INDUSTRIAL REPORT Fall 2019

Maintaining Momentum

Yardi[®] Matrix

New Deliveries Outpace Net Absorption



OVERVIEW

- At mid-year, the overall vacancy rate matched the historic low of 4.8% recorded at the end of 2018.
- New deliveries surpassed net absorption for another consecutive quarter.
- E-commerce sales for the second quarter of 2019 totaled \$146.2 billion, up 13.3% from the second quarter of 2018.

Despite rising concerns about the national economy in this late-stage business cycle and increasing trade tensions, the industrial real estate sector carried its stellar performance well into the first half of 2019. Distribution centers, ware-houses, manufacturing facilities and other light industrial buildings continue to generate strong momentum, particularly in markets with improved infrastructure, sustained employment growth and proximity to major ports and air cargo centers.

Between June 2018 and June 2019, total nonfarm employment expanded by 2.3 million for an annualized increase of 1.5%. During the same 12-month period, employment in manufacturing gained 167,000 (up 1.3%); jobs in durable goods manufacturing increased by 126,000 (up 1.6%), while transportation and warehousing added 158,000 jobs (up 2.9%). The unemployment rate stood at 3.7% at mid-year, contracting by just 30 basis points since June 2018.

Image by zilli/iStockphoto.com; cover image by yoh4nn/iStockphoto.com

E-commerce's solid growth-spurred by the rise of "social commerce," a new retail model that enables brands to advertise their products and services across social media channels through interactive video content-remains the major driver of demand and development. Online purchases have continued to grow at an accelerated pace, prompting e-commerce players to further expand their presence near and within major metros and ports. According to U.S. Census Bureau data, retail sales volume for the second guarter of 2019 totaled \$1.36 trillion—up 1.8% from the first quarter and a 3.2% increase compared to the second quarter of 2018—with e-commerce accounting for 10.7% of total sales. Total e-commerce sales for the second quarter of 2019 were \$146.2 billion-up 4.2% guarter-over-guarter and 13.3% over the second quarter of 2018.

With e-commerce sales volume doubling over the past five years, retail companies are competing for urban warehouses in the race for fast delivery. Amazon still dominates the market, setting the pace with next-day and even sameday delivery offerings—but other major retailers, such as Walmart and Target, have been quick to join the shipping competition for the prize of fastest deliverer. In April, Amazon announced plans to invest \$800 million to make one-day

Market	Under Construction (SF)	Total Stock (SF)	UC as a % of Stock
Houston	8,830,813	270,262,045	3.3%
Philadelphia	2,826,695	183,436,465	1.5%
Phoenix	7,600,642	155,390,826	4.9%

Q2 2019 Industrial Pipeline in Core Markets

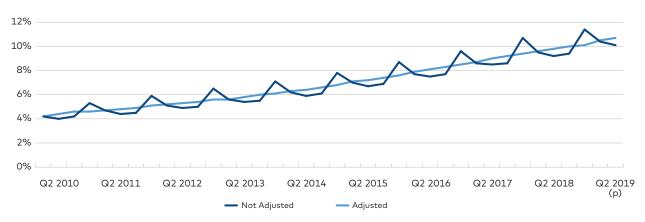
Source: Yardi Matrix research. Data as of August 2019

National Market Indicators for Q2 2019			
YTD Net Absorption (SF)	90,074,185		
QTD Net Absorption (SF)	51,625,296		
Under Construction (SF)	314,406,583		
Total Vacancy	4.8%		
Average Asking Rent (NNN) per SF	\$6.59		

shipping standard for Prime members. Walmart responded one month later with an announcement of plans to roll out next-day deliveries in three states, with a goal of providing the service to 75% of its U.S. consumer base by the end of 2019. Meanwhile, Target's e-commerce footprint is growing and its profitability expanded for the first time in three years. This is largely due to Shipt, a grocery delivery company that the retailer acquired in 2018 for \$550 million.

Since 2016, the expanded Panama Canal has enabled major U.S. ports to handle mega-ships of as many as 15,000 20-foot equivalent container units (TEUs), decreasing transportation costs and boosting container volumes. This has led to increased demand for warehouse/distribution and logistics facilities near ports, pushing down industrial vacancy rates in both port-centered markets and nearby metros, which has encouraged developers to break ground on a speculative basis. Recent JLL research shows that in 2018 the East Coast ports (Baltimore, Charleston, Houston, Jacksonville, Miami, New York/New Jersey, Savannah and Virginia) accounted for 48.9% of total U.S. shipping volume, up 5.4% since 2008. Cargo activity dwindled in the West Coast ports (Long Beach, Los Angeles, Oakland and Seattle-Tacoma) from 56.5% in 2008 to 51.1% in 2018.

Demand for modern, functional industrial space remains high. More than 40 million square feet





Source: Retail Indicators Branch, U.S. Census Bureau. Released on August 19, 2019

was delivered in the second quarter, bringing the total new-supply inventory for the first half of 2019 to a solid 103.3 million square feet.

New deliveries outpaced net absorption (90 million square feet in the first half) for another consecutive quarter. Many companies opt to lease before completion, as large blocks of contiguous space in existing buildings are increasingly harder to find; JLL research shows that total U.S. preleasing rates increased from 43.1% in the first guarter to 57% in the second quarter. Despite the imbalance, as of June 2019, the average U.S. vacancy rate matched the historic low of 4.8% recorded in the final quarter of 2018; it is projected to stay under the 5% mark through 2019-a sign that the industrial real estate sector remains robust despite increasing trade tensions, particularly with China; a weakening global economy; labor shortages; and rising land prices.

Tightening vacancy rates, heightened demand for new properties and shrinking land available for development in most markets pushed the average asking rent to \$6.59 per square foot as of June, slightly above the national average of \$6.54 per square foot at the end of 2018. Despite rising rents, e-commerce companies are projected to continue to lease more warehouse space to meet fast delivery times and alleviate the pressure of growing transportation costs.

Nearly 315 million square feet was under construction nationally at mid-year, an increase of roughly 7% compared to the final quarter of 2018, reflecting tenants' insatiable appetite for space and developers' confidence that the new space will be rapidly absorbed. According to Yardi Matrix data, a combined 19.3 million square feet was under construction in three major industrial markets: Houston, Philadelphia and Phoenix.

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.

HOUSTON

Economic Snapshot

While still heavily relying on the energy industry, Houston's expanding economy has been taking major steps toward diversification and improving its infrastructure. Total employment stood at 3.4 million at mid-year, having gained 73,000 new jobs in the 12 months ending in June, a 2.1% annual increase. However, Houston's unemployment rate of 4.8% is above the national rate of 3.7% for the same month. The industrial market continues to perform, supported by significant job growth in the manufacturing sector, which gained 11,300 jobs since June 2018, accounting for a 4.9% annual increase. The trade, transportation and utilities sector followed with 7,800 new jobs (up 1.3% year-over-year).

Development Pipeline

With a population of nearly 7 million people, the Houston-Woodlands-Sugar Land MSA continues to drive demand for warehouse and distribution center space as e-commerce further expands. The Port of Houston is the major container gateway for Texas and nearby states and handles nearly 70% of the U.S. Gulf Coast container traffic, with 1.2 million TEUs in 2018, up 11.7% compared to the previous year's volume.

Houston's inventory of industrial spaces of at least 100,000 square feet totaled more than 270 million square feet in August. But that is expected to expand in the coming quarters, with 15.7 million square feet under construction throughout the metro at mid-year. The majority of the projects underway are located in the Northeast and Southeast submarkets, and more than half of the development pipeline comprises speculative projects.

Hines is set to add more than 3 million square feet of industrial space in the Cypress West submarket, where the developer kicked off the two-phase logistics park branded as Grand National Business Park. Phase 1 totals 770,640 square feet of Class A warehouse and distribution space and is currently under construction on 106 acres at 7575 N.

Houston Market Indicators for Q2 2019			
YTD Net Absorption (SF)	4,130,473		
QTD Net Absorption (SF)	2,367,913		
Under Construction (SF)	15,675,028		
Total Vacancy	6.1%		
Average Asking Rent (NNN) per SF	\$6.40		

Sam Houston Parkway, with an estimated completion date scheduled for Spring 2020. The facility has major street exposure to the Sam Houston Tollway/State Route 8 and Fallbrook Drive. When fully completed, the project will also feature a retail center and a hotel.

Leasing Activity

The second quarter of 2019 saw 2.4 million square feet absorbed, bringing Houston's year-to-date net absorption to 4.1 million and pushing the average industrial vacancy rate to 6.1%. The average asking rate stabilized at \$6.40 per square foot.

Builders FirstSource, a manufacturer and supplier of building materials, signed a lease for 276,500 square feet, or the entire Building 3, at Invesco Real Estate's Claymoore Business Park, situated on 12.87 acres at 11711 Clay Road in the Beltway



Grand National Business Park Phase 1. Rendering courtesy of Hines

8 submarket. The single-story Class B warehouse, built in 1998, has immediate access to the Texas State Highway Beltway 8. The facility features 122 grade level parking spaces, 45 docks, ESFR sprinklers and skylights.

Major Sale

In June, ATCAP Partners acquired Greensmor Airpark, a two-property complex totaling 352,080 square feet in Greenspoint. Yardi Matrix data indicates that the assets changed ownership in a portfolio transaction valued at \$21.7 million financed with a \$15.2 million acquisition loan held by JPMorgan Chase. The seller was Aeroterm, a Maryland-based owner-developer of airport logistics facilities. The transaction involved a nine-building property encompassing 241,970 square feet on 25.87 acres at 2700 Greens Road, north of Beltway 8. The Class B property includes 19,357 square feet of retail and 160 grade-level parking spaces. Located 0.3 miles away at 15900-15925 Morales Road, the second property in the portfolio comprises six buildings totaling 110,110 square feet. The property was constructed on 12.87 acres between 1969 and 1991 and has 88 grade-level parking spaces. All buildings in the Greensmor Airpark portfolio feature cross docks, dock bumpers, truck courts and loading doors.

PHILADELPHIA

Economic Snapshot

Thanks to its position between New York City and Washington, D.C., Philadelphia's industrial market continues to post strong fundamentals, despite the late-stage cycle. Investors are keen on the post-industrial land pockets located in the Lower Schuylkill corridor—once a center for heavy industry—that are being revitalized to accommodate the market's growing demand for space.

Total employment stood at 970,867 people at mid-year—with some 20,000 jobs added in the 12 months ending in June, accounting for a 2.1% annual expansion—and the unemployment rate of 4.8% was substantially above the national figure. The trade, transportation and utilities sector expanded by 3% year-over-year, having added 400 new positions for a total of 135,500 jobs, while manufacturing lost some 600 jobs during the same 12-month period (down 1.8%).

Development Pipeline

E-commerce's stellar rise ensures strong demand for warehouse and distribution facilities in the metro, which still boasts abundant space for development, whereas other major East Coast markets have land scarcity. With retail companies shifting their focus from cutting logistics costs to shortening delivery times, developers are breaking ground on distribution centers located in the proximity of major population centers. Small-size distribution facilities (less than 350,000 square feet) are in high demand within city limits, where Millennials account for roughly 30% of the population. Large-scale big-box warehouses abound in the l-81/78 Corridor.

Some 6.2 million square feet was under construction throughout the metro at mid-year. Most development projects are located in Bucks County and Northeast Philadelphia, according to Yardi Matrix.

Prologis Burlington 130 was the largest industrial project under construction in the metro as of June. The 913,466-square-foot building is a

Philadelphia Market Indicators for Q2 2019				
YTD Net Absorption (SF)	2,894,516			
QTD Net Absorption (SF)	1,155,649			
Under Construction (SF)	6,199,786			
Total Vacancy	4.6%			
Average Asking Rent (NNN) per SF	\$5.84			

Class A warehouse facility located at 1800 N. U.S. Route 130 in Burlington County—and the only industrial property of more than 665,000 square feet to be delivered along the New Jersey Turnpike in 2019. Upon completion, the single-story facility will feature 40-foot-clear ceiling heights, 54-foot-by-50-foot column spacing, 17 dock doors and four drive-in doors, as well as 241 trailer parking spaces and 635 parking spaces for cars. The facility benefits from major street exposure to Route 130, which is 0.1 miles away.

Leasing Activity

Some 1.2 million square feet was absorbed throughout the market in the second quarter, bringing the total industrial absorption levels for



Prologis Burlington 130. Rendering courtesy of Prologis

the first six months of the year to nearly 3 million square feet. The average vacancy rate stood at 4.6%, 20 basis points below the national average, and the average asking rate stabilized at \$5.84 per square foot as of June.

Jako Enterprises has leased 201,546 square feet of warehouse space at Ricatto's 7601 State Road in Northeast Philadelphia. The retail store operator relocated into the Class B facility from 12000 Roosevelt Blvd., also in Northeast Philadelphia. The facility features 40-foot-by-40-foot column spacing, skylights, 16 loading docks, one drivein bay and 100 parking spaces. Situated on 8.31 acres, the 1968-built 7601 State Road building has major exposure to Interstate 95 and is less than 1 mile from the Holmesburg Junction train station. The property is located in an Opportunity Zone.

Major Sale

New York-based Sun Equity Partners acquired Barrington Business Center in the Cherry Hill submarket. Triangle Capital Group sold the 867,581-square-foot industrial complex for a combined \$43 million in one of the largest transactions closed in the metro in the second quarter of 2019. Tremont Mortgage provided a \$37.6 million first mortgage bridge loan to finance the acquisition. The Class B property contains nine single-story facilities completed between 1956 and 1970 and completely renovated in 1999. Seven buildings are located at 1 Commerce Drive and two buildings have an address of 8 Commerce Drive. The assets feature clear heights ranging from 30 feet to 34 feet, 90 loading docks and elevators, five drive-in bays and a total of 161 parking spaces. Barrington Business Center is situated just south of the New Jersey Turnpike and Interstate 295 and roughly 16 miles from the Port of Philadelphia.

PHOENIX

Economic Snapshot

Building on several consecutive quarters of exceptional performance, the Phoenix industrial real estate sector carried its remarkable growth well into 2019. Located along Interstate 10—with its immediate logistical advantages for e-commerce players—the metro continues to attract both new residents and businesses, thanks to its improved interstate system, cheaper energy costs, expanding employment and more affordable cost of living compared to major markets in Southern California. Phoenix Sky Harbor International Airport's cargo capability is projected to reach 44,000 by 2027, more than double the volume in 2017, according to information provider Airport Technology.

The metro's workforce base expanded by nearly 99,000 jobs in the 12 months ending in June—up 4.3% year-over-year—bringing total employment to 2.4 million people at mid-year. The increase is largely attributed to a massive influx of residents and businesses relocating from California. Over the 12 months ending in June, manufacturing expanded by 5.3% year-over-year, gaining 6,800 new jobs. Nearly 10,000 jobs were added to the trade, transportation and utilities sector, up 2.5% since June 2018. The unemployment rate stood at 4.6% as of June 2019.

Development Pipeline

As Phoenix's economy continues to expand and welcome more e-commerce players, the race for space tightens. Tenant demand for modern warehouse, distribution and manufacturing facilities remained strong in the second quarter, underpinned by low vacancy rates across most submarkets. More than 7 million square feet of industrial space was under construction at mid-year—with about half of the projects comprising distribution facilities in Glendale and Phoenix–West, according to Cushman & Wakefield research.

The largest industrial project under construction in the second quarter was Clarius Partners'

Phoenix Market Indicators for Q2 2019				
YTD Net Absorption (SF)	3,221,078			
QTD Net Absorption (SF)	1,537,667			
Under Construction (SF)	7,163,789			
Total Vacancy	7.0%			
Average Asking Rent (NNN) per SF	\$7.18			

HUB at Goodyear, a 790,980-square-foot speculative building in Phoenix-West designed to meet the metro's strong demand for warehouse and e-commerce space. Situated on 43 acres at 305 S. Bullard Ave. in fast-growing Goodyear, the property features 56-foot-by-50-foot column spacing, 40-foot clear-height ceilings and 190-foot truck courts with 144 dock-high and four grade-level doors. According to Commercial Property Executive, this is the first of many projects expected to take shape in Goodyear's emerging Bullard Tech Corridor and the fourth speculative industrial building offering 40-foot clear heights to be developed in the metro. Developed in a joint venture with LGE Design Build, the building is located in an Opportunity Zone and sits 1 mile south of Interstate 10.



The HUB at Goodyear. Rendering courtesy of LGE Design Build

Leasing Activity

With 1.5 million square feet absorbed during the second quarter, Phoenix's total net absorption for the first half of the year amounts to 3.2 million square feet. The metro's average industrial vacancy rate of 7% as of June—the lowest since the historic record of 6.2% of 2006, per JLL research—will further contract over the coming quarters, as businesses are expanding or relocating into the metro. The average asking rate for the quarter was \$7.18 per square foot.

One of the second quarter's top lease transactions involves Walmart, which leased 121,895 square feet at Prologis' Westside Business Park 2, a 203,372-square-foot facility in Phoenix–West. The lease is part of Walmart's plan to invest \$72 million in upgrading several Arizona stores and fulfillment centers by the end of 2019. Located at 901 S. 86th Ave. in Tolleson, the Class A light-industrial facility has 42 dock doors, 48-foot-by-56foot column spacing, skylights, ESFR sprinklers and 148 parking spaces. The asset has immediate access to West Buckeye Road and is just south of the Papago Freeway Tunnel/Interstate 10.

Major Sale

BH Properties acquired the Honeywell Aerospace Glendale DSES Campus at 19019 N. 59th Ave. in the Glendale submarket from Lexington Realty Trust. The 252,300-square-foot facility traded for \$26.5 million in one of Phoenix's largest transactions completed in the second quarter of 2019. Built in 1990, the Class B corporate campus spreads across 45 acres and contains three single-story buildings that feature offices, clean rooms, research-and-development labs and assembly areas, insulated ceilings, two grade-level loading doors, as well as 1,100 parking spaces. The asset is situated just south of Arizona State Route 101, which encompasses most of the Phoenix metro area.

Top 5 Industrial Owners in Phoenix



Industrial properties remain a hot commodity in most markets across the U.S. With demand for new space projected to further increase due to burgeoning retail sales, developers and institutional buyers will continue to expand their holdings in urban pockets with strong e-commerce activity, such as Phoenix– West. Following is a list of the top 5 industrial owners in Phoenix, based on square footage, according to Yardi Matrix data.

Owner	Total Square Feet	Largest Property	Property Size (Square Feet)	Building Class
Liberty Property Trust	4,916,822	Liberty Logistics Center I	593,600	А
Harrison Properties	4,930,972	515 N. 51st Ave.	1,070,359	В
Reliance Management	5,138,464	1300 S. Litchfield Road	1,085,179	В
Prologis	6,856,599	Westside Business Park 4	535,213	А
Link Industrial Properties	9,417,324	Agave Distribution Center	1,267,110	А

LINK INDUSTRIAL PROPERTIES

The Texas-based institutional investor—an affiliate of Blackstone owns 42 properties totaling 7,137,945 square feet of industrial space in Phoenix. The largest asset in its portfolio is the 1.3 million-square-foot Agave Distribution Center in an Opportunity Zone in Phoenix–West. The Class A facility was built by the Buzz Oates Cos. in 2009 on almost 70 acres at 800 N. 75th Ave. Link Industrial Properties acquired the asset in September of this year from Global Logistics Properties in an \$18.7 billion unrecorded portfolio transaction that incorporated 1,300 properties totaling 179 million square feet of industrial, office and retail space nationwide, according to Yardi Matrix data. Agave Distribution Center is situated just south of Interstate 10/Papago Freeway and has major street exposure to 75th Avenue, with a traffic count of 26,270 cars per day. Property characteristics include 57'x57' column spacing, 30' clear heights, refrigerated storage space, food-grade warehouse space, skylights and insulated ceilings, as well as 1,267 grade-level parking spaces.



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.