RESEARCH

Newmark Knight Frank

NATIONAL
3Q17 INDUSTRIAL MARKET

DEMAND FOR DISTRIBUTION SPACE FROM E-COMMERCE SECTOR REMAINS STRONG

The U.S. industrial market recorded higher asking rents and absorption during the third quarter, as the industrial asset class continued to outperform other sectors.

Demand Rises During the Third Quarter

Proving that demand for industrial space nationwide remains strong, net absorption totaled 53.9 million square feet during the third quarter of 2017. While the third-quarter total fell short of the 84.4 million square feet absorbed in the third quarter of 2016, it built upon the absorption total of 52.8 million square feet in the second quarter of 2017.

Twenty of the 46 industrial markets tracked by NKF absorbed 1 million square feet or more in the third quarter, led by California's Inland Empire with 6.4 million square feet and Dallas with 5.0 million square feet. Atlanta and Phoenix also posted strong totals. Seven markets experienced declines in occupied space, or negative absorption, led by the Silicon Valley market.

VACANCY IS PARTICULARLY LIMITED IN IMPORT-FOCUSED MARKETS, SUCH AS LOS ANGELES

Another way to measure demand for space is to divide absorption by total occupied space, which shows how rapidly the occupied base is growing regardless of a market's size. In the third quarter, occupied industrial space expanded by 0.4% across the U.S., led by Nashville at 1.4%. California's Inland Empire and Phoenix each achieved a rate of 1.2%. Comparatively, the Silicon Valley market saw occupied space shrink by 0.6% for the third quarter of 2017.

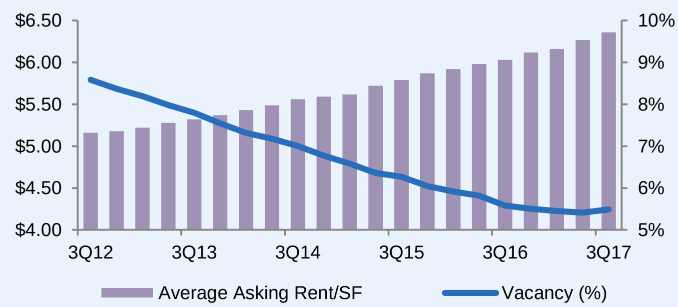
The largest industrial lease of the third quarter was signed by Wayfair Inc., an e-commerce home goods retailer, for 1.3 million square feet in Cranbury, New Jersey, in the Northern New Jersey market. Other large leases signed during the third quarter included online fashion retailer ASOS for 1.0 million square feet in Atlanta; one by Georgia-Pacific for 900,639 square feet in McDonough, Georgia; one by Amazon for 856,000 square feet in Detroit; and one by JC Penney for 624,627 square feet in San Bernardino, California. For the third quarter, e-commerce retailers took down several of the largest blocks of industrial space, demonstrating that the demand for distribution space from the e-commerce sector remains strong.

Current Conditions

- Absorption was strong during the third quarter, measuring 53.9 million square feet.
- Vacancy remains modest, at 5.5%, and is particularly limited in several import-focused markets such as Los Angeles.
- Average asking rents rose 5.5% over the past year.
- Strong demand from the e-commerce sector is leading to technological innovation, as distribution centers seek to automate and streamline operations.

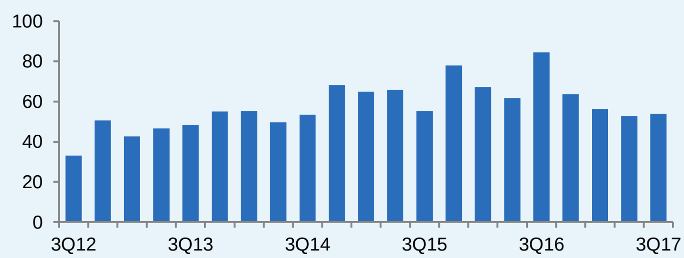
Market Analysis

Asking Rent and Vacancy



Net Absorption

Square Feet, Millions



Market Summary

	Current Quarter	Prior Quarter	Year Ago Period	12-Month Forecast
Vacancy Rate	5.5%	5.4%	5.6%	↔
Net Absorption*	53.9	52.8	84.4	↔
Average Asking Rent/SF	$6.36	$6.27	$6.03	↑
Under Construction*	235.3	236.0	225.4	↔
Deliveries*	64.1	50.5	56.3	↑

* Square feet, millions

Deliveries Increasing to Meet Strong Demand

Developers delivered 64.1 million square feet of new space during the third quarter, a significant jump from the 50.5 million square feet delivered last quarter, which was the lowest national delivery total in two years. Industrial space under construction at the end of the quarter measured 235.3 million square feet, a decrease from the 236.0 million square feet recorded for the second quarter, yet an increase from the 225.4 million square feet recorded one year ago. The volume of space under construction has been fairly stable during the past year; this was the fifth consecutive quarter where the total exceeded 220 million square feet.

As in the second quarter, six major distribution hubs accounted for nearly half of the third quarter's construction total, led by the Inland Empire with 30.3 million square feet and Dallas with 21.7 million square feet. Atlanta, Chicago, Northern New Jersey, and Washington rounded out the top six, each with more than ten million square feet of industrial space currently under construction.

Industrial space under construction at the end of the third quarter was 1.7% of total inventory. Based on this metric, the supply was growing most rapidly in the Inland Empire at 5.5%, Baltimore at 4.2%, and Dallas at 4.0%. Markets that serve as major distribution hubs and which are proximate to sizeable metro areas, like the ones listed above, are likely to require the greatest amount of new supply in the coming years, as e-commerce firms seek solutions to their delivery needs. Three of the five largest leases signed during the third quarter were for e-commerce distribution centers, as this sector continues to grow exponentially to serve the on-demand needs of consumers.

Vacancy is Consistently Low

The vacancy rate remained low during the third quarter, at 5.5%. The rate is down 10 basis points over the past year. Vacancy is very tight in several major markets, notably in Los Angeles at 1.0%, Orange County at 2.0%, the Inland Empire at 3.1%, Seattle at 3.4%, and Cincinnati at 3.4%. Southern California's access to the ports of Los Angeles and Long Beach make the regional industrial markets there highly desirable for the distribution of exports and imports, particularly with regard to Asia-Pacific trade.

None of the 46 markets tracked by NKF had a double-digit vacancy rate as of third-quarter 2017. This speaks to the health of the market. It also helps to explain why investors have become keen on this product type. According to NCREIF, U.S. industrial is the only core property sector to have achieved a double-digit unlevered total return in 2016, totaling 12.4% overall. Industrial outperformed the second-best performing sector, retail, by 550 basis points between the second quarter of 2016 and the second quarter of 2017.

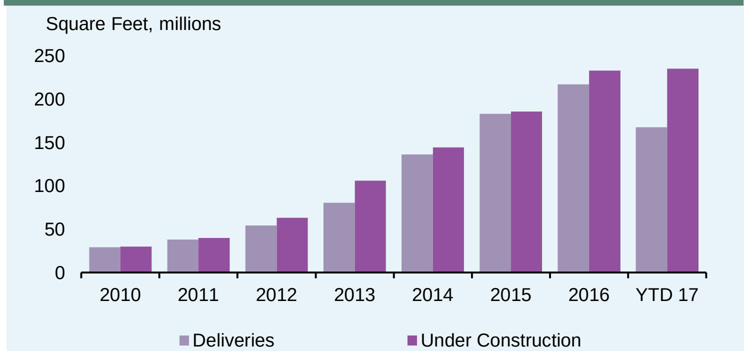
The only industrial market to post a third-quarter vacancy increase of more than one percentage point was Austin, which recorded a 120 basis-point increase in vacancy from last quarter. Sixteen other markets posted a lesser rise in vacancy. Conversely, 25 of the 46 markets covered in this report posted vacancy decreases relative to last quarter's figures. On balance, vacancy has remained low enough in most markets to drive rent increases.

Rent Growth Remains Strong Nationally

Average asking rents across the U.S. ended the third quarter at $6.36/SF triple net, up 1.4% from the second quarter and up 5.5% from a year ago. Rents are rising especially rapidly for modern distribution centers that meet the needs of online retailers, complete with higher ceiling heights and automated warehouse management and control systems.

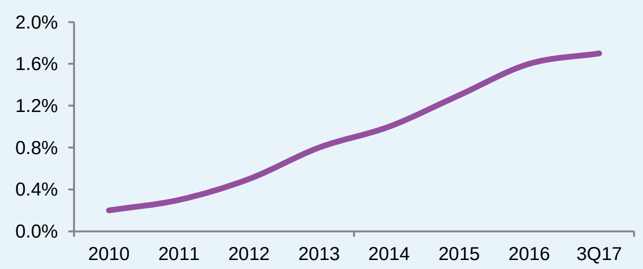
Eight markets posted double-digit rent gains over the past four quarters, led by Nashville with a strong 19.1% increase. Northern New Jersey, Los Angeles, Seattle, and the Oakland/East Bay market rounded out the top five gainers. Only seven of 46 markets experienced declines in the average asking rent over the past four quarters, led by Pittsburgh with a 6.3% decrease.

Construction and Deliveries



Source: CoStar, NKF

Construction as a Share of Inventory



Source: CoStar, NKF

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What to Expect

With the economy in its ninth year of expansion, the current growth cycle has become the third-longest of the 12 post-World War II expansions. Indicators generally suggest that the expansion will continue into 2018 and perhaps beyond, although the Federal Reserve recently lowered its growth forecast. Driven by robust investment fundamentals and the rapid growth in e-commerce sales and distribution, the industrial market appears to be in position for a longer run than other major property types. Office absorption has receded gradually since 2014, but industrial absorption has accelerated – with some quarterly volatility – since 2009. Demand for industrial space will be hard-pressed to match 2016's total absorption of 276.8 million square feet, but through third-quarter 2017, total absorption measured a solid 157.0 million square feet.

E-commerce, the economic driver that has catalyzed demand for industrial space, continues to grow at a feverish pace. As consumers continue to push for faster deliveries, retailers have had to re-examine their supply chain policies to ensure efficiency. This has led to increasing the overall inventory nationally; this modernization has led to record high construction totals over the past several quarters. Some retailers have looked toward vertically-designed distribution centers to maximize efficiency while retaining a more efficient physical footprint. E-commerce giant Amazon continues to hold great influence over the national industrial market, mostly due to its consistent growth, both in terms of hiring and real estate. Amazon has also been at the forefront of technological innovation in the industrial sector, as it seeks to implement robotics to streamline warehousing operations.

Global trade volumes have been relatively weak in recent years, restrained by slower growth in China and other emerging global economies, along with widespread economic softness outside the U.S. But the global economy is firming, and the Trump administration appears to be backing away from its campaign rhetoric advocating tariffs and trade restrictions; both are encouraging signs for the national industrial market. Markets that support importers have seen the strongest demand for industrial product—Los Angeles, Orange County and the Inland Empire have the three lowest vacancy rates for the third quarter of 2017, out of 46 markets surveyed by NKF. Echoing the pace of demand, average asking rents in several California markets are high—both Orange County and Los Angeles rank among the top ten markets nationally in that metric, with the Silicon Valley and Oakland/East Bay markets ranked #1 and #2 respectively.

E-COMMERCE CONTINUES TO GROW AT A FEVERISH PACE

As both net absorption and construction remain robust, the industrial market is expected to sustain its above-trend growth for at least another year. Absorption is keeping up with construction for now, but that dynamic has the potential to shift. If the economy continues to grow, it will become the second-longest post-war expansion by early 2018, and the longest ever in the summer of 2019. That is not out of the realm of possibility, and the industrial market stands to be one of the greatest beneficiaries of the shift in consumer behavior toward convenience, manifested through home delivery of goods.

Select Lease/User Transactions

Tenant	Market	Building	Type	Square Feet
Wayfair Inc.	Northern New Jersey, NJ	1 Brick Yard Road	Direct New	1,346,088
ASOS	Atlanta, GA	4500 Derrick Industrial Pkwy	Direct New	1,039,570
Georgia-Pacific	Atlanta, GA	490 Westridge Pkwy	Direct Renewal	900,639
Amazon	Detroit, MI	32801-33325 Ecorse Road	Direct New	856,000
JC Penney	Inland Empire, CA	5959 Palm Avenue	Direct New	624,627

Select Sales Transactions

Building/Portfolio	Market	Sale Price	Price/SF	Square Feet
Rancho Pacifica Industrial Park Portfolio 17	Los Angeles, CA	$210,500,000	$183	1,149,081
TIAA-CREF CA Industrial Portfolio 2017	Inland Empire, CA	$172,001,500	$112	1,529,324
17791 Perris Boulevard	Inland Empire, CA	$111,858,000	$141	794,477
10850 Via Frontera	San Diego, CA	$110,000,000	$428	257,040
2476 E. Swedesford Road	Philadelphia, PA	$73,000,000	$205	356,223

Market Statistics

Market	Inventory (SF)	SF Under Construction	SF Absorbed This Quarter	SF Absorbed YTD	% Vacant	Average Asking Rent/SF
Atlanta	620,754,464	16,076,215	3,665,978	16,184,925	7.7%	$4.77
Austin	89,250,033	1,117,826	-296,777	-543,463	8.1%	$10.34
Baltimore	172,974,973	7,338,214	1,453,355	3,948,811	7.9%	$5.32
Boston	219,960,672	631,853	201,961	1,038,881	6.5%	$8.17
Broward County, FL	105,577,643	1,101,858	36,153	741,667	4.6%	$9.29
Charlotte	364,490,552	4,867,323	2,496,301	7,262,495	5.4%	$4.28
Chicago	1,125,033,943	14,760,114	3,042,196	9,352,234	8.1%	$5.25
Cincinnati	269,386,336	2,908,456	567,319	4,134,038	3.4%	$4.22
Cleveland	293,964,623	707,597	140,592	865,931	6.4%	$4.27
Columbus	274,648,434	6,664,425	896,177	3,986,979	4.6%	$3.67
Dallas	827,681,495	21,754,818	5,064,704	15,999,090	6.7%	$5.14
Denver	189,704,332	4,797,131	1,739,005	2,430,388	5.0%	$8.43
Detroit	382,621,263	8,206,975	1,437,460	4,086,207	5.3%	$4.92
Houston	547,375,042	4,864,618	3,035,998	6,007,626	5.4%	$6.71
Indianapolis	319,016,485	3,709,244	531,433	1,250,038	5.8%	$3.75
Inland Empire, CA	548,253,127	30,398,258	6,429,383	15,025,277	3.1%	$6.47
Jacksonville	122,919,862	1,849,491	1,211,033	1,929,796	5.4%	$4.31
Kansas City	325,133,034	5,456,516	1,196,015	2,767,827	6.2%	$4.66
Las Vegas	107,688,588	2,567,143	777,356	1,272,934	7.1%	$7.29
Long Island	157,434,414	253,774	-108,684	-301,277	3.4%	$10.85
Los Angeles	986,370,143	5,882,742	1,258,651	2,141,928	1.0%	$9.34
Memphis	249,302,422	7,297,384	1,589,641	3,030,631	6.7%	$3.17
Miami	210,918,037	2,234,187	595,024	1,260,517	4.1%	$7.93
Milwaukee	230,452,339	495,861	602,576	1,579,268	4.4%	$4.43
Minneapolis	375,102,865	1,932,800	-179,954	-421,561	4.4%	$6.58
Nashville	229,294,340	6,465,251	3,130,490	4,538,884	4.5%	$5.43
New Jersey Northern	630,435,791	14,313,240	2,853,839	6,356,310	5.1%	$7.72
Oakland/East Bay	199,828,354	2,411,124	-520,630	-2,781	3.9%	$12.72
Orange County, CA	258,546,370	1,304,754	-50,041	-231,201	2.0%	$12.22
Orlando	181,728,710	1,037,925	824,735	3,076,597	4.4%	$5.94
Palm Beach	48,042,505	166,392	154,981	609,756	3.9%	$9.34
Penn. I-81/78 Corridor	330,260,908	9,493,950	216,031	7,993,325	6.7%	$4.45
Philadelphia	500,881,080	3,215,160	1,772,548	4,935,964	7.0%	$5.15
Phoenix	283,644,048	3,754,361	3,146,756	7,280,353	9.5%	$7.34
Pittsburgh	134,766,040	73,920	126,706	504,472	7.8%	$4.49
Portland	217,498,647	2,145,352	535,132	1,828,576	3.6%	$8.38
Raleigh/Durham	117,688,668	2,055,716	622,480	1,352,674	6.0%	$6.66
Sacramento	154,919,068	2,193,597	533,590	3,200,386	6.8%	$5.28
Salt Lake City	217,374,818	3,993,054	663,788	3,447,773	4.1%	$5.62
San Antonio	112,782,215	1,202,011	1,001,282	992,453	5.9%	$5.56
San Diego	168,464,417	1,573,080	244,702	1,750	4.5%	$11.27
Seattle	301,737,138	6,344,545	-502,709	2,352,835	3.4%	$8.93
Silicon Valley	215,183,817	0	-1,094,649	-4,177,774	8.6%	$21.60
St. Louis	280,944,591	3,145,028	1,398,577	4,218,437	5.2%	$4.54
Tampa/St. Petersburg	255,061,515	2,305,286	82,269	1,369,349	5.6%	$5.15
Washington, DC	287,638,935	10,234,052	1,453,584	2,362,585	7.4%	$8.19
National	**14,242,737,096**	**235,302,621**	**53,976,357**	**157,041,910**	**5.5%**	**$6.36**

Note: Absorption reflects change in occupied space for the specified period of time. Rents are quoted in triple net terms. During 3Q17, Northern New Jersey revised its minimum size cutoff for tracking industrial space, which reduced its total inventory.

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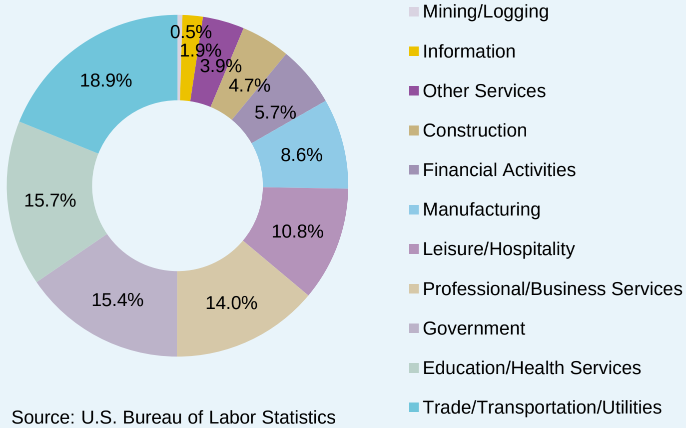
ECONOMIC CONDITIONS

The U.S. economy grew at an annual rate of 3.1% during the second quarter, according to the Bureau of Economic Analysis' third estimate, released in September. Notably, second quarter GDP was the highest since the first quarter of 2015. Steady job growth has underpinned the nation's recent economic performance. The unemployment rate has remained mostly unchanged since April, holding between 4.3% and 4.4% over the past five months, reflecting an economy near full employment. Employers added 169,000 new jobs in August 2017 and an average of 187,000 per month for the first eight months of the year. September data reflected a loss of 33,000 jobs, but the data was heavily impacted by Hurricanes Harvey, Irma, and Maria, and should be set aside for now.

As was widely expected, the Federal Reserve raised the federal funds rate at its June meeting, with another hike likely in December even with inflation remaining weak. Congressional decisions on the FY 2018 budget have been deferred until December, which may impact domestic spending in 2018.

Employment By Industry

United States, 2016 Annual Average

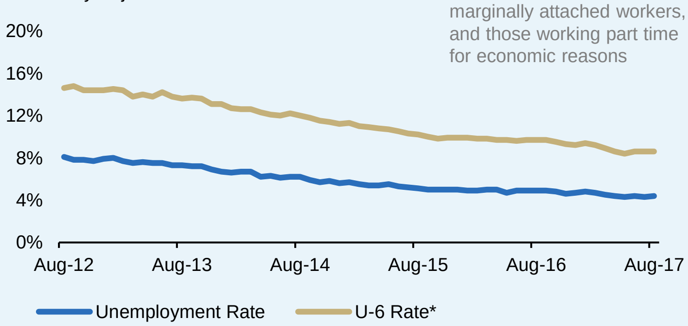


Source: U.S. Bureau of Labor Statistics

Unemployment Rate

Seasonally Adjusted

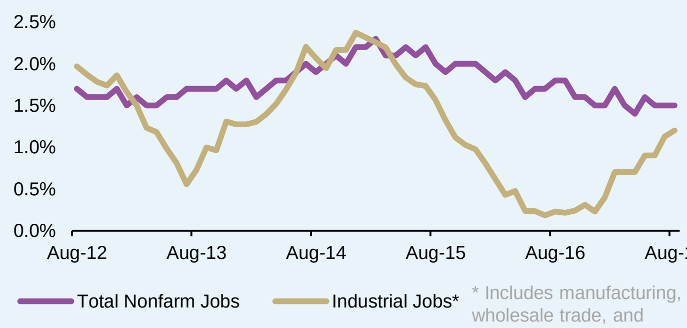
* Includes total unemployed, marginally attached workers, and those working part time for economic reasons



Source: U.S. Bureau of Labor Statistics

Payroll Employment

12-Month % Change, Not Seasonally Adjusted



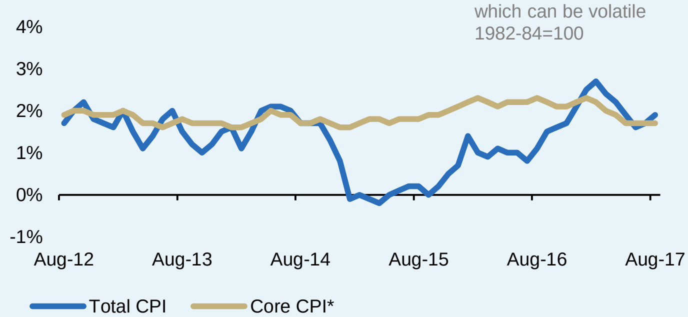
* Includes manufacturing, wholesale trade, and transportation and warehousing

Source: U.S. Bureau of Labor Statistics

Consumer Price Index (CPI)

12-Month % Change, Not Seasonally Adjusted

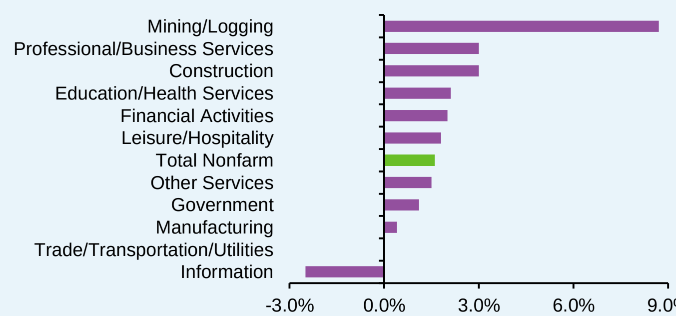
* Excludes food and energy, which can be volatile
1982-84=100



Source: U.S. Bureau of Labor Statistics

Employment Growth by Industry

August 2017, 12-Month % Change, Not Seasonally Adjusted



Source: U.S. Bureau of Labor Statistics

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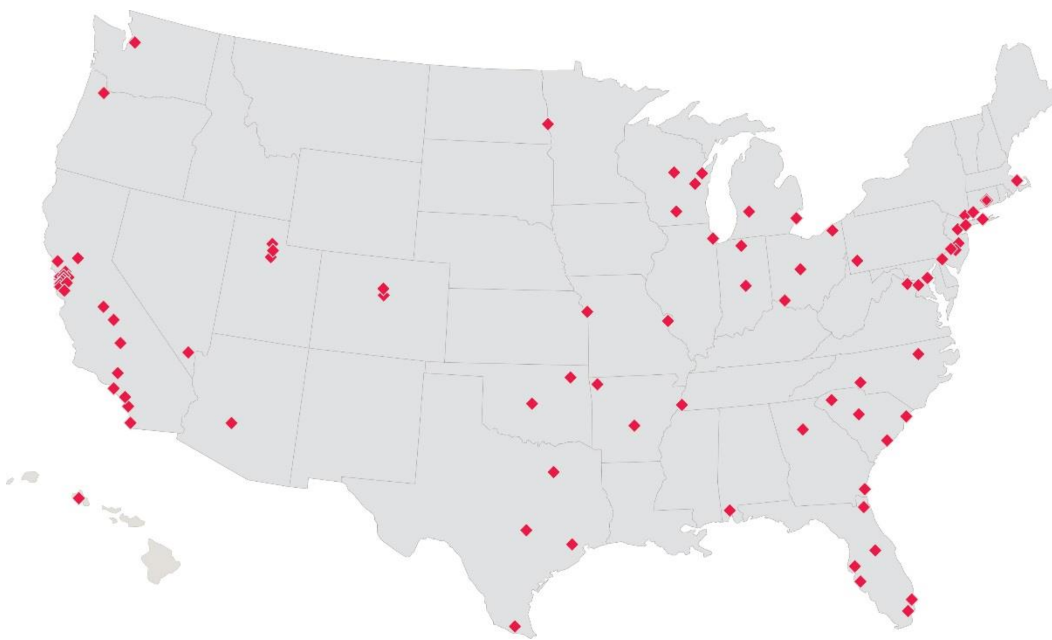

Newmark Knight Frank has implemented a proprietary database and our tracking methodology has been revised. With this expansion and refinement in our data, there may be adjustments in historical statistics including availability, asking rents, absorption and effective rents.

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