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# Rapid Industrial Growth: How Long Can It Last?

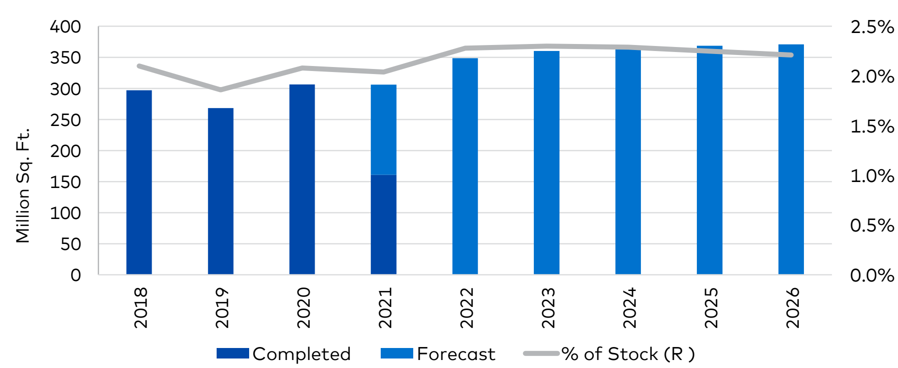
Industrial real estate has seen unprecedented demand and supply growth in recent years, driven by factors that include increasing e-commerce and retail sales. Absorption, rents and investor demand have surged, an unaccustomed trend for a historically slow-growing sector.

The rapid growth raises the question of whether the segment is in a bubble or if the demand will wane. To answer that question, Yardi Matrix looked at the economic factors that produce demand for industrial space. Our conclusion leads us to believe that industrial market fundamentals should remain strong for the next five years.

The study looked at the macroeconomic variables that historically have correlated with absorption and supply of industrial space. Those factors—including retail sales, housing starts and personal income—are projected to continue to grow robustly through the middle of the decade. Given the strong historical correlation, we believe that demand for industrial space will continue unabated for at least several more years.

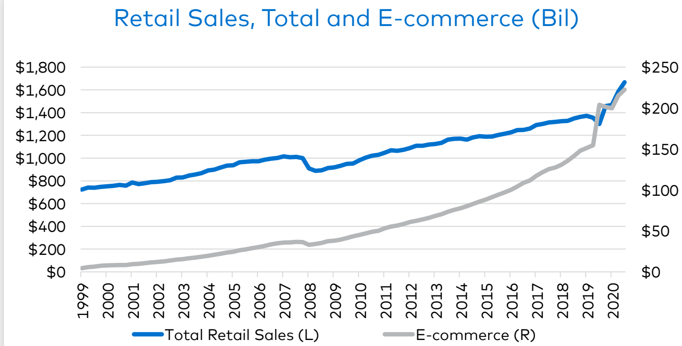
Our forecast calls for a 2.0% to 2.3% annual increase in total stock over the next five years, which would generate between 350 million and 370 million square feet of new industrial space each year through 2026, a total of 1.8 billion square feet. That follows the more than 290 million square feet of industrial space that has been delivered annually over the last three years, peaking at 306 million square feet in 2020. All that development, however, may not meet the demand for industrial space.

Industrial Supply Forecast Through 2026




Source: CommercialEdge

## E-commerce, Retail Driving Growth



*Source: U.S. Census Bureau*

Industrial demand growth has many causes, led by the e-commerce revolution. Online sales have risen rapidly over the last two decades, reaching a quarterly record of $222 billion, or 13.3% of all retail sales, in the second quarter of 2021, according to the U.S. Census Bureau. That's up from $39.2 billion, or 4.2% of all retail sales, in the first quarter of 2010, and $5.7 billion, or 0.8% of all retail sales, in the first quarter of 2000, according to the Census Bureau.

E-commerce has created a need for high-tech logistics facilities close enough to populated areas to ship products to consumers within hours, and have sufficient technical amenities such as fast connectivity, high ceilings, bays to accommodate delivery trucks and parking. These third-party logistics (3PL) facilities increasingly use technologies like robotics and artificial intelligence. Use of these technologies in industrial buildings is expected to increase more than tenfold by 2025, according to a recent report by the National Association of Industrial and Office Properties (NAIOP).

Since older industrial stock often does not have the technical capacity for such logistics usage, the development of new space is necessary to accommodate the growth of 3PLs. More than 60 percent of demand for industrial space is coming from 3PLs, companies such as FedEx, UPS, DHL and others that are servicing e-commerce fulfillment, according to NAIOP.

No mention of 3PLs would be complete without Amazon and national retailers Walmart and Target, which operate mega-warehouses around the country. Amazon alone operates hundreds of millions of square feet of commercial space and is expanding rapidly. Amazon is set to occupy eight of the largest 10 industrial developments in the U.S., encompassing 28.3 million square feet, according to Yardi's CommercialEdge. Amazon has more than 50 million square feet of industrial space either under construction or in the planning stage, per CommercialEdge.

While e-commerce is growing at a faster rate and taking up a greater share of all retail sales, it is far from the only reason for the growth in industrial demand. Retail sales excluding e-commerce also are growing rapidly. In fact, retail sales not made through e-commerce reached a record-high $1.44 trillion in this year's second quarter (that figure comes from subtracting $222 billion of e-commerce sales from $1.66 trillion of total retail sales), according to the Census Bureau.

Other drivers of industrial demand include manufacturing; food and beverage (cold storage); automobiles, tires and parts; as well as the building materials/construction and medical industries. What's more, some companies that had difficulty getting products during the pandemic have decided to lease more space to warehouse inventory so they don't get caught short again in the event of another economic disruption.

And while national firms get the focus of attention, smaller companies with local or regional scope also are increasing their occupancy of industrial space. Examples include those that service the booming home improvement and health care supply industries and local contractors. Smaller companies are more likely to occupy multi-tenant buildings. Multi-tenant space accounts for more than 40% of industrial square footage in half of the top 30 metros ranked by amount of industrial stock.

Markets with the highest percentage of multi-tenant space include some large industrial areas, led by Fort Lauderdale (64.6%), Las Vegas (62.8%) and Miami (58%), according to CommercialEdge. Other large markets with a high percentage of multi-tenant space include New Jersey (52.9%), Orange County (48.2%), San Francisco (48.1%) and Austin (46.6%).

## Forecasting Industrial Demand

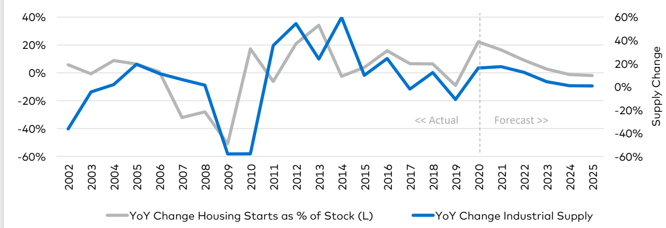
To produce our forecast for industrial supply over the next five years, we looked at various economic metrics that have in the past correlated to industrial growth. We found five economic metrics—housing starts, retail and wholesale inventories, retail sales (excluding auto and gasoline), personal income, and weighted import and export volumes—that were the most closely correlated with historical growth in industrial supply.

That these metrics correlated to demand for Industrial space is largely a function of how much the sector is sensitive to changes in economic growth and consumer demand, which accounts for about two-thirds of the U.S. economy. Ultimately the demand for physical goods translates into the space required to physically handle and store those goods as they move from the producer to the end user.

For our purposes, we used Moody's Analytics' five-year forecast for the five economic metrics we determined closely correlate with industrial supply growth. Based on projected changes in those metrics, we foresee no letdown in industrial supply growth through 2026.

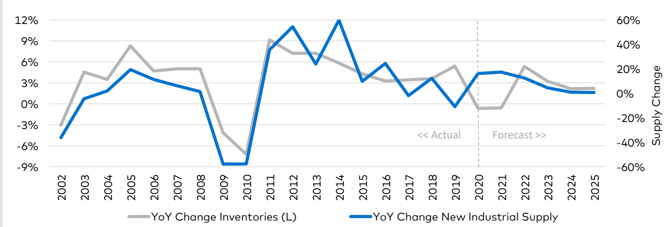
Although the shortage of labor and COVID-19 related issues in getting materials and government approvals have slowed construction somewhat, we expect 305 million square feet of space to be delivered this year. We project that number will jump to 348 million square feet in 2022, 360 million square feet in 2023, 366 million

Housing Starts vs. Industrial Supply



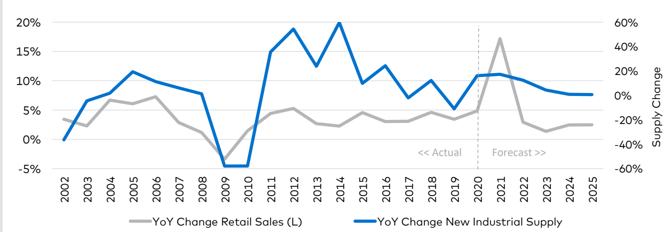

*Sources: U.S. Bureau of Economic Analysis, Yardi Matrix, Moody's Analytics*

Retail & Wholesale Inventories vs. Industrial Supply



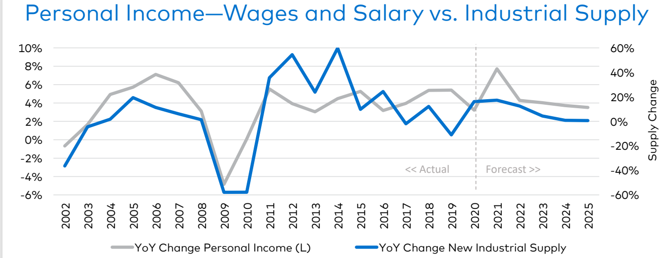

*Source: U.S. Bureau of Economic Analysis, Yardi Matrix, Moody's Analytics*

Retail Sales (ex. Food, Autos, and Gas) vs. Industrial Supply



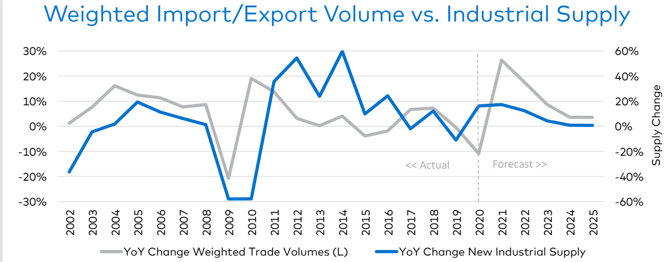

*Sources: U.S. Bureau of Economic Analysis, Yardi Matrix, Moody's Analytics*

Personal Income—Wages and Salary vs. Industrial Supply




*Sources: U.S. Bureau of Economic Analysis, Yardi Matrix, Moody's Analytics*

Weighted Import/Export Volume vs. Industrial Supply




*Sources: U.S. Bureau of Economic Analysis, Moody's Analytics, Yardi Matrix* square feet in 2024, 368 million square feet in 2025 and 370 million square feet in 2026.

## Metro-Level Growth

Robust demand for industrial space is a nationwide phenomenon. By total square feet, the development pipeline is concentrated in the largest industrial markets, but smaller markets are growing more rapidly as a percentage of stock. That reflects both healthy demand for 3PL properties for deliveries near gateway population centers as well as the outsize growth of jobs and population in parts of the Southeast and Southwest that have a lower cost of living, less congestion, access to parks and recreation, and more favorable weather.

Secondary and tertiary metros also have more places to build than urban markets, where land and rent are more expensive on a per-capita basis. What's more, in tertiary markets, building a few large facilities creates a large percentage boost in stock. An example is Little Rock, Ark., where construction of two new Amazon distribution centers totaling 4.4 million square feet represents a roughly 10% increase in total stock.

As of August 2021, 508 million square feet of industrial space were under construction in the U.S., according to CommercialEdge, with 191 million square feet, or 37.7%, concentrated in the top 10 markets. Dallas (31.9 million square feet) leads in the amount of space under construction, followed by Chicago (27.7 million square feet), Phoenix (25.0 million square feet), the Inland Empire (21.5 million square feet) and Houston (18.5 million square feet).

Only two of the top 10 metros in industrial space under construction are also among the top 10 in construction as a percentage of stock. The two in the top 10 for both total supply and percentage growth are Austin (13.1% of stock under construction) and Phoenix (9.5% of stock under construction). Metros that have the most industrial space under construction as a percentage of stock are primarily secondary and tertiary markets, led by Amarillo, Texas (20.6%), Lafayette-Lake Charles, La. (20.4%), Savannah, Ga. (17.7%) and Jackson, Miss. (15.2%).

When we project supply growth over a five-year period through 2026, four metros account for nearly a quarter of all space to be delivered: Dallas (161 million square feet), Chicago (128 million square feet), the Inland Empire (123 million square feet) and Phoenix (107 million square feet). Seven metros are forecast to add to industrial stock at a whopping annual rate of at

### Top 10 Metros Industrial Supply U/C

| Market | Sq Ft UC |
|---|---|
| Dallas | 31,891,159 |
| Chicago | 27,695,365 |
| Phoenix | 24,995,007 |
| Inland Empire | 21,453,222 |
| Houston | 18,519,123 |
| Indianapolis | 16,584,191 |
| Austin | 13,298,819 |
| Philadelphia | 13,068,536 |
| Savannah | 12,649,780 |
| Atlanta | 11,839,308 |

*Source: CommercialEdge*

### Top 10 Metros Industrial Supply U/C

| Market | UC % Stock |
|---|---|
| Amarillo | 20.6% |
| Lafayette, La. | 20.4% |
| Savannah | 17.7% |
| Jackson | 15.2% |
| Austin | 13.1% |
| Little Rock | 12.2% |
| Charleston | 11.3% |
| Syracuse | 10.2% |
| Phoenix | 9.5% |
| Eugene | 9.1% |

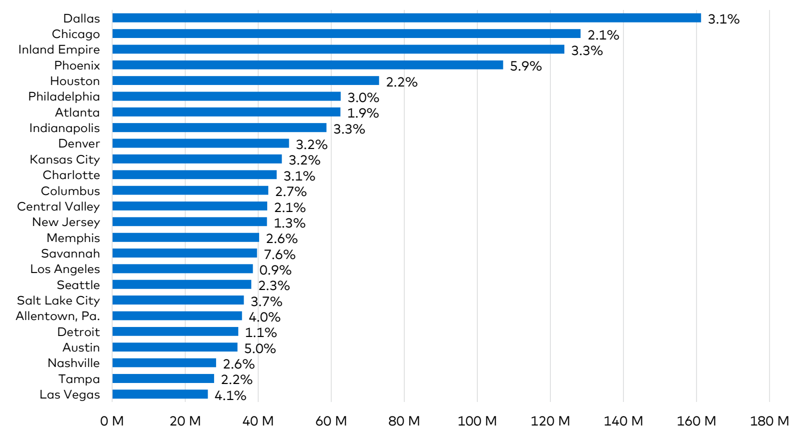
*Source: CommercialEdge*

least 5% through 2026. These metros are concentrated in the high-growth areas of the Southeast and Southwest: Columbia, S.C., (7.7% annual rate, 19.5 million square feet), Savannah, Ga. (7.6%, 39.6 million square feet), Baton Rouge, La. (6.3%, 3.8 million square feet), Charleston, S.C. (5.9%, 20.2 million square feet), Phoenix (5.9%, 107.1 million square feet), Austin (5.0%, 34.3 million square feet), and the Southwest Florida Coast (5.0%, 11.4 million square feet).

As trade and shipping activity grow, many ports—including Long Beach, Los Angeles, Newark and Savannah—are seeing record growth in inbound cargo. That has led to delays in moving cargo, even as activity at some ports moves round-the-clock. The growing competition to rent space has led occupancy rates to steadily rise over the last decade and enabled property owners to boost revenue streams from services such as parking and storage.

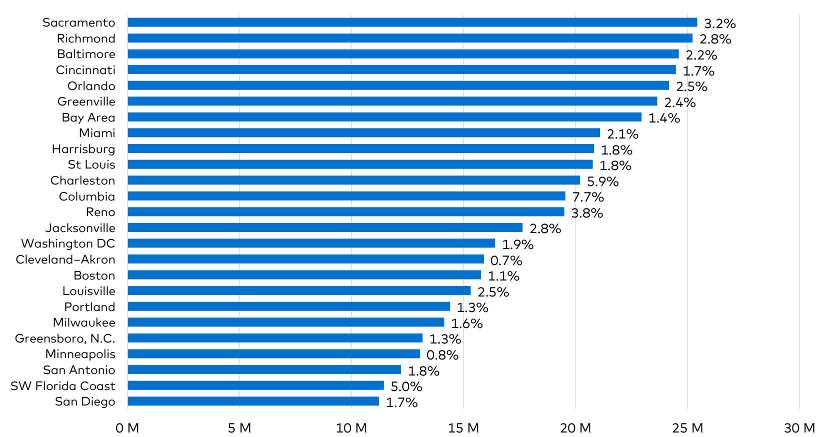
Nationally, rents rose 4.0% year-over-year through July, according to CommercialEdge, led by large industrial markets near gateway population centers. Rents are up 6.9% year-over-year in the Inland Empire, where the vacancy rate has dropped to a minuscule 1.4%. Other metros with strong rent growth include Los Angeles (6.4% year-over-year through July), New Jersey

Industrial Supply Forecast 2021-26 by Metro, Larger Markets




*Source: CommercialEdge. Percentages represent annual % increase in total stock.*

Industrial Supply Forecast 2021-26 by Metro, Smaller Markets




*Source: CommercialEdge. Percentages represent annual % increase in total stock.*

(6.3%), Nashville (6.2%), Seattle (5.6%) and the Bay Area (4.9%).

Since peaking near 15% in the wake of the Global Financial Crisis in 2009, industrial vacancy rates have declined steadily, according to data from the Urban Land Institute and CBRE. As of July, the national vacancy rate was 5.8%, per CommercialEdge. Other than the Inland Empire, metros with extremely low vacancy rates include Nashville (2.0% as of July), Columbus (2.2%), Indianapolis (2.4%), Los Angeles (3.4%), New Jersey (3.7%) and Kansas City (3.9%).

Industrial performance and prospects for growth have made it increasingly popular with investors. Industrial properties in the National Council of Real Estate Investment Fiduciaries' Property Index (which encompasses $742 billion of assets) have outperformed other property types, producing a 23.0% total return

Industrial Lease Rates and YoY Growth by Metro

| Market | Avg. Lease Rate July 2021 | 12-Month Rent Growth |
|---|---|---|
| Inland Empire | $6.36 | 6.9% |
| Los Angeles | $4.97 | 6.2% |
| New Jersey | $3.93 | 2.1% |
| Nashville | $3.96 | 1.3% |
| Seattle | $10.13 | 6.4% |
| Bay Area | $7.74 | 6.3% |
| Atlanta | $4.31 | 1.2% |
| Miami | $11.41 | 3.3% |
| **National** | **$6.36** | **3.5%** |
| Memphis | $4.39 | 4.4% |
| Central Valley | $4.70 | 3.7% |
| Dallas | $7.95 | 3.3% |
| Denver | $5.13 | 3.8% |
| Philadelphia | $8.66 | 4.4% |
| Orange County | $6.31 | 4.0% |
| Charlotte | $6.97 | 2.9% |
| Portland | $5.32 | 2.7% |
| Phoenix | $6.68 | 1.7% |
| Houston | $5.98 | 1.5% |
| Cincinnati | $4.07 | 2.7% |
| Chicago | $8.86 | 5.6% |
| Tampa | $5.54 | 3.3% |
| St. Louis | $10.83 | 4.9% |
| Twin Cities | $5.86 | 2.2% |
| Boston | $3.35 | 4.0% |
| Columbus | $6.27 | 2.6% |
| Baltimore | $4.25 | 2.4% |
| Detroit | $7.81 | 2.1% |
| Indianapolis | $7.54 | 3.5% |
| Kansas City | $5.85 | 2.8% |

*Source: CommercialEdge*

in the four quarters ending in second quarter 2021, well above the total index's 7.4% return. Industrial REITs produced an average 20.5% return over the 10 years through mid-September, the highest return of all major property sectors and almost double the 10.8% return of all equity REITs, according to NAREIT.

## No End in Sight for Demand

The industrial market has grown rapidly during the last decade, and no slowdown appears to be in sight, given that consensus economic growth forecasts range from moderate to strong. The bullish outlook is driven in the short term by consumer spending due to pent-up demand and heightened household savings coming out of the pandemic. In the 18 months following the onset of COVID-19, U.S. households accumulated an additional $4 trillion in savings and money markets that will fuel spending in coming months and years.

In the medium term, the economy will be stimulated by consumer spending and (likely) trillions of dollars of government infrastructure spending. The upshot is that demand for industrial—especially more technologically sophisticated 3PL space—is very likely to remain strong for the foreseeable future.

*—Paul Fiorilla, Director of Research*

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