

Booming E-commerce Drives Heated Demand



OVERVIEW

- The overall vacancy rate continued to decline to a new historic low of 4.8% at the end of 2018.
- E-commerce sales increased 14.2% year-over-year, driving the greatest demand for new industrial product and product near dense urban clusters.
- Nearly 60 million square feet of industrial space was delivered in the U.S. in the final quarter of 2018, bringing total annual completions to more than 250 million square feet.
- Total sales volume amounted to \$92 billion in 2018, up 25% year-over-year.

The U.S. industrial real estate market continued to perform throughout the final quarter of 2018, ending another year of remarkable growth largely attributed to healthy business investments and consumers' growing appetite for online spending. Total employment increased by 2.8 million, or 1.9%, in the 12 months ending in December 2018. That was 70 basis points higher than the growth seen in the previous 12-month cycle. Roughly 304,000 jobs were added year-over-year in the trade, transportation and utilities sector, a 1.1% increase that was 65 basis points higher than growth in the year-earlier period.

Image by gehringj/iStockphoto.com; cover image by Dario Egidi/iStockphoto.com

Demand for industrial space is stronger than ever across the nation, as e-commerce and third-party logistics businesses keep expanding their operations. According to U.S. Census Bureau data, retail sales volume for the fourth quarter of 2018 totaled \$1.3 trillion—a 3.1% increase year-over-year—with e-commerce accounting for 9.9% of that. Similarly, on an annual basis, e-commerce sales accounted for 9.7% of total sales volume (\$513.6 billion). E-commerce sales increased 14.2% over 2017.

The expanding e-commerce sector continues to drive demand for modern distribution, warehouse and last-mile facilities located within or close to densely populated urban areas and in major U.S. ports, especially those situated in California and South Florida. The latter region has required increased shipping capacity to accommodate more goods coming in from Latin America and the Caribbean, according to a recent study by NKF.

The expanded Panama Canal—which reached completion less than three years ago, after a decade-long, \$5.3 billion effort—has been fueling demand for industrial space across all major U.S. seaports, which have become tight distribution markets with sky-rocketing rental rates.

Q4 2018 Industrial Pipeline in Core Markets

Market	Under Construction (SF)	Total Stock (SF)	UC as a % of Stock
Atlanta	4,331,966	334,501,790	1.3%
Dallas	16,711,845	480,852,651	3.5%
Los Angeles	3,817,339	367,258,165	1.0%

Source: Yardi Matrix research. Data as of February 2019

National Market Indicators for Q4 2018			
YTD Net Absorption (SF)	257,283,147		
QTD Net Absorption (SF)	68,606,647		
Under Construction (SF)	294,690,443		
Total Vacancy	4.8%		
Average Asking Rent (NNN) per SF	\$6.54		

New Deliveries

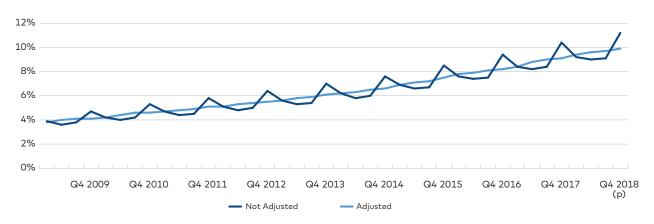
Nearly 60 million square feet of industrial space was delivered in the U.S. in the fourth quarter, bringing the total amount of completions to more than 250 million square feet for the entire year. Yardi Matrix data indicates that approximately 8 million square feet—or 13% of the new product that reached completion in the final quarter of 2018—was added in three major industrial markets: Atlanta, Dallas and Los Angeles.

Nearly 300 million square feet of space was under construction nationally in the final quarter of 2018—with roughly 190 million square feet of that comprising speculative projects—a 10% increase over the same quarter of 2017. This demonstrates the developer's growing confidence that the new product will be easily absorbed in the coming quarters, especially in strategic supply-chain markets.

That confidence is merited: Some 69 million square feet of space was absorbed in the fourth quarter of 2018—the 35th consecutive year of positive absorption—with most of that being speculative space that was leased up before completion in the primary industrial markets of Dallas, Atlanta, Chicago, New Jersey and the Inland Empire. This pushed the annual absorption to 257 million square feet, roughly 16% above the previous year's

Estimated Quarterly U.S. Retail E-Commerce Sales as a Percent of Total Quarterly Retail Sales

(1st Quarter 2009-4nd Quarter 2018)



Source: Retail Indicators Branch, U.S. Census Bureau. Released on March 13, 2019

total. With almost 20 million square feet absorbed in 2018, Atlanta had one of the highest annual net absorption rates among all major U.S. markets.

With absorption greater than deliveries, the overall industrial vacancy rate dropped to a new historic low of 4.8% at year's end, down 20 basis points from the previous year, reflecting companies' insatiable demand in a supply-constrained real estate sector. Los Angeles, with available land for development scarce and expensive, is the nation's hottest industrial property market, boasting the lowest vacancy rate (1.5% in the fourth quarter) and the highest rent rates (\$10.23 per square foot).

Fueled by accelerated demand for top-quality inventory and tightening vacancy rates, asking rents

continued to increase throughout 2018, reaching a national average of \$6.54 per square foot, approximately 5% higher than a year ago. Expect rent growth to slow slightly through the coming quarters as projects underway are completed.

Investment activity was healthy across all major markets throughout 2018, with total sales volume amounting to \$92 billion, up 25% year-over-year, according to Colliers International. Supported by the expanding e-commerce segment and consumers' growing appetite for online spending, the industrial sector will continue to be a hot commodity for investors in the coming quarters. Expect warehouse and distribution facilities situated in gateway cities near airports, seaports and rail lines to attract the greatest investment interest.

Except where otherwise attributed, data collected from publicly available sources of JLL, CBRE, NKF, Colliers International, Cushman & Wakefield and Transwestern. All data is aggregated and averaged and does not represent specific market or firm weightings.

ATLANTA

Economic Snapshot

Atlanta's booming economy further expanded into 2018, following several years of growth bolstered by strong population gains. The metro's affordable housing and relatively low cost of doing business continued to attract corporations and a young workforce. Total employment stood at 2.8 million in November, a gain of 60,800 jobs, or a 2.2% year-over-year increase, significantly above the national job growth rate of 1.7%. The metro added some 13,900 jobs in the trade, transportation and utilities super-sector—a 2.3% increase over the same 12-month period a year ago—with most gains coming from the transportation and warehousing sector, which added 6,700 jobs.

Development Pipeline

Demand for industrial space continues its accelerated growth, spurred by strengthening market fundamentals and the metro's location relatively close to the Port of Savannah—which handled 4.35 million 20-foot equivalent container units (TEUs), a 7.5% uptick over the previous year, according to the Georgia Ports Authority. With a total inventory of 334.5 million square feet of space, Atlanta remains one of the nation's most dynamic industrial markets. Nearly 17 million square feet of industrial space was under construction in the metro in the fourth quarter of 2018—equal to 5.0% of total stock—with most of the projects located in the South Atlanta submarket.

The largest industrial project under construction was PNK Group's Southern Gateway at Lambert Farms – Building B, which is scheduled for completion in the first quarter of 2019. Totaling 1.1 million square feet of warehouse space, the development is located on 317 acres at NEC King Mill Road and Macon Street in South Henry County. According to Yardi Matrix, the Class A speculative project has major street exposure to Manson Street, State Route 42 and US Route 23 and features cross docks, loading doors and a truck court, as well as 56-by-70-foot bay spacing.

Atlanta Market Indicators for Q4 2018			
YTD Net Absorption (SF)	19,934,362		
QTD Net Absorption (SF)	5,835,716		
Under Construction (SF)	16,730,724		
Total Vacancy	6.3%		
Average Asking Rent (NNN) per SF	\$4.70		

Leasing Activity

The last quarter of 2018 saw nearly 6 million square feet absorbed, bringing the metro's annual net absorption to 19.9 million square feet and pushing down Atlanta's average industrial vacancy rate to 6.3%. The average asking rate stabilized at \$4.70 per square foot.

Industrial distributor HD Supply inked one of the metro's largest leases in the fourth quarter of 2018. The company—a Home Depot spinoff—leased an entire 1 million-square-foot warehouse building situated on 71 acres at 2100 Anvil Block Road within the Gillem Logistics Center in the industrial-heavy submarket of South Atlanta. Built on the site of the former Fort Gillem Army Base, Robinson Weeks Partners' logistics center is within the federally approved Service



Area of Foreign-Trade Zone (FTZ) 26, which is associated with the freight terminal at Hartsfield-Jackson Atlanta International Airport.

Major Sale

In one of the top transactions closed in the metro in the last quarter of 2018, Colony Industrial acquired a nine-property, 890,920-square-foot industrial portfolio in Northeast Atlanta for a combined \$79 million from John Hancock Real Estate. According to Yardi Matrix, the portfolio transaction comprises the 500,750-square-foot Gwinnett Forest Business Center at 2150 Boggs Road and a 120,00-square-foot warehouse facility at 1645 Satellite Blvd. in Duluth, and 270,170 square feet of space at 2925 and 3255 Shawnee Industrial Way in Suwanee.

Image by Gabe Beaird/iStockphoto.com

DALLAS

Economic Snapshot

The Dallas-Fort Worth metro continues to thrive, fueled by exceptional job growth, increasing population and a favorable business environment, in line with North Texas' booming economy and population growth. Some 94,700 new jobs were created across the metro in the 12 months ending in November 2018, bringing total employment to 3.8 million jobs—a 2.6% increase year-over-year, well above the national job growth rate of 1.7%. The metro's largest supersector—trade, transportation and utilities—added 18,900 jobs as of November 2018, accounting for a 2.4% increase for the 12-month period, more than double the national gain of 1.1% in the same employment sector. The transportation, warehousing and utilities sector saw the most gains, with 9,300 jobs added in the 12 months ended in November 2018.

Development Pipeline

The metro's proximity to several distribution hubs and its central location in Texas-combined with the state's lack of income tax-continue to attract e-commerce businesses, despite the fact that Amazon did not end up choosing Dallas for its second headquarters. Elevated demand for logistics and warehouse space places the metro among the nation's top-performing markets for industrial real estate. The metro's existing industrial inventory of 481 million square feet at the end of 2018 is projected to increase by 4.5% over the coming quarters, as some 21.5 million square feet of space was under construction at the end of the fourth quarter. The bulk of developments is concentrated near DFW International Airport and in the Great Southwest Industrial District. However, research data by Newmark Knight Frank indicates that the metro's new-supply pipeline contracted by 8.9% compared to the previous quarter and by 20.1% on a year-over-year basis.

One of the largest industrial projects under construction in the last quarter of 2018 was Duke Realty Corp.'s 634,564-square-foot distribution facility in Lewisville, an infill submarket with

Dallas Market Indicators for Q4 2018				
YTD Net Absorption (SF)	19,718,376			
QTD Net Absorption (SF)	5,731,179			
Under Construction (SF)	21,405,799			
Total Vacancy	6.4%			
Average Asking Rent (NNN) per SF	\$5.01			

very limited land available for development. The property—which kicked off in summer 2018 and is scheduled to come online in May 2019—is 71% pre-leased to PPG Industries. According to Yardi Matrix data, the Class A property is situated within the developer's Lakeside Ranch business park, north of DFW International Airport.

Leasing Activity

Some 5.7 million square feet of space was absorbed in Dallas in the last quarter of 2018, boosting the annual net absorption to 19.7 million square feet, with the highest demand coming from tenants looking for spaces ranging between 100,000 and 150,000 square feet. The metro's industrial vacancy rate remained relatively flat compared to the previous quarter (at 6.4%) but



dropped some 70 basis points year-over-year. Asking rents for industrial space in Dallas averaged \$5.01 per square foot, up 1.8% compared to the previous quarter.

Dematic Corp.—an Atlanta-based supplier of integrated automated supply-chain technology and services—signed the metro's top lease in the last quarter of 2018 as part of its strategy to accommodate demand for automated technology solutions in the South. The engineering company leased nearly 900,000 square feet of warehouse space at TCRG Properties' Synergy Crossing Buildings 200 and 100 in the North Fort Worth submarket, with plans to open a massive distribution center with increased storage and shipping capacity. The new Dematic facility is scheduled to open in the second quarter of 2019. According to Yardi Matrix, Synergy Cross-

ing Building 200 is a 496,782-square-foot Class A warehouse property situated on 159 acres at 2581 Golden Triangle Blvd., with major street exposure to Interstate 35. The 403,000-square-foot Building 100 is currently under construction at 1101 Interstate 35 West.

Major Sale

The largest fourth-quarter sale was LBA Realty's acquisition of a 622,000-square-foot warehouse portfolio in the Las Colinas submarket. While the sale price remained undisclosed, the deal was subject to a \$29 million loan held by Allianz, according to Yardi Matrix. The transaction incorporated a 377,228-square-foot building at 201 Northpoint Drive and a 245,000-square-foot property at 440 S. Royal Lane. Both assets were sold by Staples Realty.

Image by Nate Hovee/iStockphoto.com

LOS ANGELES

Economic Snapshot

Despite trade headwinds, the metro's booming economy relies heavily on the busy Port of Los Angeles and the neighboring Port of Long Beach—which, combined, handle 40% of all imports into the U.S. and continue to support a plethora of e-commerce businesses and job gains in the area. According to recent data by the World Shipping Council, the Port of Los Angeles ranks 18th among the world's busiest container ports and is the only U.S. entrant in a Top 20 dominated by East Asia. The combined ports of Los Angeles and Long Beach handled a record 11.3 million TEUs year-over-year through November 2018, up 3.3% over the same period in 2017, recent Transwestern data shows.

Some 60,400 jobs were added in the Los Angeles metro area in the 12 months ending in November, accounting for a 1.3% year-over-year increase. The unemployment rate was 4.7% as of November 2018, up 10 basis points over the previous month and well above the national rate of 3.7% for the same period. Employment growth was led by the professional and business services sector (up 2% year-over-year in November), while growth in the trade, transportation and utilities sector remained relatively flat compared to November 2017.

Development Pipeline

The metro's 1.6 billion-square-foot industrial market—the nation's largest, but dominated by outdated facilities built in the 1980s and before—is still far from keeping up with sky-high demand for modern and efficient product. Some 5.8 million square feet was under construction in the last quarter of 2018, accounting for 1.7% of the total stock. Most is speculative, with just 3% of the projects underway being pre-leased, according to Transwestern data.

One of the largest projects under construction in the last quarter of 2018 was Pacific Industrial's 421,692-square-foot industrial campus in Long

Los Angeles Market Indicators for Q4 2018				
YTD Net Absorption (SF)	5,139,052			
QTD Net Absorption (SF)	1,657,084			
Under Construction (SF)	5,788,408			
Total Vacancy	1.5%			
Average Asking Rent (NNN) per SF	\$10.23			

Beach, just south of the 405 Freeway. Dubbed Pacific Edge, the project is strategically situated on 20 acres at 2300 Redondo Ave., less than one mile from Long Beach Airport and within 10 miles of the ports of Los Angeles and Long Beach. Slated for completion this fall, the three industrial facilities—ranging from 100,000 to 205,000 square feet—will serve both the Los Angeles and Orange County markets.

Leasing Activity

Some 1.7 million square feet was absorbed across the market in the last quarter of 2018—mostly consisting of newly delivered, amenitized space that's highly sought after by e-commerce, logistics and food storage tenants—bringing the net absorption for the entire year to 5.1 million square feet. The metro ended the year on a high note, with an overall industrial vacancy rate of



1.5%, more than three times lower than the national rate of 4.8%. Average asking rents stabilized at \$10.23 per square foot, 10% higher year-over-year, marking the highest rent rates in the history of the sector. The huge supply-demand imbalance continues to create extremely favorable market conditions for landlords, which require longer terms for new leases or extensions and higher annual rent increases.

Online wholesale retailer Four Seasons General Merchandise signed one of the quarter's largest leases, more than 630,000 square feet of warehouse space at Clarion Partners' Commerce Distribution Center at 5800 E. Slauson Ave. in the Gateway Cities submarket. Completed in 1982, the 777,113-square-foot industrial property is situated in an Opportunity Zone and is less than two miles from the Long Beach Freeway (Interstate 710), which facilitates truck transportation

between the metro's twin ports and the Los Angeles Intermodal Facility in Vernon.

Major Sale

One of the largest sales closed in the fourth quarter of 2018 was Elite Lighting's purchase of the 278,283-square-foot warehouse facility at 1 Minson Way in the Gateway Cities. The buyer acquired the Class B property from Minson Corp. for \$38.3 million, or \$137.62 per square foot, according to Yardi Matrix data. The sale was subject to a \$26.8 million loan held by Bank of Hope. Built in phases between 1956 and 1997, the industrial property comprises three concrete buildings situated on 13 acres, less than two miles from the Santa Ana Freeway (Interstate 5), which connects Los Angeles and its southeastern suburbs.

Image by Matt Gush/iStockphoto.com

EXECUTIVE INSIGHT

Q&A with Walter Byrd, Executive Managing Director, Transwestern Commercial Services

An industry veteran, Byrd co-manages Transwestern's national industrial practice while personally representing institutional owners and international freight and logistics firms in South Florida.

What's your view of the current state of the U.S. industrial real estate market?

The U.S. industrial market is very healthy • today and is expected to remain so for the foreseeable future. In major markets, absorption will continue to keep up with new construction. While users and investors will remain focused on the major gateway markets, they continue to show increasing interest in secondary markets, in search of better yields.

Which regions will see increased institutional investment in the long run?

Institutional investors will stay focused on the coastal markets as well as major markets in the Sunbelt, as these are the highest population-growth centers in the country. The most recent U.S. Census updates show once again that the greatest rates of population growth are in the South and West. In particular, we see strong growth in California and the Pacific Northwest, as well as Florida and Texas. Also, with continued cap rate compression, interest will continue to expand in up-and-coming markets like Nashville, Charleston, San Antonio and Phoenix that have good fundamentals.

What trends will define the industrial real estate sector in the coming years?



I'm not sure about "defining" the industrial sector, but there are two primary trends that we are watching closely. First, the implementation of automation and robotics will have significant impacts on distribution and the supply chain—the level of impact is what everyone is trying to get their heads around. Second, within large and growing MSAs, the lack of infrastructure investment in the midst of population growth is increasing the need for urban infill locations. These can be very difficult to find in many markets, but distribution networks depend on them. These are the two trends that we are watching closely as we advise our clients in their long-range planning and investments.

How will e-commerce continue to shape the growing demand for industrial space?

A lt's important to remember that e-com-•merce is another channel for the acquisition and distribution of goods. It has always been the case that manufacturers and retailers needed adequate warehousing and distribution capacity; the major difference now is the speed from acquisition to fulfillment. To that end, the growth in same-day or even within-an-hour delivery is increasing the need for closer-in locations that enable goods to reach every home or business more efficiently.

With the continued maturation of e-commerce fulfillment, more companies are seeking to develop their own networks. For instance, companies that have in the past used Amazon for distribution are beginning to grow to the point that they need or want to control their own distribution channels.

About 10,000 Baby Boomers reach retirement age in the U.S. each day. What's your view on the growth of drug and medical supply distribution centers for hospitals and senior-care facilities?

I think the dynamic is very similar to e-commerce in that these goods have always needed channels for distribution. I'm not sure the aging population will particularly drive much in that respect as supply chains become more efficient and can handle the increased volume. However, as the health-care industry continues to work to meet the evolving challenges of cost and quality care for patients, providers are pushing to offer more services to patients in the comfort of their homes. The ability to deliver goods and services to decentralized locations like homes will increase the need for infill distribution centers.

What factors do you consider when determining the next investment location?

A Markets that see sustained growth will continue to be the focus for investors, but barriers to entry are also important, whether

those are economic, governmental or geographic. These barriers go to the issue of how much product can be built to compete. In other words, markets with healthy, consistent demand and limits to the amount of supply that can be added will always be the most attractive to investors—hence, the focus on the big coastal markets.

Talk about your largest industrial project under construction.

Transwestern's development arm is heavi• ly focused on industrial projects right now, and we are looking for opportunities in underserved markets. We are particularly active in Southern California, the Northeast and Texas.

. What's ahead for Transwestern?

We continue to assist our clients in identifying suitable locations for their industrial facilities or to place investment capital to meet their return goals. Adding more industrial expertise through acquisitions and better training of our existing team are our primary focuses with respect to human capital. Growing our industrial presence on the West Coast is our primary goal as a company.

Increasingly, our focus is on the gathering of data and the better use of analytics to help our clients make the best decisions. While the entire real estate sector is investing in this area, Transwestern is focused on bringing analytics closer to our brokers, property managers and ultimately our clients, to most effectively and efficiently utilize the massive amounts of data being generated. This is a significant shift in just the past five years. Never in our industry has there been such a convergence of data, capital and experience, which makes this the most exciting time to be in industrial real estate.

Contacts

Jeff Adler Vice President & General Manager of Yardi Matrix Jeff.Adler@Yardi.com (800) 866-1124 x2403

Jack Kern
Director of Research
and Publications
Jack.Kern@Yardi.com
(800) 866-1124 x2444

Veronica Grecu Senior Real Estate Market Analyst Veronica.Grecu@Yardi.com (306) 955-1855 x7583

Suzann D. Silverman
Editorial Director
Suzann.Silverman@Yardi.com

DISCLAIMER

Although every effort is made to ensure the accuracy, timeliness and completeness of the information provided in this publication, the information is provided "AS IS" and Yardi Matrix does not guarantee, warrant, represent or undertake that the information provided is correct, accurate, current or complete. Yardi Matrix is not liable for any loss, claim, or demand arising directly or indirectly from any use or reliance upon the information contained herein.

COPYRIGHT NOTICE

This document, publication and/or presentation (collectively, "document") is protected by copyright, trademark and other intellectual property laws. Use of this document is subject to the terms and conditions of Yardi Systems, Inc. dba Yardi Matrix's Terms of Use (http://www.yardimatrix.com/Terms) or other agreement including, but not limited to, restrictions on its use, copying, disclosure, distribution and decompilation. No part of this document may be disclosed or reproduced in any form by any means without the prior written authorization of Yardi Systems, Inc. This document may contain proprietary information about software and service processes, algorithms, and data models which is confidential and constitutes trade secrets. This document is intended for utilization solely in connection with Yardi Matrix publications and for no other purpose.

Yardi®, Yardi Systems, Inc., the Yardi Logo, Yardi Matrix, and the names of Yardi products and services are trademarks or registered trademarks of Yardi Systems, Inc. in the United States and may be protected as trademarks in other countries. All other product, service, or company names mentioned in this document are claimed as trademarks and trade names by their respective companies.

© 2019 Yardi Systems, Inc. All Rights Reserved.