Alternatives Research Real Estate





U.S. PROPERTY PERFORMANCE MONITOR

Fourth Quarter 2021

A NUTSHELL

- _ U.S. core real estate, as measured by the NCREIF Property Index (NPI), delivered a total return of 6.2% (quarterly) and 17.7% (trailing four quarters) in the fourth quarter of 2021 the highest quarterly return in the index's history and the strongest annual return since 2006.
- _ Across sectors and markets, the dispersion of performance was at its widest in over 40 years.
- _ Total returns for industrial property (trailing four quarters) were the highest of any sector in the history of the index (since 1978). Apartment increased meaningfully while Office and Retail lagged behind.
- _ Sun Belt and Mountain West markets generally outperformed while New York, Chicago, and San Francisco struggled.

Private Real Estate Property Returns

- Core real estate total returns jumped to 17.7% (trailing four quarters) in the fourth quarter of 2021 from 1.6% in 2020.1
- _ The industrial sector's total returns (43.3%) were the highest produced by any sector in the history of the index (since 1978). Apartments (19.9%) outpaced the overall NPI and were the highest in a decade. Office returns (6.1%) were resilient despite concerns over the effects of remote working. Retail picked up (4.2%) and returns registered the second positive quarter since 2019.
- _ Relative to other major asset classes, private real estate underperformed stocks (29%) and outperformed bonds (-1.5%) over the past year, consistent with historical patterns.
- Property fundamentals improved in the fourth quarter, as overall vacancies fell back to pre-COVID levels. Industrial vacancies dropped to 2.1%, the lowest ever recorded. Net Operating Income (NOI) increased 12.4% (trailing four quarters), the most since 2001, led by a rebound in Apartment and Retail and persistent gains in Industrial (while Office was stable).
- _ Geographic trends were largely unchanged. Regional markets generally benefitting from lower costs and in-migration (e.g., Sun Belt and Mountain West) performed well. Gateway markets with comparatively higher costs (e.g., New York, Chicago, and San Francisco) generally underperformed.

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¹ NCREIF Property Index as of December 31, 2021. Past performance is no guarantee of future results.



NPI MARKET CAPITALIZATION

Index market value U.S. \$834.2 billion - Property count 9,919



RECENT PERFORMANCE TRENDS

	Quarter	12 months	s trailing
	4Q 2021	4Q 2021	3Q 2021
Private Real Estate (NPI)	6.2%	17.7%	12.2%
Broad Equities (large cap)	11.0%	28.7%	30.0%
Bonds	0.0%	-1.5%	-0.9%
Listed Real Estate	16.2%	41.3%	31.5%
10-Year Treasury ²	1.5%	1.5%	1.5%
12-Month LIBOR ³	0.6%	0.6%	0.2%
CPI (SA)	2.2%	7.1%	5.4%

Sources: NCREIF, Standard and Poor's, Barclay's, NAREIT, and Federal Reserve as of December 31, 2021.

NCREIF Property Index (NPI) Performance by Sector and Region

- _ Industrial total returns of 43.3% (trailing four quarters) were the strongest ever recorded by any sector in the history of the NPI, fueled in part by a 11.5% year-over-year increase in NOI. E-commerce has been a pivotal driver of the sector's impressive performance, as retailers have scrambled to build out distribution capacity.
- _ Apartments were the second-best performing sector, producing total returns of 19.9% (trailing four quarters). An ongoing migration of ageing Millennials to the suburbs, a trend that first surfaced in 2015 and accelerated with the pandemic, helped Garden (28.9%) to outperform High-Rise (15.6%) assets.
- _ Total returns for retail property increased in the fourth quarter of 2021, at 4.2% (trailing four quarters). However, the market was bifurcated, with malls (about half the index) generating the weakest returns, and neighborhood (8.5%) and community (6.6%) centers faring better.
- _ Office performance continued to be modest in the fourth quarter, delivering total returns of 6.1% (trailing four quarters).
 Suburban outperformed CBDs by a wide margin (10.0% vs. 3.3%, respectively). While workplace occupancy remained depressed, NOIs were stable as tenants continued to honor lease obligations.
- Regional dynamics were generally unchanged. The West led the pack (21.1%), followed closely by the South (19.8%). Returns in the East and Midwest lagged the index over the past year.

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² These figures represent annual yields.

³ These figures represent annual yields.



DETAILED PROPERTY TYPE NPI PERFORMANCE

		Market value	Trailir		
	No. of props.	U.S.\$ (Mil)	Total return	Income	Apprec.
Apartment					
Garden	753	66,409	28.9%	4.5%	23.7%
High Rise	1,085	131,538	15.6%	3.4%	11.8%
Low Rise	261	23,421	21.1%	3.9%	16.7%
Industrial					
R&D	32	1,633	30.6%	5.0%	24.7%
Flex	208	5,401	43.1%	5.1%	36.6%
Warehouse	4,295	219,457	43.5%	4.1%	38.3%
Office					
CBD	497	142,135	3.3%	4.2%	-0.9%
Suburban	1,203	109,052	10.0%	4.9%	4.9%
Retail					
Community	225	14,118	6.6%	5.4%	1.2%
Neighborhood	535	20,486	8.5%	5.1%	3.3%
Power	188	13,377	6.5%	5.7%	0.7%
Regional	63	13,965	-0.2%	4.2%	-4.3%
Super Regional	75	49,597	2.7%	4.4%	-1.6%

Source: NCREIF Property Index as of December 31, 2021. Past performance is no guarantee of future results.

RETURNS BY PROPERTY TYPE AND REGION

Annual returns								Standard deviation		
	Total	1 year Income	Apprec.	3 years	5 years	10 years	20 years	Since inception ⁴	20 years	Since inception ⁵
Property type										
Apartment	19.9%	3.8%	15.7%	8.8%	7.7%	9.0%	8.5%	10.2%	8.6%	7.5%
Industrial	43.3%	4.1%	38.1%	22.0%	18.6%	15.6%	11.4%	10.7%	9.5%	7.9%
Office	6.1%	4.5%	1.6%	4.7%	5.4%	7.6%	7.4%	8.2%	9.0%	9.3%
Retail	4.2%	4.7%	-0.5%	-0.6%	1.2%	6.6%	8.7%	8.8%	8.8%	7.0%
Total Index	17.7%	4.2%	13.0%	8.4%	7.8%	9.3%	8.7%	9.1%	8.3%	7.4%
Region										
East	13.4%	4.1%	9.0%	6.4%	5.9%	7.5%	8.1%	9.7%	8.8%	8.9%
Midwest	12.2%	4.4%	7.6%	4.5%	4.7%	7.4%	6.9%	7.8%	6.8%	5.9%
South	19.8%	4.6%	14.7%	9.0%	8.1%	9.8%	8.7%	8.4%	7.6%	6.6%
West	21.1%	4.1%	16.5%	10.4%	9.7%	11.1%	9.7%	9.8%	9.1%	8.2%
Total Index	17.7%	4.2%	13.0%	8.4%	7.8%	9.3%	8.7%	9.1%	8.3%	7.4%

Source: NCREIF Property Index as of December 31, 2021. Past performance is not indicative of future returns.

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 $^{^4}$ Index returns start in 1978, equivalent to a 44 year calculation. 5 Index returns start in 1978, equivalent to a 44 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 metros with particularly strong or weak performance may boost or weigh on returns from time to time. The tables on the following page list out which markets had the strongest positive and negative effect on returns during the past four quarters.

Apartments – The pandemic reinforced demographic trends underpinning apartment markets. Over the past year, the Sun Belt (e.g., Phoenix, Atlanta, Raleigh, Dallas, and Fort Lauderdale) and Denver, benefitting from in-migration, were the largest positive contributors. Gateway locations with comparatively higher costs (e.g., New York, Chicago, and San Francisco) struggled, although Boston, Seattle and Washington D.C. fared better.

Industrial – Performance remained impressive, with every market delivering double-digit total returns over the trailing four quarters. Major port markets, including Riverside (75.6%), Los Angeles (57.2%), Orange County (58.2%), and New York (48.8%) were particularly noteworthy. On a relative basis, major inland distribution hubs (i.e., Atlanta, Chicago, and Dallas) underperformed, although returns were still elevated. Markets in Florida generally underperformed over the trailing four quarters. The worst-ranked major industrial market, Houston (24.2%), nevertheless outperformed the overall NPI.

Office – Markets with outsized exposure to technology and life sciences (i.e., Boston, San Diego, Seattle, Austin, Oakland, and San Jose) continued to make the largest contribution to sector returns. Further, demographic tailwinds and corporate expansions continued to benefit Sun Belt office markets such as Atlanta and Charlotte. Conversely, values slipped in several gateway markets, including Chicago, Washington D.C., and New York, collectively subtracting 130 basis points from sector returns.

Retail – Over the past year, tenant mix generally governed retail property performance as service-oriented, daily-needs shopping centers proved relatively resilient to e-commerce. Conversely, Malls and lifestyle shopping centers were challenged by store closures and bankruptcies. Case in point, metros with the largest negative contribution to sector returns (e.g., Los Angeles, Chicago, Boston, and New York) had notable mall exposure. Markets which performed well on a relative basis (e.g., Phoenix, Atlanta, Las Vegas, and Houston) benefitted from demographic tailwinds.



A	partment		li li	ndustrial			Office			Retail	
Metro	Metro returns	Impact on sector returns	Metro	Metro returns ⁷	Impact on sector returns	Metro	Metro returns ⁸	Impact on sector returns	Metro	Metro returns ⁹	Impact on sector returns
Phoenix	44.1%	50	Riverside	75.6%	402	Boston	11.0%	53	Phoenix	9.9%	19
Denver	29.2%	49	Los Angeles	57.2%	127	San Diego	21.9%	30	Atlanta	10.6%	16
Atlanta	27.0%	33	Orange County	58.2%	54	Seattle	9.6%	18	Las Vegas	6.8%	16
Raleigh	37.0%	29	New York	48.4%	43	Austin	11.9%	13	Houston	5.2%	6
Dallas	24.0%	24	San Diego	49.8%	10	Oakland	13.2%	13	Baltimore	4.8%	1
Fort Lauderdale	31.4%	23	Philadelphia	50.0%	8	San Jose	8.9%	11	Oakland	4.6%	1
Orange County	26.9%	18	Phoenix	44.3%	1	Atlanta	9.7%	6	Orange County	4.6%	1
Austin	24.7%	17	Baltimore	42.3%	-2	Charlotte	8.2%	2	Riverside	4.3%	0
San Diego	23.7%	11	Boston	38.4%	-7	Dallas	6.1%	0	Dallas	4.2%	0
Miami	23.9%	8	Washington , DC	36.5%	-9	Fort Lauderdale	5.0%	-1	San Diego	4.1%	-1
Boston	19.4%	-3	Fort Lauderdale	27.5%	-20	Miami	4.3%	-2	Miami	2.9%	-3
Seattle	17.9%	-9	Atlanta	36.9%	-23	Los Angeles	5.7%	-3	San Francisco	1.1%	-7
Oakland	13.3%	-15	Portland	29.1%	-24	Denver	4.8%	-3	Seattle	0.8%	-8
Houston	15.0%	-16	Dallas	39.6%	-25	Portland	2.1%	-4	Orlando	0.6%	-8
San Jose	10.5%	-22	Denver	24.3%	-29	Orange County	2.6%	-5	San Jose	1.1%	-8
Washington, DC	15.2%	-41	Miami	34.2%	-32	San Francisco	5.2%	-10	Washington , DC	3.1%	-9
Los Angeles	13.4%	-44	Oakland	32.8%	-44	Houston	2.0%	-13	Los Angeles	2.4%	-11
San Francisc	o 6.6%	-49	Houston	24.2%	-44	Chicago	3.4%	-14	Chicago	2.0%	-14
Chicago	9.1%	-68	Seattle	30.0%	-91	Washington , DC	2.3%	-47	Boston	-2.1%	-16
New York	8.8%	-110	Chicago	25.9%	-142	New York	2.2%	-70	New York	-0.8%	-22

Source: NCREIF Property Index as of December 31, 2021.

⁶ Four-quarter cumulative returns ending fourth quarter 2021.

⁷ Four-quarter cumulative returns ending fourth quarter 2021.

⁸ Four-quarter cumulative returns ending fourth quarter 2021.

⁹ Four-quarter cumulative returns ending fourth quarter 2021.



Appendix - Historical Performance

	12 months trailing								
	12/2020 – 12/2021	12/2019 – 12/2020	12/2018 – 12/2019	12/2017 – 12/2018	12/2016 – 12/2017				
Private Real Estate (NPI)	17.7%	1.6%	6.4%	6.7%	7.0%				
Broad Equities (large cap)	28.7%	18.4%	31.5%	-4.4%	21.8%				
Bonds	-1.5%	7.5%	8.7%	0.0%	3.5%				
Listed Real Estate	41.3%	-5.1%	28.7%	-4.0%	8.7%				
10-Year Treasury ¹⁰	1.5%	0.9%	1.9%	2.7%	2.4%				
12-Month LIBOR ¹¹	0.6%	0.3%	2.0%	3.0%	2.1%				
CPI (SA)	7.1%	1.3%	2.3%	1.9%	2.1%				

Sources: NCREIF, Standard and Poor's, Barclay's, NAREIT, and Federal Reserve as of December 31, 2021.

¹⁰ These figures represent annual yields.11 These figures represent annual yields.



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