

# PROPERTY PERFORMANCE MONITOR

## Third Quarter 2018



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Marketing Material

### QUARTERLY HIGHLIGHTS

- Core real estate, as measured by the NCREIF Property Index (NPI), registered unlevered total returns of 7.2% in the trailing four quarters as of the third quarter 2018.
- Industrial outperformed by a wide margin, returning 14.2%. Office and Apartment properties returned a distant 6.9% and 6.4%, respectively. The Retail sector languished (3.9%).
- Performance varied markedly within sectors. In the Apartment sector, Garden returns were more than double those of High-Rise; within Retail, Neighborhood and Community centers fared better than Regional and Super Regional centers.
- West Coast markets generally led the index while New York, Chicago and Washington D.C. generally weighed on returns.

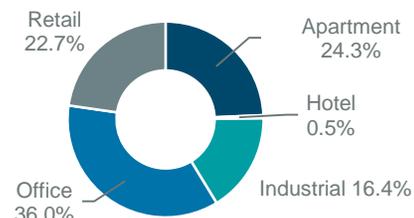
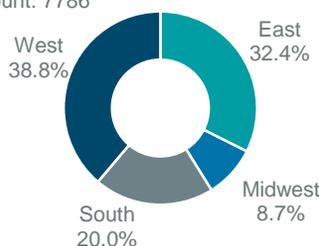
### PRIVATE REAL ESTATE PROPERTY RETURNS

- Trailing four-quarter NPI returns have hovered between 6.9% to 7.2% for six consecutive quarters. In the third quarter appreciation returns were at their highest annual level since early 2017.
- Private real estate outperformed bonds and underperformed equities on both a quarterly and an annual basis.
- Overall occupancy increased to 94.1%, the highest level since late 2000. NOI growth declined but remained healthy, at 4.2% (year-over-year, four-quarter moving average).
- Industrial's outperformance widened, as its return spread to the overall NPI reached 700 bps. Retail's negative gap increased; the third quarter marked the eleventh straight quarter of decelerating Retail returns.
- Seattle and Los Angeles were star performers, leading several other strong West Coast markets. The bottom of the list was mixed but generally included Chicago and markets in the Northeast.

### NPI MARKET CAPITALIZATION

Index market value: \$591.9 billion

Property count: 7786



### RECENT PERFORMANCE TRENDS

	12 months trailing		
	Quarter	3Q 2018	4Q 2017
Private Real Estate (NPI)	1.7%	7.2%	7.0%
Broad Equities (large cap)	7.7%	17.9%	21.8%
Bonds	0.1%	-1.4%	4.0%
Listed Real Estate	0.5%	4.3%	8.7%
10-Year Treasury <sup>1</sup>	2.9%	2.7%	2.3%
12-Month LIBOR <sup>1</sup>	2.8%	2.5%	1.8%
CPI (SA)	0.5%	2.6%	2.1%

Sources: NCREIF, Standard and Poor's, Barclay's and Federal Reserve. As of September 30, 2018. Past performance is no guarantee of future results. For definitions of indices, see the last page of this report.

<sup>1</sup> These figures represent annual yields.

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## NCREIF PROPERTY INDEX (NPI) PERFORMANCE BY SECTOR AND REGION

- Overall returns were steady, led by Industrial. Office showed signs of strength while Apartment moderated. Retail continued to struggle, posting its lowest rolling one-year return since mid-2010.
- Returns for all three Industrial subsectors remained in double digits, bolstered by both strong income yields and capital appreciation. Warehouse, Flex, and R&D returns were all at multi-year highs.
- The divide between Retail's winners and losers grew starker. Regional and Super Regional shopping centers struggled, returning only 2.5% over the past year, while Neighborhood and Community centers returned a respectable 5.9%.
- Strong NOI growth of 5.2% (year-over-year, four-quarter moving average) translated into improved returns for both Suburban and CBD returns. Suburban Office returned 7.4% year-over-year while CBD Office returned 6.0%.
- Garden Apartments were the standout subtype outside of Industrial, returning 9.3%. High-Rise Apartments were weak on a relative basis, although returns stabilized.
- Regional dynamics were unchanged, with the West leading the pack by a significant margin, followed by the South. Total returns in the East and Midwest were comparable.

## DETAILED PROPERTY TYPE NPI PERFORMANCE

	No. of props.	Market value (Mil)	Trailing four quarters		
			Total return	Income	Apprec.
<b>Apartment</b>					
Garden	635	\$42,862	9.3%	5.0%	4.1%
High Rise	856	\$88,975	4.9%	4.0%	0.9%
Low Rise	150	\$11,991	7.2%	4.3%	2.8%
<b>Industrial</b>					
R&D	30	\$962	15.5%	5.7%	9.4%
Flex	234	\$3,683	13.6%	5.7%	7.6%
Warehouse	3,028	\$90,373	14.1%	4.9%	8.9%
<b>Office</b>					
CBD	443	\$126,191	6.3%	4.3%	2.0%
Suburban	1,028	\$87,015	7.6%	5.1%	2.4%
<b>Retail</b>					
Community	238	\$15,259	5.1%	5.3%	-0.2%
Neighborhood	487	\$19,326	6.5%	5.0%	1.4%
Power	188	\$15,923	5.1%	5.4%	-0.3%
Regional	62	\$18,795	1.0%	4.6%	-3.5%
Super Regional	59	\$47,273	3.2%	4.3%	-1.1%

Source: NCREIF Property Index as of September 30, 2018. Past performance is no guarantee of future results.

## RETURNS BY PROPERTY TYPE AND REGION

	Annual returns							Standard deviation		
	1 Year			3 years	5 years	10 years	20 years	Since inception <sup>2</sup>	20 years	Since inception <sup>2</sup>
Property Type	Total	Income	Apprec.							
Apartment	6.4%	4.3%	2.0%	7.0%	8.6%	6.4%	9.0%	10.4%	8.4%	7.6%
Industrial	14.2%	4.9%	8.9%	13.1%	13.5%	8.0%	9.9%	9.8%	8.3%	7.5%
Office	6.8%	4.6%	2.2%	6.7%	8.7%	5.2%	8.4%	8.4%	9.1%	9.5%
Retail	3.9%	4.6%	-0.7%	7.0%	9.6%	7.6%	10.2%	9.6%	7.6%	6.5%
<b>Total Index</b>	<b>7.2%</b>	<b>4.6%</b>	<b>2.5%</b>	<b>7.8%</b>	<b>9.6%</b>	<b>6.4%</b>	<b>9.1%</b>	<b>9.2%</b>	<b>8.2%</b>	<b>7.5%</b>
Region	Total	Income	Apprec.							
East	5.2%	4.4%	0.8%	5.9%	7.6%	5.2%	9.0%	10.0%	8.7%	9.1%
Midwest	5.3%	5.0%	0.3%	6.3%	8.4%	5.9%	7.6%	8.0%	6.6%	5.9%
South	7.4%	5.0%	2.2%	7.6%	10.0%	7.0%	8.7%	8.3%	7.3%	6.7%
West	9.2%	4.5%	4.5%	9.8%	11.4%	7.4%	10.1%	9.8%	9.0%	8.4%
<b>Total Index</b>	<b>7.2%</b>	<b>4.6%</b>	<b>2.5%</b>	<b>7.8%</b>	<b>9.6%</b>	<b>6.4%</b>	<b>9.1%</b>	<b>9.2%</b>	<b>8.2%</b>	<b>7.5%</b>

Source: NCREIF Property Index. As of September 30, 2018. Past performance is not indicative of future returns.

<sup>2</sup> Index returns start in 1978, equivalent to a 40.75 year calculation.

## MARKET ANALYSIS – BENCHMARK INSIGHTS AND PORTFOLIO IMPLICATIONS

The NCREIF Property Index is a value-weighted index of property returns and as such, a large portion of the index is located in just 20 markets. Local economic growth will affect properties located in the same market similarly, so we can estimate the effect of property geographical location on the overall index. Large metros, by value, will likely have the largest impact on the index, although small metro with particularly strong or weak performance may boost or weigh on returns from time to time. The following tables lists out which markets had the strongest positive and negative effect on returns during the past four quarters.

### IMPACT OF TOP 20 MARKETS ON SECTOR PERFORMANCE

Apartment			Industrial			Office			Retail		
Metro	Metro returns <sup>3</sup>	Impact on sector returns	Metro	Metro returns <sup>3</sup>	Impact on sector returns	Metro	Metro returns <sup>3</sup>	Impact on sector returns	Metro	Metro returns <sup>3</sup>	Impact on sector returns
Phoenix	15.6%	15	Los Angeles	16.8%	29	San Francisco	9.5%	26	San Diego	8.0%	17
Denver	8.2%	9	Seattle	17.5%	25	Seattle	10.3%	16	Los Angeles	6.3%	15
Atlanta	8.9%	8	New York	17.3%	18	Oakland	13.3%	13	Dallas	5.7%	9
San Diego	8.8%	6	Oakland	17.6%	14	Dallas	11.4%	12	San Jose	7.9%	9
Oakland	8.9%	5	Santa Ana	17.2%	10	Los Angeles	8.3%	12	Las Vegas	5.7%	8
Houston	7.2%	3	Portland	17.0%	5	Austin	12.3%	11	Miami	5.1%	4
Boston	7.0%	3	San Francisco	16.1%	3	San Jose	9.6%	10	Denver	5.2%	4
San Jose	7.6%	3	Riverside	14.3%	1	Boston	7.4%	6	Oakland	5.3%	3
Seattle	6.8%	2	San Jose	14.7%	1	Atlanta	9.0%	3	Santa Ana	4.8%	2
Santa Ana	7.5%	2	San Diego	14.1%	0	Portland	9.5%	3	San Francisco	4.6%	2
Los Angeles	6.6%	2	Fort Lauderdale	12.6%	-2	Miami	7.5%	1	Seattle	4.6%	1
Fort Lauderdale	6.9%	1	Washington, DC	12.0%	-3	Phoenix	5.4%	-1	Orlando	4.1%	1
Austin	5.9%	-1	Phoenix	10.8%	-4	San Diego	5.8%	-2	Atlanta	3.5%	-1
Philadelphia	4.9%	-3	Baltimore	11.8%	-5	Minneapolis	3.0%	-3	Phoenix	3.4%	-2
Portland	4.8%	-3	Miami	12.0%	-8	Santa Ana	5.2%	-3	Washington, DC	3.5%	-3
San Francisco	4.4%	-5	Harrisburg	8.3%	-8	Chicago	5.8%	-4	Boston	1.7%	-8
Dallas	5.2%	-6	Atlanta	11.5%	-8	Houston	5.0%	-6	Houston	2.5%	-9
Washington, DC	5.3%	-9	Houston	11.0%	-9	Denver	4.0%	-6	Baltimore	-1.1%	-10
Chicago	3.5%	-20	Dallas	11.4%	-22	Washington, DC	4.1%	-32	Chicago	2.3%	-13
New York	3.4%	-35	Chicago	11.1%	-28	New York	3.8%	-64	New York	-0.5%	-26

Source: NCREIF Property Index as of September 30, 2018. Past performance is no guarantee of future results. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.

**Apartments** – Orlando, Riverside, Nashville, and Tampa, smaller markets that fell outside of the top 20, boasted some of the highest total returns. Phoenix, Denver, and Atlanta made the largest positive contributions. Major Texas markets weighed on results, with the exception of Houston, which appears to be on an upswing. Several gateway markets struggled; New York, Chicago, Washington, DC, and San Francisco all detracted from sector returns.

**Industrial** – Performance remained strong across all metros, with only Sacramento underperforming the overall NPI. West Coast metros continued to dominate, joined by New York. Los Angeles' contribution to sector returns was substantial thanks to its size. The major distribution hubs of Atlanta, Chicago, and Dallas, all of which have above-average construction activity, underperformed, as did Miami and Fort Lauderdale. West Palm Beach uncoupled from the other South Florida markets, flaunting a 12.2% quarterly total return.

**Office** – Tech-heavy markets including Portland, Seattle, San Francisco, Austin and Oakland delivered a large positive impact on sector returns. Dallas benefited from robust overall corporate demand. Several gateway markets with substantial supply pipelines (New York, Washington, DC) or anemic growth (Chicago) weighed on returns, although Los Angeles performed well and Boston held its own. Denver decelerated sharply while an upward trend took hold in Houston, although its returns remained below average.

**Retail** – West Coast markets generally produced the highest returns. The Sunbelt was mixed with Nashville and Raleigh producing the highest returns and Atlanta, Phoenix and Orlando hovering around the middle of the pack. Four of the five largest detractors were in the East; in particular, New York's low returns and large size imposed the greatest drag on sector results. Houston's retail returns slipped, running counter to trends in the metro's other sectors.

<sup>3</sup> Four-quarter cumulative returns ending third quarter 2018.

# RESEARCH & STRATEGY – ALTERNATIVES

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