

Supply Chain Risk Mitigation and Federal Policies Bolster Long-Term Industrial Performance

Competition for industrial space is strongest across CRE spectrum.

At 4.0 percent, the vacancy rate in the U.S. industrial sector was at least 30 basis points below every other major commercial real estate segment in March. The pandemic's jolt to online consumer spending, as well as the shipping backlogs that occurred thereafter, structurally altered many businesses' risk management planning and led them to buttress industrial footprints. A resilient labor market is also propping up wages, buoying retail sales, and fueling needs for warehousing capacity and distribution resources. Companies are slated to absorb a net of 330 million square feet of industrial space this year to support their operations, a volume 52 percent higher than the long-term mean. Expansions by large industrial users will aid demand for business-to-business services, also driving leasing activity for available space near these companies' new operations. This overall dynamic will keep national vacancy well-below any reading prior to 2021, despite a second consecutive year of record-level construction in 2023.

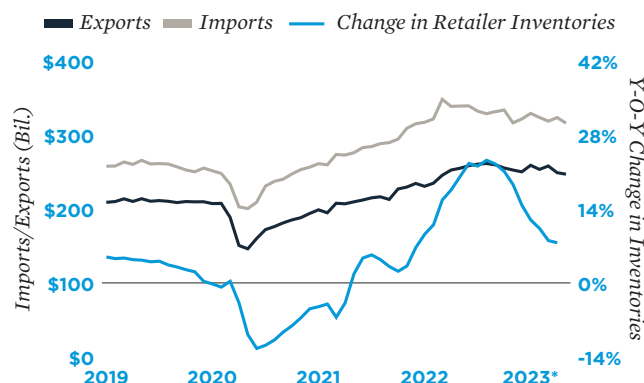
Shipments fall, presenting headwinds. While both supply and demand are above normal levels, some drivers of space use are moderating this year. Three-month average imports and exports fell by \$2.6 and \$2.2 billion in May. This softening cut growth in retailer inventories to one-third of the rate from last August. Warehousing demand is easing from 2022's peak as a result, positioning industrial vacancy to bump up near-term. Looking to 2024, a slowdown in deliveries is anticipated, helping cap further rises in this metric. Less than 80 million square feet was underway in June with completion dates slated for beyond this year, compared to volumes over 400 million square feet in both 2022 and 2023. The ease in new supply should steer expanding industrial tenants to available facilities, limiting upward pressure on the national vacancy rate longer-term.

Geopolitical trends support long-term manufacturing sector growth.

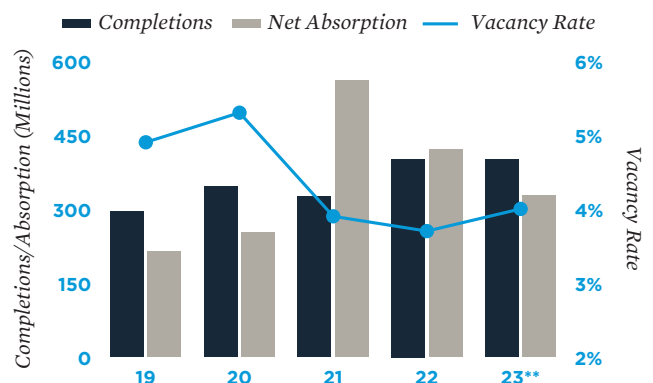
The United States-Mexico-Canada Agreement, passed in mid-2020 in response to pandemic-induced trade disruptions, encouraged a collection of domestic and international companies to nearshore operations to North America. Looming geopolitical tensions also motivated the federal government to support the gradual unwinding of global supply chains, offering incentives to companies that re-shore the production of key intermediate inputs for industries like automotives. The CHIPS Act, for example, has already sparked over \$200 billion in semiconductor investment since August 2022, with the clustering of supplier networks supporting space demand in metros like Phoenix and San Jose. At the same time, several ongoing labor disputes are temporarily pausing additional expansions in the sector. Metro-level, and even submarket-specific housing dynamics, which are often key to worker satisfaction, could play a larger role in influencing companies' production expansion plans moving forward.

Economic growth aids investor interest. Metros amenable to the creation of workforce housing are attracting expanding tenants, as well as investors seeking acquisitions in growing economies. Charlotte and Las Vegas, markets expected to register historic multifamily growth in 2023, had some of the only year-over-year jumps in industrial transaction velocity among major metros in the first quarter. With slowing overall U.S. migration also easing freight utilization in some areas, investors may key-in on local demographics, aiding interest for last-mile warehouses in metros with standout growth trends like Orlando and Dallas-Fort Worth. A rush to warehouses and distribution assets is also occurring around some of the nation's strongest shipment hubs, shoring up deal flow in Los Angeles and Chicago, where total throughput volumes remain higher than in 2019.

Retailers' Stock Growing Less as Trade Slows



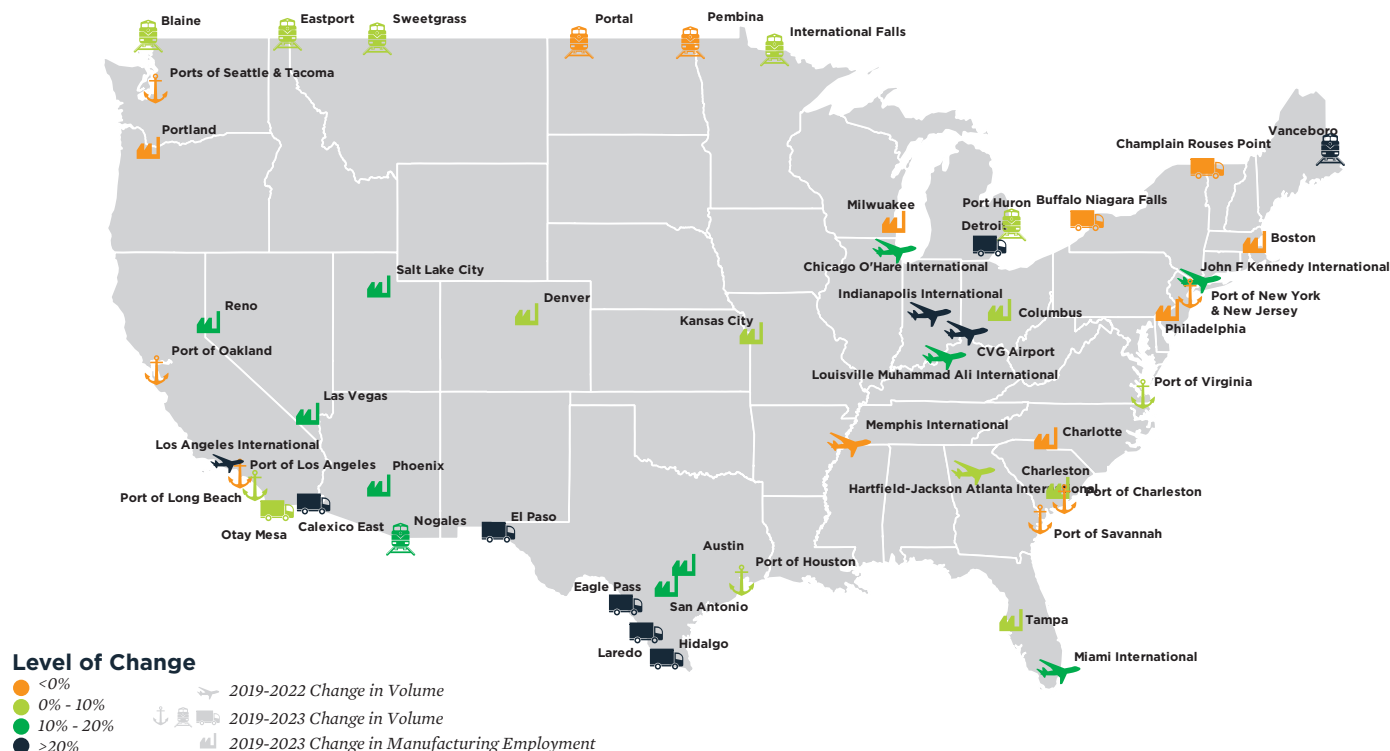
Industrial Supply and Demand



* Through April ** Forecast

Sources: CoStar Group, Inc.; U.S. Census Bureau

Strongest Shipping and Manufacturing Gains in Southwestern Metros



Notes: Airport cargo volumes based on preliminary 2022 estimates; employment, rail and truck freight comparing monthly totals as of May of each year; sea freight comparing quarterly totals for 1Q of each year. Sources: Marcus & Millichap Research Services; Department of Transportation; Federal Aviation Administration; Bureau of Transportation Statistics; Bureau of Labor Statistics; U.S. Census Bureau

LOGISTICS HIGHLIGHTS

- Los Angeles:** Even amid recent disruptions at its ports, the metro continues to host the largest share of trans-continental shipping activity among U.S. markets. Air cargo weights at Los Angeles International Airport were 53 percent higher in 2022 than in 2019, while the Port of Long Beach noted the greatest increase in TEU volume out of any major maritime port over the last four years. Investors are following these trends, as the metro's share of deal flow among primary markets lifted from 13 percent in 2022 to 15 percent over the first six months of this year.
- San Antonio:** In April, shipping activity with Mexico was 20 percent higher than in the same month of 2019, with border towns in Texas hosting much of this growth. The amount of truck and rail cargo transported here rose by 8 percent over the span. San Antonio, which sits near crossings like Laredo, Hidalgo and Eagle Pass, has emerged as a hub for companies moving goods through the region, spurring record-level industrial demand recently. This compressed metrowide vacancy to 4.4 percent in March, down 250 basis points from the 2019 year-end mark.
- Indianapolis, Cincinnati and Louisville:** At the end of the first quarter, vacancy rates in each metro were at least 270 basis points lower than their respective long-term averages. Increased air cargo has played a substantial role in boosting industrial demand in these areas, with volumes at the Louisville Muhammad Ali, CVG and Indianapolis international airports collectively rising by five percent from 2021 to 2022.

MANUFACTURING HIGHLIGHTS

- Phoenix:** Over the four years ending in May, manufacturers added 14,600 personnel here, fueled by multiple multi-billion dollar expansions. Abundant land suitable for industrial development, as well as a high level of accessibility to financial incentives, raised Arizona to the number one state for foreign direct investment in 2022, with several new semiconductor plants driving this rank. Large expansions have jolted space demand from supporting firms, as tenants absorbed no less than a net of 3 million square feet here over each of the last 12 quarters ending in March 2023.
- Charleston:** Automotive manufacturing infrastructure, port accessibility and a low cost of doing business have the metro well-positioned to benefit from the federal push to reshore supply chains and produce electric vehicles domestically. An 8.7 percent gain in the local manufacturing headcount outpaced every other major metro over the past year, reflecting expansions from firms like Volvo, which will produce electric SUVs here. Tenant demand from similar companies remains robust, pushing asking rents to rise by a record 22.3 percent annually in March.
- Columbus:** Roughly 5.6 million square feet of manufacturing space is underway or planned in the metro, higher than in any other major market. Intel's \$20 billion semiconductor plant here is drawing suppliers to available sites nearby, boosting space demand. Reflecting this, asking rents grew by nearly 29 percent over the 12 months ended in March, aided by a record volume of high-quality facilities entering the market.

2023 U.S. Forecast

EMPLOYMENT

1.6% increase Y-O-Y

- The national headcount will continue to grow faster than historic norms this year, despite some layoffs and labor disputes recently occurring in several industries. Resilient consumer spending, as well as an aging labor base, are encouraging many firms to seek new talent in 2023.

CONSTRUCTION

400 million square feet completed

- Inventory expands by 2.3 percent for the second consecutive year, with warehouses and distribution facilities above 500,000 square feet accounting for over 50 percent of this space. In comparison, manufacturing spaces will comprise just 6 percent of total deliveries in 2023.

VACANCY

30 basis point increase Y-O-Y

- Continued record construction, paired with lower production output and freight utilization, lift the year-end vacancy rate to 4.0 percent. Meanwhile, supply additions under 100,000 square feet will account for just 5 percent of total completion volume, helping cap vacancy in this subsector.

ASKING RENT

5.5% increase Y-O-Y

- Rising vacancy tempers the pace of rent growth; however, the national average asking rate will still reach \$10.44 per square foot at year-end. With limited manufacturing facilities underway, the marketed rent for these types of spaces is expected to remain above the historical norm.

2023 INVESTMENT OUTLOOK

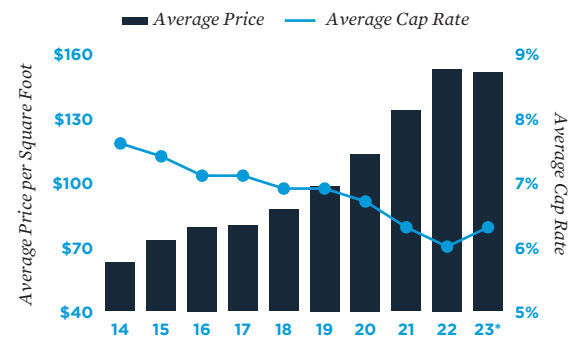
Industrial sales activity surpassing norms, a standout among property types.

The Federal Reserve's combined 500-basis-point lift in the overnight lending rate since March of last year has constrained deal making across most property types, which was largely apparent during the first six months of 2023. The industrial sector, however, was the only major commercial real estate segment to note a trailing 12-month transaction velocity stronger than its long-term average this June. Moving forward, the sector's historically strong metrics, and capital infusions available from recently-passed federal statutes, should continue to buoy investor interest.

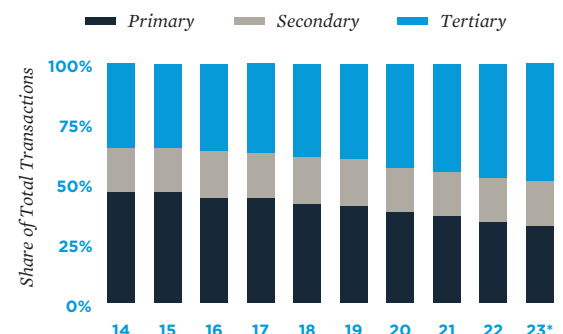
- Well-capitalized buyers remain active.** The average sale price over the trailing 12-month period ending in June hovered in the low-\$150 per square foot range, a slight tick down from the mean through 2022. Higher lending costs and greater underwriting scrutiny also placed upward pressure on cap rates, with yields averaging at 6.4 percent over the last year. While investors seeking higher leverage loans are being forced to evaluate opportunities more carefully, well-capitalized buyers have generally remained active. As of July, at least \$9.9 billion is actively being raised by investment funds for the acquisition of U.S. industrial assets, likely aiding trading activity for properties priced above \$10 million near-term.

- Interest in smaller metros is robust.** Trading activity in tertiary markets continues to grow as a share of the nation's total industrial deal flow. The proportion rose to a ten-year high, at 49 percent of transactions over the 12-months trailing June. While balance sheet concerns from regional banks could challenge lending in some smaller metros near-term, tertiary markets' long-term growth prospects are still generally outweighing potential short-term risks to most investors.

Investment Sales Trends



Trend Toward Smaller Markets Continues



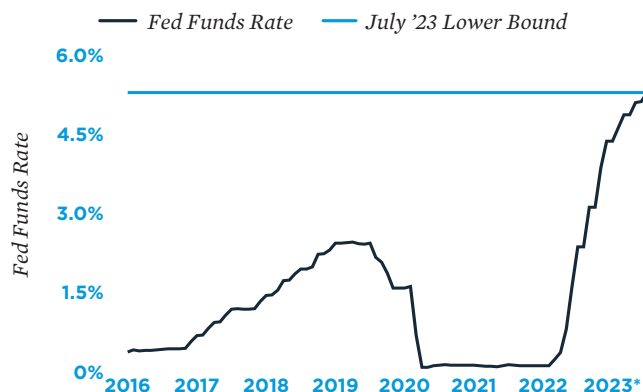
* Preliminary data for the trailing 12-months through 2Q
Sources: CoStar Group, Inc.; Real Capital Analytics

Industrial Underwriting Impacted by the Federal Reserve's Bid to Cool Inflation

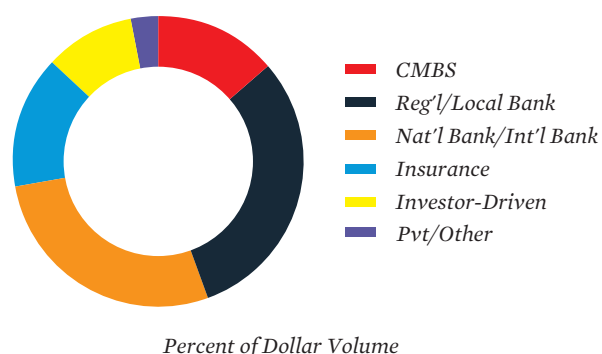
More cautious personal financial choices may help provide landing strip for the Federal Reserve. Over the first half of the year, job growth continued to exceed historical norms and consumer spending remained resilient, keeping inflation persistently high and the Federal Reserve committed to maintaining an elevated overnight rate in the near-term. At its July meeting, the Federal Open Market Committee (FOMC) raised the federal funds rate by 25 basis points, marking the 11th increase since March 2022. While now at an upper range of 5.5 percent, the highest mark since January 2001, many FOMC participants continue to signal that one or more hikes may be necessary to sufficiently cool inflation. Meanwhile, the central bank has continued to skim its balance sheet in an effort to bring up long-term interest rates, with the Fed's total holdings relative to GDP expected to decrease by 3 percent throughout 2023. Treasury yields continue to climb due to these maneuvers, as the two-year note surpassed the 10-year note over the 11 consecutive months trailing July. While the inversion of these two metrics may serve as a recession predictor, multiple signs suggest that the economy could be slowing to a soft landing. Monthly growth in personal consumption expenditures has been on a decelerating trend for the past six months, while the personal savings rate edged up to a 17-month high in May. Growth in the latter statistic, which remains well-below historic norms, should serve to cool consumer spending, restore some liquidity to banks and aid the Fed in pinning down a terminal rate this cycle.

While capital remains available, stricter lending alters investor strategies. Recent banking failures and a higher cost of capital are requiring lenders to further scrutinize underwriting criteria across property types, prompting nearly all sources of debt funding to bump up quoted rates and widen spreads. Relative stability in the industrial landscape is nevertheless attracting lenders to the sector, leading to sufficient levels of capital for investors that are able to incur less favorable terms. Initial deposits are now required on the majority of bank borrowings, with fixed rates for most loans pushing up to the 5.50 to 6.50 percent band. Loan-to-value ratios have also fallen to a range of 55 to 65 percent across most sources of capital, with tighter debt underwriting likely to sustain these rates in the foreseeable future. For these reasons, many investors pursuing value-add opportunities are using mezzanine debt or bridge financing to improve overall leverage. However, core-located, well-leased assets are still expected to generate favorable long-term returns. With construction costs continuing to rise, deals for these properties are generally being completed at a low basis relative to anticipated future values, keeping cap rates down for high-quality, newer assets. This dynamic may become more apparent over the next few years as development costs advance further and the national pipeline tapers in 2024 and beyond.

Federal Funds Rate Over Time



Industrial Mortgage Originations By Lender**



* CPI through May; 10-Year Treasury through June 24 ** Representative of trades priced \$2.5 million and above completed in 2022
Sources: IPA Research Services; Federal Reserve; U.S. Census Bureau

Industrial Division

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Sources: Marcus & Millichap Research Services; IPA Capital Corporation; Bureau of Labor Statistics; CoStar Group, Inc.; Department of Transportation; Federal Aviation Administration; Bureau of Transportation Statistics; The White House; U.S. Trade Representative; Semiconductor Industry Association; Arizona Commerce Authority; Federal Reserve; Real Capital Analytics; U.S. Census Bureau