Yardi Matrix

National Industrial Report

July 2022

Land Scarcity Leads to New Approaches

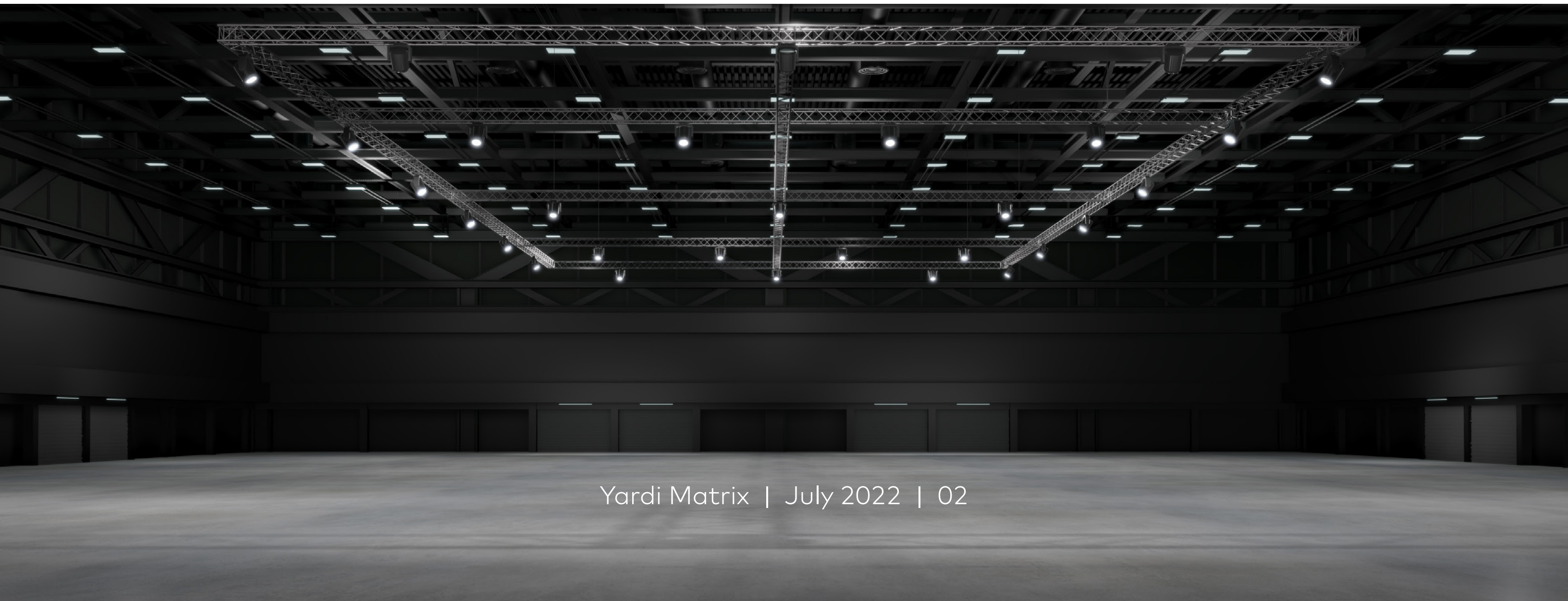
- Despite levels of inflation not seen in 40 years and with many weary of a possible recession around the corner, demand for industrial space remains as high as ever. In June, the average in-place rents grew 4.9% year-over-year, the vacancy rate fell to 4.6% and the average cost of a new lease signed in the last 12 months was 88 cents higher per foot than the overall average. Supply of new industrial space cannot maintain pace with demand, a problem more pronounced in areas where geography limits the amount of land available for development. Port markets, and Southern California in particular, are most attuned to this issue.

- Consumer demand for quick delivery of online purchases is intensifying the need for well-located last-mile distribution facilities. In the supply chain, research from Prologis suggests that transportation accounts for roughly half of all costs, underscoring the need for well-located facilities, especially when considering the recent run-up in diesel prices. Offshoring of manufacturing in recent decades led to industrial areas in many major cities being rezoned as residential and commercial districts. Land scarcity is leading to new modes of operation from both occupiers and developers.

- One way developers are addressing this issue is multistory industrial. While common in Asia, multistory industrial buildings are rare in the United States. The main constraint is cost, with estimates pegging a multistory building as 40 percent more expensive than a single-story property with an equivalent amount of space. Nevertheless, large multistory buildings are being developed, including many of the multimillion-square-foot Amazon facilities completed of late. A joint venture between Turnbridge Equities and Dune Real Estate Partners will develop Bronx Logistics Center, a 500,000-square-foot multistory building with 800,000 square feet of parking between a garage and the roof.

- Outdoor storage is being used to fill gaps in the supply chain when there is a lack of sufficient land for industrial properties, with outdoor lots increasingly used by e-commerce and logistics companies. Institutional investors are setting their eyes on the niche sector for a few reasons: Outdoor storage properties are in high demand, and supply is fixed because cities do not want to add zoning for this purpose. Such properties come with minimal capital expenditures and low management requirements.

- The lack of land is also leading some developers to consider conversions of old office and retail space into industrial. Conversions remain rare at the moment but may increase in the future as land in coastal markets further evaporates.



Rents and Occupancy:
Detroit Benefits From Cross-Border Shipping

- National in-place rents for industrial space averaged $6.57 per foot in June, up four cents from May and 4.9% over the last 12 months.

- Rents grew fastest in coastal markets, with Southern California again leading the pack. Average in-place rents grew 7.4% year-over-year in the Inland Empire, 6.8% in Los Angeles and 6.5% in Orange County. Coastal ports aren't the only place with growing rents, however. Detroit is seeing increased activity thanks to greater cross-border shipping between the U.S. and Canada, and the nearby Port Huron is one of the nation's busiest rail and truck entry points. With a vacancy rate of 7.2% and a new lease only costing 23 cents more than the market average, Detroit will not be mistaken for the Inland Empire. However, with supply-chain issues leading many firms to consider reshoring and nearshoring manufacturing, cross-border trade activity in North America could lead to increased demand for industrial space in rail and truck port markets such as Detroit, San Diego and Southern Texas.

- New leases cost 88 cents more per foot than the average lease, with tenants signing in the last 12 months paying an average of $7.65 per square foot.

- The spread between the average lease rate and a new lease is largest in Southern California, where minuscule vacancy rates and record levels of traffic in the ports of Los Angeles and Long Beach combined with a limited supply of land for new development has stretched industrial markets to their limits. In Los Angeles, a new lease costs $4.37 more per foot, in Orange County $3.98 more and in the Inland Empire $3.77.

- The national vacancy rate in June was 4.6%, falling 10 basis points from the previous month. The lowest vacancy rates were in the Inland Empire (0.6%), Columbus (1.4%), Los Angeles (1.9%) and Nashville (2.1%).

Average Rent by Metro

Market	Jun-22 Average Rent	12-Month Change	Avg Rate Signed in Last 12 Months	Vacancy Rate
National	$6.57	4.9%	$7.65	4.6%
Inland Empire	$6.86	7.4%	$10.63	0.6%
Los Angeles	$10.63	6.8%	$15.00	1.9%
Orange County	$12.04	6.5%	$16.02	3.5%
Detroit	$5.78	6.4%	$6.01	7.2%
Phoenix	$7.28	6.2%	$7.89	4.0%
Boston	$8.46	6.0%	$9.29	8.2%
Bay Area	$11.40	5.7%	$11.40	5.9%
Central Valley	$5.43	5.5%	$6.98	3.3%
Dallas–Fort Worth	$4.89	5.4%	$5.69	4.1%
New Jersey	$8.35	5.4%	$10.58	2.8%
Portland	$8.25	4.8%	$8.72	5.5%
Baltimore	$6.81	4.8%	$8.25	5.0%
Philadelphia	$6.41	4.8%	$7.05	5.8%
Tampa	$6.49	4.6%	$7.50	6.9%
Atlanta	$4.73	4.5%	$5.47	3.1%
Miami	$9.05	4.3%	$10.42	3.1%
Nashville	$5.35	4.2%	$5.73	2.1%
Seattle	$9.08	4.1%	$9.83	7.9%
Twin Cities	$6.01	4.1%	$6.94	7.3%
Cincinnati	$4.14	3.9%	$4.45	7.1%
Denver	$7.83	3.8%	$7.68	7.4%
St. Louis	$4.13	3.2%	$3.97	4.7%
Memphis	$3.49	3.2%	$3.45	5.2%
Chicago	$5.38	2.8%	$5.74	4.9%
Charlotte	$6.32	2.6%	$6.40	5.6%
Kansas City	$4.39	2.5%	$3.93	4.0%
Indianapolis	$4.06	2.5%	$4.38	2.4%
Columbus	$4.02	2.0%	$4.01	1.4%
Houston	$5.94	1.2%	$5.53	8.8%

Source: Yardi Matrix. Data as of June 2022. Rent data provided by Yardi Market Insight. National rent and occupancy data is a weighted average of the top 30 markets.

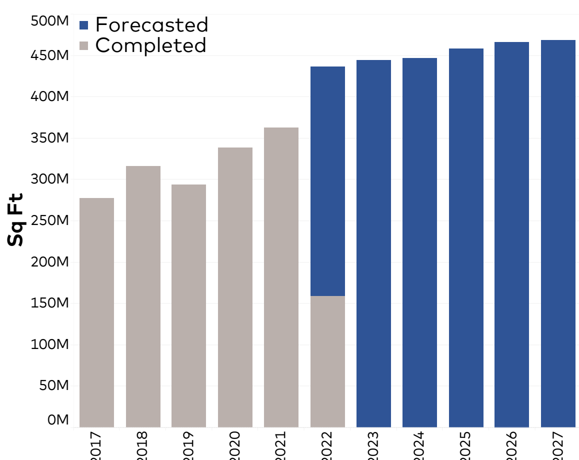
Supply:
Indianapolis Among Nation's Largest Pipelines

- Nationally, 667.5 million square feet of new industrial stock are under construction, according to Yardi Matrix. An additional 684.6 million square feet are in the planning stages.

- The first half of the year saw 159.6 million square feet of deliveries logged by Yardi Matrix. Dallas has by far delivered the most new stock in 2022, with 15.9 million square feet completed, more than the second (Indianapolis, with 7.9 million square feet) and third (Phoenix, 7.7 million) most active markets combined.

- Although e-commerce growth has cooled in recent quarters, fulfillment and logistics centers still fuel much of the new supply being brought to market. Indianapolis—a logistics hub due to its central location, with access to interstate highways and the second-largest FedEx hub in the world—has become a hotbed for new development. Indianapolis has the fifth-largest pipeline in the nation by square footage and the second largest by percentage of existing stock. The largest project underway is a 2.2 million-square-foot Walmart Distribution Center that began construction in 2020 and is set to deliver later this year. The vast majority of projects are logistics parks, both new and expansions of existing complexes.

National New Supply Forecast



Source: Yardi Matrix. Data as of June 2022

Supply Pipeline (by metro)

Market	Under Construction	Under Construction % Stock	UC Plus Planned % Stock
National	667,496,801	3.8%	7.8%
Phoenix	43,751,911	15.2%	37.7%
Kansas City	10,469,959	4.1%	19.3%
Philadelphia	11,834,824	2.9%	12.7%
Charlotte	12,038,341	4.2%	12.5%
Indianapolis	24,145,512	7.6%	12.3%
Inland Empire	35,797,313	6.0%	11.1%
Dallas	56,944,661	6.8%	10.8%
Columbus	17,838,031	6.5%	10.0%
Denver	13,108,307	5.4%	7.4%
Nashville	10,545,581	5.4%	6.7%
Seattle	8,755,312	3.2%	6.5%
Chicago	25,385,034	2.6%	6.4%
Houston	19,505,349	3.5%	6.2%
Memphis	10,514,940	3.8%	5.9%
Baltimore	6,116,575	3.0%	5.3%
Central Valley	8,572,938	2.6%	4.7%
Tampa	5,172,706	2.4%	4.7%
New Jersey	13,496,526	2.5%	4.5%
Atlanta	12,603,232	2.4%	4.3%
Bay Area	5,909,022	2.1%	4.2%
Boston	6,964,167	3.0%	3.8%
Detroit	9,285,653	1.7%	3.5%
Twin Cities	4,491,646	1.4%	3.3%
Cincinnati	6,328,301	2.4%	3.1%
Portland	1,857,374	1.0%	3.1%
Los Angeles	2,965,474	0.4%	2.2%
Bridgeport	2,276,643	1.1%	1.9%
Orange County	2,753,240	1.5%	1.9%
Cleveland	2,318,646	0.6%	1.4%

Source: Yardi Matrix. Data as of June 2022

Economic Indicators: Inflation Continues to Hammer Producers

- The Producer Price Index (PPI), which measures inflation on the supply side of the economy, grew at a monthly rate of 1.1%, and at 11.3% over the past year as of June, according to the Bureau of Labor Statistics. The index has grown at a yearly rate above 10% for seven straight months. Much of the increase is due to the expansion in energy prices. Core PPI, which removes volatile energy and food prices, rose 0.3% on the month and 6.4% year-over-year in June, the lowest mark for the core figure since October of last year.

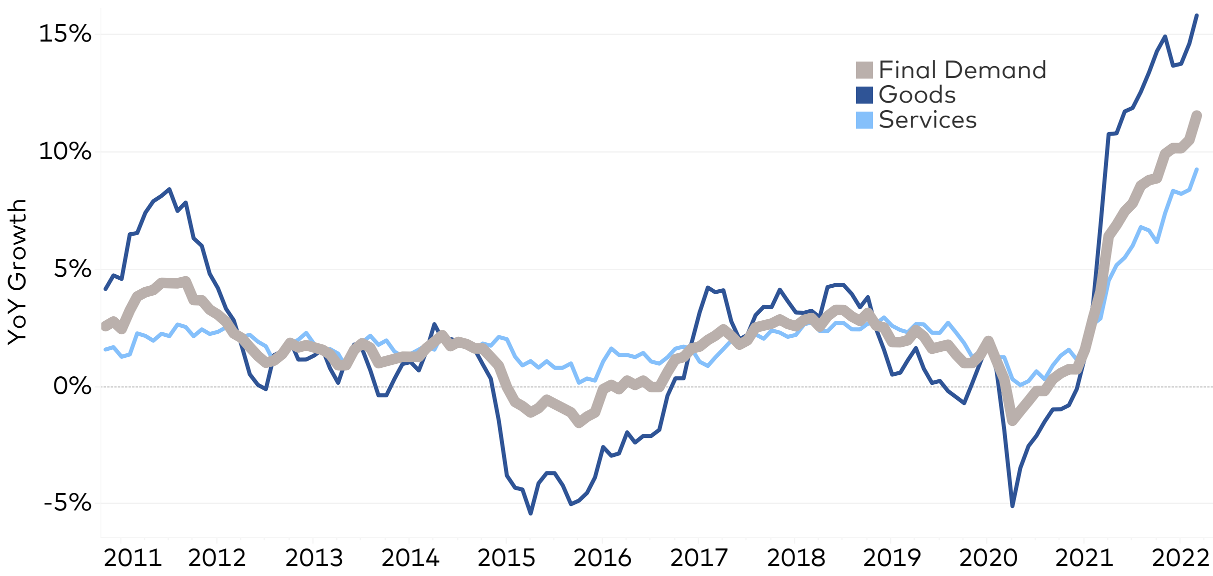
- Supply conditions have improved as of late, with backlogs at ports easing in the last few months and both energy and commodity prices falling in recent weeks, but inflation still remains well above target. High readings in the PPI and CPI will lead the Federal Reserve to raise interest rates again this month, perhaps as high as 100 basis points. Demand for industrial space is currently high, but increased rates may lead to new supply and transaction markets cooling as the cost of capital increases.

Economic Indicators

National Employment (June)	ISM Purchasing Manager's Index (June)
152.0M	53.0
0.2% MoM ▲	-3.1 MoM ▼
4.3% YoY ▲	-7.9 YoY ▼
Inventories (April)	**Imports** (May)
$2,348.3B	$284.0B
1.3% MoM ▲	0.1% MoM ▲
16.8% YoY ▲	21.7% YoY ▲
Core Retail Sales (May)	**Exports** (May)
$479.6B	$179.0B
-0.1% MoM ▼	1.7% MoM ▲
7.6% YoY ▲	23.2% YoY ▲

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

Producer Price Index



Sources: U.S. Census Bureau, Yardi Matrix

Transactions:
Prices Skyrocketing in Inland Empire

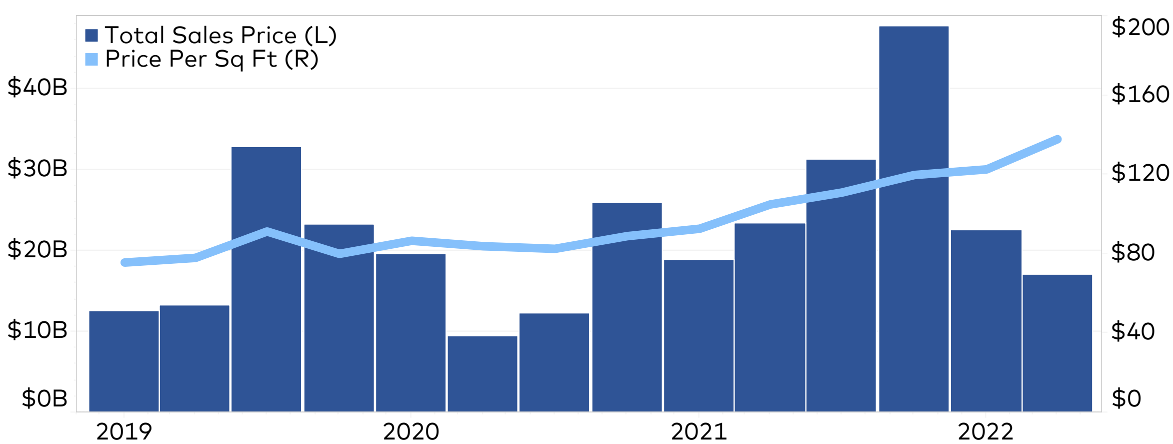
- Nationally, there were $39.6 billion in industrial transactions during the first half of the year, according to Yardi Matrix.
- The average price per square foot of an industrial building in the second quarter was $138, up 12.4% over the first quarter and 31.3% year-over-year. The second quarter was the seventh straight quarter with increasing average sale prices. The average sale price of an industrial property increased 67% during that time.
- With the lowest vacancy rates in the country and the highest rent growth, investors are hungry for assets in the Inland Empire. In all, $1.7 billion of industrial sales have been completed in the market so far this year, and the average sale price of industrial properties has more than doubled in the last two years, from $138 per foot in 2020 to $299 in 2022. The most popular submarket in 2022 is Fontana, where 11 industrial properties have sold for more than $500 million so far this year, at an average of $371 per square foot, $72 higher than the overall average sale price in the market. Alder Commerce Center, a 175,000-square-foot warehouse completed last year in the submarket, recently sold for $83.4 million, an average of $477 per foot.

Sales Activity

Market	YTD Sales Price PSF	YTD Sales (Mil, as of 06/30)
National	$129	$39,581
Houston	$159	$2,821
Chicago	$90	$2,281
Los Angeles	$282	$2,268
Phoenix	$248	$2,067
New Jersey	$184	$1,784
Dallas	$96	$1,730
Inland Empire	$299	$1,656
Philadelphia	$109	$1,277
Bay Area	$213	$1,209
Denver	$172	$1,095
Tampa	$132	$813
Boston	$206	$808
Atlanta	$110	$757
Columbus	$73	$621
Nashville	$161	$592
Baltimore	$122	$592
Indianapolis	$81	$549
Seattle	$241	$543
Charlotte	$106	$538
Orange County	$350	$493
Twin Cities	$98	$463
Detroit	$59	$422
Kansas City	$60	$346
Portland	$169	$300
Bridgeport	$67	$254

Source: Yardi Matrix. Data as of June 2022

Quarterly Transactions



Source: Yardi Matrix. Data as of June 2022

Definitions

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

- Average Rents—Provided by Yardi Matrix Expert, 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.

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.

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

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