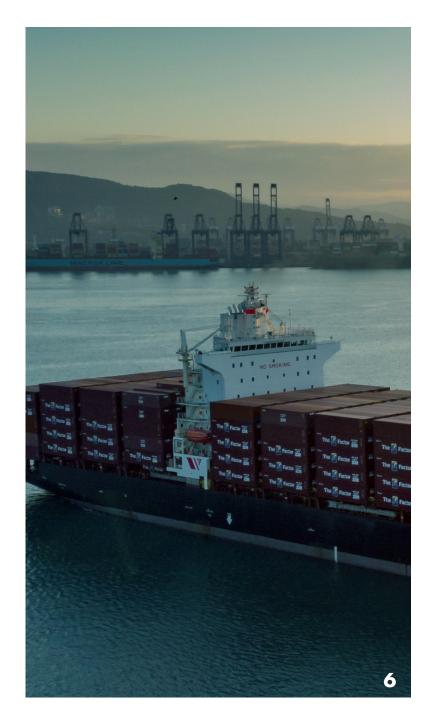


E-COMMERCE FUELS EXPEDITED OCEAN FREIGHT SERVICES

The economic conditions caused by the COVID-19 pandemic, the changes in consumer behavior and doubledigit growth in cargo activity in the second half of 2020 helped to encourage U.S. e-tailers to shift more of their transport choices from air to expedited ocean services. A key factor contributing towards the expedited ocean freight solution was shippers facing severely restricted access to air transport.

Air cargo rates in the Fall of 2020 were up more than 25% from the comparable period a year earlier. Ongoing travel curbs due to COVID-19 have kept many passenger planes grounded, restricting access to customers and causing air cargo rates to skyrocket.

In response, innovative Ocean Carriers expanded and developed new customized solutions to meet rising demand for faster transit times, fed by greater online shopping and challenges in securing air freight capacity.





ZIM + TRAC: EXPEDITED SHIPPING SOLUTION

ZIM Integrated Shipping Services Ltd., a leading carrier in the global container shipping industry, launched an expedited delivery service from South China to Los Angeles/Long Beach in July 2020, called ZIM E-Commerce Xpress (ZEX). ZEX is designed to meet the needs of ZIM's e-commerce customers for faster freight service by transporting time-sensitive cargo from China to the West Coast in just 12 days, the shortest time-frame available. As part of its expedited ocean shipping services, ZEX had to ensure streamlined delivery of cargo to customers. A key part of this solution was providing shippers with dedicated high-quality chassis amid a challenging equipment landscape caused by record cargo growth.

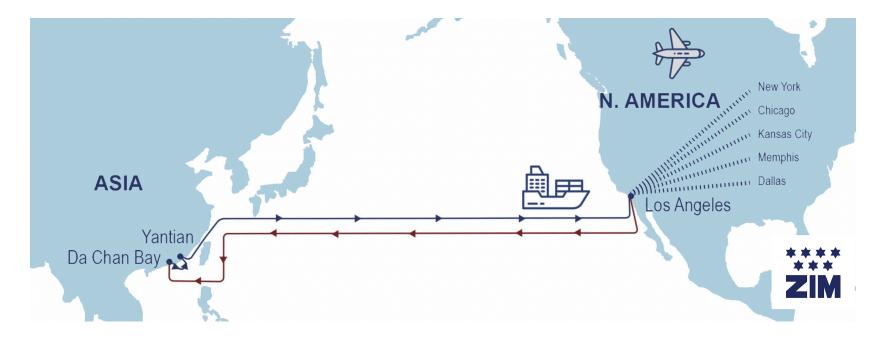




ZIM selected TRAC Intermodal as their exclusive chassis provider for the new ZIM eCommerce Xpress (ZEX) service. The ZEX vessel would call the Los Angeles Long Beach market at West Basin Container Terminal (WBCT) starting July 6, 2020.

To ensure equipment availability for the ZEX service, TRAC was tasked to create a dedicated private chassis pool that included:

- Supplying 1,500 properly marked high-quality chassis equipped with GPS units in just 5 weeks
- Continued supply of equipment to support ZEX service growth (By Q2 2021, growing ZEX service was supported by over 3600 TRAC's chassis.)
- Deploying marine chassis pool management, including M&R processes, fleet optimization, billing, account management & streamlined customer communications.





TRAC'S PRIVATE CHASSIS POOL

TRAC ZIM EXPEDITED CHASSIS POOL (TZEP)

To meet ZIM's urgent need for fast turnaround, TRAC created a new dedicated private chassis pool, the TRAC ZIM Expedited Pool (TZEP) at the West Basin Container Terminal (WBCT) at the LA/LB ports.

Based on forecast cargo volume, timing, street dwell forecasts and location arrangements provided by ZIM, TRAC's team raced to ensure its top-quality fleet was ready to meet ZIM Express (ZEX) line's commitments.

Tapping into its nimble and agile operations, TRAC quickly and efficiently set up a private pool. In just 5 weeks, the first tranche of 1,500 chassis were reconditioned, outfitted with GPS and delivered to WBCT to support the ZEX service. The process involved:

In just 5 weeks, **1,500** TRAC's chassis were reconditioned and delivered to WBCT. By May 2021, growing ZEX service was supported by over **3600** TRAC's chassis.

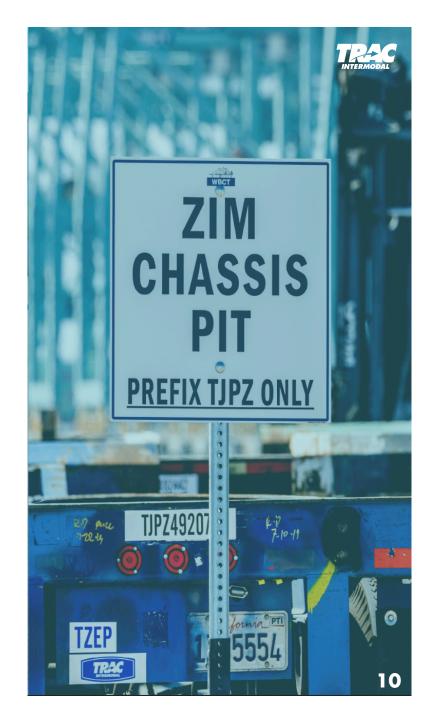


SECURING FLEET AVAILABILITY

Ensuring equipment to support the pool was the biggest challenge. TRAC had to identify units that could be repositioned to the new pool. This involved identifying out-of-service chassis in various locations and setting up a process to get them repaired and ready to deploy. The "TJPZ" marked chassis began to arrive at the pool in the first week of June 2020. By July 6th, close to 1,500 chassis were positioned in time for the first vessel off-loading.

CHASSIS FLEET READINESS

A key step in the process was finding and allocating M&R service partners to repair the out-of-service units. The situation was especially challenging due to COVID restrictions and limitations put on labor. Chassis had to be repaired and equipped with GPS units with markings and monikers indicating the new pool. TRAC's longstanding relationships with the ILWU and M&R vendors such as PMG, PCMC and Innovative Terminal Services were critical in delivering on its fleet promise. Both TRAC's team and its vendors that utilize ILWU labor worked seven days a week to fulfill its commitments to ZIM.







CROSS-TEAM COLLABORATION

The project involved a great deal of coordination between TRAC's fleet compliance team, corporate and regional operations, M&R, procurement and vendor management departments, as well as the customer support and communications groups.

Once chassis candidates were identified, they had to be shipped to various repair locations and then on to the terminal. When the process was fully operational, TRAC was delivering 100 road-ready chassis a day.

The short turnaround and deliverables made this a significant effort. TRAC reached out to union shops in advance to determine available resources. The M&R team coordinated, spoke to the shops about TRAC's plan/needs, and collaborated to ensure they had enough mechanics for the project. Coordination and ongoing communications with vendors to structure agreements in advance was important. Despite many challenges, including COVID-19, TRAC and its long-standing service partners worked collaboratively to complete project demands.



DEDICATED ACCOUNT MANAGEMENT

TRAC offers multi-tiered account management that spans national and strategic teams, operations and field support. Its seasoned executive sales team provides highlevel overview and tactical direction to ensure that a customer's account objectives are fully satisfied. TRAC's strategic support team establishes SOPs to ensure fleet availability and timely, accurate billing. Its customer service and operations teams provide proper equipment placement, availability and roadability. Ongoing account support is readily accessible on a day-to-day basis.

TRADE COMMUNICATIONS

TRAC maintains a steady stream of communications to motor carriers covering all operational details through a series of ongoing customer announcements.

MEETING THE E-COMMERCE WAVE WITH DEDICATED CHASSIS POOL SOLUTIONS

TRAC ZIM Expedited Chassis Pool (TZEP) has proven successful in supporting ZIM's expedited ocean freight needs. As the ZEX grows and adds new vessel strings, TRAC is growing with them.

As of Spring 2021, TRAC Intermodal has increased its TZEP chassis fleet to 3,600 at the WBCT terminal.

Beyond providing dedicated, high-quality equipment, TZEP ensures streamlined and efficient operations. The pool provides motor carriers with wheeled, pre-mounted containers so they can quickly hook up the chassis and get on the road. Loaded containers are discharged directly from the vessel onto TRAC chassis, creating faster and smoother on-terminal turn times and ultimately quicker cargo delivery to final destinations.



RE-THINKING SUPPLY CHAIN

A pool solution specifically dedicated to the needs of e-commerce customers marks changes in the intermodal supply chain by altering the traditional flow of goods and touchpoints along the way. Online shoppers expect faster delivery, which is forcing companies to rethink where they situate warehouses, distribution centers and fulfillment locations.

These changes are driving demand for affordable, timesensitive transportation solutions which speed up supply chains, fueling growth in expedited ocean shipping services. The global sea freight forwarding market is booming thanks to growing internet penetration, increasing Purchasing Power Parity, as well as developments of services designed for the e-commerce industry. The Sea Freight Forwarding Market is expected to grow at a CAGR of more than 3% during the 2020-2025 period.*

With steadily rising air freight costs, expedited shipping solutions provide a hedge against costly, less reliable air cargo options. Expedited ocean freight services provide customers with trusted, timely and economical cargo delivery capabilities and TRAC Intermodal is customizing its chassis pool solutions to support this evolution of the intermodal supply chain.



