RESEARCH **3Q 2018**

Newmark Knight Frank

NATIONAL INDUSTRIAL MARKET

INDUSTRIAL SECTOR METRICS STEADY IN THIRD QUARTER

The U.S. industrial market saw an uptick in asking rents and consistent overall vacancy during the third quarter of 2018. After accelerating last quarter, net absorption decreased by nearly 13.0 million square feet during the third quarter. Despite fluctuations in quarterly absorption, the overall strength and consistency of the market suggest that the industrial asset class can justify the consistently large construction totals seen over the past several quarters.

NET ABSORPTION DECREASES

Demand for industrial space decreased during the third quarter of 2018, posting 49.7 million square feet of net absorption, the lowest quarterly absorption total recorded since the third quarter of 2013. Although absorption is down from the 61.5 million square feet recorded at third-quarter 2017, the vacancy rate dropped 20 basis points from one year ago to 5.1%. Average asking rents continue to steadily increase, with the third-quarter average measuring $6.96/SF, up from $6.78/SF posted last quarter and the highest quarterly average recorded this cycle.

Twenty of the 49 industrial markets tracked by NKF absorbed 1.0 million square feet or more in the third quarter, led by Atlanta with 5.4 million square feet and Chicago with 4.9 million square feet. California's Inland Empire, Pennsylvania's I-81/78 Corridor and Indianapolis all recorded 2.7 million square feet or more of absorption during third-quarter 2018. Six markets posted declines in occupied space, or negative absorption, during the third quarter, led by the Columbus market.

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. For the third quarter of 2018, absorption equaled 0.4% of occupied space across the U.S., led by Pennsylvania's I-81/78 Corridor at 1.1%, while Atlanta and Greenville, South Carolina, both recorded 1.0%. By contrast, the Columbus market saw occupied space shrink by 0.6% over the quarter.

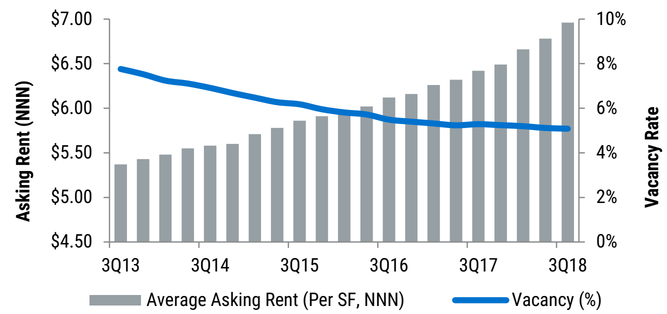
The largest industrial lease of the third quarter was a sublease deal signed by Mars Wrigley Confectionery US for 1.5 million square feet in Irving, Texas. Other noteworthy third-quarter deals included UPS signing for 1.0 million square feet of new space in Easton, Pennsylvania; Nordstrom Inc. signing a 1.0 million square-foot direct lease in the Riverside, California market; and CJ Logistics signing a direct lease for 753,170 square feet in Fontana, California.

CURRENT CONDITIONS

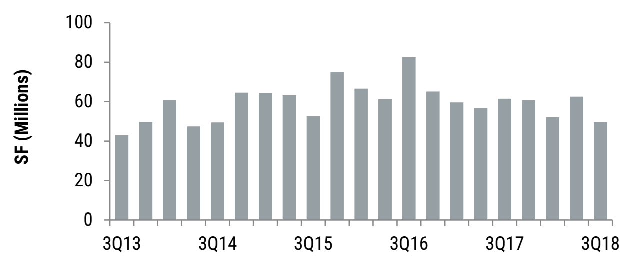
- Absorption measured 49.7 million square feet during third-quarter 2018, down from 61.5 million square feet one year ago.
- Vacancy remained unchanged from the previous quarter at 5.1%.
- Average asking rents rose by 2.7% from last quarter to $6.96/SF, the highest average recorded this cycle.
- UPS signed a 1.0 million-square-foot direct lease in Easton, Pennsylvania, during the third quarter of 2018.

MARKET ANALYSIS

Asking Rent and Vacancy Rate



Net Absorption



MARKET SUMMARY

	Current Quarter	Prior Quarter	Year Ago Period	12-Month Forecast
Total Inventory (SF)	14.7 B	14.8 B	13.7 B	↑
Vacancy Rate	5.1%	5.1%	5.3%	↔
Quarterly Net Absorption (SF)	49.7 M	62.6 M	61.5 M	↔
Average Asking Rent/SF	$6.96	$6.78	$6.42	↑
Under Construction (SF)	248.9 M	235.5 M	237.5 M	↔
Deliveries (SF)	52.1 M	65.7 M	69.4 M	↔

DELIVERIES DECREASE

Developers delivered 52.1 million square feet of new space to market during the third quarter of 2018, down from the 65.7 million square feet delivered last quarter. Delivery totals have stabilized from the 69.4 million square feet recorded at third-quarter 2017, the largest figure seen so far this cycle. Industrial space under construction at third-quarter 2018 measured 248.9 million square feet, up from 235.5 million square feet recorded last quarter. Industrial space under construction has remained above 230.0 million square feet since the fourth quarter of 2016. Groundbreakings continue to increase nationwide as warehouse-using tenants demand more space to house growing operations, often in service of e-commerce.

Six industrial markets combined to account for over 100 million square feet of the third quarter's construction total, led by Dallas with 24.5 million square feet and California's Inland Empire with 22.0 million square feet. Atlanta, Chicago, Washington, D.C., and Houston rounded out the top six, with all of those markets but Houston posting more than 12.0 million square feet of industrial space under construction as of third-quarter 2018.

Industrial space under construction as of the third-quarter 2018 equaled 1.7% of total inventory nationwide. Based on this metric, the supply was growing most rapidly in Las Vegas at 5.3% of inventory, Washington, D.C., at 4.4% and Charleston, South Carolina, at 3.9%. Markets that serve as international trade and distribution hubs and that are near large seaports or growing metropolitan areas, such as the ones listed above, will continue to see supply rise in the period ahead, as e-commerce and third-party logistics tenants keep expanding operations. Over the past several quarters, supply chain and third-party logistics providers were behind the majority of large lease transactions signed throughout the national industrial market. These industries will continue to seek space in gateway markets to manage expanding global trade flows and the increase in e-commerce.

E-COMMERCE DRIVES INDUSTRIAL MARKET

E-commerce spending in the U.S. is projected to grow 60% over the next five years, while consumer expectations for rapid product delivery continues to increase. Amazon, which now receives 43% of online sales, has had to greatly expand its transportation infrastructure to meet ever growing demand. While long established in major industrial markets like Seattle, California's Central Valley and Inland Empire, and Dallas/Fort Worth, the online retail giant continues to expand into smaller locations in densely populated markets like San Francisco, Los Angeles, Miami, and New York. While many of these buildings may be older and present functional challenges, industrial locations close to major cities are highly desirable for last-mile distribution facilities because they minimize shipping costs and quicken delivery times to the end-user. This urban product can command rent premiums over new product further from the city and represent opportunities for developers to capitalize on previously suppressed rent.

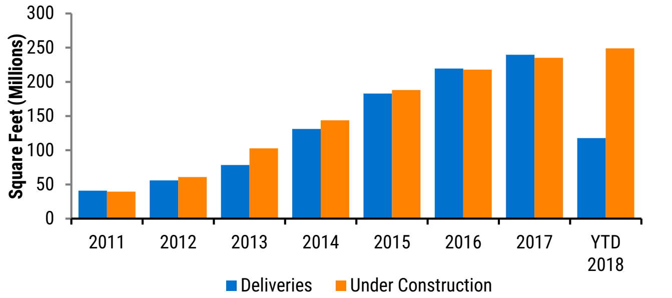
For additional information on the impact of last mile distribution facilities, please read our recent white paper: *Myth vs. Reality: Evaluating Popular Misconceptions in Commercial Real Estate*, at ngkf.com.

VACANCY REMAINS LOW

The U.S. industrial vacancy rate was 5.1% at the end of the third quarter of 2018, matching the previous quarter's rate but down 20 basis points year-over-year. Vacancy is very tight in several major markets, notably Los Angeles at 1.2% and Orange County at 2.4%. 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, and have continued to keep the vacancy rate at a consistently low level over the past several quarters. None of the 49 markets tracked by NKF recorded a double-digit vacancy rate during the third quarter of 2018. This speaks to the overall strength of the national industrial market and helps to explain why investors have become keen on this product type. Per the National Council of Real Estate Investment Fiduciaries (NCREIF), the U.S. industrial sector achieved a 3.58% total return during the second quarter of 2018, significantly outperforming all other property sectors. Industrial outperformed the runner-up, hotel, by 163 basis points during second-quarter 2018.

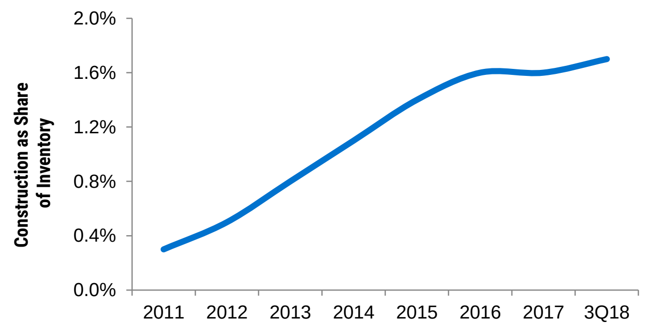
CONSTRUCTION AND DELIVERIES

United States Industrial Market



CONSTRUCTION AS A SHARE OF INVENTORY

United States Industrial Market



3Q 2018 **NATIONAL INDUSTRIAL MARKET**

AVERAGE ASKING RENTS AT RECORD HIGH

Average asking rents across the U.S. at third-quarter 2018 measured $6.96/SF triple net, up 2.7% from the second quarter and up 8.4% from one year ago. The third-quarter 2018 average is the highest recorded this cycle and reflects the overall strength of the national industrial market. E-commerce tenants are demanding top-quality distribution centers that can offer higher ceiling heights and automated warehouse management systems, which are helping to drive rents to record highs. Within the largest metropolitan areas nationwide, developers are planning multi-story warehouses that will offer truck ramps to second-floor loading bays. The concept of rapid last-mile delivery—the delivery of goods to customers within hours—continues to proliferate in dense urban environments across the United States. The desire to reduce delivery times along with increasing demand and rental rates will push industrial developers to continue innovating available product in order to remain competitive.

WHAT TO EXPECT

As of the third quarter of 2018, the current U.S. economic expansion has become the second-longest growth cycle post-World War II. If growth continues through mid-2019, the expansion will supplant the 10-year record set in the late 1990s by the technology boom. The Federal Reserve's GDP growth forecast of 2.8% for 2018 suggests that the expansion is likely to continue beyond this year, though an accelerating tariff war likely would slow growth. The industrial market's appeal to investors continues to grow in 2018—total returns for industrial properties during the second quarter measured 3.58% per NCREIF, far outperforming other sectors. Market statistics for third-quarter 2018 prove the industrial sector's strength as an asset class, as vacancy remained historically low. Average asking rents for industrial space continued to rise to a new record high for the current real estate cycle.

E-commerce, along with related industries such as supply chain management and third-party logistics, continued to grow rapidly during the third quarter of 2018. As consumers across demographic and economic spectrums continue to demand more rapid product delivery, developers have had to innovate their product and offer more efficient space in the largest urban markets. The surge in growth for e-commerce and the demand for ever-faster shipping has pushed rents to a cyclical high. The growth in e-commerce has encouraged institutional investors to purchase more industrial product in order to capitalize on ever-increasing demand and balance their portfolios.

In mid-June, the U.S. Supreme Court ruled in favor of South Dakota in the *South Dakota v. Wayfair, Inc.* case, centering on sales tax collection. The court ruled that U.S. states may impose sales tax on online businesses regardless of whether the business in question has a physical presence in that state. While e-commerce giants like Wayfair are likely to continue growing operations on a national scale, South Dakota v. Wayfair may negatively affect smaller e-commerce operators that cannot rely on nationwide economies of scale. This in turn could lead to reduced business for third-party-logistics providers and warehouse developers, as smaller e-commerce tenants may not be able to maintain strong growth rates. The new law will require online retailers to track all transactions that cross state lines and to register all intrastate transactions that exceed a certain threshold. While the effect of South Dakota v. Wayfair on the nation's industrial market is unclear as of late 2018, it may require smaller e-commerce players to re-evaluate their national business and sales strategies in order to remain profitable.

Despite fluctuations in absorption, with record-high asking rents and consistently low vacancy, the industrial market should sustain its above-trend growth into 2019. As consumers continue to order more goods online, e-commerce tenants will require more space.

SELECT 3Q 2018 LEASE/USER TRANSACTIONS

Tenant	Market	Building	Type	Square Feet
Mars Wrigley Confectionery US	Irving, TX	3240 State Highway 161	Sublease New	1,536,520
UPS, Inc.	Easton, PA	1620 Van Buren Road	Direct New	1,015,740
Nordstrom, Inc.	Riverside, CA	490 Columbia Avenue	Direct New	1,009,092
CJ Logistics (Hankook Tires)	Fontana, CA	10825 Production Avenue	Direct New	753,170

SELECT 3Q 2018 SALES TRANSACTIONS

Building/Portfolio	Market	Price	Price/SF	Square Feet
4225 Hacienda Drive	Pleasanton, CA	$60,000,000	$152.31	393,931
3510 Carlin Drive	West Sacramento, CA	$33,400,000	$86.21	387,420
17300 Silica Rd	Victorville, CA	$10,000,000	$28.01	357,000
47400 Kato Road	Fremont, CA	$46,872,000	$155.00	302,400

MARKET STATISTICS (CONTINUED ON NEXT PAGE)

	Total Inventory (SF)	SF Under Construction	SF Absorbed This Quarter	SF Absorbed Year-to-Date	Vacancy Rate	Average Asking Rent (Price/SF)
National	**14,708,137,831**	**248,938,731**	**49,683,058**	**164,108,171**	**5.1%**	**$6.96**
Atlanta	597,493,798	19,880,057	5,379,557	12,287,600	7.2%	$5.18
Austin	89,339,529	2,640,748	451,421	1,484,344	6.5%	$10.00
Baltimore	178,888,943	4,292,925	338,427	608,144	8.7%	$4.79
Boston	220,160,692	2,393,229	102,023	1,368,574	6.1%	$8.99
Broward County, FL	106,041,626	1,249,821	351,672	649,664	4.4%	$9.16
Charlotte	377,184,961	6,021,148	2,242,241	5,863,884	5.0%	$5.46
Charleston, SC	71,725,505	2,817,499	6,598	4,446,670	8.2%	$4.40
Chicago	1,131,634,597	16,308,302	4,921,220	8,705,646	7.8%	$5.43
Cincinnati	272,005,606	6,291,422	1,054,213	1,054,213	2.8%	$4.48
Cleveland	285,684,168	2,303,073	1,197,172	1,227,579	5.9%	$4.20
Columbia, SC	58,642,189	1,018,056	187,065	762,932	7.8%	$4.02
Columbus	279,659,923	3,857,079	-1,611,265	2,890,128	4.8%	$3.85
Dallas	855,605,517	24,452,063	1,386,711	10,683,656	6.4%	$5.61
Denver	197,591,392	5,180,777	1,159,138	2,759,105	5.5%	$8.77
Detroit	388,940,300	6,549,701	221,194	2,916,070	4.3%	$5.52
Greenville, SC	203,657,712	4,122,282	1,875,945	4,090,377	4.9%	$3.66
Houston	522,347,030	10,327,728	1,528,113	5,303,534	5.5%	$6.91
Indianapolis	322,651,318	4,819,460	2,727,187	7,469,069	3.9%	$3.84
Inland Empire, CA	582,457,528	21,986,001	4,884,492	20,289,109	4.0%	$7.39
Jacksonville	125,827,358	876,891	201,877	1,704,833	2.7%	$4.90
Kansas City	278,399,225	3,878,647	1,071,240	2,671,530	5.4%	$4.93
Las Vegas	111,735,899	5,957,479	593,683	1,220,340	5.4%	$7.58
Long Island	158,218,291	192,819	-273,894	-620,357	3.4%	$12.48
Los Angeles	993,038,851	4,125,036	1,873,558	3,713,383	1.2%	$10.01
Memphis	262,113,441	2,779,307	1,557,109	2,794,479	7.1%	$3.33

Note: Absorption is the net change in occupied space over a period of time. Data may not match totals in some NKF metro reports due to different local methodologies. Asking rents are quoted on a triple net basis.

MARKET STATISTICS (CONTINUED FROM PREVIOUS PAGE)

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National	**14,708,137,831**	**248,938,731**	**49,683,058**	**164,108,171**	**5.1%**	**$6.96**
Miami	213,760,153	2,980,602	415,160	2,577,726	3.7%	$7.73
Milwaukee	232,363,520	669,300	608,140	684,639	3.8%	$4.51
Minneapolis	378,664,601	1,913,452	290,143	1,711,026	3.7%	$6.61
Nashville	236,038,968	5,136,041	-248,026	1,960,490	3.6%	$5.53
New Jersey Northern	642,029,832	5,519,897	2,386,987	13,127,913	4.5%	$8.43
Oakland/East Bay	250,268,039	4,633,772	-1,044,215	-913,490	4.8%	$14.56
Orange County, CA	258,458,383	1,795,075	-39,005	-143,564	2.4%	$13.25
Orlando	184,752,894	907,477	-299,622	2,738,858	4.1%	$6.42
Palm Beach	48,266,825	146,253	11,314	41,935	3.4%	$9.84
Penn. I-81/78 Corridor	341,830,039	5,271,520	3,505,840	7,178,718	7.0%	$4.62
Philadelphia	498,658,222	5,129,559	557,923	1,051,870	5.9%	$5.40
Phoenix	287,383,759	6,006,103	1,894,020	5,000,517	7.4%	$8.68
Pittsburgh	135,134,946	1,301,127	463,608	952,088	7.2%	$4.51
Portland	220,614,866	2,574,677	1,543,712	2,288,119	4.1%	$7.92
Raleigh/Durham	117,704,754	2,163,686	529,410	1,236,608	5.2%	$6.75
Sacramento	169,284,027	1,267,963	187,451	2,999,541	4.9%	$6.64
Salt Lake City	224,674,543	5,601,580	1,319,055	3,446,416	3.9%	$5.94
San Antonio	116,965,024	4,178,031	54,874	128,556	6.4%	$6.10
San Diego	169,224,586	2,513,164	372,021	673,979	4.2%	$12.02
Seattle	306,266,770	5,241,464	587,106	2,378,433	3.4%	$9.91
Silicon Valley	186,993,178	526,000	277,291	308,475	6.1%	$23.36
St. Louis	264,865,616	3,828,752	1,698,199	1,946,677	4.7%	$4.79
Tampa/St. Petersburg	257,907,920	2,429,463	471,307	1,537,243	5.2%	$5.66
Washington, DC	294,980,967	12,882,223	713,668	4,850,892	3.7%	$8.60

Note: Absorption is the net change in occupied space over a period of time. Data may not match totals in some NKF metro reports due to different local methodologies. Asking rents are quoted on a triple net basis.

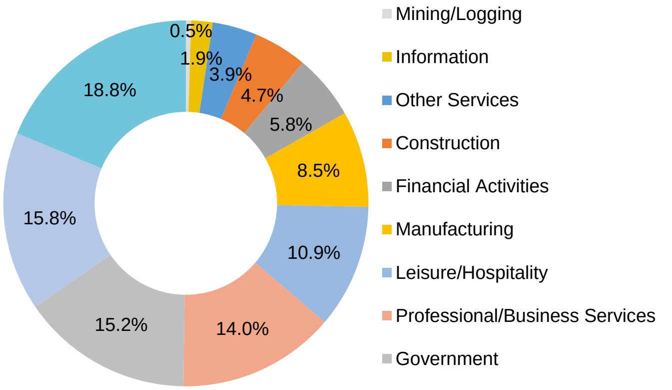
3Q 2018 NATIONAL INDUSTRIAL MARKET

ECONOMIC CONDITIONS

The U.S. economy grew at an annual rate of 4.2% during the second quarter, according to the Bureau of Economic Analysis' third estimate, released in September 2018. The inflation rate was 2.2% (not seasonally adjusted) for the 12 months ending in August. GDP continues to rise methodically, consistent with steady job growth. The unemployment rate declined 50 basis points from one year ago, reaching 3.9% in August 2018, reflecting an economy near full employment. The rate declined to 3.7% in September. Employers added 270,000 new jobs in August 2018, a significant increase from the 221,000 added in August 2017, with Professional and Business Services, Construction and Manufacturing among the notable growth sectors. Although consumer and business confidence has increased with the passage of the Tax Cuts and Jobs Act, the full effect of tax reform will not be felt in the near term. Also, two key macroeconomic trends bear monitoring: the Fed's continued interest rate hikes, which may curtail consumer and business spending as lenders tighten standards; and the threat of trade-hampering tariffs. China's quick retaliation against new U.S. tariffs suggests a more volatile growth path for the national economy in the period ahead.

EMPLOYMENT BY INDUSTRY

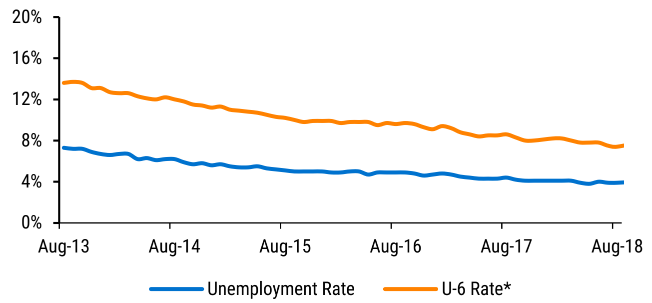
United States, 2017 Annual Average



Source: U.S. Bureau of Labor Statistics, NKF Research; October 2018

UNEMPLOYMENT RATE

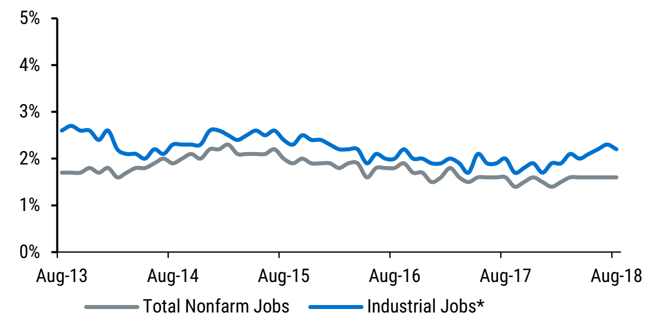
United States, Seasonally Adjusted



* Includes total unemployed, marginally attached workers, and those working part time for economic reasons
Source: U.S. Bureau of Labor Statistics, NKF Research; October 2018

PAYROLL EMPLOYMENT

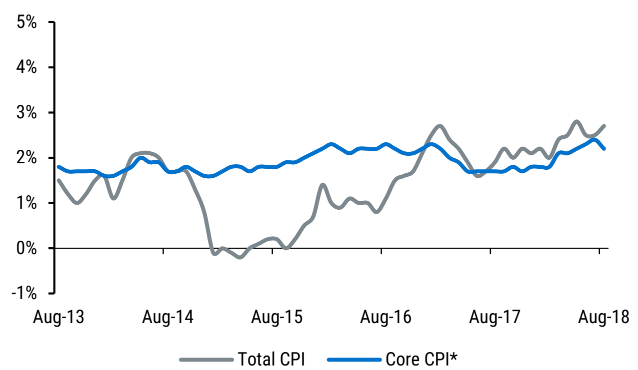
United States, 12-Month % Change , Not Seasonally Adjusted



* Includes manufacturing, wholesale trade, and transportation and warehousing
Source: U.S. Bureau of Labor Statistics, NKF Research; October 2018

CONSUMER PRICE INDEX (CPI)

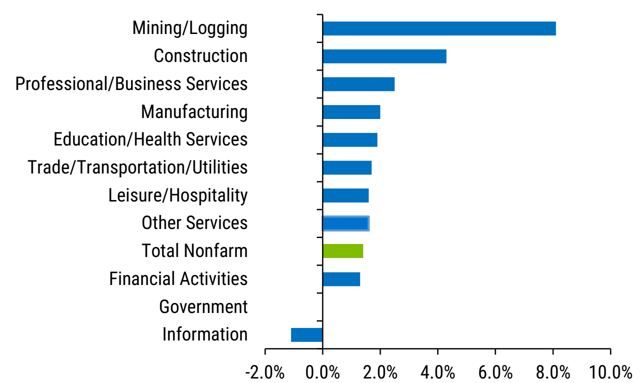
United States, 12-Month % Change, Not Seasonally Adjusted



*Excludes food and energy, which can be volatile; 1982-84=100
Source: U.S. Bureau of Labor Statistics, NKF Research; October 2018

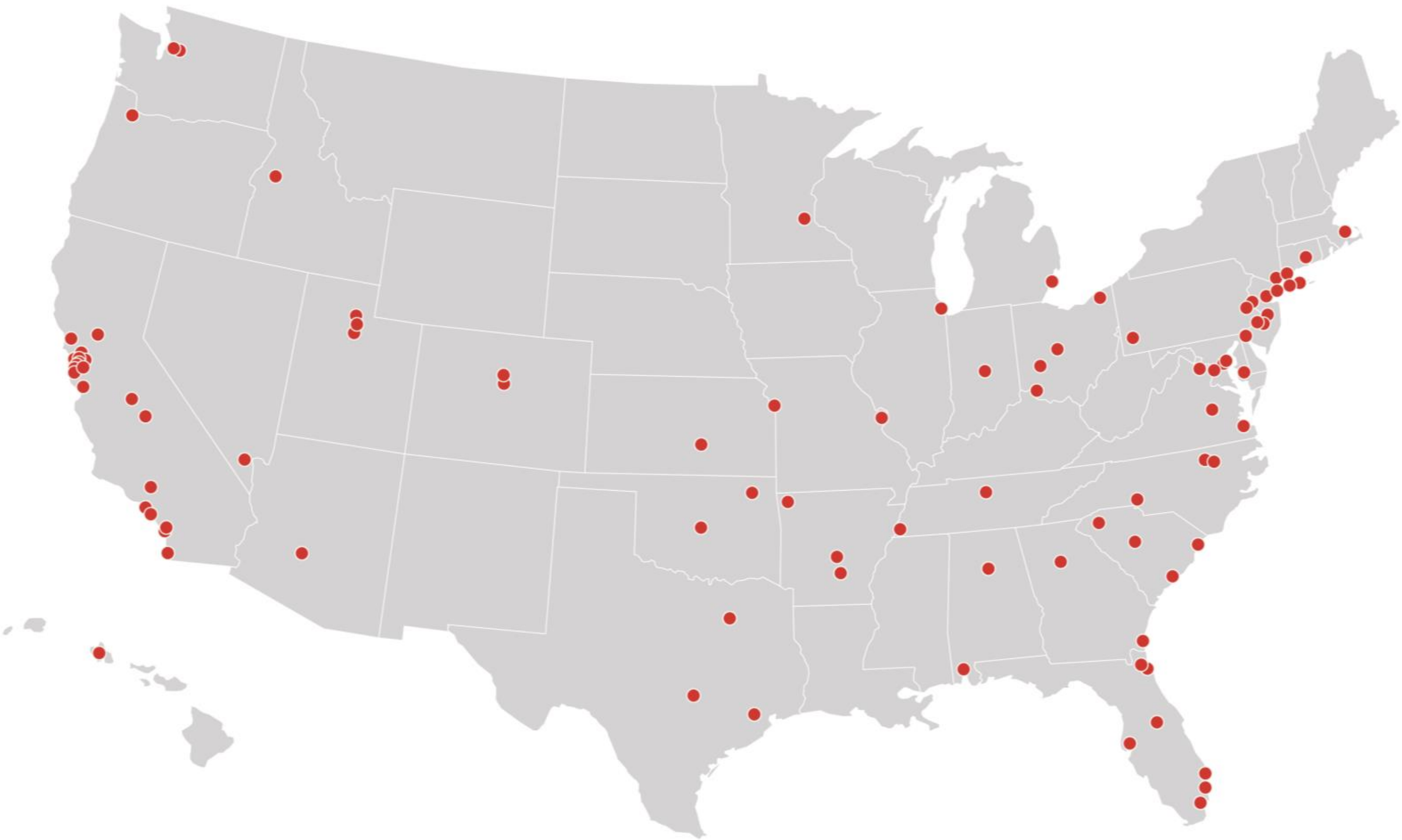
EMPLOYMENT GROWTH BY INDUSTRY

U.S., August 2018, 12-Month % Change, Not Seas. Adj.



Source: U.S. Bureau of Labor Statistics, NKF Research; October 2018

NEWMARK KNIGHT FRANK UNITED STATES OFFICE LOCATIONS



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