Yardi Matrix

National Industrial Report

December 2021

E-Commerce Growth Slows But Continues to Fuel Industrial Demand

- The pandemic has dominated every aspect of the economy over the last 21 months, upending many of the trends that had been prevalent in the previous decade. One of the biggest shifts is consumer demand moving from services to goods, with a greater share of goods now purchased online. The prominence of e-commerce—accounting for 16% of core retail sales in the third quarter—has been a main factor in industrial becoming commercial real estate's darling asset class. Although growth in e-commerce is starting to slow, it's still well above pre-pandemic levels.

- Amazon's share of e-commerce is estimated to range from 40% to 50%, and its footprint is felt in the industrial market, where it occupies an ever-increasing amount of space. Yardi Matrix data shows 12 properties larger than 3 million square feet delivering this year, all of them either leased or owned by Amazon. Massive distribution centers have been completed in a variety of markets, from major metros like Chicago and Houston to tertiary markets like Little Rock and Colorado Springs.

- Although it is the main player, Amazon is not the only company driving the e-commerce boom. Big-box retailers have long been trying to compete with the online behemoth for e-commerce sales, and the pandemic has increased the importance of doing so. Both Target's and Walmart's third quarter earnings noted solid but slowing growth of e-commerce sales, following the national trend, but also highlighted the importance of physical stores in the future of online sales. Instead of occupying massive distribution centers, these companies use their stores to fulfill orders. Target reported that while online purchases accounted for 17.6% of all sales in the third quarter, stores fulfilled 96.7% of orders. Omnichannel retail—providing customers with a seamless, consistent experience between online and brick-and-mortar—will become more prevalent in the future. Amazon is prepared for these coming changes after purchasing Whole Foods in part for the chain's site selection.

- E-commerce sales have grown steadily since the Census Bureau started tracking them in 2010. However, growth has started to slow and become more volatile since the third quarter of 2020. E-commerce's share of core retail sales peaked at 19.4% in the second quarter of 2020, but fell to 16% by the third quarter of 2021. Despite this loss of share, though, online sales are still well above pre-pandemic levels. We believe that some of the shift to e-commerce over the last two years was structural rather than temporary, and e-commerce will continue to fuel the industrial market.

Rents and Occupancy: Southern California Remains Hot

- National rents for industrial space averaged $6.37 per square foot in November, an increase of 3.8% over the last 12 months.
- Rent growth continues to be highest in the Inland Empire and Los Angeles, which both have seen 6.2% growth in rents over the last two months.
- Tenants are paying a premium when signing leases this year, with the average rate for a lease signed over the last 12 months at $7.02 per foot, 65 cents higher than the average of all leases. All three Southern California markets are in the top five for largest spread between average and new leases. Orange County has the largest spread between new and average lease cost at $2.58 per foot, followed by Los Angeles ($2.10), Nashville ($1.94), New Jersey ($1.86) and the Inland Empire ($1.82). In general, these spreads are largest in places with tight vacancy rates, a lack of available land for new development, or a combination.
- The national vacancy rate was 5.7% in November, down 20 basis points from the previous month.
- Vacancy rates are lowest in the Inland Empire (1.0%), Columbus (2.3%), Nashville (3.0%), Los Angeles (3.1%) and Orange County (3.4%).
- Three Southern California markets being among the top for all metrics provided by Yardi Market Insight illustrates exactly how in demand industrial space is within the region. Traffic at the ports of Los Angeles and Long Beach is hitting all-time highs this year, even as those ports are experiencing delays in offloading goods. With the pandemic shifting Americans' consumption preferences from services to goods, ports are receiving more containers than ever as firms scramble to adjust to new demand.

Average Rent by Metro

Market	Nov-21 Average Rent	12-Month Change	Avg Rate Signed in Last 12 Months	Vacancy Rate
National	$6.37	3.8%	$7.02	5.7%
Inland Empire	$6.49	6.2%	$8.31	1.0%
Los Angeles	$10.23	6.2%	$12.33	3.1%
Nashville	$5.00	5.6%	$6.94	3.0%
New Jersey	$7.98	5.4%	$9.84	4.0%
Bay Area	$10.93	5.3%	$12.09	6.3%
Philadelphia	$6.15	5.0%	$6.75	6.4%
Central Valley	$5.19	4.5%	$6.75	4.0%
Atlanta	$4.52	4.5%	$3.58	5.0%
Portland	$8.03	4.3%	$7.78	6.1%
Dallas	$4.76	3.9%	$5.33	4.5%
Miami	$8.99	3.8%	$10.20	4.4%
Cincinnati	$4.13	3.7%	$4.35	10.0%
Seattle	$8.93	3.7%	$10.13	7.4%
Orange County	$11.49	3.6%	$14.07	3.4%
Tampa	$6.37	3.5%	$6.65	7.4%
Phoenix	$6.95	3.4%	$7.02	5.4%
Twin Cities	$5.91	3.1%	$6.05	7.9%
Memphis	$3.45	2.9%	$3.29	5.9%
Baltimore	$6.71	2.6%	$7.27	6.4%
St. Louis	$4.08	2.5%	$3.77	7.8%
Detroit	$5.59	2.1%	$5.22	7.5%
Denver	$7.71	2.1%	$7.32	10.2%
Charlotte	$6.18	1.8%	$6.34	7.7%
Indianapolis	$4.05	1.7%	$4.62	3.5%
Chicago	$5.37	1.7%	$5.95	6.2%
Houston	$5.88	1.5%	$5.52	11.6%
Columbus	$3.97	1.5%	$3.95	2.3%
Boston	$8.02	1.4%	$9.84	9.5%
Kansas City	$4.12	0.7%	$3.49	4.3%

Source: Yardi Matrix. Data as of November 2021. Rent data provided by Yardi Market Insight. National rent and occupancy data is a weighted average of the top 30 markets.

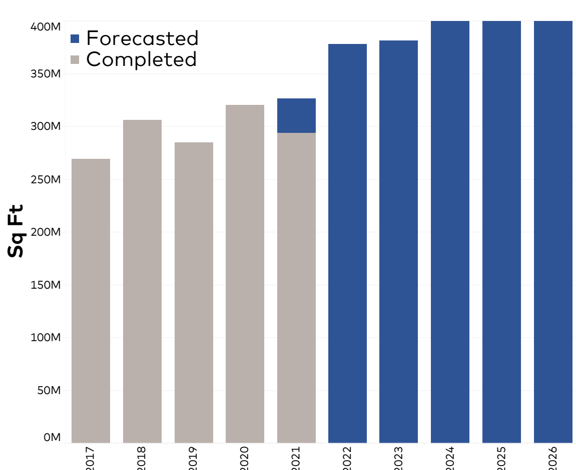
Supply:
Philadelphia Pipeline Flourishes

- Nationally, 293.9 million square feet of new industrial supply were delivered through the first 11 months of the year.

- There are 555.4 million square feet of new supply currently under construction and an additional 520.5 million square feet in the planning stages. While new industrial space is being built across the country, more than half of all stock under construction is in the top 20 markets of the 120 covered by Yardi Matrix.

- The Philadelphia market, which includes portions of Southern New Jersey and Northern Delaware, is seeing robust demand due to its proximity to the ports of New York and New Jersey and population centers throughout the tri-state region. In all, 11.9 million square feet have been delivered this year, mostly logistics and distribution facilities. LogistiCenter at I-95 Wilmington, a 3.8 million-square-foot facility fully leased to Amazon, delivered this summer. Southern New Jersey—with access to the Pennsylvania and New Jersey turnpikes—is particularly popular with developers. The three largest under-construction properties are logistics and distribution centers in the area, including 1 million square feet at Port Logistics Center at Logan, the first building of a planned 1.8 million square feet.

National New Supply Forecast



Source: Yardi Matrix. Data as of November 2021

Supply Pipeline (by metro)

Market	Under Construction	Under Construction % Stock	UC Plus Planned % Stock
National	555,377,431	3.4%	6.7%
Phoenix	29,702,924	10.8%	29.1%
Indianapolis	21,982,549	7.1%	13.0%
Charlotte	9,937,376	3.7%	10.9%
Dallas	37,654,472	4.6%	10.4%
Kansas City	9,798,715	3.9%	9.2%
Inland Empire	25,623,051	4.3%	9.1%
Philadelphia	13,518,051	3.4%	8.4%
Columbus	13,320,361	4.9%	7.1%
Seattle	10,892,678	4.0%	7.0%
Memphis	11,588,141	4.4%	6.6%
Denver	9,316,940	3.9%	6.6%
Houston	19,300,000	3.6%	6.4%
Nashville	7,708,725	4.0%	6.4%
Chicago	26,059,092	2.7%	5.8%
New Jersey	11,569,595	2.2%	4.9%
Atlanta	10,924,468	2.1%	4.5%
Central Valley	6,618,689	2.1%	4.4%
Tampa	5,792,257	2.8%	4.2%
Bay Area	4,356,287	1.6%	4.1%
Twin Cities	4,834,508	1.5%	4.0%
Boston	6,519,992	2.8%	3.8%
Baltimore	3,980,556	2.0%	3.7%
Portland	4,860,819	2.6%	3.6%
Detroit	9,772,776	1.8%	3.2%
Cincinnati	5,904,505	2.2%	2.9%
Los Angeles	6,632,698	1.0%	2.8%
Bridgeport	2,214,067	1.1%	2.4%
Orange County	1,851,051	1.0%	1.6%
Cleveland	3,491,120	0.9%	1.2%

Source: Yardi Matrix. Data as of November 2021

Economic Indicators:
E-Commerce Numbers Dip in Third Quarter

- Prior to the pandemic, the growth of e-commerce sales reported by the Census Bureau grew at a steady rate. Since the data was first reported in 2010, the quarterly growth rate was always between 2% and 6%, and the year-over-year growth sat between 11% and 20% up until the start of the pandemic. COVID-19 upended this trend in a dramatic way—in the second quarter of last year, e-commerce sales jumped 31.9% on the quarter and 43.8% year-over-year. Following that spike, e-commerce sales fell for the first time ever, and three of the five most recent quarters have seen declines.

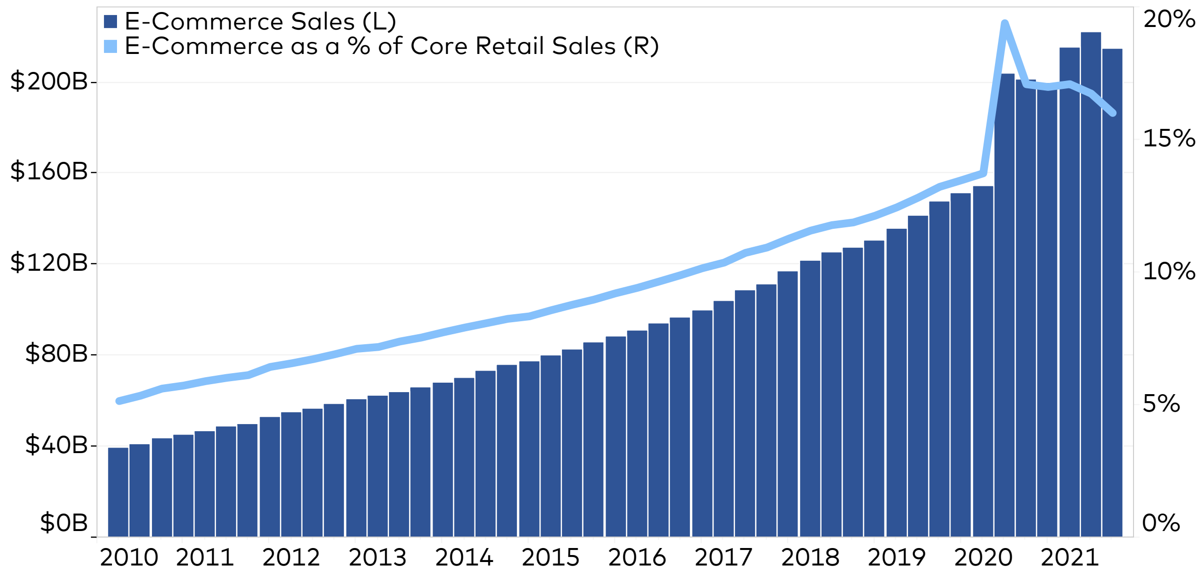
- E-commerce sales are still ahead of where they were on the pre-pandemic trend line from 2010 through the first quarter of 2020. During that time, e-commerce sales grew at an average rate of 3.5% per quarter. If sales had grown at this rate over the last six quarters, they would be at $190 billion in the third quarter of 2021, $25 billion less than the $215 billion reported by the Census Bureau.

Economic Indicators

National Employment	ISM Purchasing Manager's Index
(November)	(November)
148.6M	61.1
0.1% MoM ▲	0.3 MoM ▲
4.1% YoY ▲	3.4 YoY ▲
Inventories	**Imports**
(September)	(October)
$2,101.8B	$242.7B
0.7% MoM ▲	0.7% MoM ▲
7.5% YoY ▲	16.7% YoY ▲
Core Retail Sales	**Exports**
(October)	(October)
$457.6B	$158.7B
1.4% MoM ▲	11.1% MoM ▲
14.9% YoY ▲	26.2% 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:
Phoenix in High Demand Among Investors

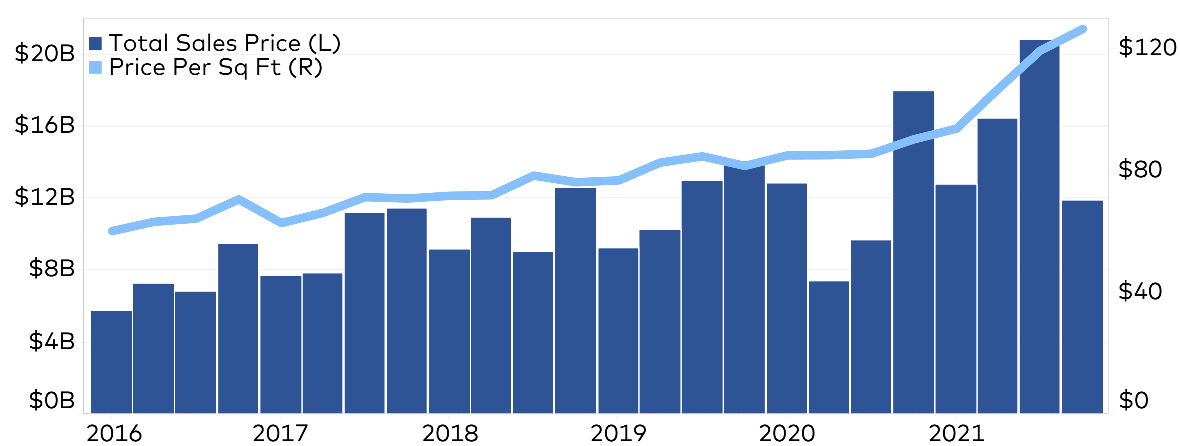
- Nationally, there were $61.6 billion of industrial transactions year-to-date through November, according to Yardi Matrix. This is an all-time high for sales volume, already surpassing the record of $47.8 billion set last year.
- The national average sales price of an industrial building has increased 27.4% this year, from $87 per square foot to $111.
- Phoenix may be the hottest industrial market in the country, with more sales volume than every market but Los Angeles and Chicago despite being the 15th largest market in the country by total inventory.
- The largest transaction in Phoenix this year was BentallGreenOak's $180 million acquisition of 303 Park Phase I, a 1.3 million-square-foot building leased to Walmart in Glendale. The second-largest transaction was Nike's $103.2 million sale of the Goodyear logistics center, which the shoemaker sold after scrapping plans to manufacture the sole that goes in the Nike Air line of shoes at the location. Despite the change of plans, Nike was able to profit handsomely off the hot industrial market in Phoenix. Nike purchased the 901,700-square-foot building for $69.8 million only two years ago.

Sales Activity

Market	YTD Sales Price PSF	YTD Sales (Mil, as of 11/30)
National	$111	$61,647
Los Angeles	$301	$6,007
Chicago	$80	$4,074
Phoenix	$152	$3,616
Inland Empire	$168	$3,597
Atlanta	$84	$2,492
New Jersey	$189	$2,418
Philadelphia	$90	$2,030
Bay Area	$229	$1,816
Boston	$139	$1,639
Tampa	$108	$1,468
Seattle	$203	$1,412
Denver	$168	$1,319
Orange County	$292	$1,270
Columbus	$62	$1,090
Baltimore	$109	$1,041
Twin Cities	$85	$936
Charlotte	$90	$794
Dallas	$88	$776
Central Valley	$95	$736
Houston	$84	$724
Nashville	$107	$644
Memphis	$48	$609
Indianapolis	$60	$527
Cincinnati	$62	$456
Cleveland	$42	$400
Bridgeport	$51	$317
Kansas City	$62	$315
Portland	$136	$283
Detroit	$53	$225

Source: Yardi Matrix. Data as of November 2021

Quarterly Transactions



Source: Yardi Matrix. Data as of November 2021

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.

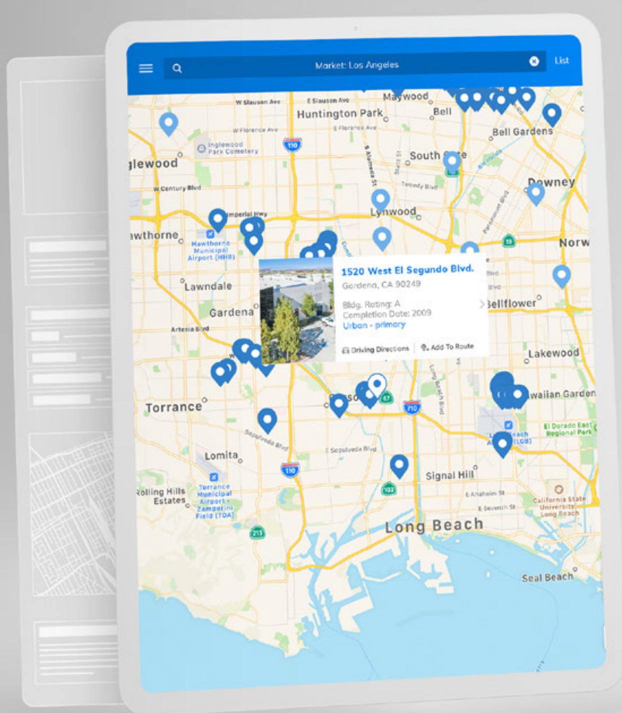
Stage of the supply pipeline:

- 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 do not always include portfolio transactions or those with unpublished dollar values.

Yardi® Matrix

Power your business with the industry's leading source for originating, pre-underwriting and managing assets for profitable loans and investments.



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

Key features

- Active in 60+ major markets across the U.S., covering over 12 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
- Gain new supply pipeline information at the asset, competitive set and market level
- Benchmark performance to similar assets
- Access trend reports on sales, lease and listing comps as well as portfolios of owners, managers, buyers and sellers

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