



Yardi Matrix

National Industrial Report

November 2023



Electric Vehicle Push Continues

- The rise of electric vehicles is spurring the need for industrial space across the country. Millions of square feet of new industrial space will be needed not only for the manufacturing facilities where EVs are assembled but also for battery production and supplier networks.
- Electric vehicle sales have grown rapidly in recent years, but 2023 has tempered expectations. Reporting indicates that car dealer inventories of EVs have swelled this year as affordability and consumer concerns about the availability of charging networks have led to slower-than-anticipated growth. Nonetheless, hybrid-electric vehicle sales were up more than 50% year-over-year in October and plug-in vehicle sales were up 22%, according to data compiled by Argonne National Laboratory; more than 1.1 million electric vehicles have been sold in 2023 to date.
- The ramp-up in EV production was caused by the Inflation Reduction Act, which generated a rush of EV manufacturers building new facilities in the U.S. The IRA provides financial assistance to manufacturers as well as stipulating that tax credits may only be used on EVs manufactured in the United States. A so-called Battery Belt that extends from Michigan through the Carolinas and Georgia has sprung up in response. Hyundai and LG announced a \$4.3 billion plant earlier this year, and Toyota recently announced it would be increasing investment in its EV manufacturing facility in North Carolina by \$8 billion. Yet as consumers have embraced EVs more slowly than previously expected, some projects are being scaled back. Ford, for instance, announced it will be delaying \$12 billion in projects related to EVs, including reducing capacity of a planned battery plant in Michigan by 43%.
- EV and battery manufacturing will also require extensive supplier networks that will likewise occupy millions of square feet of industrial space. In North Carolina, India-based Epsilon Advanced Materials announced a \$650 million plant in Brunswick County that will produce synthetic graphite anodes, a key component in EV batteries. Cnano Technology USA, a manufacturer of EV components, announced a \$95 million facility in the Kansas City market. The interactions between materials and parts providers with the manufacturers will also require additional logistics space.
- We expect that while the near-term outlook may be a bit rocky, over the long term the production of EVs, their batteries and supplier networks will be a driver of industrial demand. The IRA provides both a carrot and a stick, and traditional automakers are investing billions to get a foothold in the EV market alongside Tesla and upstart EV-only firms.



Rents and Occupancy: New Supply Moderates Dallas Rent Growth

- National in-place rents for industrial space averaged \$7.56 per square foot in October, an increase of five cents from September and up 7.6% year-over-year.
- Dallas has been one of the most in-demand industrial markets for years now, due to high population growth, access to infrastructure and its links to Mexico, where manufacturing has been booming as a nearshoring push continues. In-place rents in Dallas have increased 6.8% percent in the last 12 months, while the vacancy rate sits at 4.1%. The market has not seen rent growth hit double digits like other hot markets due to the impact of new supply. The industrial supply boom in Dallas predates the pandemic—the market has added an astounding 281 million square feet since 2014 (30.7% of stock).
- The national vacancy rate in October was 4.6%, unchanged from the previous month. Record levels of new supply have caused the national vacancy rate to tick up slowly this year from 3.9% in January, a 70-basis-point increase year-to-date.
- The average rate for new leases signed in the last 12 months rose to \$10.28 per square foot, \$2.72 more than the average for all leases.
- Coastal markets continued to see the biggest spread between new leases and the average for all leases. Even as logistics demand normalized in 2023, tenants were still paying high premiums for new leases in markets with access to a shipping port. In the Inland Empire, a new lease signed in the last 12 months cost \$18.49 per square foot, \$9.32 more per foot than the market average. Los Angeles (\$6.99 more per foot), the Bay Area (\$5.72), Miami (\$5.19), Orange County (\$4.93), Seattle (\$4.91) and New Jersey (\$3.95) all saw significant premiums.

Average Rent by Metro

Market	Oct-23 Average Rent	12-Month Change	Avg Rate Signed in Last 12 Months	Vacancy Rate
National	\$7.56	7.6%	\$10.28	4.6%
Inland Empire	\$9.17	15.2%	\$18.49	4.3%
Orange County	\$14.01	12.3%	\$18.94	4.6%
Los Angeles	\$13.58	12.3%	\$20.57	5.9%
Miami	\$10.62	10.3%	\$15.81	4.3%
Boston	\$9.98	9.0%	\$12.66	7.2%
Seattle	\$10.67	8.9%	\$15.58	4.8%
New Jersey	\$9.96	8.7%	\$13.91	5.3%
Bridgeport	\$8.67	7.8%	\$10.98	3.2%
Phoenix	\$8.41	7.5%	\$10.96	2.4%
Atlanta	\$5.58	7.3%	\$8.25	3.9%
Nashville	\$6.00	7.1%	\$8.98	1.5%
Portland	\$9.28	6.9%	\$11.22	4.3%
Dallas–Fort Worth	\$5.67	6.8%	\$7.91	4.1%
Bay Area	\$12.63	6.8%	\$18.35	3.9%
Philadelphia	\$7.48	6.3%	\$9.95	4.0%
Baltimore	\$7.69	6.1%	\$9.71	4.4%
Columbus	\$4.61	6.0%	\$6.87	1.6%
Central Valley	\$6.03	5.8%	\$9.39	5.0%
St. Louis	\$4.63	5.2%	\$4.27	6.6%
Tampa	\$7.27	5.1%	\$9.37	5.8%
Twin Cities	\$6.61	4.9%	\$7.82	5.6%
Memphis	\$3.80	4.7%	\$3.94	4.0%
Detroit	\$6.68	4.5%	\$6.41	5.8%
Denver	\$8.17	4.2%	\$9.16	6.7%
Indianapolis	\$4.59	4.1%	\$4.85	3.1%
Houston	\$6.41	4.1%	\$7.89	6.7%
Kansas City	\$4.74	3.9%	\$5.00	3.0%
Chicago	\$5.87	3.9%	\$6.75	4.9%
Charlotte	\$6.35	3.8%	\$7.09	2.2%
Cincinnati	\$4.73	3.7%	\$5.91	5.5%

Source: Yardi Matrix. Data as of October 2023. Rent data provided by Yardi Market Insight. National rent and occupancy data is a weighted average of the top 30 markets.

Supply: New Jersey Supply Boom Abates

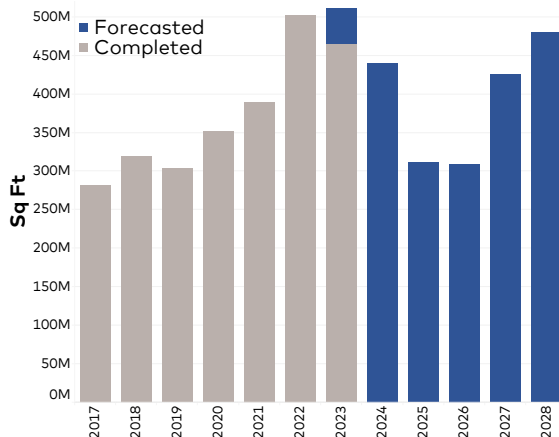
- Industrial supply under construction currently totals 512.5 million square feet, according to Yardi Matrix.
- Although new-supply levels remain historically high, much of the new stock being built is concentrated in a few markets. More than a quarter of the new supply currently under construction is located in just five markets, and half is in the top 18 markets.
- Due to its proximity to ports, rail and highways, with access to many of the country's largest population centers, New Jersey has been a hot industrial market in recent years, delivering 37.8 million square feet (6.7% of stock) since the start of 2020. However, a significant slowdown is on the horizon. The market currently has only 1.3% of stock under construction. After starting a combined 25 million square feet across 2021 and 2022, New Jersey has started just 4.1 million square feet in 2023. While this is partly due to factors like rising interest rates and tightening credit standards that have impacted the broader real estate market, New Jersey's new-construction slowdown has been steeper than the nationwide drop-off for industrial starts, likely indicating a decline in land available for industrial development.

Supply Pipeline (by metro)

Market	Under Construction	Under Construction % Stock	UC Plus Planned % Stock
National	512,537,552	2.7%	6.5%
Phoenix	47,336,968	12.7%	36.8%
Dallas	42,425,506	4.6%	9.8%
Inland Empire	25,746,160	4.1%	10.8%
Denver	10,164,966	4.0%	6.1%
Charlotte	11,984,100	3.8%	9.6%
Memphis	10,845,290	3.8%	4.6%
Kansas City	10,209,831	3.7%	18.0%
Houston	17,206,945	2.9%	5.0%
Philadelphia	11,068,220	2.6%	7.3%
Columbus	7,458,110	2.5%	6.2%
Central Valley	7,106,107	2.1%	2.8%
Indianapolis	7,042,306	2.0%	6.5%
Bay Area	5,650,404	1.9%	3.6%
Tampa	5,073,126	1.9%	6.4%
Nashville	3,713,304	1.8%	4.1%
Chicago	17,981,820	1.7%	3.9%
Detroit	8,612,581	1.6%	2.7%
Bridgeport	3,346,344	1.6%	2.7%
New Jersey	7,317,855	1.3%	3.9%
Seattle	3,617,718	1.3%	4.0%
Cincinnati	3,510,363	1.2%	2.3%
Atlanta	4,886,431	0.9%	2.5%
Twin Cities	3,035,673	0.9%	2.5%
Boston	2,254,880	0.9%	1.9%
Baltimore	1,675,100	0.8%	2.4%
Cleveland	2,661,775	0.7%	1.1%
Los Angeles	4,531,682	0.6%	2.1%
Orange County	1,021,119	0.5%	0.9%
Portland	563,594	0.3%	2.1%

Source: Yardi Matrix. Data as of October 2023

National New Supply Forecast



Source: Yardi Matrix. Data as of October 2023

Economic Indicators: Warehouse Employment Continues Slide

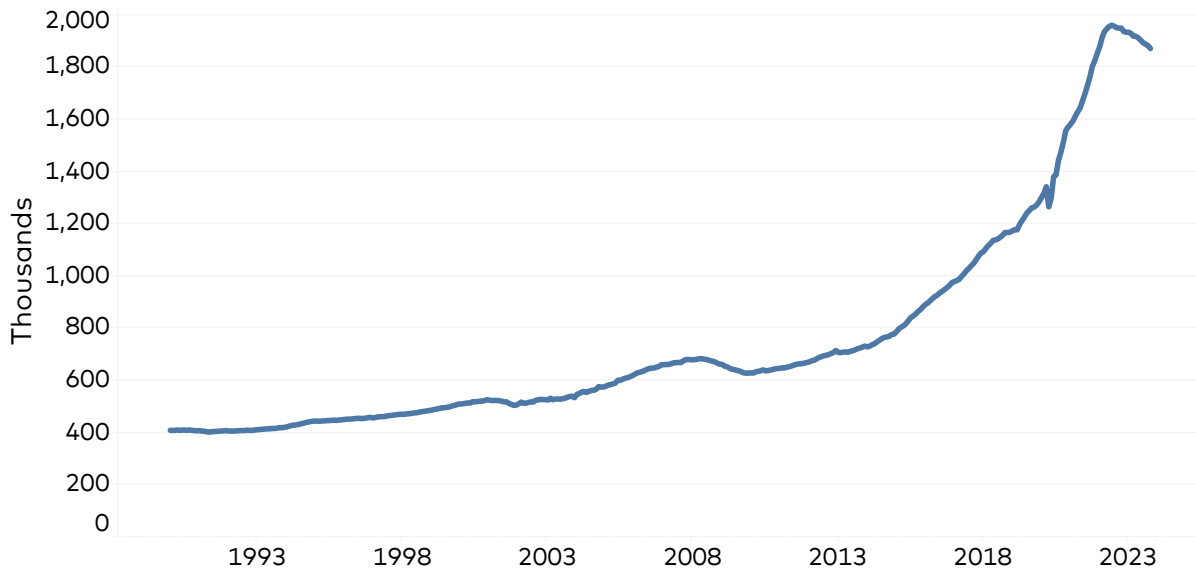
- Employment in the warehousing and storage sector fell by more than 10,000 jobs in the month of October, according to the Bureau of Labor Statistics. Year-over-year, the sector has shed 78,200 workers, a decrease of 4.0%. Employment in the sector has decreased for 12 straight months.
- One reason behind the decline in warehouse jobs may be Amazon's pullback, which reportedly began right around the time that employment started falling in the sector. Amazon is the largest employer, by far, in this sector. After expanding rapidly for nearly two years, the online retailer slowed hiring and put millions of square feet up for sublease last year.
- Automation may be another factor behind falling levels of warehouse employment. As a tight labor market has made warehouse positions harder to fill for e-commerce retailers and logistics providers, many have looked to automating roles and processes to improve efficiencies.

Economic Indicators

National Employment (October) 156.9M 0.1% MoM ▲ 1.9% YoY ▲	ISM Purchasing Manager's Index (October) 46.7 -2.3 MoM ▼ -3.3 YoY ▼
Inventories (August) \$2,548.8B 0.4% MoM ▲ 1.0% YoY ▲	Imports (September) \$263.0B 2.7% MoM ▲ -3.0% YoY ▼
Core Retail Sales (September) \$513.6B 0.8% MoM ▲ 4.3% YoY ▲	Exports (September) \$176.7B 3.1% MoM ▲ -2.2% YoY ▼

Sources: Bureau of Labor Statistics; Institute for Supply Management, U.S. Census Bureau; Bureau of Economic Analysis; Moody's Analytics

Warehousing and Storage Employment



Sources: U.S. Census Bureau (BOC), Yardi Matrix

Transactions: Phoenix Slows but Remains Active

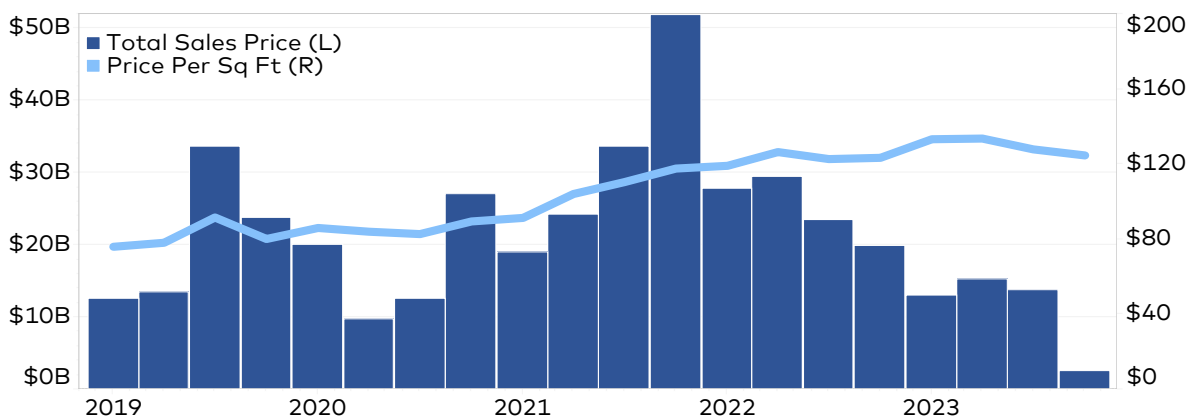
- Industrial sales totaled \$44.4 billion through the end of October, according to Yardi Matrix data.
- Even as interest rate hikes have caused investors to pull back across all real estate asset classes, the average price of an industrial sale has increased slightly this year. Properties have traded at an average of \$131 per square foot in 2023, an increase of 6.8% over 2022.
- Due to reshoring of manufacturing, population growth and overflow demand from tight markets in Southern California, Phoenix has become one of the most sought-after industrial markets in recent years. Yet in 2023, investment activity in Phoenix has finally cooled off. Following more than \$10 billion in sales across 2021 and 2022 combined, only \$1.9 billion of sales have occurred in 2023. The price per square foot has fallen 19% this year, to \$158, as well. Despite this slowdown, Prologis has remained an active investor in the market this year. The firm has purchased 2.8 million square feet of Phoenix properties in 2023, with most of the buying focused on the western side of the market. Last month, it acquired Airpark Logistics Center, a 2.7 million-square-foot campus across 170 acres in Goodyear.

Sales Activity

Market	YTD Sales Price PSF	YTD Sales (Mil, as of 10/31)
National	\$131	\$44,403
Inland Empire	\$250	\$3,733
Los Angeles	\$314	\$3,558
Dallas	\$126	\$2,397
Bay Area	\$340	\$2,278
New Jersey	\$216	\$2,248
Houston	\$129	\$2,065
Phoenix	\$158	\$1,942
Chicago	\$87	\$1,634
Atlanta	\$107	\$1,151
Twin Cities	\$97	\$852
Orange County	\$304	\$802
Charlotte	\$96	\$731
Philadelphia	\$113	\$669
Indianapolis	\$104	\$668
Tampa	\$119	\$649
Cincinnati	\$99	\$592
Boston	\$135	\$583
Baltimore	\$122	\$535
Bridgeport	\$91	\$500
Columbus	\$80	\$492
Seattle	\$199	\$445
Detroit	\$74	\$437
Denver	\$131	\$333
Nashville	\$119	\$272
Memphis	\$72	\$255

Source: Yardi Matrix. Data as of October 2023

Quarterly Transactions



Source: Yardi Matrix. Data as of October 2023

Definitions

Yardi Matrix collects listing rate and occupancy data using proprietary methods.

- **Average Rents**—Provided by Yardi Market Insight, a cutting-edge service that uses anonymized and aggregated data from other Yardi platforms to provide the most accurate rental and expense information available.
- **Vacancy**—The total square feet vacant in a market, including subleases, divided by the total square feet of office space in that market. Owner-occupied buildings are not included in vacancy calculations. Also provided by Yardi Market Insight.

Stage of the supply pipeline:

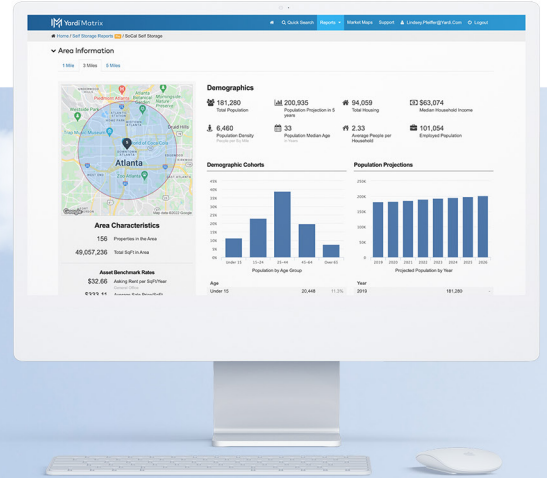
- **Planned**—Buildings that are currently in the process of acquiring zoning approval and permits but have not yet begun construction.
- **Under Construction**—Buildings for which construction and excavation has begun.

Sales volume and price-per-square-foot calculations for portfolio transactions or those with unpublished dollar values are estimated using sales comps based on similar sales in the market and submarket, use type, location and asset ratings, sale date and property size.



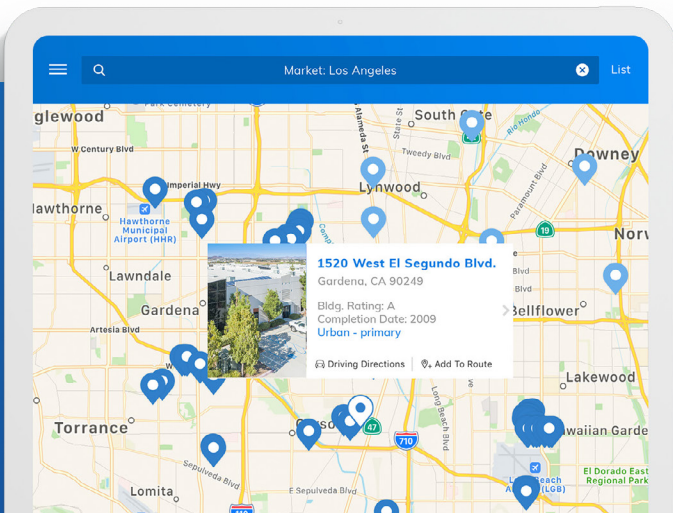
Yardi Matrix

Power your business with the industry's leading data provider



INDUSTRIAL KEY FEATURES

- Active in 107 markets across the U.S., covering over 16 billion square feet
- Find acquisition prospects based on in-place loans, maturity dates, lenders and originators
- Pierce the LLC with true ownership and contact info at the asset and portfolio level
- Gain new supply pipeline information at the asset, competitive set and market level
- Anonymized transacted rents and expense comps



Yardi Matrix Industrial delivers comprehensive property-level data, allowing you to make informed business decisions faster than ever.



(800) 866-1144

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Contact us



Contacts

Peter Kolaczynski

Manager, Commercial
Peter.Kolaczynski@Yardi.com
(800) 866-1124 x2410

Rob McCartney

Sales Manager, Matrix
Rob.McCartney@Yardi.com
(800) 866-1124 x2412

Doug Ressler

Media Contact
Doug.Ressler@Yardi.com
(800) 866-1124 x2419

Author

Justin Dean

Senior Research Analyst

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