Yardi Matrix

National Industrial Report

March 2024

AI Boosts Data Center Development

- Artificial intelligence has grown rapidly over the past year, requiring vast amounts of data and processing power, in turn generating increased demand for data centers. However, the resource-intensive demands of the technology are creating significant headwinds for development and shifting some construction into secondary and tertiary markets.

- In the 120 markets covered by Yardi Matrix, 27.4 million square feet of data center space are under construction and an additional 33.5 million square feet are in the planning stages. At a time when overall industrial starts are slowing, data center starts are on the rise. Data center starts increased in 2023, growing to 14.2 million square feet after averaging 10 million square feet during the previous three years. Between 2020 and 2022, data centers comprised 2.0% of all industrial starts, but in 2023 the share grew to 4.3%. Meta has fully embraced AI and is the most active owner of data centers under construction in Yardi Matrix markets, with 7.4 million square feet currently being built. Meta's largest project underway is the 2.0 million-square-foot Eagle Mountain Expansion in Utah.

- Northern Virginia, which has the highest concentration of data centers in the country, also has the most new development underway. The market has twice as much completed space as Dallas, the second-largest market, and the existing infrastructure provides an advantage over other locations. However, there are growing concerns about Northern Virginia's capacity to add more data centers due to the massive amount of power required by the facilities. This is especially true during an AI-fueled boom because AI model training requires power-hungry GPUs, using an estimated two to five times more power than a regular cloud server. Data center operators are now looking westward or to secondary markets such as Atlanta, which has 3 million square feet of data centers under construction (34% of stock), to find the power and land they require.

- In the Western U.S., land and power are cheaper, but water availability is a major headwind. Not only is water used in generating the massive amount of electricity to power data centers but it is also used directly in cooling the centers, which create a significant amount of heat. As of now, the amount of water used by data centers is relatively small when compared to other uses, but tech giants are engaged in an AI arms race and expanding rapidly. Water usage has become a major concern of residents and policy makers alike in places including Phoenix—which has 4.3 million square feet under construction and another 6.3 million in planning—Salt Lake City and Eastern Oregon.

Rents and Occupancy: Inland Empire Continues to Lead Rent Growth

- National in-place rents for industrial space averaged $7.68 per square foot in February, a decrease of four cents from January but up 7.5% year-over-year.

- In-place rent growth was highest in the Inland Empire, increasing 12.7% year-over-year. The market has been at the top of the rent growth metric since Yardi Matrix began reporting rents at the beginning of 2021, with in-place rents there increasing more than 60% during that time. The Inland Empire market finally appears to be cooling, however, with vacancy rates at 6.0% in February of this year after sitting below 3%—and for a while below 2%—during much of the previous three years. To meet booming demand, developers rushed to bring new space to the market, delivering 100 million square feet (16.2% of stock) since the start of 2020.

- Three other coastal markets exceeded 10% year-over-year growth in February: Miami (12.0%), Orange County (11.4%) and Los Angeles (11.4%).

- The national vacancy rate was 5.0% in February, up 20 basis points from the previous month. Record levels of new supply coming online simultaneous with demand cooling have sent vacancy upwards and provided some much needed breathing room to the most in-demand markets.

- The average rate for new leases signed in the last 12 months was $10.31 per square foot, $2.63 more than the average for all leases. The highest spread between the rates for new and existing leases were on the coasts.

Average Rent by Metro

Market	Feb-24 Average Rent	12-Month Change	Avg Rate Signed in Last 12 Months	Vacancy Rate
National	$7.68	7.5%	$10.31	5.0%
Inland Empire	$9.78	12.7%	$15.01	6.0%
Miami	$11.18	12.0%	$16.32	4.6%
Orange County	$15.29	11.4%	$19.64	4.5%
Los Angeles	$14.14	11.4%	$19.37	4.8%
New Jersey	$10.38	9.1%	$14.00	4.7%
Seattle	$10.94	8.6%	$13.79	6.1%
Phoenix	$8.73	8.4%	$11.03	3.2%
Boston	$10.35	8.4%	$12.49	8.6%
Nashville	$5.83	7.8%	$9.46	3.5%
Portland	$9.48	7.2%	$11.11	4.1%
Dallas–Fort Worth	$5.88	7.1%	$8.17	4.7%
Atlanta	$5.60	7.1%	$8.49	4.5%
Bridgeport	$8.98	6.9%	$12.04	3.7%
Columbus	$4.64	6.7%	$7.41	2.7%
Central Valley	$6.15	6.4%	$8.94	4.8%
Baltimore	$7.74	6.3%	$10.62	6.4%
Bay Area	$7.74	6.3%	$18.27	4.6%
Philadelphia	$7.49	5.8%	$10.15	5.4%
St. Louis	$6.06	5.8%	$7.18	6.9%
Twin Cities	$6.77	5.5%	$7.84	5.6%
Cincinnati	$4.76	5.1%	$6.15	6.3%
Memphis	$3.85	4.9%	$4.28	5.7%
Charlotte	$6.57	4.8%	$8.02	3.1%
Indianapolis	$4.60	4.8%	$6.25	3.1%
Kansas City	$4.89	4.7%	$5.60	2.5%
Denver	$8.22	4.6%	$9.77	7.3%
Tampa	$7.37	4.5%	$9.99	6.4%
Chicago	$6.00	4.3%	$7.34	5.2%
Houston	$6.56	4.3%	$7.65	5.3%
Detroit	$6.79	2.6%	$6.72	5.4%

Source: Yardi Matrix. Data as of February 2024. Rent data provided by Yardi Market Insight. National rent and occupancy data is a weighted average of the top 30 markets.

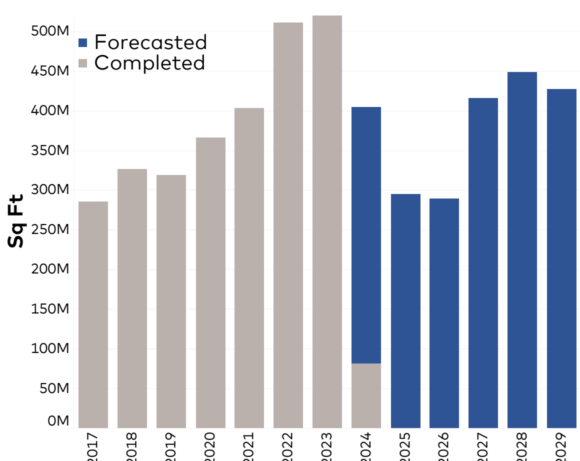
Supply:
Phoenix Pipeline Large; New Starts Slow Down

- Industrial supply under construction currently totals 419.8 million square feet, representing 2.2% of stock, according to Yardi Matrix.

- Increased interest rates, tightened standards for construction loans, normalizing demand for industrial space and economic uncertainty have combined to cool the industrial pipeline, which reached record levels in 2021 and 2022. New construction starts fell more than 40% between 2022 and 2023, with 341.9 million square feet breaking ground last year. The deceleration of the pipeline has continued in the early stages of 2024, with Yardi Matrix logging only 20.0 million square feet of starts during the first two months of this year. While there is a lag in collecting all starts data, this is a significant slowdown from previous quarters.

- Phoenix continues to be the most active market for industrial construction—42.7 million square feet (11.1% of stock) are currently underway there—although as in the rest of the country its pipeline has shrunk in recent quarters. Last April, the Phoenix pipeline reached 57.6 million square feet under construction, its largest size ever recorded by Yardi Matrix. In the months since, Phoenix has logged 29.1 million square feet of completions, with just 14.1 million started.

National New Supply Forecast



Source: Yardi Matrix. Data as of February 2024

Supply Pipeline (by metro)

Market	Under Construction	Under Construction % Stock	UC Plus Planned % Stock
National	419,827,076	2.2%	5.4%
Phoenix	42,659,895	11.1%	28.2%
Charlotte	13,013,247	4.1%	8.4%
Kansas City	11,250,932	4.1%	16.5%
Memphis	10,018,000	3.4%	3.9%
Dallas	27,234,452	2.9%	8.2%
Denver	7,277,716	2.8%	4.6%
Central Valley	7,681,565	2.2%	2.9%
Tampa	4,994,324	1.9%	6.1%
Columbus	5,542,163	1.8%	4.6%
Bay Area	5,469,415	1.8%	6.1%
Seattle	4,952,015	1.7%	4.5%
Inland Empire	9,710,744	1.5%	8.4%
Nashville	3,230,347	1.5%	3.6%
Philadelphia	6,147,172	1.4%	5.3%
Bridgeport	2,944,300	1.4%	2.4%
Houston	8,232,736	1.3%	3.9%
Detroit	7,839,039	1.3%	2.4%
New Jersey	7,085,356	1.2%	3.4%
Boston	2,961,351	1.2%	2.5%
Chicago	11,444,526	1.1%	2.6%
Indianapolis	4,155,777	1.1%	3.8%
Atlanta	5,716,993	1.0%	3.0%
Portland	1,546,966	0.8%	2.0%
Cincinnati	1,964,197	0.7%	1.2%
Los Angeles	4,302,431	0.6%	2.6%
Cleveland	2,400,000	0.6%	0.9%
Baltimore	787,875	0.4%	1.9%
Orange County	724,872	0.4%	0.9%
Twin Cities	1,093,229	0.3%	1.2%

Source: Yardi Matrix. Data as of February 2024

Economic Indicators:
E-commerce Sales Growth Cools

- Online sales growth cooled in the fourth quarter of 2023, according to the U.S. Census Bureau. On a seasonally adjusted basis, e-commerce sales totaled $285.2 billion in the fourth quarter of 2023, up 0.8% from the previous quarter and 7.5% year-over-year. This was the lowest quarterly increase of the year and only the third quarter since 2010 to grow less than 1% (the others were the fourth quarter of 2022 and the third quarter of 2021). Despite the fourth-quarter slowdown, e-commerce sales totaled $1.1 trillion in 2023, up 7.4% from 2022.

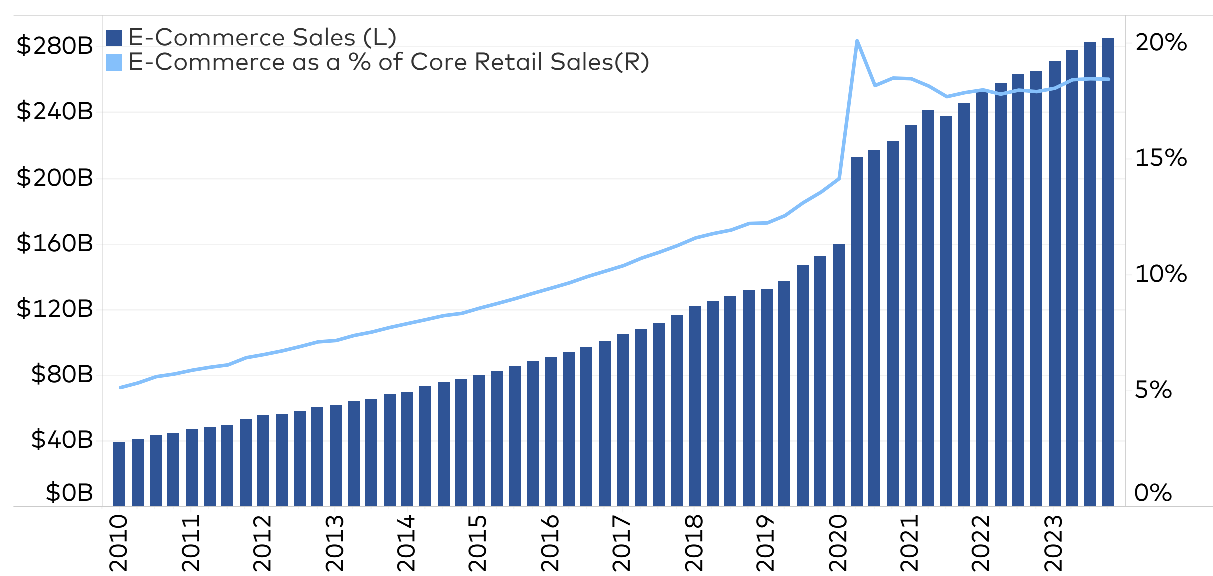
- While the total e-commerce sales volume continues to grow, its share of core retail sales was unchanged from the third quarter at 18.5%, which itself was up only 10 basis points from the second quarter. Despite its share of retail sales plateauing in 2023, we anticipate e-commerce will drive high levels of industrial demand in the long run. Retail remains in a state of rebalancing following the shock of the pandemic, and traditional retailers have invested significantly in online sales frameworks.

Economic Indicators

National Employment (February) 157.8M 0.2% MoM ▲ 1.8% YoY ▲	**ISM Purchasing Manager's Index** (February) 47.8 -1.3 MoM ▼ 0.1 YoY ▲
Inventories (December) $2,554.8B 0.3% MoM ▲ 0.4% YoY ▲	**Imports** (January) $263.4B 1.2% MoM ▲ -1.7% YoY ▼
Core Retail Sales (January) $512.3B -0.8% MoM ▼ 1.5% YoY ▲	**Exports** (January) $171.8B 0.1% MoM ▲ -3.4% YoY ▼

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

Quarterly E-Commerce Sales



Sources: U.S. Census Bureau, Yardi Matrix

Transactions:
Los Angeles Leads in Early-Year Sales Volume

- Industrial sales totaled $5.7 billion in the first two months of 2024, according to Yardi Matrix data, with properties trading at an average of $132 per square foot.

- Even as the number of sales has fallen in recent quarters, the price that properties trade at has remained sticky. The average sale price of an industrial property so far this quarter is up 9.6% over the last quarter and 2.0% year-over-year. Increased interest rates, tightened capital markets and normalizing demand have not created discounts in the market for industrial properties.

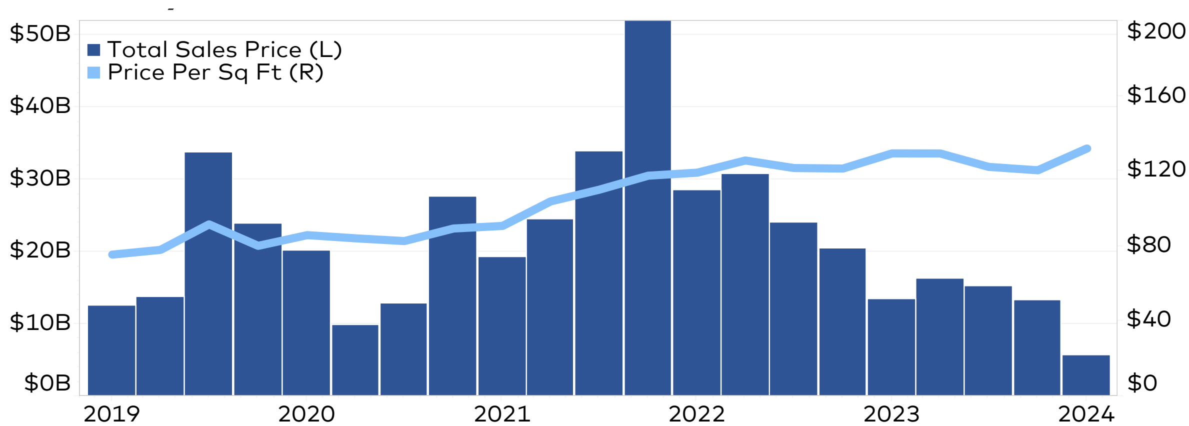
- The highest sales volume during the first two months of the year was in Los Angeles, which registered $435 million in transactions. Nearly half of that volume is due to CenterPoint spending $196.5 million acquiring four properties in the South Los Angeles submarket. The submarket is supply constrained and offers access to the ports as well as transportation networks. Investor appetite remains strong for Los Angeles properties, but price gains have plateaued following a period of rapid gain. Between 2019 and 2021, the average sale price in Los Angeles increased 44.7%, from $190 to $294 per foot. Average sale price has increased only 8.9% in the years since, sitting at $320 per foot in 2024.

Sales Activity

Market	YTD Sales Price PSF	YTD Sales (Mil, as of 2/29)
National	$132	$5,703
Los Angeles	$320	$435
Chicago	$97	$373
Bay Area	$274	$321
Dallas	$165	$318
Phoenix	$168	$298
Denver	$123	$240
Houston	$124	$220
Seattle	$256	$176
New Jersey	$249	$171
Atlanta	$118	$168
Inland Empire	$170	$143
Columbus	$79	$123
Boston	$234	$107
Twin Cities	$123	$79
Charlotte	$69	$77
Central Valley	$111	$72
Cincinnati	$71	$70
Indianapolis	$60	$62
Cleveland	$43	$45
Philadelphia	$91	$42
Memphis	$46	$41
Tampa	$114	$32
Nashville	$197	$32
Portland	$174	$25
Baltimore	$28	$19

Source: Yardi Matrix. Data as of February 2024

Quarterly Transactions



Source: Yardi Matrix. Data as of February 2024

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.

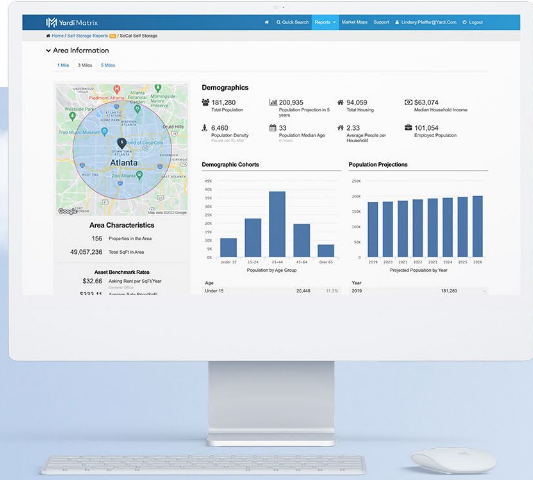
Stage of the supply pipeline:

- 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.

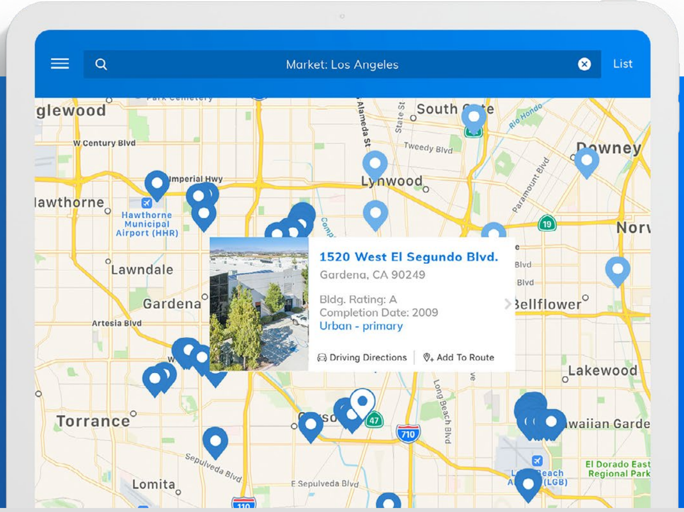
Yardi Matrix

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.

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