

WHITE PAPER /

FourKites Global Ocean Report

H1 2022

EXECUTIVE SUMMARY

KEY TAKEAWAYS:

A number of disruptive events caused dwell, port congestion and disruptions to continue in the first half of 2022 with imports seeing dwell times that were 20% or higher compared to last year for the first five months. While shutdowns due to COVID-19 let up slightly, these disruptions will continue into the second half of the year.

As global economic pressures have risen, shipping volumes have remained strong, which is a huge win for the ocean shipping industry. **Pricing has diminished significantly, but pressures loom** as to what could happen if recessions impact the US and Europe, with both being major consumer markets.

COVID-19 shutdowns are not the only reasons for delays and disruptions. As we saw in the first half of the year, **labor shortages and political conflict greatly disrupted the supply chain and caused delays**, shortages in raw materials, inflated prices, rate increases and limited product availability.

However, ocean transit time decreased 6 days from the peak of 49 days during the first half of the year — **an indicator of some easing in ocean freight congestion.**

Due to high inflation continuing through 2022, **the holiday shopping season will be more tame** than in years past, as consumers exhibit more price sensitivity.

Demand for ocean visibility grew in the first half of 2022, with the FourKites platform seeing ocean freight volume increase 230% compared to the same time last year — also driven by shippers increasing their inventory levels to fulfill demand and ensure safety stock.

FourKites anticipates **demand for real-time visibility of ocean freight volume for the second half of 2022 will continue to increase**, with retailers needing insight into shipments of time-sensitive inventory for the holiday season.



Looking Forward with Glenn Koepke

Glenn Koepke, GM of Network Collaboration, is a widely recognized thought leader with a deep knowledge of the supply chain industry. Having traveled the world implementing supply chain transformation products and solutions with Fortune 500 companies, Glenn brings a deep expertise in market dynamics, solution needs and global supply chain trends, which gained him recognition as a 2022 Pro to Know by Supply and Demand Chain Executive. We spoke to Glenn on what we can expect in the ocean freight and supply chain industry in the future.



SUSTAINABILITY REQUIREMENTS

“The situation will remain very challenging for about 18 to 24 months. It is not expected to improve much before the first half 2023. Uncertainties around the war in Ukraine, fuel prices and economic recession make forecasts even more difficult. Looking ahead, the decarbonization of the industry and ESG requirements will also bring their own set of challenges, changes, constraints and costs. We need to be prepared for it and get better equipped for managing agile and resilient supply chains.”



OCEAN CHAOS CONTINUES

“We will still face high freight rates relative to pre-COVID; however, rates have slashed in half from one year ago on the spot container market. And while freight rate volatility will remain in the spot market, the contracted rate market will see significantly reduced pricing while steamship line operators are looking to secure consistent freight volume from shippers and BCOs. This will trend toward stabilization in early 2024. Carriers have added capacity. The lack of equipment should resolve, as there are theoretically more boxes than needed. But every section of the supply chain moves slower with congested terminals, depots and warehouses, and a general lack of staff and drivers to keep the pace.”



DIGITAL TRANSFORMATION ACCELERATES

“In terms of logistics providers, there will be additional strategic investments made by large carriers and forwarders expanding their footprint, capacity and networks while accelerating their digital transformation. On the demand side, cross-border e-commerce logistics will keep growing at double-digit year-on-year growth, with a real influence on our future international supply chain models.”



DISRUPTIONS CAUSING DELAYS

Ocean shippers have grown accustomed to the ocean chaos over the last two years and that is not slowing down. In the first half of 2022, we saw more COVID-19 port shutdowns, continuing port congestion and container shortages, labor negotiations and new legislation. As we approach the second half of 2022, we take a look back at the major trends that occurred in ocean freight shipping in the first half of the year, and what shippers can do to proactively address disruptions and boost resilience in their supply chain.

“Traditional retail challenges like building customer loyalty, recruiting and retaining a top-notch labor force and ensuring product availability – never easy to achieve – are being further exacerbated by the rise of e-commerce, an ongoing labor shortage and constant supply chain disruptions.”

— Mark Delaney
Vice President of Retail Industry Strategy
FourKites

COVID-19 and China

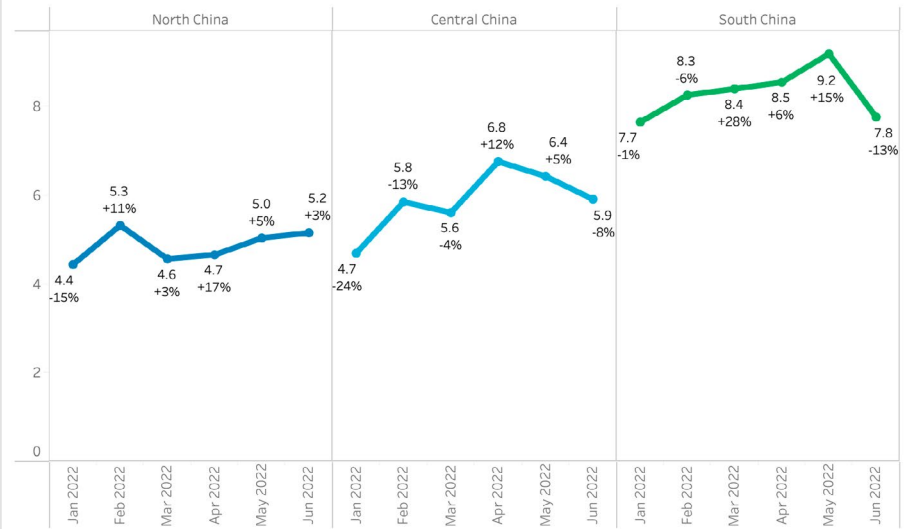
Disruptions continued as we progressed in 2022, but the most significant was the **Shanghai lockdowns** due to an increase in COVID-19 in the area.

When lockdowns started on March 13, the shipping community wondered how significant the impact would be for the supply chain network. According to FourKites data, we initially saw a 32% reduction in ocean shipment volume in Guangdong Province, where Shenzhen is located. The Port of Shanghai saw similar impacts as partial lockdowns went into effect.

As volumes recovered, shipments from Shanghai to the U.S. began moving more slowly. While the ports of L.A. and Long Beach made great progress in clearing the queue of ships waiting offshore during May and June, land-side issues began to mount as shippers were slow to pick up inventory. At the same time, gas prices increased dramatically. As a result, ocean vessels from Shanghai to the West Coast were slow steaming to save fuel and avoid creating further congestion for the ports.

Monthly Trend in Chinese Port Dwell Times

Average ocean dwell time by region of China for all stop types (number of days, YOY % growth)

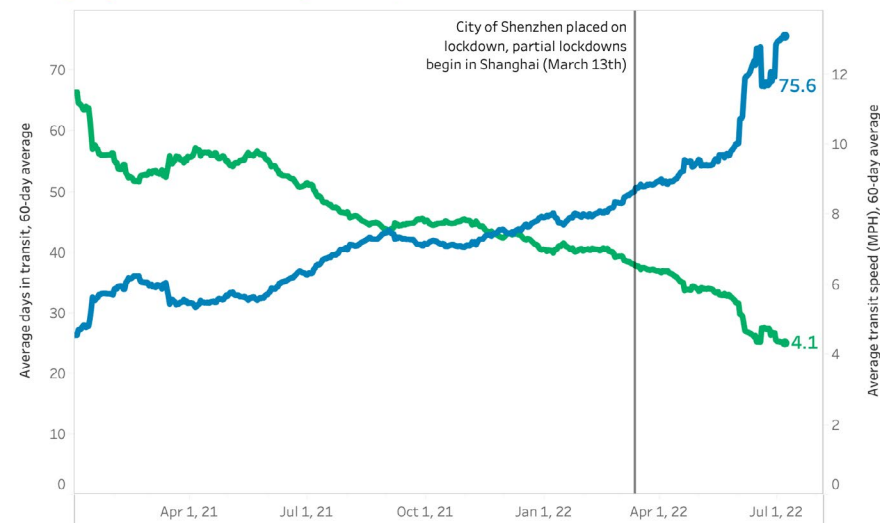


Source: FourKites Tracking Data (2022)



Transit Time for Ocean Shipments from Shanghai to U.S. Remain Elevated

Average days in transit and average transit speed in MPH, 60-day average



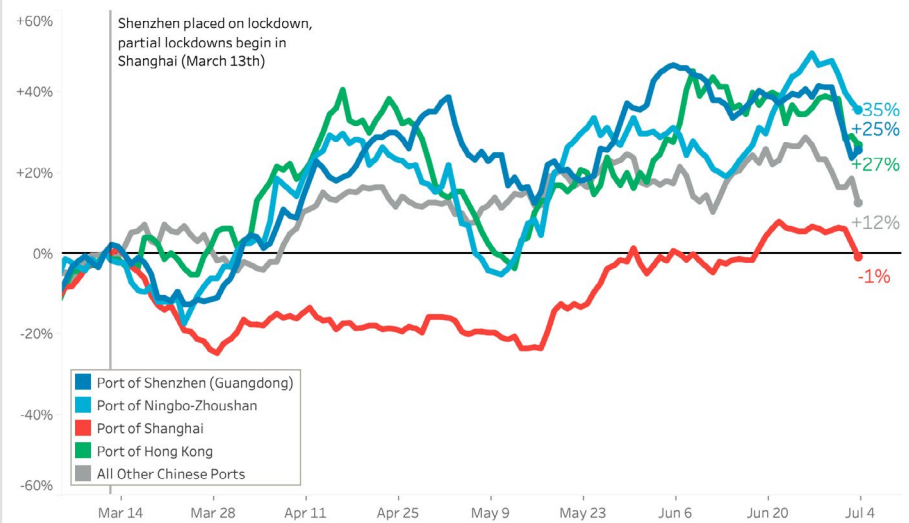
Source: FourKites Tracking Data (2022)

Includes all ocean shipments traveling from Shanghai to the United States
Measures the difference between arrival times at origin and final delivery destination



Chinese Port Volumes Continue Recovery as COVID-19 Lockdowns Ease

Fourteen-day average ocean shipment volume (% change from March 12, 2022)



Source: FourKites Tracking Data (2022)

Includes import, export, and transshipment loads; volume measures tracked shipments for FourKites customers



Russia-Ukraine Conflict

The Russia-Ukraine conflict was another significant disruption to the international supply chain, from sourcing raw materials to delays at major ports. According to the [FourKites Russian-Ukraine Conflict Tracker](#), Russian import volume decreased 89% while Ukraine imports decreased 59%.

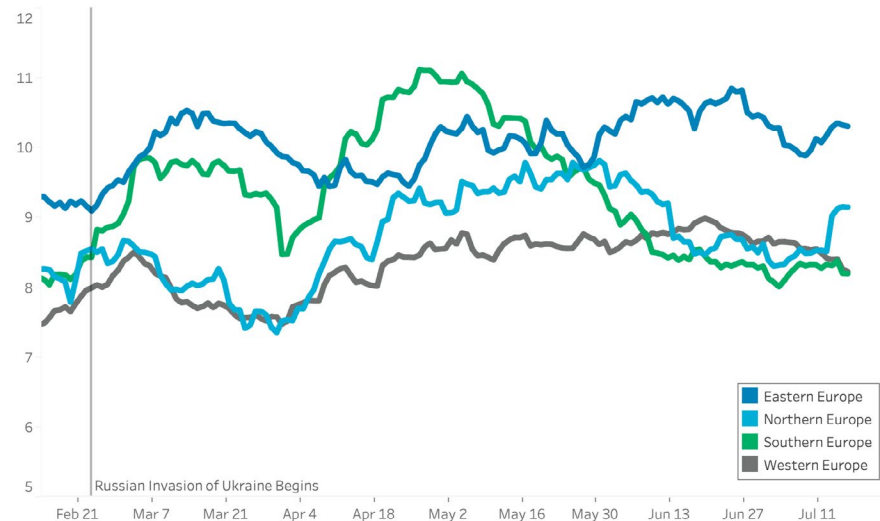
In the ocean world, the 28-day average dwell time for European exports decreased by 17% after the peak seen in mid-April and, as of mid-July, was down 10% since before the conflict began. Import dwell, meanwhile, time was 28% higher than when the conflict began. FourKites saw the largest increases in ocean dwell time in Eastern and Northern Europe, with the 28-day average ocean dwell time increasing by 12% and 13%, respectively.

Ukraine is a top exporter of iron, steel and grains, and as volume decreases further, key manufacturers and food and beverage companies will be without key raw materials for their products. This could mean prolonged delays, higher prices and less product availability for downstream stakeholders for the foreseeable future.

For retail, CPG and food and beverage ocean shippers, their ocean dwell time continues to increase 36% and 34%, respectively. For other shippers in the manufacturing, chemicals and oil and gas industries, FourKites data saw ocean dwell times increase slightly compared to when the invasion began in February.

Increasing Ocean Dwell Times Across Europe

28-day average ocean dwell time by European region (number of days)



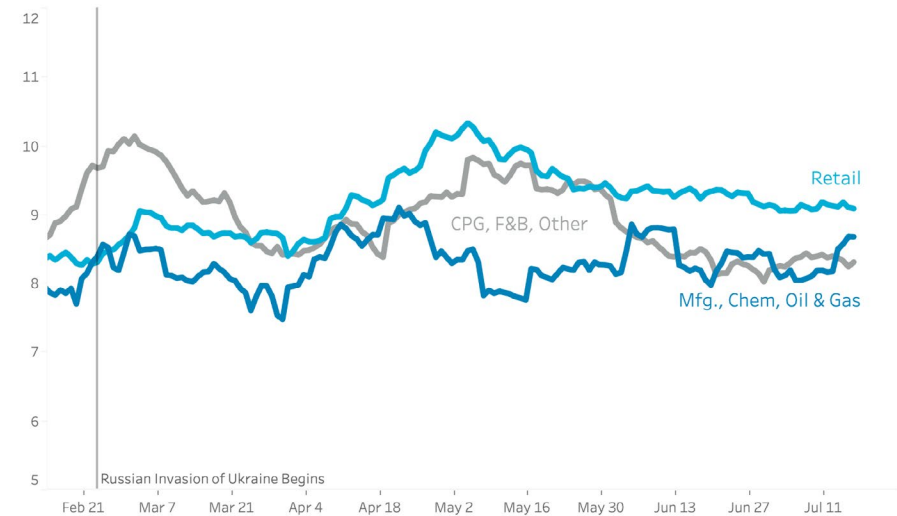
Source: FourKites Tracking Data (2022)

Ocean dwell time measured as difference between ingate/outgate time and vessel departure/arrival time for exports/imports respectively. Averaged across all imports/exports/transshipments for FourKites customers



Increasing Ocean Dwell Times at European Ports

28-day average ocean dwell time by industry (number of days)



Source: FourKites Tracking Data (2022)

Ocean dwell time measured as difference between ingate/outgate time and vessel departure/arrival time for exports/imports respectively. Averaged across all imports/exports/transshipments for FourKites customers



Labor Disputes

As if current supply chain disruptions are not enough of a challenge for shippers, West Coast Labor Contract negotiations between the Pacific Maritime Association (PMA) and the International Longshore and Warehouse Union (ILWU) posed a threat of further supply chain disruptions. Fortunately, despite labor contracts expiring on June 30, 2022 the ports never shut down and the two sides had a tentative agreement in place by the end of July.

FourKites analyzed [the potential impact that these labor negotiations](#) could have on Western US ports by examining the impact of past strikes, including the strikes in Australia and Montreal in 2021. During the strike in Australia, the average shipment duration went up 15% to 48 days, while the strike in Montreal had the average shipment duration go up 50%! With the current ocean freight journey length already at 40 or more days, the labor strike could significantly affect shipments coming into the Western US.

As of the end of July 2022, there was no update to labor contract negotiations, despite the expired contract. To make matters worse, ports in Germany were impacted by a labor strike between the trade union and seaport companies – that dispute is expected to be settled by early September 2022.

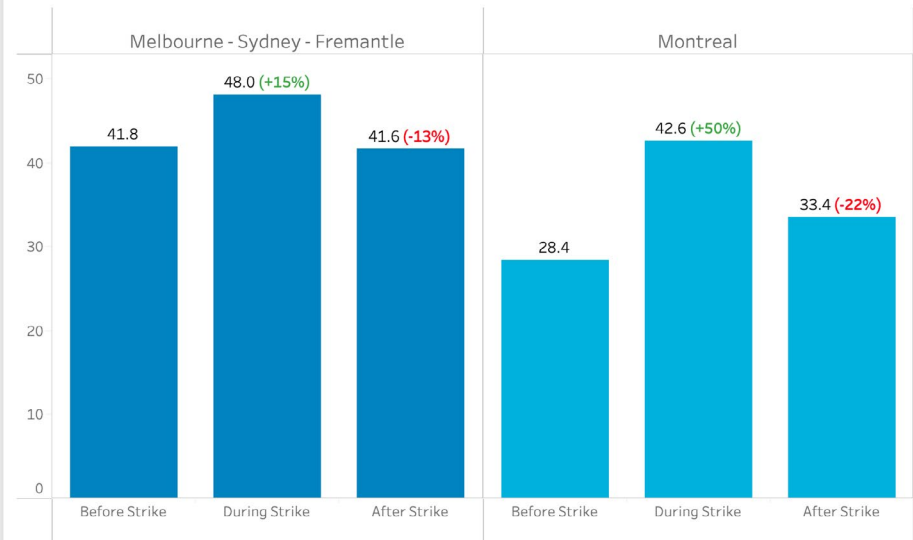
SHIPPER REFORM ACT OF 2022

At the end of June, President Biden signed the Shipper Reform Act of 2022 into law. The bill adds additional requirements and accountability for ocean carriers; requires the FMC to create rules around fees, prohibited practices and creating a shipping registry; and the ability to create emergency orders for common carriers to share information with shipper, rail and truckload carriers.

But, according to experts, the impact is domestic and there is little expectation that it will have little influence on ocean shipping challenges.

Average Shipment Duration Increased During Strikes

Average ocean shipment duration in days



Source: FourKites Tracking Data (2021)

Shipment length measures the time in days from origin to destination for loads traveling through each respective port



Dwell Times Increase

Ocean dwell saw an average of 7.9 days for exports, 6.4 days for imports and 8.4 days for transshipment ports. EMEA saw the highest dwell for exports, recording 9.7 days in dwell, followed by 8.6 days for the Americas, both of which were higher when compared to the same time last year.

In terms of imports, overall dwell is lower for all regions. The Americas had the highest dwell, with 7.2 average days, with APAC and EMEA at 5.1 and 6.4 days respectively. Compared to the first half of 2021, these are still about a quarter higher than the dwell last year. This is not surprising with more and more news about vessels stuck outside congested ports and longer ocean journey timelines almost on a daily basis. This shows that port congestion and disruption are still major problems for both imports and exports, no matter the region.

OCEAN JOURNEY IN DAYS

Overall, during the first half of the year, average global ocean transit time peaked at nearly 50 days, starting at 44.1 days in January 2022 and falling back to 43.7 by July 2022. When compared to the first half of 2021, we are still seeing inflated transit times, with 2022 being 19% higher than last year.

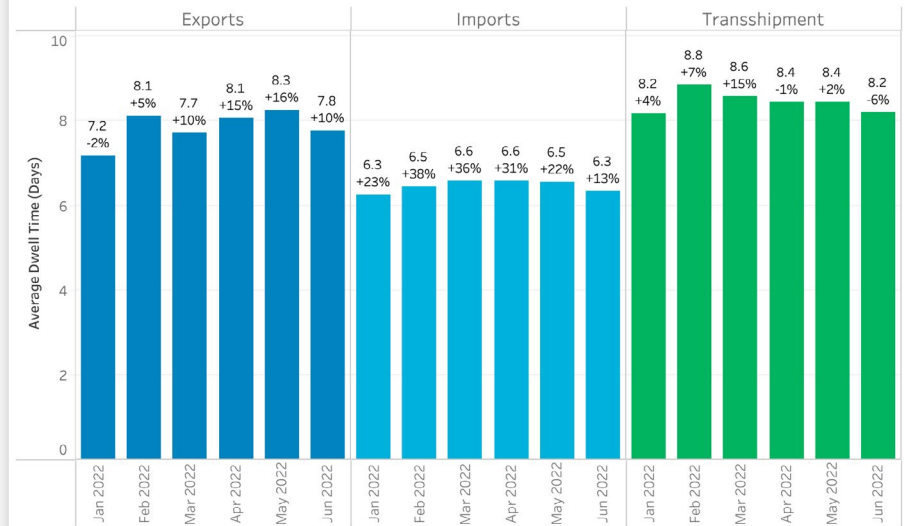
The biggest change in the ocean transit time for H1 2022 was the EMEA to North America lanes, seeing a difference of 17.1 days, while North America to EMEA stayed more flat, with a difference of 6.2 days. Between APAC and North America, the ocean journey went from a high of 54.8 days to 46.0, despite having delays and shutdowns in APAC due to COVID-19. The return trip from North America to APAC saw a more significant dip in the first half of 2022, going from a high of 48.9 to 41.1, a difference of 7.8 days.

CONTAINER PRICES & AVAILABILITY

According to [Drewry](#) as of June 30, 2022, the World Container Index year-to-date was at \$8,421 for a 40 foot container. This is 16% lower than a year ago and \$4,903 higher than the five year average. While this is lower than the high of \$9,698 in January 2022, this shows that container prices continue to be a key challenge for shippers as they navigate the market for container availability and pricing.

Global Monthly Trends in Ocean Dwell Time

Average ocean dwell time by stop type (number of days, YOY % growth)

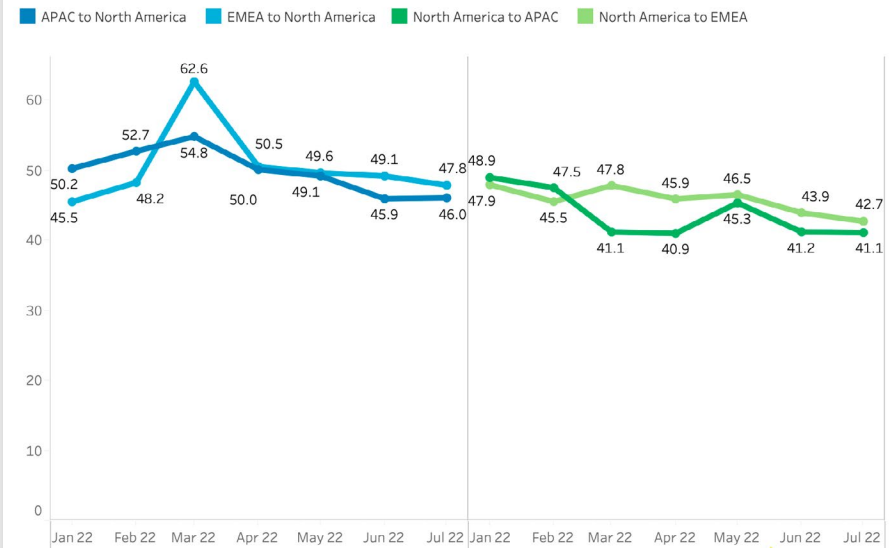


Source: FourKites Tracking Data (2022)



Average Ocean Transit Time Down Since Peaks Early in the Year

Average ocean shipment transit time by lane (number of days)



Source: FourKites Tracking Data (2022)



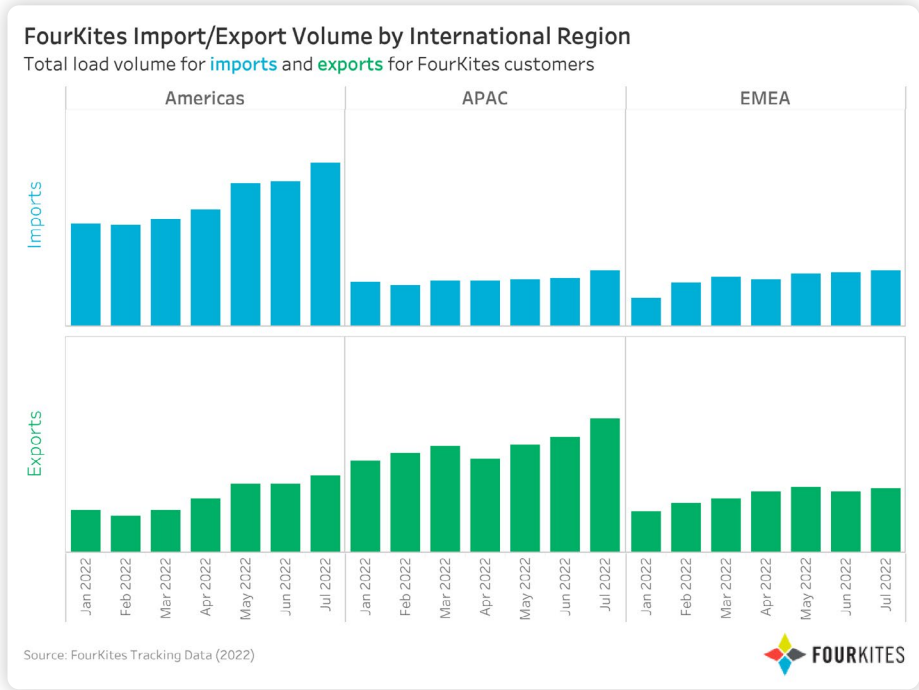


DEMAND FOR OCEAN VISIBILITY SPIKES

Amidst unprecedented disruption, international shippers invested in greater ocean visibility. Overall for the first half of 2022, the FourKites platform saw increases across the board for global ocean freight volume, increasing 231% since H1 2021.

Exports in the first half of 2022 saw a significant jump year-over-year, with volume 184% higher than it was a year ago as new customers joined FourKites or existing ones increased the loads they track. Meanwhile, imports saw an increase for the first half of the year — by the end June 2022, import volume was 116% greater than the same period last year. While customer growth drove meaningful volume, the increase can also be attributed to shippers increasing their inventory and safety stock to fill store shelves or fulfill orders.

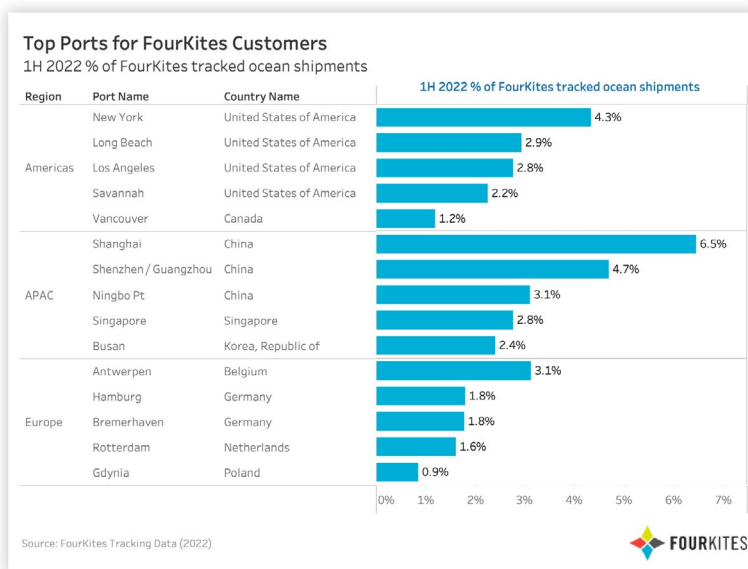
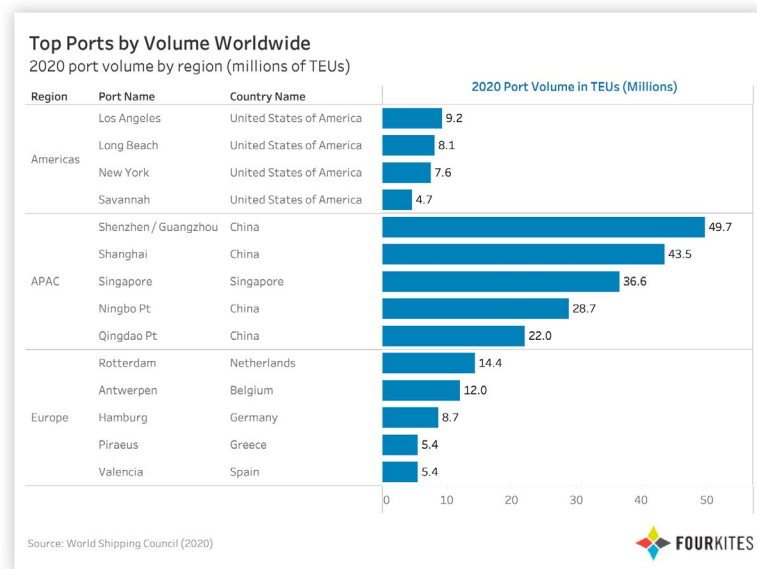
During COVID-19, we saw empty shelves or out-of-stock parts, which caused decreases in customer loyalty and the inability to fulfill orders on time and in full. Now, shippers want to ensure that they have plenty of inventory despite long ocean transit times by increasing their safety stock and inventory levels.



Increased Port Volume Continues

Port congestion continued through the first half of 2022. As key lanes to access ports in the US from APAC, the Port of Long Beach and Los Angeles were some of the busiest ports in the Americas, processing nearly [8 million](#) and [6 million](#) TEUs, respectively, through the first half of the year. Meanwhile, the Port of New York saw [3.1 million TEUs](#) of shipments during the first half of the year but was one of the busiest ports in the Americas for FourKites customers—which can be attributed to FourKites’ retail and fast-moving consumer goods customers.

Despite having prolonged closures in the first half of the year from COVID-19, ports across China moved a total of 142.3 million TEU over the first half of 2022, a 3% year-on-year increase, according to [Port Technology](#).



Port	Cargo Volume (in '0000 Tons)				Containers Throughput (in '0000 TEUs)			
	June	YoY %	January-June	YoY %	June	YoY %	January-June	YoY %
Dalian	2455	-11.4%	15315	-3.8%	32	3.2%	191	10.3%
Tianjin	4920	6.5%	27512	3.2%	205	-2.0%	1052	2.2%
Qingdao	5763	0.1%	32791	2.8%	222	-3.6%	1247	7.0%
Rizao	4723	4.7%	27912	5.8%	48	9.1%	273	11.8%
Lianyungang	2191	0.0%	13306	2.4%	41	-2.4%	246	-0.8%
Shanghai	5530	-9.6%	31477	-9.0%	379	-9.5%	2254	-1.7%
Ningbo&Zhoushan	11085	2.4%	64055	2.8%	316	17.9%	1747	8.7%
Xiamen	1978	-0.1%	11126	0.2%	111	3.7%	599	1.4%
Shenzhen	2376	19.5%	13138	-8.5%	262	41.6%	1440	4.6%
Guangzhou	5613	3.0%	30636	-1.9%	219	5.3%	1174	-0.3%
Beibu Gulf	3140	4.0%	18162	5.1%	57	35.7%	317	21.4%
Yinkou	1702	5.3%	10261	-13.8%	37	-15.9%	205	-22.5%

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TIPS FOR MANAGING ONGOING OCEAN DISRUPTION

BUILD RESILIENCE IN THEIR SUPPLY CHAIN

What is clear from the first half of 2022 is that disruptions are not slowing down. To stay afloat, shippers must find ways to build resilience into their supply chain. One way to do this is to diversify particular lanes or ports that have seen their share of disruption to limit the impact to the shipper's supply chain network. Also looking at key ports where unnecessary dwell or demurrage and detention fees accumulated can be a good indicator of increased disruption at those locations.

COMPREHENSIVE END-TO-END VISIBILITY

Having a comprehensive end-to-end visibility solution for your ocean shipments can allow you to have visibility down to the PO or SKU level of your freight. Not only do modern end-to-end visibility solutions, like FourKites' Dynamic Ocean, allow you to go beyond port-to-port tracking to the full multimodal journey, but they also allow you to get predictive ETAs at your fingertips to know exactly where your ocean freight is in real time.

OCEAN EXCEPTION MANAGEMENT

One key area of managing ocean disruptions is exception management. With a comprehensive ocean visibility solution, shippers are able to see what containers are (or will be) delayed and prioritize accordingly to reduce the impact of delays to customer satisfaction and transportation costs.

OPTIMIZE YOUR SUPPLY CHAIN NETWORK

Another area to mitigate disruptions is to optimize your supply chain network. By analyzing the historical performance of your key carriers, lanes or ports within your network, shippers can pinpoint bottlenecks or areas with regular disruptions. Shippers can also identify carriers or ports that tend to accumulate demurrage and detention fees to reduce the impact of their bottom line. By identifying these bottlenecks, shippers can choose alternatives to limit disruptions and optimize their supply chain.

5 Results Shippers Can Expect with Ocean Exception Management



01. Lower Transportation Costs

Reduce the added costs from delays, dwell or utilizing alternative modes by prioritizing containers that are late.



02. Reduction in Demurrage & Detention Fees

Drastically reduce unnecessary demurrage and detention fees by managing delays and disruptions, which can result in millions of dollars in cost savings.



03. Improved Customer Satisfaction

Keep customers informed on delays and provide accurate ETAs for operations and headcount planning.



04. Improved Product Availability

Ensure that your shipments make it to store shelves in time and in full for time-sensitive promotions, back-to-school or seasonal events even if the containers are hit with delays or disruptions.



05. Less Spoilage

Prioritize containers that include perishable goods and ensure that they arrive at their destination on-time to eliminate risk of inventory loss and increased product and transportation costs.



GET STARTED WITH REAL-TIME VISIBILITY.

We'd love to show you why the world's most recognized brands trust FourKites as the #1 solution for supply chain visibility. Modernize your ocean freight shipping with end-to-end visibility.

[SCHEDULE A DEMO](#)