

SUPPLY CHAIN MARKET PULSE

May 2024

KEY TRENDS AND CHALLENGES IN THE SUPPLY CHAIN

1

DEMAND/SUPPLY IMBALANCE

- A surplus of transportation capacity continues to keep pricing down for customers
- Persistently low prices and weak demand has created risk of solvency for transportation providers. The longer these market conditions remain may result in incremental capacity being removed from the market driving prices up
- Shippers should remain mindful of these risks, pursuing diversified, flexible, and resilient logistics strategies
- Ocean cargo from Asia to US and EU is experiencing an uptick in volume, ahead of traditional peak season. This has driven up ocean rates

2

SHIFT IN TRADE FLOWS

- Geopolitics and changing cost positions are shifting trade strategies across the globe. Nearshoring has been, and remains a topic of conversation and has been accelerated by the Pandemic.
- Recently announced Chinese tariffs may accelerate some temporary trade shifts in affected trade categories.
- While Trans-Pacific trade routes remain critical due to the ongoing significance of Asian economies, trade routes to Mexico and Central America are gaining prominence, bolstered by their geographical proximity and expanding manufacturing sectors

3

SUPPLY CHAIN DISRUPTIONS

- Labor actions are back in the news. Potential rail disruptions in Canada may impact critical trade corridors of imported product from Asia flowing into Chicago and the US Midwest. If no resolution, there will be near-term disruption.
- Ocean routings continue to be diverted around the Cape of Africa causing longer transits, higher emissions, and higher costs within the global ocean shipping market. Supply chains have normalized to the longer transit times
- Supply chain practitioners are beginning to look out at potential disruptions for 2024 with the North American East Coast port contract renewal due in October 2024.

MAY SPECIAL TOPIC – RAILROADS

North American Rail industry is facing increasing pressures to operate more efficiently, leading to tensions with Rail unions



NEWS IN THE BOARDROOM!

- Proxy fight at Norfolk Southern by Ancora cools off with no change to management and 3 new board members
- Ancora originally targeted the replacement of all 13 board members and Norfolk's CEO & COO
- The activist plan pushes for Precision Scheduled Railroading (PSR) to drive operational efficiency by running fewer but longer trains with reduced car switching
- Rail unions argue this drives up safety risks due to increased demand for inspections and maintenance



RAIL STRIKE THREATS AGAIN

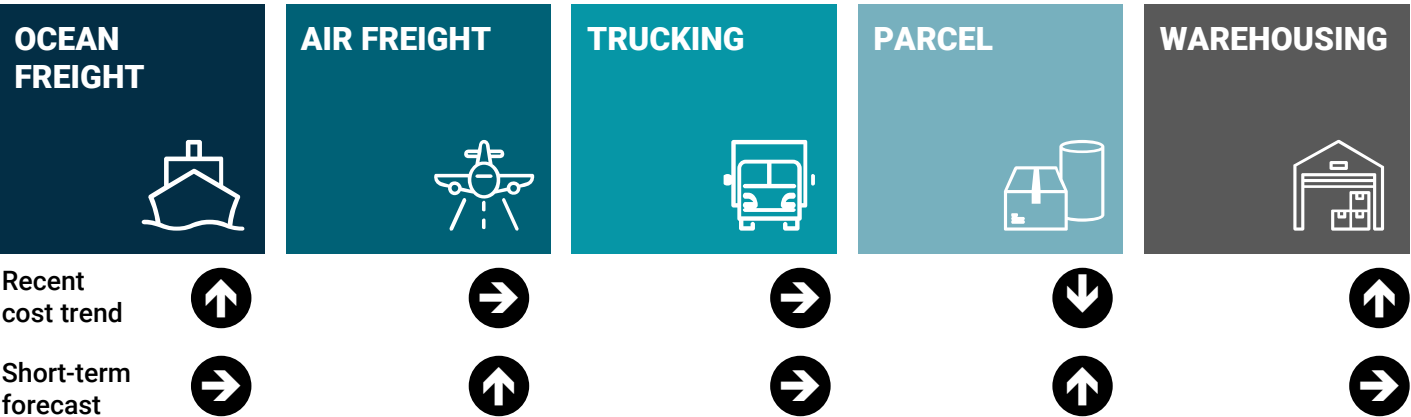
- Rail workers in Canada have been negotiating for higher wages, better scheduling, stricter safety regulations, and other benefits. Unable to reach resolution with railroads, a union voted to authorize worker strikes.
- Canada's Industrial Relations Board (CIRB) stepped in though, delaying the potential Canadian rail strikes. Various stakeholders now have until May 21st to weigh in.
- When could this impact supply chains if a strike is authorized? Likely no earlier than July based on previous situations the CIRB has handled but more information will be known in the coming weeks.
- The impact of a strike could halt \$1 billion worth of goods per day in Canada.

Railroads will continue to be watched closely as they push for more operational efficiencies while balancing safety and service levels

Source: AlixPartners analysis, AP News, NY Times, Journal of Commerce

FREIGHT COSTS

The freight market has seen geopolitical shocks begin to normalize. Pricing remains pressured from an environment of weak demand and excess supply



WHAT IS MOST IMPORTANT TO KNOW?

International Transportation prices are ticking upward from increased demand and managed supply

- Ocean & Air Freight prices are ticking upwards from increased demand
- Baltimore port disruption has caused very little impact to pricing or capacity in the market, and is normalized

Major parcel players are facing revenue declines in a more challenged market

- Parcel carriers have been aggressive on pricing in an attempt to win business; however, shippers should prepare for rise in ground parcel delivery costs as U.S. parcel revenue sees first decline in seven years

Companies are continuing to look at structural aspects of their supply chains

- To further optimize, companies are shifting from procurement exercises to optimizing a changed Supply Chain network as a result of constant waves of disruptions of different kinds

Although spot market rates have likely bottomed, fluctuation will be part of the new norm

- Supply Chain resilience is going to be key in 2024
- This environment provides opportunity to optimize core carrier base enhancing service and capacity commitments

WHAT ACTIONS CAN WE TAKE?

Take advantage of every opportunity – freight procurement remains a hot market

- RFPs are not the only answer; shippers should renegotiate rates with incumbents for faster results and rationalize their truckload supplier community with top performing suppliers

Strategically review the network

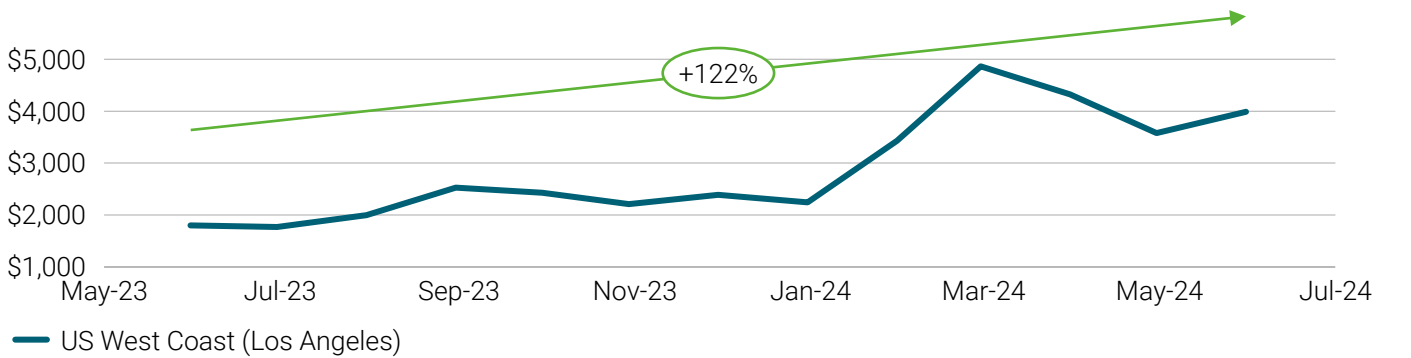
- Review and use this time as an opportunity to reset the strategic distribution network.
- Align where the organization needs to be physically, and from a capability standpoint to take advantage of the next growth period

Source: AlixPartners analysis

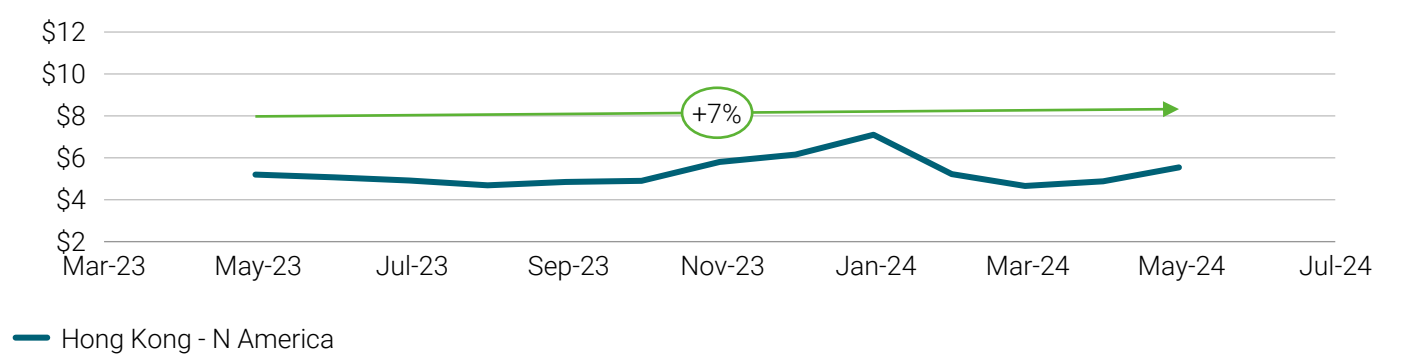
FREIGHT TRENDS

Recent macro-economic have sent international transportation rates higher are now stabilizing. Domestic trucking remains depressed due to supply/demand imbalance

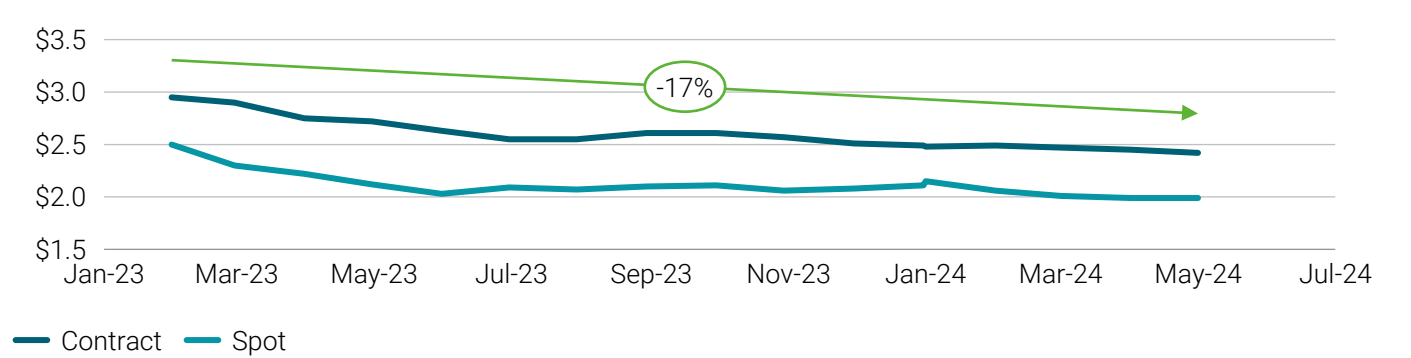
OCEAN FREIGHT – SHANGHAI TO U.S. – (\$/40FT)



AIR FREIGHT – HONG KONG TO U.S. – (\$/KG)



TRUCKING: DRY VAN – (\$/MILE)



KEY TRENDS AND FACTS

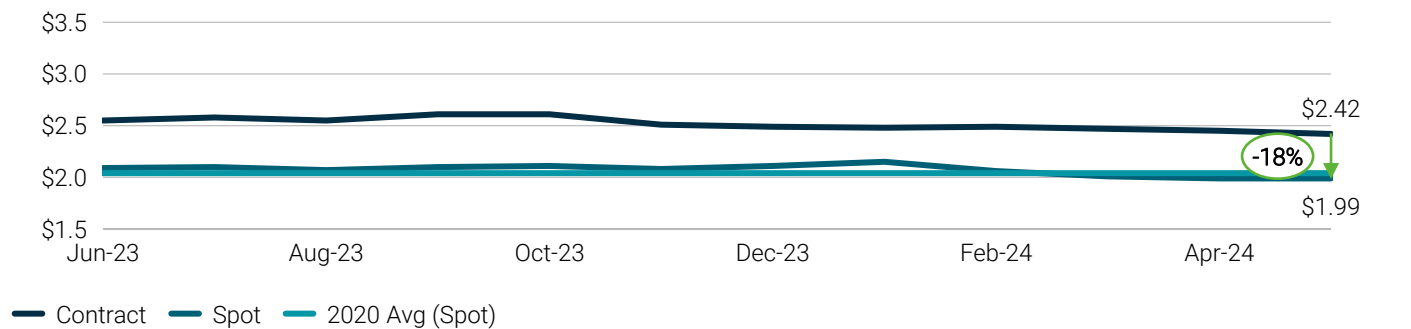
KEY DRIVERS CAUSING RATE CHANGES ARE:

- Ocean carriers declared a GRI in May in reaction to surge in demand ahead of traditional peak season
- Air demand remains elevated, driven by the cargo diversion from the Red Sea Crisis and growth in E Commerce
- TL rates remain low as shippers refrain from building inventory and carrier exits slow, prolonging the road to recovery

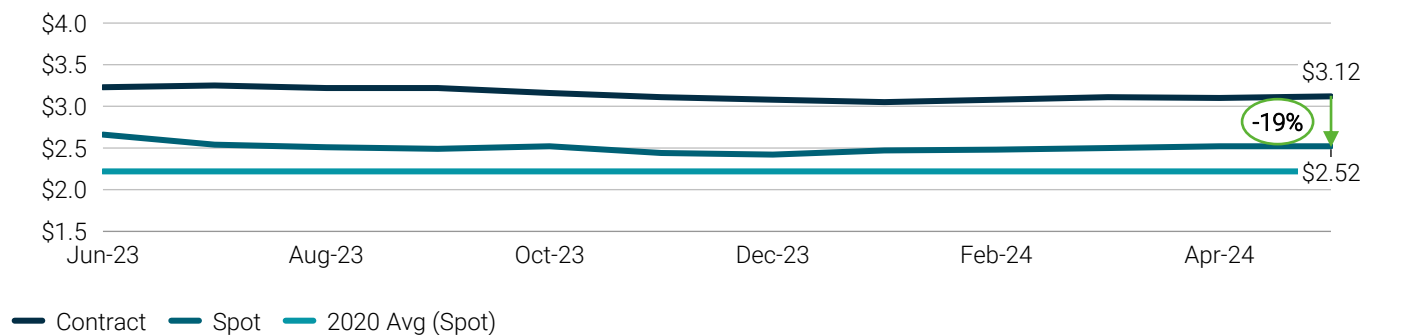
TRUCKING FREIGHT

Market conditions challenge carriers as rates remain below sustainable levels and shippers continue to push for lower contract pricing

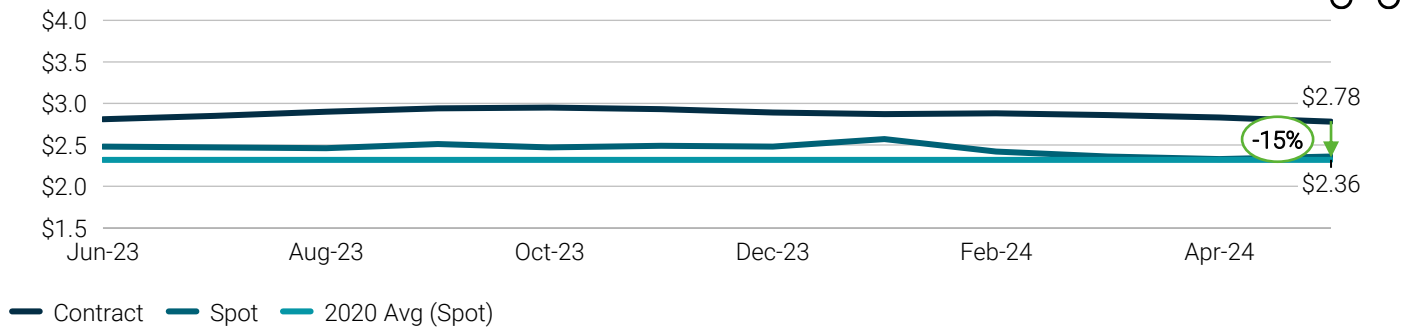
DRY VAN – U.S. DOMESTIC FREIGHT RATES, INCL. FUEL (UNIT:\$ PER MILE)



FLATBED – U.S. DOMESTIC FREIGHT RATES, INCL. FUEL (UNIT:\$ PER MILE)



REEFER – U.S. DOMESTIC FREIGHT RATES, INCL. FUEL (UNIT:\$ PER MILE)



KEY TRENDS AND FACTS

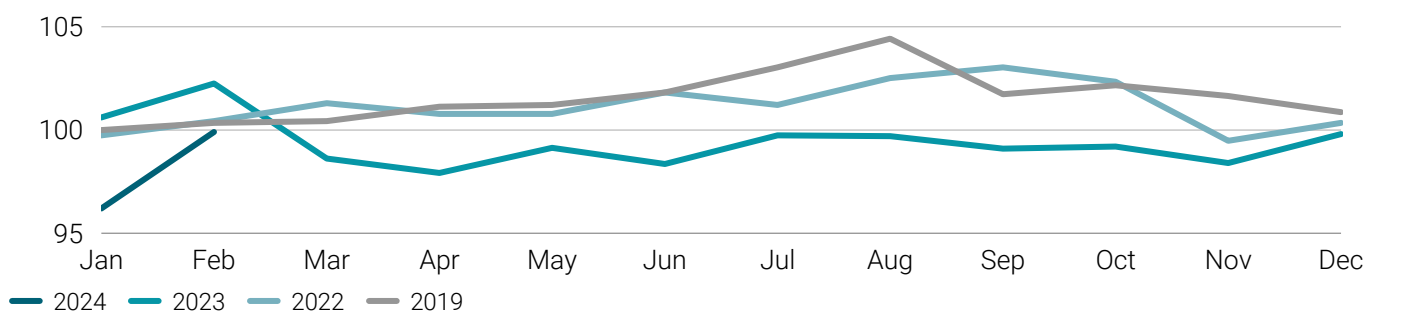
- Dry van spot rates continue to dip below the 2020 average
- FTL carriers including Schneider National and PAM reported significant YoY revenue decreases in Q1, signaling that the freight recession continues without sufficient signs of recovery ([Freight Waves](#))
- Market conditions for long haul shipments are resembling 2019, with high operating costs, dampened soft rates, and excess capacity in the market ([DAT](#))

Source: DAT, WSJ, Freight Waves, AlixPartners analysis

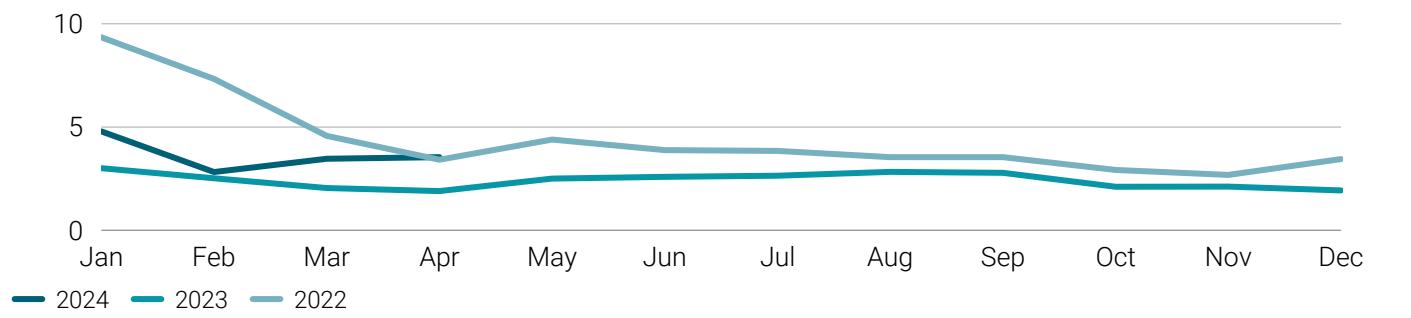
TRUCKING FREIGHT

Carriers faced significant headwinds in Q1 as volumes dropped more than 20% YoY and oversupply persists

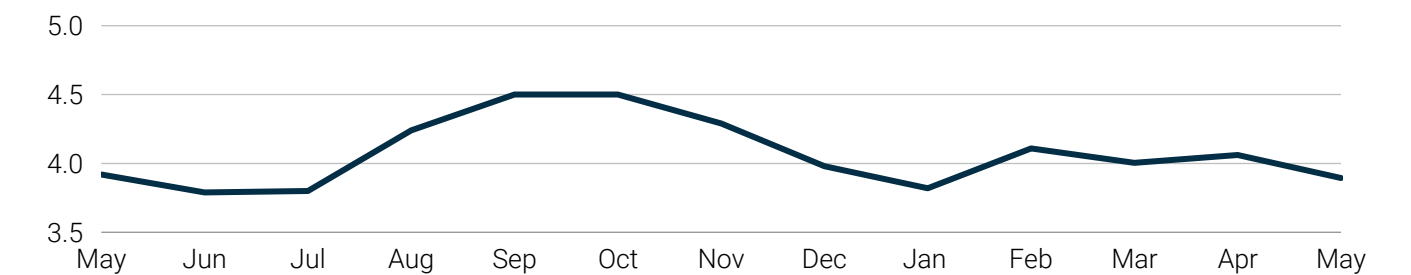
TRUCK DEMAND – TONNAGE, YEAR OVER YEAR, INDEX (100)=JAN 2019



VAN LOAD-TO-TRUCK RATIO – YEAR OVER YEAR



DIESEL – \$ PER GALLON



KEY TRENDS AND FACTS



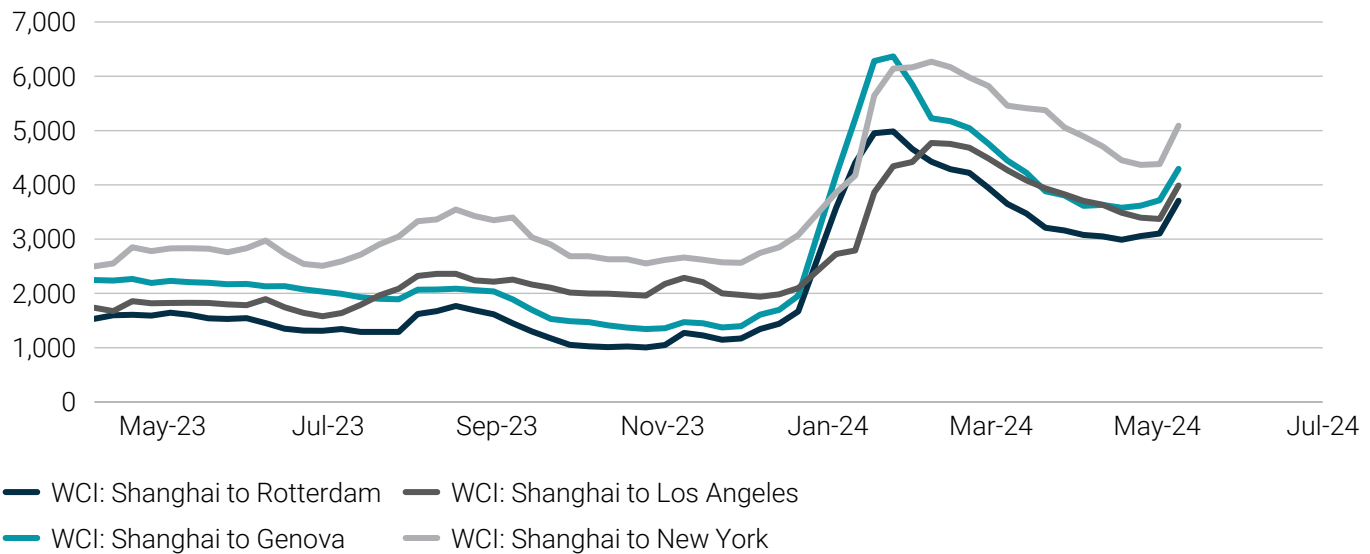
- **Shipment volumes dropped 21.6% YoY in Q1**, marking the largest YoY decline on record according to U.S. Bank ([S&P JoC](#))
- **Shippers continue to show hesitation** towards increasing orders in fear of overstocking inventory ([S&P JoC](#))
- Excess capacity continues to be slow to exit the market, resulting in **prolonged downward pressure on rates** ([Freight Waves](#)); **carriers are beginning to sell trucks** to address issues of surplus supply ([S&P JoC](#)) however the market is flush with used assets

OCEAN FREIGHT

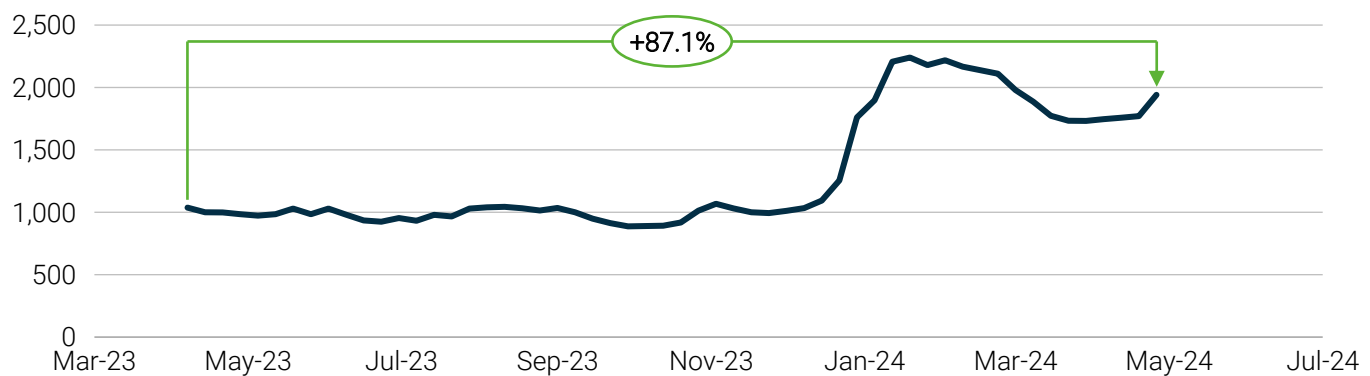
Ocean rates are spiking on Asia outbound lanes as a result of the May 1st General Rate Increase imposed by ocean carriers

TRANSPACIFIC: CENTRAL CHINA (SHANGHAI) TO U.S. MONTHLY SHIPPING RATE FOR 40FT CONTAINER EVOLUTION (UNIT: \$)

Drewry: Trade Routes from Shanghai (US\$/40ft)



Shanghai Container Freight Index (US\$/20ft)



KEY TRENDS AND FACTS



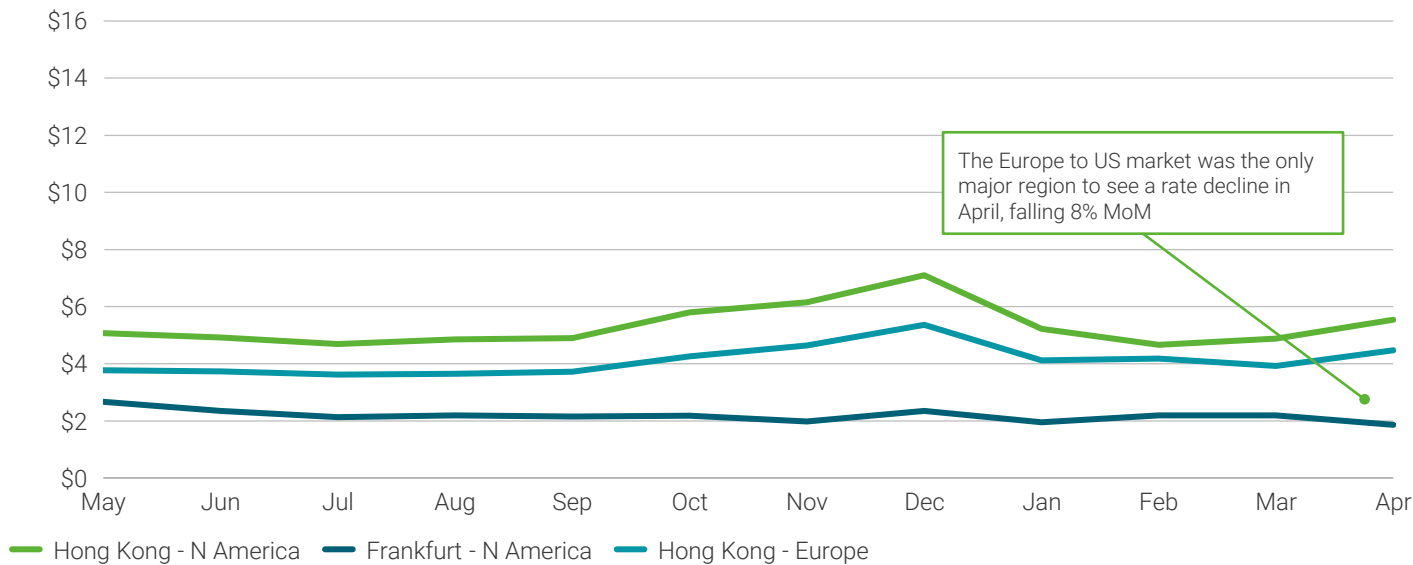
- Asia outbound rates have spiked since the general rate increase (GRI) took hold on May 1st; the increase was based on increased demand from Asian countries coupled with equipment challenges ([JOC](#))
- New routes have been added from Asia to Mexico to serve the burgeoning demand from Mexico; this demand increase is potentially due to US manufactures nearshoring of their supply chains([Freightwaves](#))

Source: Drewry Ocean report, TI Insights, Journal of Commerce, SCFI, AlixPartners analysis

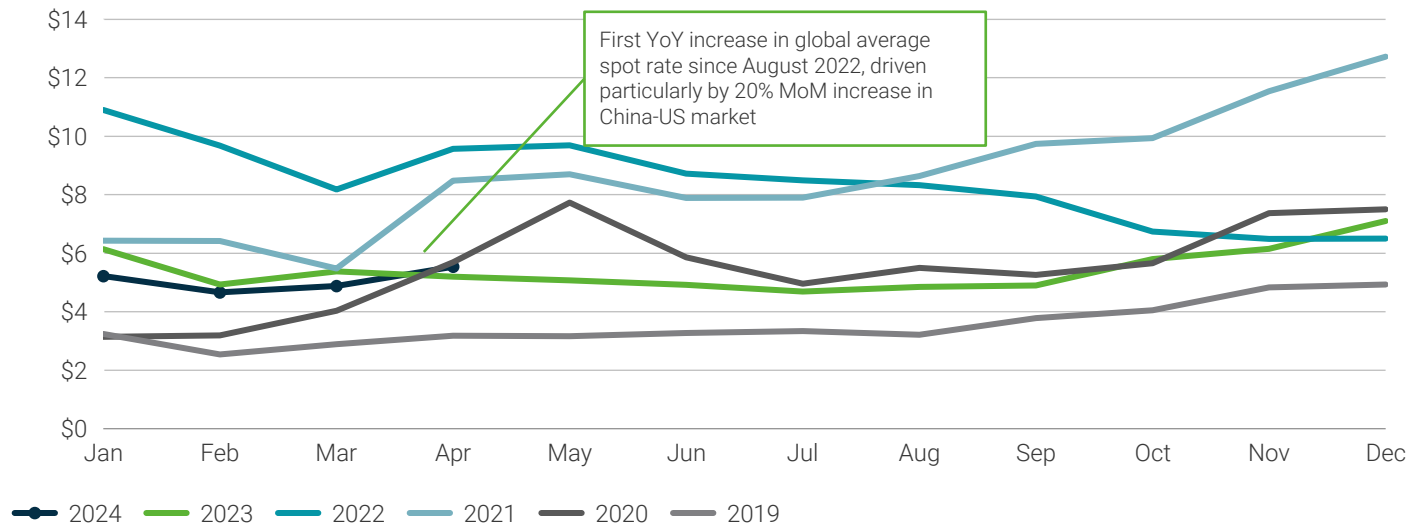
AIR FREIGHT

Global air freight demand rose 11% YoY for the fourth consecutive month

KEY INTERNATIONAL ROUTES (UNIT:\$ PER KG)



HONG KONG TO NORTH AMERICA HISTORY (UNIT:\$ PER KG)



KEY TRENDS AND FACTS



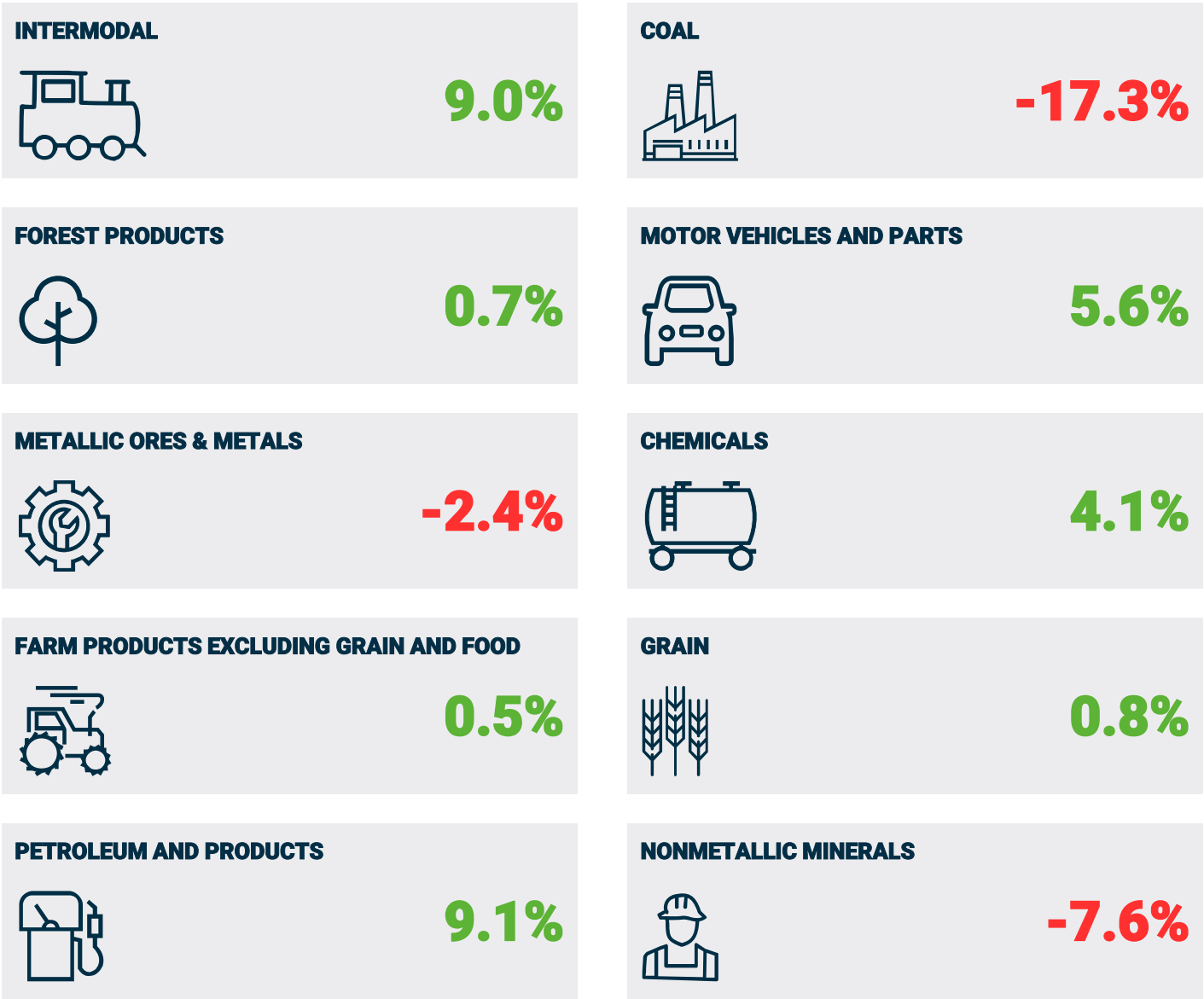
- Global average spot rates rose to \$2.59/kg but these increases should not last, as capacity increases.
- Airline summer schedules have begun, increasing cargo capacity by 5% YoY ([Air Cargo News](#)).
- 41% of cargo volumes were sold on the spot market, a 4% reduction YoY.
- Global spot share remains 10 percentage points above pre-Covid levels.

Source: Baltic Exchange Air Freight Index - TAC database, AlixPartners analysis, IATA, American Journal of Transportation, Air Cargo News

RAIL FREIGHT

Total U.S. rail traffic in April was up 2.2% YTD versus 2023. Carloads declined 4.8% and intermodal traffic increased 9.0% YTD

U.S. RAIL VOLUME BY COMMODITY – YEAR-TO-DATE CHANGE VS 2023



Source: Association of American Railroads

KEY TRENDS AND FACTS

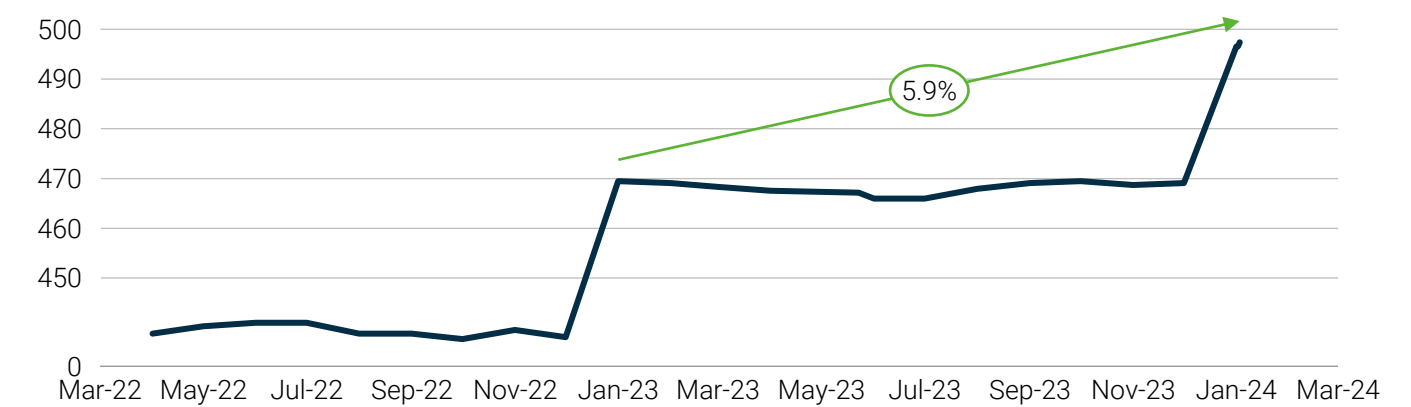


- Canada’s labor board has delayed the potential Canadian rail strike. Over 9,300 rail workers could have gone on strike as soon as May 22. The workers are negotiating for higher wages, better scheduling, and other benefits. The impact of a strike could halt \$1 billion worth of goods per day in Canada. Now until the labor board makes a ruling, the workers cannot go on strike.
- “U.S. rail carloads declined in April primarily due to decreased coal shipments. Excluding coal, year-over-year carload volumes have experienced a three-month consecutive increase.” (AAR)
- International intermodal volumes have remained strong – with the Port of Los Angeles having it’s third-best Q1 by volume for the port (only behind Q1 2021 and 2022). Domestic intermodal volumes have not been as strong, but railroads forecast it to strengthen later in the year given the weak truck market that drove down trucking rates is expected to ease.

USA PARCEL

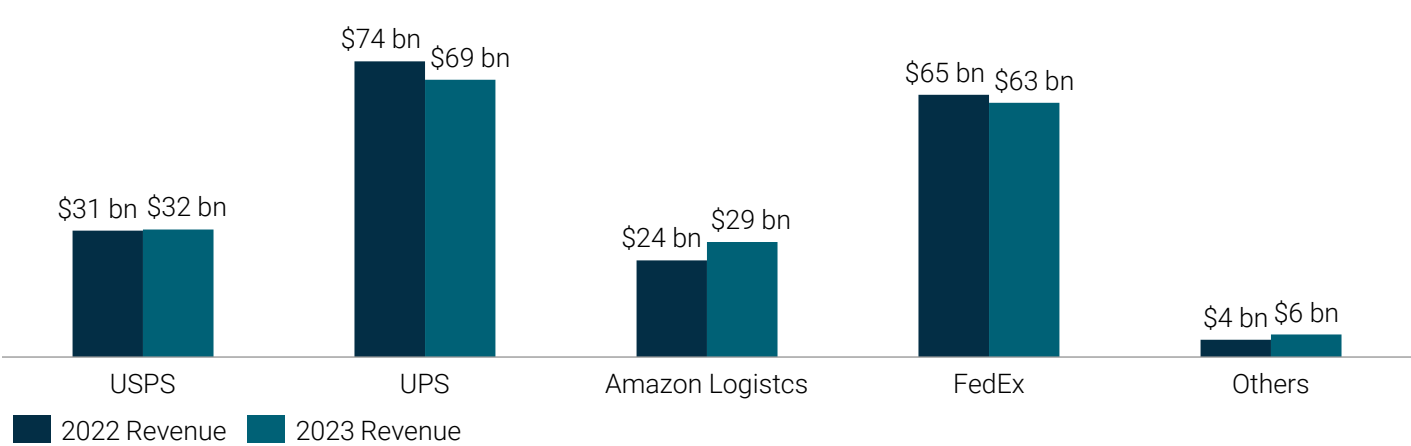
Shippers should prepare for rise in ground parcel delivery costs as FedEx and UPS are becoming less willing to offer discounts; US parcel revenue sees first decline in 7 years

PRODUCER PRICE INDEX – STANDARD COURIER SERVICES INDEX¹



1. Measures the average change over time in the selling prices received by domestic producers for their output. For e.g.: If a 1kg package average parcel selling price in US was \$5 in Dec 1992, today it is about $5 \times 466 / 100 = \$23.3$

US PARCEL CARRIERS REVENUE (2022 AND 2023)



2. In 2023, US parcel revenue declined slightly for the first time in 7 years by -0.3% from \$198.4B in 2022 to \$197.9B, reflecting high capacity

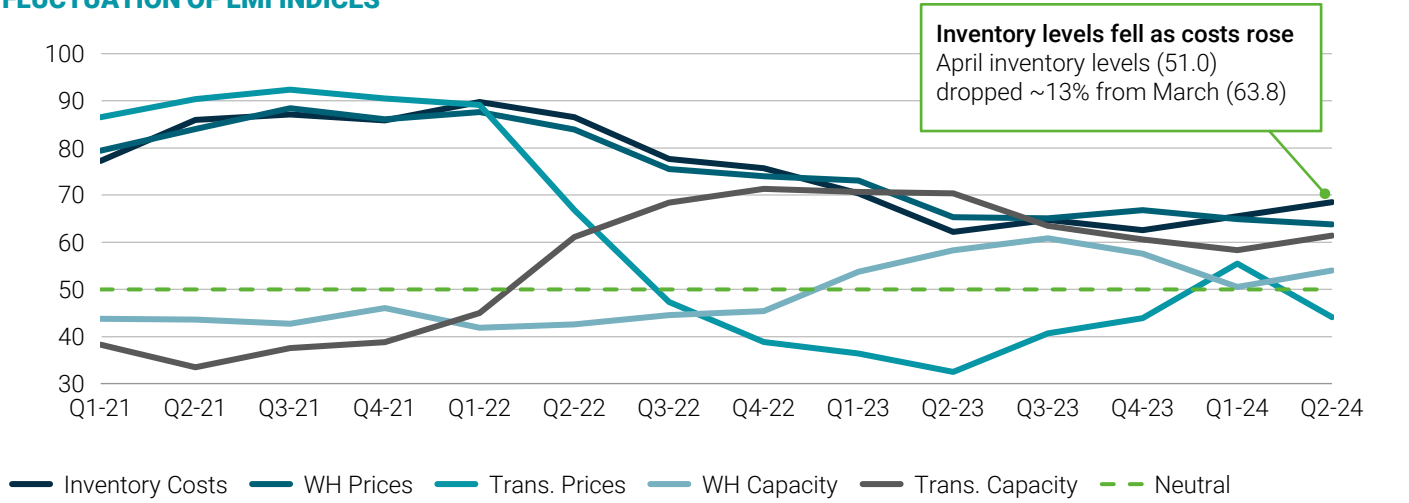
KEY TRENDS AND FACTS

- The ground parcel rate per package is projected to rise to 29.3% above the January 2018 baseline in Q2, marking a slight increase from the previous year
- This potential increase would end a recent trend of declining rates over the past three quarters, during which carriers aggressively discounted shipping rates
- Fuel surcharge increases and other adjustments to delivery fees, along with carriers' reduced enthusiasm for discounting, are contributing to the expected rise in costs
- Express parcel rates are also anticipated to increase in Q2, with a forecasted rise from 3.8% to 4.1% above the baseline, reversing a decline from the previous quarter

WAREHOUSING TRENDS

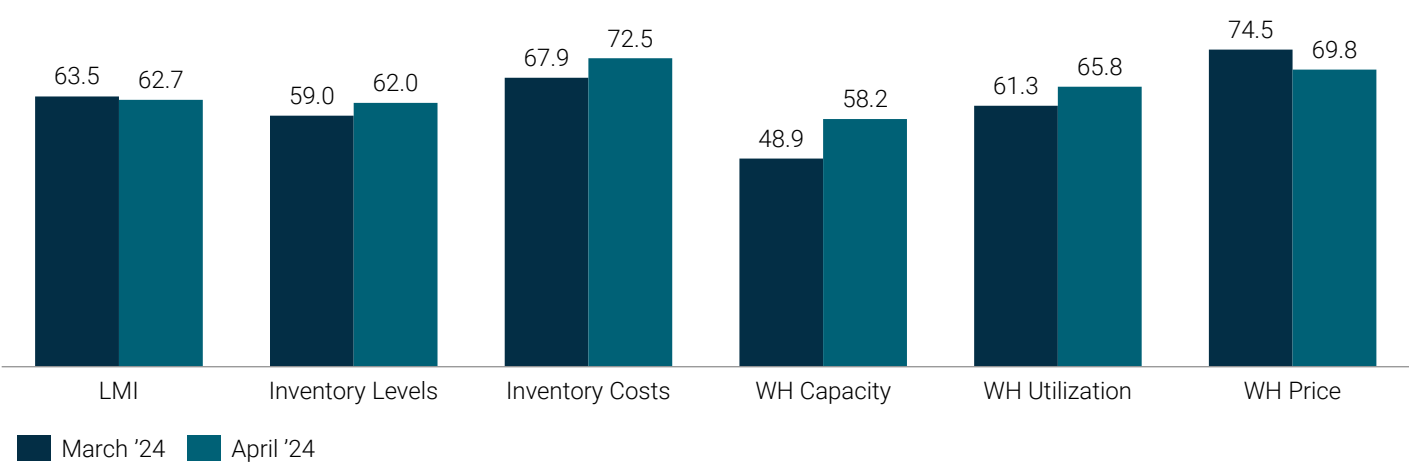
Warehousing and transportation capacity rose as inventory levels fell 13% from March 2024 to April

FLUCTUATION OF LMI INDICES



Logistics Manager Index (LMI) Legend: +50 = Increasing -50 = Decreasing

LMI SURVEY – NEXT 12-MONTH PREDICTION



KEY TRENDS AND FACTS

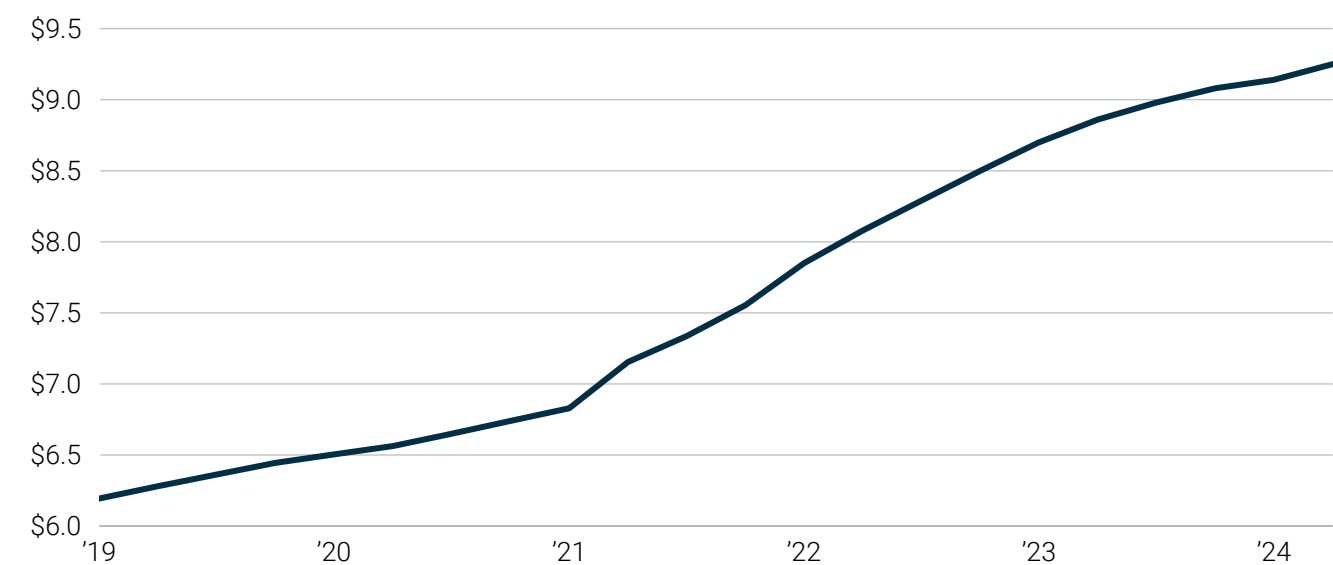
- [Overall Logistics Managers' Index](#) reached 52.9 in April, down (-5.4) from March's reading of 58.3, and showed the slowest rate of expansion in 2024. Inventory level drop likely to balance significant inventory growth in March partly due to grouping together cargos to avoid Chinese New Year, trying to get ahead of interest rates dropping, or a combination of the two.
- As shipping customers focus on lean inventories and tightening logistic spending, [spot and contract rates have been retreating](#) to retain business volume from last year.
- [Manufacturing orders declined in April](#), but industry experts remain confident this is a bump in the road as they head into a growth period with summer demand predicted to bring order volumes back up.

Source: Logistics Managers' Index, FreightWaves, The Census Bureau, AlixPartners analysis

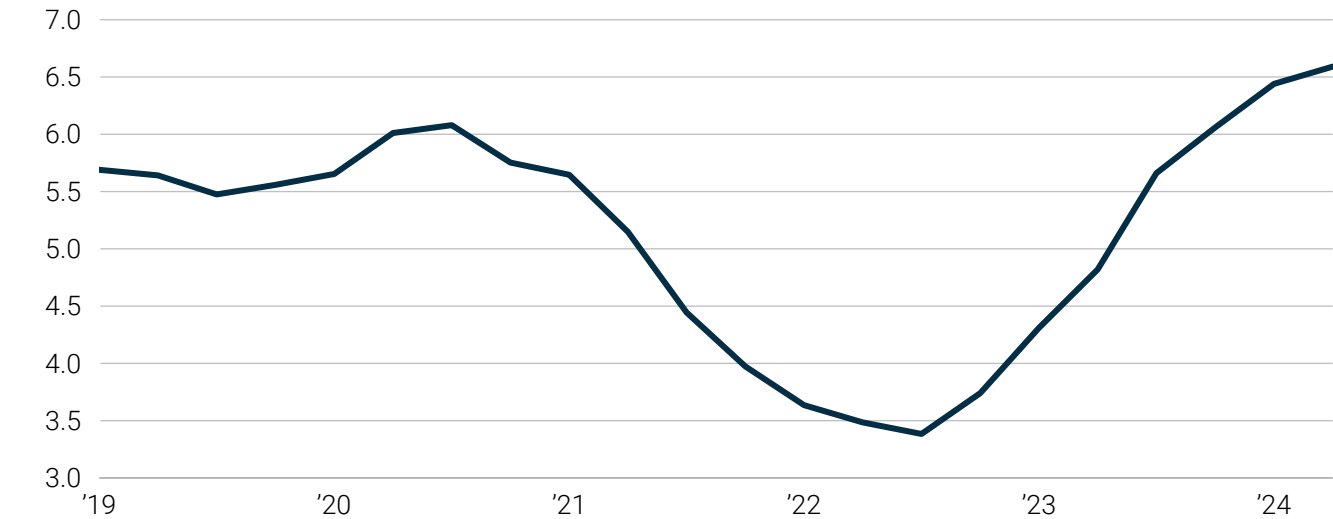
WAREHOUSING TRENDS

National warehousing vacancy continues to grow at a slow pace, likely linked to declining inventory levels

NATIONAL AVERAGE MARKET RENT/SQ FT (\$)



NATIONAL AVERAGE VACANCY RATE (%)



KEY TRENDS AND FACTS



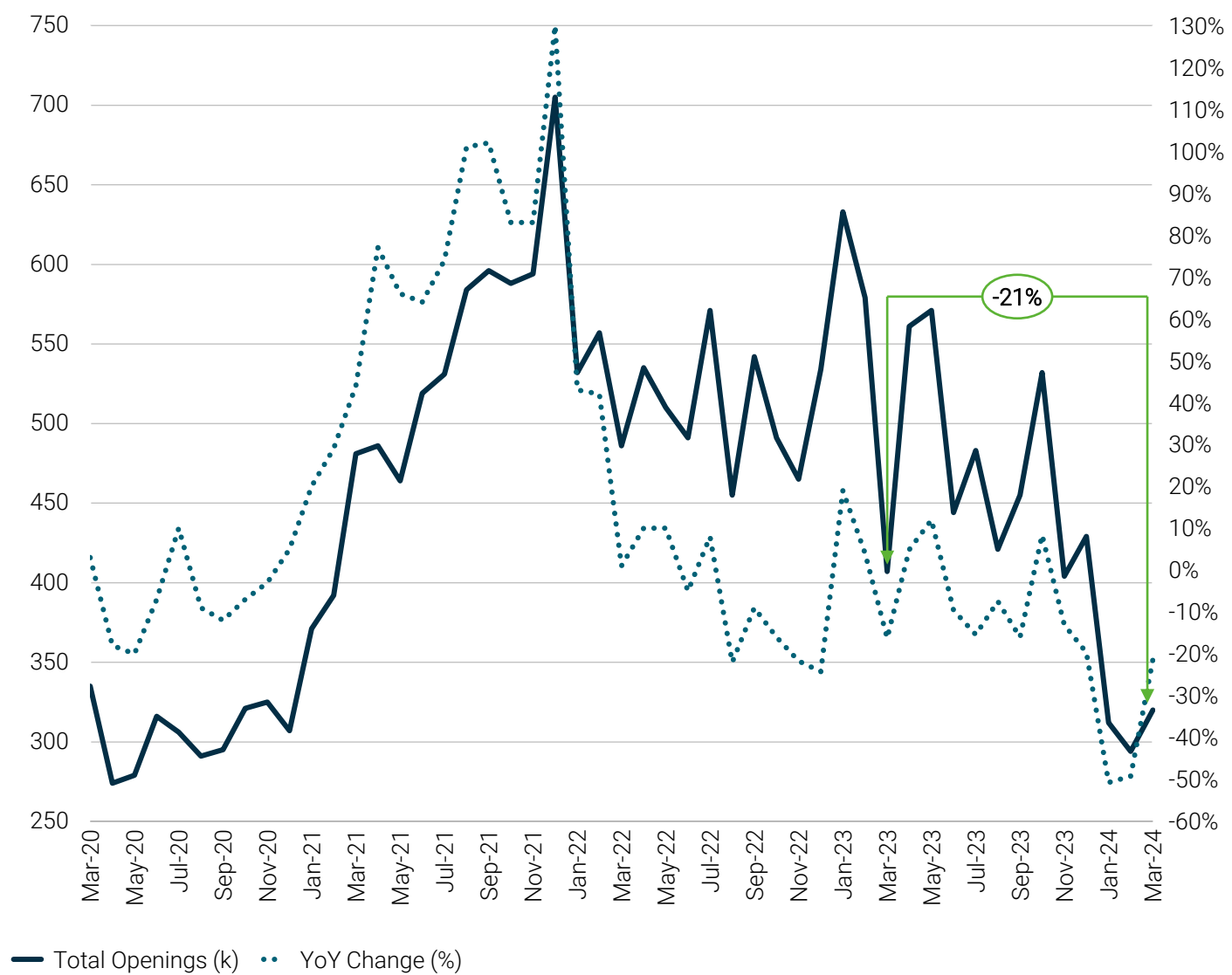
- **Quarterly vacancy has increased 2.3% from Q1 2024 so far in Q2**, likely a result of falling inventory levels and continued hesitance to re-sign leases with uncertainty around interest rates.
- Despite vacancy trends, [demand for cold storage has increased](#) with demand in the fresh and frozen segments. Employee retention at cold storage warehouses averaging 32% and increased demand are driving increased appetite for automation.
- [AutoStore announced plans to launch US headquarters](#) in the greater Boston region and to support the company's continued growth and investment in the North America.

Source: AlixPartners & Mohr Partners, Freight Waves, Supply Chain Dives, AlixPartners analysis

LABOR

Logistics job openings in March were down 21% YOY but up approximately 9% from the month prior

TOTAL TRANSPORTATION, WAREHOUSING, AND UTILITIES JOB OPENINGS – JANUARY 2024 (THOUSANDS; SEASONAL ADJ.)



KEY TRENDS AND FACTS



- BLS estimated that there were **320k job projected openings** in the warehousing, transportation, and utilities sector in March; up ~9% from the prior month but down 21% YOY
- Despite overall growth in jobs in the logistics industry, [several freight and logistics companies laid off 1,300 employees](#) last month including Ryder Logistics.

Source: U.S. Bureau of Labor Statistics Job Openings, AlixPartners analysis, Freight Waves

IMPORT TRENDS

China had been a go-to hub for U.S. manufacturers, but US/China relations and tariffs have been pushing trade towards other countries (Vietnam, Mexico, India gained most)

CATEGORIES				COUNTRY WISE CHANGES (2018 V LTM MARCH 2024)			
	TOTAL US IMPORTS			 CHINA	 VIETNAM	 INDIA	 MEXICO
	2018 (\$B)	LTM MAR 2024 (\$B)	CHANGE (%)	CHG. %	CHG. %	CHG. %	CHG. %
Apparel & Textiles	\$116	\$109	(6%) ▼	(33%) ▼	17% ▲	16% ▲	1% ▲
Automotive & Transportation Parts	\$340	\$428	26% ▲	(11%) ▼	156% ▲	(4%) ▼	42% ▲
Chemicals & Allied Industries	\$233	\$326	40% ▲	6% ▲	142% ▲	68% ▲	63% ▲
Computer & Electronics	\$363	\$444	22% ▲	(23%) ▼	225% ▲	638% ▲	35% ▲
Food & Beverage	\$151	\$211	39% ▲	(18%) ▼	6% ▲	12% ▲	68% ▲
Footwear, Headgear & Others	\$32	\$32	(1%) ▼	(28%) ▼	34% ▲	(3%) ▼	68% ▲
Furniture	\$67	\$65	(3%) ▼	(47%) ▼	122% ▲	44% ▲	23% ▲
Leather Goods	\$15	\$14	(5%) ▼	(59%) ▼	21% ▲	25% ▲	36% ▲
Mechanical & Electricals	\$379	\$445	20% ▲	(32%) ▼	566% ▲	90% ▲	30% ▲
Metals, Parts and Products	\$139	\$158	14% ▲	(17%) ▼	82% ▲	64% ▲	41% ▲
Misc. Goods & Manf. Products	\$476	\$564	19% ▲	(2%) ▼	186% ▲	17% ▲	36% ▲
Plastics & Rubber products	\$86	\$102	18% ▲	(8%) ▼	272% ▲	79% ▲	53% ▲
Special classification provisions	\$85	\$102	19% ▲	55% ▲	866% ▲	82% ▲	28% ▲
Temporary legislation	\$18	\$23	28% ▲	32% ▲	176% ▲	49% ▲	9% ▲
Wood & Pulp Products	\$47	\$50	6% ▲	(35%) ▼	250% ▲	122% ▲	56% ▲
Total	\$2548	\$3086	21%	(23%)	131%	54%	39%
LTM March 2024 U.S. Imports (\$B)				\$419	\$118	\$84	\$478

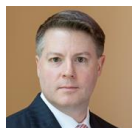
Key nearshoring trends:

- Over the past 6 years (2018 to Last Twelve Months ending Mar 2024), overall imports into the US increased by 21%. However, imports from China decreased by 23% from \$543B to \$419B
- Vietnam, Mexico, and India** have been the biggest gainers
 - Vietnam has seen 131% increase to reach \$118B; All categories have grown in imports from Vietnam
 - Imports from Mexico increased by 39% to \$478B (which is now more than China); Metal parts and Footwear, Headgear & Others have seen biggest increase in Mexico
 - Imports from India have seen a consistent growth across industries, overall increase of 54% in imports into U.S. to \$84B



AlixPartners' Global Trade Optimizer (GTO) platform tracks real-time import trends across countries, product categories, importing companies and suppliers to help our clients be proactive with footprint diversification¹

ALIXPARTNERS SUPPLY CHAIN EXPERTS – REACH OUT TO LEARN MORE



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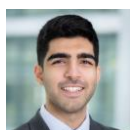
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